

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021

OR

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

Commission File No. 001-36550

PAR PACIFIC HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

84-1060803
(I.R.S. Employer
Identification No.)

825 Town & Country Lane, Suite 1500
Houston, Texas
(Address of principal executive offices)

77024
(Zip Code)

Registrant's telephone number, including area code: (281) 899-4800
Securities registered under Section 12(b) of the Act:

Title of each class
Common stock, \$0.01 par value

Trading Symbol(s)
PARR

Name of Exchange on which registered
New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant was approximately \$743,291,325 based on the closing sales price of the common stock on the New York Stock Exchange on June 30, 2021. As of February 18, 2022, 59,813,700 shares of the registrant's Common Stock, \$0.01 par value, were issued and outstanding.

Documents Incorporated By Reference

Certain information required to be disclosed in Part III of this report is incorporated by reference from the registrant's definitive proxy statement or an amendment to this report, which will be filed with the SEC not later than 120 days after the end of the fiscal year covered by this report.

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Glossary of Selected Industry Terms

Unless otherwise noted or indicated by context, the following terms used in this Annual Report on Form 10- K have the following meanings:

barrel or bbl	A common unit of measure in the oil industry, which equates to 42 gallons.
blendstocks	Various compounds that are combined with gasoline or diesel from the crude oil refining process to make finished gasoline and diesel; these may include natural gasoline, FCC unit gasoline, ethanol, reformate, or butane, among others.
Brent	A light, sweet North Sea crude oil, characterized by an API gravity of 38 degrees and a sulfur content of approximately 0.4% by weight that is used as a benchmark for other crude oils.
cardlock	Automated unattended fueling sites that are open all day and are designed for commercial fleet vehicles.
catalyst	A substance that alters, accelerates, or instigates chemical changes, but is not produced as a product of the refining process.
CO₂	Carbon dioxide.
condensate	Light hydrocarbons which are in gas form underground but are a liquid at normal temperatures and pressure.
crack spread	A simplified calculation that measures the difference between the price for refined products and crude oil. For example, we reference the 3-1-2 Singapore crack spread, which approximates the per barrel results from processing three barrels of Brent crude oil to produce one barrel of gasoline and two barrels of distillates (diesel and jet fuel).
distillates	Refers primarily to diesel, heating oil, kerosene, and jet fuel.
ethanol	A clear, colorless, flammable oxygenated liquid. Ethanol is typically produced chemically from ethylene or biologically from fermentation of various sugars from carbohydrates found in agricultural crops and cellulosic residues from crops or wood. It is used in the United States as a gasoline octane enhancer and oxygenate.
feedstocks	Crude oil or partially refined petroleum products that are further processed into refined products.
jobber	A petroleum marketer.
LSFO	Low sulfur fuel oil.
Mbbls	Thousand barrels of crude oil or other liquid hydrocarbons.
Mbpd	Thousand barrels per day.
MMbbls	Million barrels of crude oil or other liquid hydrocarbons.
MMbtu	Million British thermal units, a unit of measurement for natural gas.
MMcfd	Million cubic feet per day, a unit of measurement for natural gas.
MW	Megawatt, a unit of measurement for electricity or other energy transfer. A watt is a unit of work at the rate of one joule per second or current at the rate of one ampere across a potential difference of one volt.
NO_x	Nitrogen oxides.
refined products	Petroleum products, such as gasoline, diesel, and jet fuel, that are produced by a refinery.
SO₂	Sulfur dioxide.
SPM	Single point mooring. Also known as a single buoy mooring, refers to a loading buoy that is anchored offshore and serves as an interconnect for tankers loading or offloading crude oil and refined products.
throughput	The volume processed through a unit or refinery.
turnaround	A periodically required standard procedure to inspect, refurbish, repair, and maintain a refinery. This process involves the shutdown and inspection of major processing units and typically occurs every three to seven years, depending on unit type.
ULSD	Ultra-low sulfur diesel.
WTI	West Texas Intermediate crude oil, a light, sweet crude oil, typically characterized by an API gravity between 38 degrees and 40 degrees and a sulfur content of approximately 0.3% by weight that is used as a benchmark for other crude oils.
yield	The percentage of refined products that is produced from crude oil and other feedstocks, net of fuel used as energy.

PART I

Item 1. BUSINESS

OVERVIEW

Par Pacific Holdings, Inc., headquartered in Houston, Texas, owns and operates market-leading energy and infrastructure businesses. Our strategy is to acquire and develop energy and infrastructure businesses in logistically complex, niche markets.

Our business is organized into three primary segments:

1) **Refining** - We own and operate three refineries with total operating crude oil throughput capacity of 154 Mbpd. Our refinery in Kapolei, Hawaii, produces gasoline, jet fuel, ultra-low sulfur diesel (“ULSD”), marine fuel, low sulfur fuel oil (“LSFO”), and other associated refined products primarily for consumption in Hawaii. Our refinery in Newcastle, Wyoming, produces gasoline, jet fuel, ULSD, and other associated refined products that are primarily marketed in Wyoming and South Dakota. Our refinery in Tacoma, Washington, produces gasoline, jet fuel, ULSD, asphalt, and other associated refined products that are primarily marketed in the Pacific Northwest.

2) **Retail** - We operate 119 fuel retail outlets in Hawaii, Washington, and Idaho. Our fuel retail outlets in Hawaii sell gasoline and diesel throughout the islands of Oahu, Maui, Hawaii, and Kauai. We operate convenience stores at 34 of our Hawaii retail fuel outlets under our proprietary “nomnom” brand that sell merchandise such as soft drinks, prepared foods, and other sundries. Our Hawaii retail network includes Hele and “76” branded fuel retail sites, “nomnom” branded company-operated convenience stores, 7-Eleven operated convenience stores, other sites operated by third parties, and unattended cardlock stations. Our retail outlets in Washington and Idaho sell gasoline, diesel, and retail merchandise. Through December 31, 2021, we completed the rebranding of all 29 company-operated convenience stores in Washington and Idaho to “nomnom,” our proprietary brand.

3) **Logistics** - We operate an extensive multi-modal logistics network spanning the Pacific, the Northwest, and the Rocky Mountain regions. We own and operate terminals, pipelines, a single point mooring (“SPM”), and trucking operations to distribute refined products throughout the islands of Oahu, Maui, Hawaii, Molokai, and Kauai. We lease marine vessels for the movement of petroleum, refined products, and ethanol between the U.S. West Coast and Hawaii. We own and operate a crude oil pipeline gathering system, a refined products pipeline, storage facilities, and loading racks in Wyoming and a jet fuel storage facility and pipeline that serve Ellsworth Air Force Base in South Dakota. We own and operate logistics assets in Washington, including a marine terminal, a unit train-capable rail loading terminal, storage facilities, a truck rack, and a proprietary pipeline that serves Joint Base Lewis McChord. In 2020, we completed a project at our Tacoma, Washington, location to allow for the storage and shipment of ethanol through our unit train and marine terminals.

We also own a 46.0% equity investment in Laramie Energy, LLC (“Laramie Energy”), a joint venture entity focused on producing natural gas in Garfield, Mesa, and Rio Blanco counties, Colorado.

On November 26, 2018, we entered into a Purchase and Sale Agreement to acquire U.S. Oil & Refining Co. and certain affiliated entities (collectively, “U.S. Oil”), a privately-held downstream business (the “Washington Acquisition”). The Washington Acquisition included a 42 Mbpd refinery, a marine terminal, a unit train-capable rail loading terminal, and 2.9 MMbbls of refined product and crude oil storage. The refinery and associated logistics system are strategically located in Tacoma, Washington, and currently serve the Pacific Northwest market. On January 11, 2019, we completed the Washington Acquisition for a total purchase price of \$326.5 million, including acquired working capital, consisting of cash consideration of \$289.5 million and approximately 2.4 million shares of our common stock with a fair value of \$37.0 million issued to the seller of U.S. Oil. The Washington refinery’s results of operations are included in our refining and logistics segments commencing January 11, 2019.

Our Corporate and Other reportable segment primarily includes general and administrative costs. Please read Note 22—Segment Information to our consolidated financial statements under Item 8 of this Form 10-K for detailed information on our operating results by segment.

Impacts of the COVID-19 Pandemic

The spread and severity of the coronavirus (“COVID-19”) pandemic, in conjunction with government and other preventative measures taken to mitigate the spread of the virus, have caused severe disruptions in the worldwide economy,

including the global demand for crude oil and refined products, the movement of people and goods in the United States, and the global supply chain for industrial and commercial production, all of which have in turn disrupted our businesses and operations and impacted our financial performance in 2021 and 2020. We continue to actively monitor the impact of the global situation on our people, operations, financial condition, liquidity, suppliers, customers, and industry, and are actively responding to the impacts that these matters have on our business. Please read “Item 1A. — Risk Factors” and “Item 7. — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Overview” for further discussion of the risks, uncertainties, and actions we have taken in response to the global COVID-19 pandemic and resulting economic impact.

Corporate Information

Our common stock is listed and trades on the New York Stock Exchange (the “NYSE”) under the ticker symbol “PARR.” Our principal executive office is located at 825 Town & Country Lane, Suite 1500, Houston, Texas 77024 and our telephone number is (281) 899-4800. Throughout this Annual Report on Form 10-K, the terms “Par,” the “Company,” “we,” “our,” and “us” refer to Par Pacific Holdings, Inc. and its consolidated subsidiaries unless the context suggests otherwise.

Available Information

Our website address is www.parpacific.com. Information contained on our website is not part of this Annual Report on Form 10-K. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any other materials filed with, or furnished to, the U.S. Securities and Exchange Commission (“SEC”) by us are available on our website (under “Investors”) free of charge, as soon as reasonably practicable after such reports are filed with, or furnished to, the SEC. Alternatively, you may access these reports at the SEC’s website at www.sec.gov.

OPERATING SEGMENTS

Refining

Our refining segment buys and refines crude oil and other feedstocks into petroleum products (such as gasoline and distillates) at our Hawaii, Wyoming, and Washington refineries.

Hawaii Refinery

Our Hawaii refinery is located in Kapolei, Hawaii, on the island of Oahu, and is rated at 94 Mbd operating throughput capacity. The Hawaii refinery’s major processing units, listed in the table below, produce liquified petroleum gas (“LPG”), naphtha, gasoline, jet fuel, USLD, marine fuel, LSFO, high sulfur fuel oil (“HSFO”), asphalt, and other associated refined products. We believe the configuration of our Hawaii refinery uniquely fits the demands of the Hawaii market.

Set forth below are summaries of the operating capacity of our Hawaii refinery as of December 31, 2021:

Hawaii Refining Unit	Capacity (Mbd)
Crude Oil Distillation Units	94
Vacuum Distillation Units	40
Hydrocracker	19
Catalytic Reformer	13
Visbreaker	11
Naphtha Hydrotreater	13
Diesel Hydrotreater	10

Hawaii Refining Unit	Capacity
Hydrogen Plant (MMcfd)	18
Co-generation Turbine Unit (MW)	20

We source our crude oil for the Hawaii refinery from North America, Asia, Latin America, Africa, the Middle East, and other sources.

Crude oil is received into the Hawaii refinery’s tank farm, which includes 3.4 MMbbls of total owned crude oil storage and/or third-party crude oil storage. We process the crude oil through various refining units into products and store them in the

Hawaii refinery’s owned 3.3 MMbbls of refined product storage and additional third-party product storage. This storage capacity allows us to manage the various product requirements of our customers.

We finance our Hawaii refinery’s hydrocarbon inventories through our Supply and Offtake Agreement with J. Aron & Company LLC (“J. Aron”). Under the Supply and Offtake Agreement, J. Aron holds title to all crude oil and refined product stored in tankage at the Hawaii refinery. We purchase crude oil from J. Aron on a daily basis at market prices and sell refined products to J. Aron as they are produced. We repurchase these refined products from J. Aron prior to selling them to third parties.

The Hawaii refinery operated at an average combined crude oil throughput of 82.0 Mbd, or 87% of crude oil utilization, to meet local demand for the year ended December 31, 2021. Our Par West refinery was idled in March 2020 for economic reasons and we are evaluating alternative uses for the site. In 2020, we executed a turnaround in Hawaii, which resulted in lower throughput and utilization outside of market conditions. For further operational statistics regarding our Hawaii refining operations, please read “Item 7. — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations.”

Our Hawaii refining business contracts with wholesale and bulk customers as well as our Hawaii retail network. Many of these contracts also involve use of our Hawaii logistics assets to ultimately serve each customer. Wholesale customers include jobbers and other non-end users, as well as 43 locations where we deliver fuel to a location that subsequently sells the product at retail to the end user. Bulk customers include utilities, airlines, military, marine vessels, industrial end-users, and exporters.

The profitability of our Hawaii refining business is heavily influenced by crack spreads in the Singapore market. This market reflects the closest liquid market alternative to source refined products for Hawaii. Prior to 2020, the 4-1-2-1 Singapore crack spread (or four barrels of Brent crude oil converted into one barrel of gasoline, two barrels of distillates (diesel and jet fuel) and one barrel of fuel oil) best reflected a market indicator for our Hawaii refinery’s operations. The 4-1-2-1 Singapore crack spread averaged \$6.68 per barrel during 2019 with a low of \$4.34 per barrel average in the fourth quarter and a high of \$9.36 per barrel average in the third quarter. In 2020, we began shifting our Hawaii production profile to supply the local utilities with low sulfur fuel oil and significantly reduced our high sulfur fuel oil yield. Following the implementation of new standards by the International Marine Organization (“IMO”) beginning in 2020, we established 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)) as a new benchmark for our Hawaii operations. The 3-1-2 Singapore Crack Spread averaged \$6.22 per barrel during the year ended December 31, 2021 with a low of \$3.80 per barrel average in the first quarter and a high of \$10.49 per barrel average in the fourth quarter.

Below is a summary of average crack spreads for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,		
	2021	2020	2019
3-1-2 Singapore Crack Spread	\$ 6.22	\$ 3.15	\$ 10.80

Washington Refinery

Our Washington refinery is located in Tacoma, Washington, on approximately 139 fee-owned acres and is rated at 42 Mbd throughput capacity. The Washington refinery’s major processing units include crude oil distillation, vacuum, jet treating, diesel hydrotreating, isomerization, and reforming units, which produce ULSD, jet fuel, gasoline, asphalt, and other associated refined products that are primarily marketed in the Pacific Northwest. For further operational statistics regarding our Washington refining operations, please read “Item 7. — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations.”

We source our crude oil for the Washington refinery primarily from Canadian and Bakken producers as well as other North American sources. Most of the crude oil is delivered to the refinery via our owned unit train facility and the rest is delivered by barge.

Crude oil is received into the refinery tank farm, which includes 1.2 MMbbls of total crude oil storage. We process the crude oil through various refining units into products and store them in the refinery’s 1.5 MMbbls of refined product tankage. This storage capacity allows us to manage the various product requirements of our customers in the state of Washington and other targeted market destinations. In 2020, 0.2 MMbbls of crude oil storage was repositioned as renewable fuels storage as part of the completion of our project to allow for storage and throughput of renewable fuels at the refinery.

We finance our Washington refinery hydrocarbon inventories through an intermediation arrangement (the “Washington Refinery Intermediation Agreement”) with Merrill Lynch Commodities, Inc. (“MLC”). Under this arrangement, U.S. Oil purchases crude oil supplied from third-party suppliers and MLC provides credit support for certain crude oil purchases. MLC’s credit support can consist of either providing a payment guaranty, causing the issuance of a letter of credit from a third party issuing bank, or purchasing crude oil directly from third parties on our behalf. U.S. Oil holds title to all crude oil and refined products inventories at all times and pledges such inventories, together with all receivables arising from the sales of these inventories, exclusively to MLC.

Set forth below is a summary of the capacity of our Washington refinery as of December 31, 2021:

Washington Refining Unit	Capacity (Mbpd)
Crude Oil Distillation Unit	42
Vacuum Unit	19
Naptha Hydrotreaters	13
Catalytic Reformers	7
Diesel Hydrotreater	8
Isomerization	5

The Washington refinery operated at an average throughput of 36.3 Mbpd, or 86% utilization, for the year ended December 31, 2021. In 2021, we executed the first phase of a turnaround in Washington, which resulted in lower throughput and utilization outside of market conditions.

Our Washington refining business transports crude oil and refined products through our logistics network and sells refined products to wholesale, bulk, and retail customers primarily in the Pacific Northwest.

We believe the Pacific Northwest 5-2-2-1 Index is the best 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 (ULSD and jet fuel), and one part fuel oil as created from five barrels of Alaskan North Slope (“ANS”) crude oil. The Pacific Northwest 5-2-2-1 Index averaged \$15.95 per barrel during the year ended December 31, 2021 with a low of \$11.46 per barrel average in the first quarter and a high of \$18.59 per barrel average in the third quarter.

Below is a summary of average crack spreads and crude oil prices per barrel for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,					
	2021		2020		2019	
Pacific Northwest 5-2-2-1 Index (1)	\$	15.95	\$	11.44	\$	15.02
Bakken Clearbrook	\$	68.20	\$	37.19	\$	56.04
WCS Hardisty	\$	54.61	\$	27.45	\$	43.18
ANS	\$	71.49	\$	41.77	\$	65.72

(1) The 2019 prices for the year ended December 31, 2019 represent the price averaged over the period from January 11, 2019 to December 31, 2019.

Wyoming Refinery

Our Wyoming refinery is located in Newcastle, Wyoming, on approximately 121 fee-owned acres and with a capacity of 18 Mbpd throughput. The Wyoming refinery’s major processing units include crude oil distillation, catalytic cracker, naphtha hydrotreating, and reforming units, which produce gasoline, ULSD, jet fuel, and other associated refined products.

We source our crude oil for the Wyoming refinery from local producers in the Rocky Mountain region of the United States and North Dakota as well as other North American sources. Most of the crude oil is delivered to the refinery via our owned pipeline network and the rest is delivered by truck.

Crude oil is received into the refinery tank farm and crude oil terminals, which include 267 Mbbls of total crude oil storage. We process the crude oil through various refining units into products and store them in the Wyoming refinery’s 513

Mbbls of refined product tankage. The Wyoming refinery’s storage capacity allows us to manage the various product requirements of our customers in the states of Wyoming and South Dakota and other targeted market destinations.

Set forth below is a summary of the capacity of our Wyoming refinery as of December 31, 2021:

Wyoming Refining Unit	Capacity (Mbpd)
Crude Oil Distillation Unit	18
Residual Fluid Catalytic Cracker	7
Catalytic Reformer	4
Naphtha Hydrotreater	4
Diesel Hydrotreater	6
Isomerization	5

The Wyoming refinery operated at an average throughput of 16.9 Mbpd, or 94% utilization, for the year ended December 31, 2021. In 2020, we executed a turnaround in Wyoming, which resulted in lower throughput and utilization outside of market conditions. For further operational statistics regarding our Wyoming refining operations, please read “Item 7. — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations.”

Our Wyoming refining business transports refined products through our logistics network to wholesale, bulk, and retail customers primarily in Wyoming and South Dakota. Products are also distributed by rail from our refinery to markets beyond our logistics network.

We believe the Wyoming 3-2-1 crack spread, a 50%/50% blend of Rapid City 3-2-1 and Denver 3-2-1 (WTI based) crack spreads, best reflects a market indicator for our Wyoming refining and fuel distribution operations. The Wyoming 3-2-1 Index, or three barrels of WTI converted into two barrels of gasoline and one barrel of distillates (jet fuel and diesel), averaged \$29.00 per barrel during 2021 with a low of \$20.97 per barrel average in the first quarter and a high of \$41.78 per barrel average in the third quarter.

Below is a summary of average crack spreads for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,		
	2021	2020	2019
Wyoming 3-2-1 Index	\$ 29.00	\$ 17.80	\$ 24.90

Competition

All facets of the energy industry are highly competitive. Our competitors include major integrated, national, and independent energy companies. Many of these competitors have greater financial and technical resources and staff which may allow them to better withstand and react to changing and adverse market conditions.

Our refining business sources and obtains all of our crude oil from third-party sources and competes globally for crude oil and feedstocks. Our Hawaii refinery, through our facility with J. Aron, has access to a large variety of markets for crude oil imports and product exports. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for further information.

Our Washington refinery utilizes an intermediation arrangement with MLC and sources its crude oil and feedstocks primarily from North Dakota and Canada. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for further information. Our Wyoming refinery sources its crude oil and feedstocks primarily from the Petroleum Administration for Defense District IV Rocky Mountain (“PADD IV”) region of the United States.

Our Hawaii refinery’s product slate is tailored to meet local on-island demand. Outside the Hawaii market, our refined product sales from our Hawaii refinery typically target the U.S. West Coast market. Our Washington refinery primarily sells refined products in the Pacific Northwest region. Our Wyoming refinery primarily sells refined products locally in the PADD IV region.

Retail

The retail segment includes 90 locations in Hawaii and 29 locations in Washington and Idaho where we set the price to the retail consumer. Of these, 34 of the Hawaii locations and all 29 Washington and Idaho locations are operated by our personnel and include various sizes of convenience stores, snack shops, and kiosks. The remaining 56 Hawaii locations are cardlocks or sites operated by third parties where we retain ownership of the fuel and set retail pricing.

We hold exclusive licenses within the state of Hawaii to utilize the “76” brand for retail locations, with 40 of our retail sites branded “76”. The “76” license agreement expires October 31, 2031, unless extended by mutual agreement. An additional 42 of our sites operate under our proprietary Hele fuel brand. Since its launch in 2016, the Hele brand has won several awards for being the preferred fuel choice for Hawaii customers. Our eight cardlock locations on Kauai are branded Kauai Automated Fuels (“KAF”). All 34 company-operated convenience stores in Hawaii are branded “nomnom,” our proprietary brand.

We operate convenience stores at all 29 of our retail fuel outlets in Washington and Idaho. As part of our 2018 acquisition of these retail outlets, we entered into a multi-year branded petroleum marketing agreement for the continued supply of Cenex®-branded refined products to the acquired Cenex® Zip Trip convenience stores. As of December 31, 2021, we had completed the rebranding of all of our retail outlets in Washington and Idaho from the “Cenex®” and “Zip Trip®” brand names to our proprietary “nomnom” brand. As these stores were rebranded, we began self-supplying the fuel with equity barrels and/or unbranded fuels procured in the open market.

Competition

Competitive factors that affect our retail performance include product price, station appearance, location, customer service, and brand awareness. Our Hawaii competitors include the Shell, Texaco, Costco, Safeway, and Sam’s Club national brands, regional brand Aloha, and other local retailers. Competitors of our Pacific Northwest retail assets include the Chevron, Exxon, Conoco, Safeway, and Costco national brands, regional brands such as Maverik, Holiday, and Fred Meyer, and other local retail brands.

Logistics

Our logistics segment generates revenues by charging fees for transporting crude oil to our refineries, delivering refined products to wholesale and bulk customers and to our retail business, and storing crude oil and refined products. Substantially all of our revenues from our logistics segment represent intercompany transactions that are eliminated in consolidation.

Hawaii Logistics

Our logistics network extends throughout the state of Hawaii. On Oahu, the system begins with our SPM located 1.7 miles offshore of our Hawaii refinery. This SPM allows for the safe, reliable, and efficient receipt of crude oil shipments to the Hawaii refinery, as well as both the receipt and export of finished products. Connecting the SPM to the Hawaii refinery are three undersea pipelines: a 30-inch line for crude oil, a 20-inch line, and a 16-inch line, both for the import or export of refined products. We also have an on-shore pipeline manifold which allows for crude oil to be transferred from an undersea pipeline owned by IES Downstream, LLC (“IES”) to the SPM and from the SPM to the Hawaii refinery. From the Hawaii refinery’s gates, we distribute refined products through our logistics network throughout the islands of Oahu, Maui, Hawaii, Molokai, and Kauai and for export to the U.S. West Coast and Asia.

The Oahu logistics network includes a 27-mile wholly owned and operated pipeline network that transports refined products from our Hawaii refinery to delivery locations. The majority of our Oahu refined product volumes are distributed through a multi-product pipeline (the “Honolulu Products Pipeline”) to (i) our leased and operated Sand Island terminal, (ii) the Honolulu International Airport, (iii) interconnections to Navy and Air Force fuel facilities, and (iv) two third-party terminals in Honolulu Harbor. In addition to the Honolulu Products Pipeline, we own four proprietary pipelines connecting our Hawaii refinery to Kalaeloa Barbers Point Harbor, approximately three miles from the Hawaii refinery. The four pipelines deliver refined products to barges for distribution to the neighboring islands or export, the local utility pipeline and storage network, and another third-party terminal on the west side of Oahu. The Oahu pipeline network is generally configured to be bidirectional, allowing for both delivery and receipt of products. We also operate a proprietary trucking business on Oahu to distribute gasoline and road diesel to the final point of sale.

We have a long-term agreement with IES for storage and throughput at the Hawaii refinery which provides for the right to utilize 2 MMbbls of dedicated crude oil and refined product storage, as well as certain IES logistics assets, including its off-shore mooring and Honolulu pipeline system. Our terminal facilities on Oahu include our Sand Island facility that

comprises two tanks with a total capacity of 30 Mbbls, as well as contractual rights to utilize strategically located third-party facilities both near the Hawaii refinery and at Honolulu Harbor.

Our logistics network for the islands neighboring Oahu consists of leased barge equipment, refined product tankage, and proprietary trucking operations on the islands of Maui, Hawaii, Molokai, and Kauai. We charter a barge and have service agreements with third parties to serve our neighbor island markets. The barges deliver to, and product is dispensed from, a neighbor island network of seven petroleum terminals with total storage capacity of 301 Mbbls.

In addition to the movements within Hawaii, we also lease Jones Act marine vessels to allow for the movement of petroleum, refined products, and ethanol between the U.S. West Coast and Hawaii.

Washington Logistics

Our Washington logistics network includes 2.8 MMbbls of storage capacity, a proprietary 14-mile jet fuel pipeline that serves Joint Base Lewis McChord, a marine terminal with 15 acres of waterfront property, a unit train-capable rail loading terminal with 107 unloading spots, a manifest rail siding with 32 spots including asphalt, butane, and biodiesel loading and unloading facilities, and a truck rack with six truck lanes and 10 loading arms. These assets provide connectivity to Bakken, Canadian, and Alaskan crude oil, renewable fuels, and the Pacific, West Coast, Pacific Northwest, and Rockies product markets.

Wyoming Logistics

Our Wyoming logistics network includes 190 Mbbls of crude storage tank capacity and a 50-mile crude oil pipeline that provides us access to crude oil from the Powder River Basin. This network also includes a 40-mile refined products pipeline that transports product from our Wyoming refinery to a common carrier with access to Rapid City, South Dakota.

The logistics network in Wyoming includes storage, loading racks, and a rail siding at the refinery site. Our crude oil and refined product tanks at the Wyoming refinery have a total capacity of 593 Mbbls. We also own and operate a jet fuel storage facility and pipeline that serve Ellsworth Air Force Base in South Dakota.

Markets

Hawaii Market

The COVID-19 pandemic continued to have an impact on Hawaii's communities and economy in 2021. In the summer of 2021, however, there was a strong rebound in domestic tourists visiting Hawaii. Through the Hawaii Safe Travels program, visitors were able to provide proof of vaccination or a negative COVID-19 test to avoid the 14-day quarantine period. Restrictions that were in place in 2020 on travel, business closures, and in-person gatherings began to be lifted, which allowed for the beginning of an economic recovery. While domestic tourism has been near or at pre-pandemic levels since the summer of 2021, international tourism has yet to return. State economists expect a slow but steady multi-year road to recovery.

According to the University of Hawaii Economic Research Organization's ("UHERO") fourth quarter 2021 report, unemployment dropped from 11.8% at the end of 2020 to 7.7% at the end of 2021, which is still well above Hawaii's pre-pandemic level of 2.6%. Many workers who left the labor force during the pandemic have yet to return. This has led to a tight labor market and upward pressure on wages. Unit labor costs increased by 5% year-over-year nationally and inflation increased by more than 5% in both Hawaii and the U.S., reducing purchasing power. While the payroll job count is expected to expand at a moderate pace over the next two years, the job base in 2023 is expected to be about 5% lower than its 2019 level.

The emergence of the Omicron variant in late 2021 presented additional uncertainty. Renewed international travel restrictions have reduced the near-term visitor outlook. Once the situation eases, the return of international tourists is expected to permit a broader industry recovery in 2022. Moderate job gains are expected heading into 2022, but several factors will weigh on progress, including continuing labor shortages, the end of pandemic fiscal and monetary support, and higher inflation.

Despite the challenges mentioned above, we expect our business to continue to recover in 2022.

Pacific Northwest and Rockies Markets

Spokane, Washington, and Northwest Idaho are the primary regions of our Pacific Northwest retail operations and are enjoying significantly higher population growth rates than the country as a whole. The U.S. Census Bureau noted that the population increased 14.6% in Washington and 17.3% in Idaho from 2010 to 2020 versus a national increase of only 7.4%. Spokane is a regional hub in eastern Washington, with a population of over a half million and a variety of employers in health

care, retail, and other industries. According to the U.S. Bureau of Economic Analysis (the “BEA”), personal income for the Spokane metro area grew by 13.4% between 2018 and 2020, continuing the trend of positive growth since the 2008-2009 recession.

A significant portion of the products produced by our Washington refinery stay within the Puget Sound region. Washington is one of the fastest growing states in the union and most of this growth is occurring in the Puget Sound area due to large information industry companies like Microsoft Corporation, Amazon.com, Inc., and Expedia Group, Inc. According to the BEA, gross domestic product (“GDP”) for the State of Washington grew by 6.3% from 2019 to 2020.

The primary market for our Wyoming refined products is the Black Hills Region in South Dakota, driven largely by Pennington, Lawrence, and Meade counties, which represents nearly half of the state’s taxable tourism sales. According to the U.S. Census Bureau, the population in Pennington County, the state’s second largest county, increased by 8.2% from 2010 to 2020 compared to 7.4% nationally over the same period. According to the BEA, personal income in South Dakota grew by 8.7% from 2019 to 2020. Additionally, the South Dakota economy expects to get a boost from additional development at Ellsworth Air Force Base as the main operating base for the B-21 Raider and the home for the training unit and an operational squadron.

Demand for gasoline is highly seasonal, with a large increase in demand during the summer driving season. The South Dakota economy is anchored by tourism, including visitors to Mount Rushmore and the Black Hills, as well as government and health care spending. According to the South Dakota Department of Tourism, despite limitations on mobility and economic disruption caused by the COVID-19 pandemic, South Dakota welcomed 13.5 million visitors in 2021, a 26.0% increase as compared to 2020, resulting in visitor spending of approximately \$4.4 billion in 2021, an increase of 29.7% over 2020. In 2021, \$832 million, or 19.1%, of tourism dollars were spent on transportation services, an increase of 29% from 2020, when \$644 million, or 19.2%, of tourism dollars were spent on transportation services.

We also distribute refined products to customers in central and northeastern Wyoming. The economy in Wyoming is sensitive to demand for Powder River Basin coal and other locally-produced commodities. Coal production increased 8% in 2021 and the U.S. Energy Information Administration forecasts that coal production will increase in both 2022 and 2023.

OTHER OPERATIONS

Laramie Energy

As of December 31, 2021, we owned a 46.0% equity investment in Laramie Energy, a joint venture entity focused on producing natural gas in Garfield, Mesa, and Rio Blanco counties, Colorado. We have discontinued the application of the equity method of accounting for our investment in Laramie Energy because the book value of such investment has been reduced to zero. Our investment in Laramie Energy is not material to our consolidated financial statements as of December 31, 2021.

BANKRUPTCY AND PLAN OF REORGANIZATION

Background and General Recovery Trust

In 2011 and 2012, our predecessor, Delta Petroleum Corporation (“Delta”) and its subsidiaries (collectively “Debtors”) filed voluntary petitions under Chapter 11 of the U.S. Bankruptcy Code in the U.S. Bankruptcy Court for the District of Delaware (“Bankruptcy Court”). In March 2012, the Debtors obtained approval from the Bankruptcy Court to proceed with Laramie Energy II, LLC as the sponsor of a plan of reorganization (“Plan”). Delta emerged from bankruptcy, amended and restated its certificate of incorporation and bylaws, changed its name to Par Petroleum Corporation, and contributed the majority of its natural gas and oil properties to Laramie Energy on August 31, 2012 (the “Emergence Date”). The reorganization converted approximately \$265 million of unsecured debt to equity and allowed us to preserve significant tax attributes. On the Emergence Date, the Delta Petroleum General Recovery Trust (“General Trust”) was formed to conclude the bankruptcy.

Shares Reserved for Unsecured Claims

The Plan provides that certain allowed general unsecured claims be paid with shares of our common stock. Pursuant to the Plan, allowed claims are settled at a ratio of 54.4 shares per \$1,000 of claim. As of December 31, 2021, two related claims totaling approximately \$22.4 million remained to be resolved by the Trustee for the General Trust. One of the two remaining claims was filed by the U.S. Government for approximately \$22.4 million relating to ongoing litigation concerning a plugging and abandonment obligation in Pacific Outer Continental Shelf Lease OCS-P 0320, comprising part of the Sword Unit in the Santa Barbara Channel, California. The second unliquidated claim, which is related to the same plugging and abandonment

obligation, was filed by Noble Energy Inc., the operator and majority interest owner of the Sword Unit. We believe the probability of issuing shares to satisfy the full claim amount is remote, as the obligations upon which such proof of claim is asserted are joint and several among all working interest owners and Delta, our predecessor, owned an approximate 3.4% aggregate working interest in the unit.

The settlement of claims is subject to ongoing litigation and we are unable to predict with certainty how many shares will be required to satisfy all claims. We have accrued approximately \$0.5 million representing the estimated value of claims remaining to be settled which are deemed probable and estimable at December 31, 2021.

Closing of the Bankruptcy Cases

On February 27, 2018, the Bankruptcy Court entered its final decree closing the Chapter 11 bankruptcy cases of Delta and the other Debtors, discharging the Recovery Trustee, and finding that all assets of the General Trust were resolved, abandoned, or liquidated and have been distributed in accordance with the requirements of the Plan. In addition, the final decree required the Company or the General Trust, as applicable, to maintain the current reserves owed on account of the remaining claims of the U.S. Government and Noble Energy, Inc.

ENVIRONMENTAL REGULATIONS

General

Our activities are subject to existing federal, state, and local laws and regulations governing environmental quality and pollution control. Although no assurances can be made, we believe that, absent the occurrence of an extraordinary event, compliance with existing federal, state, and local laws, regulations, and rules regulating the release of materials in the environment or otherwise relating to the protection of human health, safety, and the environment will not have a material effect upon our capital expenditures, earnings, or competitive position with respect to our existing assets and operations. We cannot predict what effect additional regulation or legislation, enforcement policies, and claims for damages to property, employees, other persons, and the environment resulting from our operations could have on our activities.

Periodically, we receive communications from various federal, state, and local governmental authorities asserting violations of environmental laws and/or regulations. These governmental entities may also propose or assess fines or require corrective actions for these asserted violations. We intend to respond in a timely manner to all such communications and to take appropriate corrective action. Except as disclosed below, we do not anticipate that any such matters currently asserted will have a material impact on our financial condition, results of operations, or cash flows.

Refining activities

Like other petroleum refiners, our operations are subject to extensive and periodically-changing federal and state environmental regulations governing air emissions, wastewater discharges, and solid and hazardous waste management activities. Many of these regulations are becoming increasingly stringent and the cost of compliance can be expected to increase over time. Our policy is to accrue environmental and clean-up related costs of a non-capital nature when it is probable that a liability has been incurred and the amount can be reasonably estimated. Such estimates may be subject to revision in the future as regulations and other conditions change.

Climate Change and Regulation of Greenhouse Gases

According to many scientific studies, emissions of CO₂, methane, NO_x, and other gases commonly known as greenhouse gases (“GHGs”) may be contributing to global warming of the earth’s atmosphere and to global climate change. In response to the scientific studies, legislative and regulatory initiatives have been underway to limit GHG emissions. The U.S. Supreme Court determined that GHG emissions fall within the federal Clean Air Act (“CAA”) definition of an “air pollutant.” In response, the U.S. Environmental Protection Agency (“EPA”) promulgated an endangerment finding, paving the way for regulation of GHG emissions under the CAA. The EPA has now begun regulating GHG under the CAA. New construction or material expansions that meet certain GHG emissions thresholds will likely require that, among other things, a GHG permit be issued in accordance with the federal CAA regulations, and we will be required, in connection with such permitting, to undertake a technology review to determine appropriate controls to be implemented with the project in order to reduce GHG emissions. Based on current company operations, however, our existing refining activities are not subject to current federal GHG permitting requirements.

The EPA has also promulgated rules requiring large sources to report their GHG emissions. Reports are being made in connection with our refining business. Sources subject to these reporting requirements also include on and offshore petroleum

and natural gas production and onshore natural gas processing and distribution facilities that emit 25,000 metric tons or more of CO₂ equivalent per year in aggregate emissions from all site sources.

In 2007, the State of Hawaii passed Act 234, which required that GHG emissions be rolled back on a statewide basis to 1990 levels by the year 2020. In June of 2014, the Hawaii Department of Health (“DOH”) adopted regulations that require each major facility to reduce CO₂ emissions by 16% by 2020 relative to a calendar year 2010 baseline (the first year in which GHG emissions were reported to the EPA under 40 CFR Part 98). The GHG rules include an alternative for facilities to demonstrate that further GHG reductions are not economically viable and an additional provision that authorized the DOH to issue a waiver if GHGs are being effectively controlled as a consequence of other state initiatives and regulations such as the Renewable Portfolio Standard. The Hawaii GHG regulation allows for “partnering” with other facilities that have or are expected to make more significant CO₂/GHG reductions. Accordingly, our Par East and Par West Hawaii refineries submitted a GHG reduction plan and a permit application that incorporated the partnering provisions. The DOH issued a GHG permit, which caps GHG emissions from both refineries at 904,945 metric tons per year which (as required by regulation) is 16% below the combined facility GHG emission levels of 2010. In 2020, the year in which operation of the Par West crude unit was suspended, both refineries reported a combined GHG emission total of 619,609 metric tons (which is 32% below the Title V permit limit). Consequently no additional operating constraints nor capital for modifications will be required to comply with the State’s current GHG regulation.

In addition to the Hawaii GHG legislation, the State of Washington and its political subdivisions have passed several climate-focused laws in 2021 that are relevant to our Tacoma, Washington location. These include a low-carbon fuel standard designed to reduce the carbon intensity of transportation fuels by twenty percent by 2038 and a “cap and trade”-style program for GHG emissions covering industrial facilities starting in 2023. As both legislative programs are presently undergoing rulemaking processes at the Washington Department of Ecology, the contours of both sets of requirements are not yet clear. In addition to action by the State, on November 16, 2021, the Tacoma City Council adopted its Tideflats and Industrial Land Use Regulations, which prohibits new petroleum storage and allows for only limited additions of clean fuel infrastructure.

Further regulatory, legislative, and judicial developments are likely to occur in the future. The new Administration’s Executive Orders signaling a return to the Paris Climate Accord and voiding the prior Administration’s orders on the social cost of carbon suggest the imminence of such changes. Such developments may affect how these GHG initiatives will impact us. They may also impact the use of and demand for petroleum products, which could impact our business. Further, apart from these developments, tort claims alleging property damage against GHG emissions sources may be asserted. Due to the uncertainties surrounding the regulation of and other risks associated with GHG emissions, we cannot predict the financial impact of related developments on us.

National Ambient Air Quality Standards

The EPA has adopted a number of more stringent National Ambient Air Quality Standards (“NAAQS”). States are required to develop State Implementation Plans and ultimately local air districts are required to adopt rules designed to improve air quality over time. More stringent air pollutant standards and corresponding rules have already impacted and will continue to cause many refineries to invest heavily in additional air pollution controls. Thus far, Hawaii air quality, particularly on Oahu where our Hawaii refinery is located, has met even the most recent NAAQS and the Hawaii refinery has not been required to install new controls as result of local rules. Even so, NAAQS could and, to a degree, have already forced some changes for our customer base. Power plants on the Big Island, where SO₂ levels are already elevated due to volcanic activity, are switching from LSFO to diesel fuel. On Oahu, the state’s largest utility frequently cites compliance with NAAQS as one of its justifications for moving towards a cleaner bridge fuel, potentially diesel or liquefied natural gas, before reaching its renewable goals. On October 1, 2015, the EPA adopted rules, which were reaffirmed in December 2020, that substantially tightened the NAAQS for ground-level ozone. These rules are causing many areas of the country to develop requirements for additional controls and limits on combustion emissions and emissions of volatile organic compounds. In October 2021, EPA announced that it intends to revisit the December 2020 decision to retain the 2015 NAAQS standard, opening the door to potential additional tightening of those standards and additional requirements for states around the country to adopt more stringent controls. We do not currently anticipate that the more stringent NAAQS will materially impact our Hawaii, Washington, or Wyoming operations, but the risk of impact will increase in Washington as the standard is lowered.

Fuel Standards

In 2007, the U.S. Congress passed the Energy Independence and Security Act (“EISA”) which, among other things, set a target fuel economy standard of 35 miles per gallon for the combined fleet of cars and light trucks in the U.S. by model year 2020 and contained an expanded Renewable Fuel Standard (the “RFS”). In August 2012, the EPA and National Highway Traffic Safety Administration (“NHTSA”) jointly adopted regulations that establish vehicle carbon dioxide emissions standards

and an average industry fuel economy of 54.5 miles per gallon by model year 2025. On August 8, 2018, the EPA and NHTSA jointly proposed to revise existing fuel economy standards for model years 2021-2025 and to set standards for 2026 for the first time. On March 31, 2020, the agencies released updated fuel economy and vehicle emissions standards, which provide for an increase in stringency by 1.5% each year through model year 2026, as compared with the standards issued in 2012 that required 5% annual increases. On December 30, 2021, the EPA and NHTSA published a final rule containing additional fuel efficiency standards for cars and light trucks that include 5-10% reductions of GHG emissions annually through model year 2026. Higher fuel economy standards have the potential to reduce demand for our refined transportation fuel products.

Under EISA, the RFS requires an increasing amount of renewable fuel to be blended into the nation's transportation fuel supply, up to 36 billion gallons by 2022. Over time, higher annual RFS requirements have the potential to reduce demand for our refined transportation fuel products. In the near term, the RFS will be satisfied primarily with fuel ethanol blended into gasoline. We, and other refiners subject to the RFS, may meet the RFS requirements by blending the necessary volumes of renewable fuels produced by us or purchased from third parties. To the extent that refiners will not or cannot blend renewable fuels into the products they produce in the quantities required to satisfy their obligations under the RFS program, those refiners must purchase renewable credits, referred to as Renewable Identification Numbers ("RINs"), to maintain compliance. To the extent that we exceed the minimum volumetric requirements for blending of renewable fuels, we can retain these RINs for current or future RFS compliance or sell those on the open market. On December 21, 2021, the EPA published proposed RFS that include retroactive cuts to earlier 2020 quotas, set 2021 targets at levels of renewable fuels that were actually used, and would establish significantly higher volume requirements for 2022. Whether that rule will be finalized as proposed and how the final rule will fare in the courts may significantly alter our obligations to blend renewable fuels or purchase RINs. The RFS may present production and logistics challenges for both the renewable fuels and petroleum refining and marketing industries in that we may have to enter into arrangements to purchase RINs with other parties or purchase cellulosic biofuels RINs ("D3") waivers from the EPA to meet our obligations to use advanced biofuels, including biomass-based diesel and cellulosic biofuel, with potentially uncertain supplies of these new fuels.

In October 2010, the EPA issued a partial waiver decision under the federal CAA to allow for an increase in the amount of ethanol permitted to be blended into gasoline from 10% ("E10") to 15% ("E15") for 2007 and newer light duty motor vehicles. In 2019, the EPA approved year-round sales of E15 but that approval has been overturned by the courts and, as of January 10, 2022, the Supreme Court has declined to review further appeals on that subject. There are numerous issues, including state and federal regulatory issues, that need to be addressed before E15 can be marketed on a large scale for use in traditional gasoline engines; however, increased renewable fuel in the nation's transportation fuel supply could reduce demand for our refined products.

In March 2014, the EPA published a final Tier 3 gasoline standard that requires, among other things, that gasoline contain no more than 10 parts per million ("ppm") sulfur on an annual average basis and no more than 80 ppm sulfur on a per-gallon basis. The standard also lowers the allowable benzene, aromatics, and olefins content of gasoline. The effective date for the new standard was January 1, 2017, however, approved small volume refineries had until January 1, 2020 to meet the standard. The Hawaii refinery was required to comply with Tier 3 gasoline standards within 30 months of June 21, 2016, the date it was disqualified from small volume refinery status. On March 19, 2015, the EPA confirmed the small refinery status of our Wyoming refinery. The Hawaii refinery, our Wyoming refinery, and our Washington refinery, acquired in January 2019, were all granted extensions of small refinery exemptions by the EPA for 2018. All our refineries are Tier 3 compliant.

Beginning on June 30, 2014, new sulfur standards for fuel oil used by marine vessels operating within 200 miles of the U.S. coastline (which includes the entire Hawaiian Island chain) were lowered from 10,000 ppm (1%) to 1,000 ppm (0.1%). The sulfur standards began at the Hawaii refinery and were phased in so that by January 1, 2015, they were fully aligned with the IMO standards and deadline. The more stringent standards apply universally to both U.S. and foreign flagged ships. Although the marine fuel regulations provided vessel operators with a few compliance options such as installation of on-board pollution controls and demonstration unavailability, many vessel operators were forced to switch to a distillate fuel while operating within the Emission Control Area ("ECA"). Beyond the 200 mile ECA, large ocean vessels are still allowed to burn marine fuel with up to 3.5% sulfur. Our Hawaii refinery is capable of producing the 1% sulfur residual fuel oil that was previously required within the ECA. Although our Hawaii refinery remains in a position to supply vessels traveling to and through Hawaii, the market for 0.1% sulfur distillate fuel and 3.5% sulfur residual fuel is much more competitive. In addition to U.S. fuels requirements, the IMO has adopted newer standards that further reduce the global limit on sulfur content in maritime fuels to 0.5% beginning in 2020 ("IMO 2020").

In addition to federal requirements, several states, including Washington, have proposed or enacted low carbon fuel standards applicable to transportation fuels. The Washington proposal would create a carbon intensity score for transportation fuels, and require fuel producers and importers who fall short of carbon intensity goals to purchase credits.

There will be compliance costs and uncertainties regarding how we will comply with the various requirements contained in the EISA, RFS, and other fuel-related regulations. We may experience a decrease in demand for refined petroleum products due to an increase in combined fleet mileage or due to refined petroleum products being replaced by renewable fuels.

Solid and Hazardous Waste

Several of our businesses generate wastes, including hazardous wastes, that are subject to regulation under the federal Resource Conservation and Recovery Act (“RCRA”) and state statutes. The EPA has limited the disposal options for certain hazardous wastes and state regulation of the handling and disposal of refining and natural gas and oil exploration and production wastes and solid wastes is becoming more stringent.

Naturally Occurring Radioactive Materials (“NORM”) are radioactive materials that accumulate on production equipment or area soils during oil and natural gas extraction or processing. Primary responsibility for NORM regulation has been a state function. Standards have been developed for worker protection; treatment, storage, and disposal of NORM waste; management of waste piles, containers, and tanks; and limitations upon the release of NORM-contaminated land for unrestricted use. We believe that our operations are in material compliance with all applicable NORM standards.

Superfund

The Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”), also known as the “Superfund” law, imposes liability, without regard to fault or the legality of the original conduct, on certain persons with respect to the release or threatened release of a “hazardous substance” into the environment. These persons include the current owner and operator of a site, any former owner or operator who operated the site at the time of a release, transporters, and persons that disposed or arranged for the disposal of hazardous substances at a site. CERCLA also authorizes the EPA and, in some cases, third parties to take actions in response to threats to the public health or the environment and to seek to recover from the responsible persons the costs of such action. State statutes impose similar liability.

Under CERCLA, the term “hazardous substance” does not include “petroleum, including crude oil or any fraction thereof,” unless specifically listed or designated. While this “petroleum exclusion” lessens the significance of our operations, we may generate wastes that may fall within CERCLA’s definition of a “hazardous substance” in the course of our ordinary refining operations. Although we and, to our knowledge, our predecessors have used operating and disposal practices that were standard in the industry at the time, “hazardous substances” may have been disposed or released on, under, or from the properties currently or historically owned or leased by us or on, under, or from other locations where these wastes have been taken for disposal. At this time, we do not believe that we have any liability associated with any Superfund site and we have not been notified of any claim, liability, or damages under CERCLA.

Oil Pollution Act

The Oil Pollution Act of 1990 (“OPA”) and regulations thereunder impose a variety of requirements on “responsible parties” related to the prevention of crude oil spills and liability for damages resulting from such spills in U.S. waters. A “responsible party” includes the owner or operator of a facility or vessel or the lessee or permittee of the area in which an offshore facility is located. While liability limits apply in some circumstances, few defenses exist to the liability imposed by the OPA. We are not aware of the occurrence of any action or event that would subject us to liability under OPA and we believe that compliance with OPA’s financial responsibility and other operating requirements will not have a material adverse effect on us.

Discharges and Marine Protection

The Clean Water Act (“CWA”) regulates the discharge of pollutants to waters of the U.S., including wetlands, and requires a permit for the discharge of pollutants, including petroleum, to such waters. Certain facilities that store or otherwise handle crude oil are required to prepare and implement Spill Prevention, Control, and Countermeasure and Facility Response Plans relating to the possible discharge of oil to surface waters. We are required to prepare and comply with such plans and to obtain and comply with discharge permits. We believe we are in substantial compliance with these requirements and that any noncompliance would not have a material adverse effect on us. The CWA also prohibits spills of oil and hazardous substances to waters of the U.S. in excess of levels set by regulations and imposes liability in the event of a spill.

Other statutes provide protection to animal and plant species. These laws and regulations may require the acquisition of a permit or other authorization before drilling or construction related to the oil and gas industry commences and may limit or prohibit construction, drilling, and other activities on certain lands lying within wilderness or wetlands and other protected areas and impose substantial liabilities for pollution resulting from our operations. For example, the Magnuson amendment to the

Marine Mammal Protection Act may limit or restrict certain new oil terminals and oil-by-rail infrastructure in the state of Washington.

State laws further regulate discharges of pollutants to surface and groundwaters, require permits that set limits on discharges to such waters, and provide civil and criminal penalties and liabilities for spills to both surface and groundwaters. Some states have imposed regulatory requirements to respond to concerns related to potential for groundwater impact from oil and gas exploration and production. For example, the Colorado Oil and Gas Conservation Commission (“COGCC”) approved rules that require sampling of groundwater for hydrocarbons and other indicator compounds both before and after drilling.

Air Emissions

Our refining operations are subject to local, state, and federal regulations for the control of emissions from sources of air pollution. Administrative enforcement actions for failure to comply strictly with air regulations or permits may be resolved by payment of monetary fines and correction of any identified deficiencies. Alternatively, regulatory agencies could impose civil and criminal liability for non-compliance. An agency could require us to forgo construction or operation of certain air emission sources. We believe that we are in substantial compliance with air pollution control requirements.

Our refining business is subject to very significant state and federal air permitting and pollution control requirements, including some that are the subject of ongoing enforcement activities by the EPA as described in more detail below. The EPA continues to review and, in many cases, tighten ambient air quality standards, which standards, along with the advancement of pollution control technologies, could result in new regulatory and permit requirements that will impact our refining activities and involve additional costs.

On September 29, 2015, the EPA announced a final rule updating standards that control toxic air emissions from petroleum refineries, addressing, among other things, flaring operations, fence-line air quality monitoring, and additional emission reductions from storage tanks and delayed coking units. Compliance with this rule has not had a material impact on our financial condition, results of operations, or cash flows to date.

Coastal Coordination

There are various federal and state programs that regulate the conservation and development of coastal resources. The federal Coastal Zone Management Act (“CZMA”) was passed to preserve and, where possible, restore the natural resources of the coastal zone of the U.S. The CZMA provides for federal grants for state management programs that regulate land use, water use, and coastal development.

Environmental Agreement

On September 25, 2013, Par Petroleum, LLC (formerly known as Hawaii Pacific Energy; a wholly owned subsidiary of Par created for purposes of acquiring Par Hawaii Refining, LLC (“PHR”)), Tesoro Corporation (“Tesoro,” which changed its name to Andeavor Corporation before being purchased by Marathon Petroleum Company in October 2018), and PHR entered into an Environmental Agreement (“Environmental Agreement”) that allocated responsibility for known and contingent environmental liabilities related to the acquisition of PHR, including a consent decree.

Other Government Regulation

Impact of Dodd-Frank Act Derivatives Regulation

The Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”), which was passed by the U.S. Congress and signed into law in July 2010, contains significant derivatives regulation, including requirements that certain transactions be cleared on exchanges and that collateral (commonly referred to as “margin”) be posted for such transactions. The Dodd-Frank Act provides for a potential exception from these clearing and collateral requirements for commercial end users and it includes a number of defined terms used in determining how this exception applies to particular derivative transactions and the parties to those transactions. As required by the Dodd-Frank Act, the Commodities Futures and Trading Commission (“CFTC”) has promulgated numerous rules to define these terms. The CFTC has re-proposed new rules that would place limits on certain core futures and equivalent swap contracts for or linked to certain physical commodities, subject to exceptions for certain bona fide hedging transactions. As these new positions limit rules are not yet final, the impact of those provisions on us is uncertain at this time.

It is possible that the CFTC, in conjunction with prudential regulators, may mandate that financial counterparties entering into swap transactions with end users must do so with credit support agreements in place, which could result in

negotiated credit thresholds above which an end user must post collateral. If this should occur, we intend to manage our credit relationships to minimize collateral requirements.

The CFTC’s final rules may also have an impact on our counterparties. For example, our bank counterparties may be required to post collateral and assume compliance burdens resulting in additional costs. We expect that much of the increased costs could be passed on to us, thereby decreasing the relative effectiveness of our hedges and our profitability. To the extent we incur increased costs or are required to post collateral, there could be a corresponding decrease in amounts available for our capital investment program.

OSHA

We are subject to the requirements of the federal Occupational Safety and Health Act (“OSHA”) and comparable state statutes. The OSHA hazard communication standard, the EPA community right-to-know regulations under Title III of the federal Superfund Amendments and Reauthorization Act, and similar state statutes require us to organize and/or disclose information about hazardous materials used or produced in our operations. Certain of this information must be provided to employees, state and local governmental authorities, and local citizens.

SIGNIFICANT CUSTOMERS

We sell a variety of refined products to a diverse customer base. The majority of our refined products are primarily sold through short-term contracts or on the spot market. For each of the years ended December 31, 2021 and 2020, we had one customer in our refining segment that accounted for 13% of our consolidated revenue. No other customer accounted for more than 10% of our consolidated revenues during the years ended December 31, 2021, 2020, and 2019.

HUMAN CAPITAL

Workforce Composition

At Par, we believe our employees are our most valuable asset. By investing in our employees, we are able to achieve success and continue to execute on our mission and vision. At December 31, 2021, our workforce consisted of 1,336 employees, including 226 employees, or 17% of our total workforce, at our Hawaii and Washington refineries represented by the United Steelworkers Union (“USW”) with collective bargaining agreements which expired on January 31, 2022 and are currently subject to automatic extension periods while the parties continue negotiations. We value all our employees, represented and non-represented, and constantly strive to maintain and improve satisfactory relationships with them. Our 1,336 employees work in the following operating segments throughout the United States:

Operating Segment	Number of Employees
Refining and Logistics	663
Retail	573
Corporate	100
Total	1,336

Diversity

Par is focused on recruiting and developing a diverse workforce. We prioritize outreach activities that increase the diversity of applicants for open positions and actively ensure that all open positions are posted on job boards that target female, minority, disabled, and military veteran candidates. We are developing relationships with local organizations that provide services to historically underserved populations and make them aware of career opportunities at Par. As of December 31, 2021, our workforce consisted of 49% minorities and 6% protected veterans.

Culture and Values

Par is a values-driven company. Our tight-knit community values integrity, creativity, hard work, and respect for others. These four pillars support our successes and strengthen our ability to be an effective and fun place to work. We value innovative thought and rally behind ideas that create new opportunities. We believe this drives our growth and success. We value the unique heritage, experiences, and contributions of everyone we get to work with and serve. Our commitment to doing

the good and right thing with the highest ethical standards helps us to achieve our best results. As we pursue growth and success, we believe it is important to keep our people safe, to value our diversity, and to protect our environment.

Benefits

We offer highly competitive compensation, benefit, and time-off packages to promote employee fulfillment and work-life balance. Our benefits include our employee stock purchase plan, extensive health and wellness benefits, generous time off allowance, and a tuition reimbursement program.

Health and Safety

Safety is paramount to every operation and activity we undertake. We recognize that our responsible stewardship impacts every employee, every contractor, and every member of the community, and we embrace that responsibility. We promote a culture of continual safety improvement with a keen eye for evaluating and managing risk. We continually monitor the implementation of programs, policy, and procedures to achieve this objective.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K may constitute “forward-looking” statements as defined in Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), the Private Securities Litigation Reform Act of 1995 (“PSLRA”), or in releases made by the SEC, all as may be amended from time to time. Such forward-looking statements involve known and unknown risks, uncertainties, and other important factors that could cause our actual results, performance, or achievements to differ materially from any future results, performance, or achievements expressed or implied by such forward-looking statements. Statements that are not historical fact are forward-looking statements. Forward-looking statements can be identified by, among other things, the use of forward-looking language, such as the words “plan,” “believe,” “expect,” “anticipate,” “intend,” “estimate,” “project,” “may,” “will,” “would,” “could,” “should,” “seeks,” or “scheduled to,” or other similar words or the negative of these terms or other variations of these terms or comparable language or by discussion of strategy or intentions. These cautionary statements are being made pursuant to the Securities Act, the Exchange Act, and the PSLRA with the intention of obtaining the benefits of the “safe harbor” provisions of such laws.

The forward-looking statements contained in this Annual Report on Form 10-K are largely based on our expectations, which reflect estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions and other factors. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. In addition, management’s assumptions about future events may prove to be inaccurate. All readers are cautioned that the forward-looking statements contained in this Annual Report on Form 10-K are not guarantees of future performance and we cannot assure any reader that such statements will be realized or that the forward-looking events and circumstances will occur. Actual results may differ materially from those anticipated or implied in the forward-looking statements due to factors described in “Item 1A. — Risk Factors,” “Item 7. — Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and elsewhere in this Annual Report on Form 10-K. 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 the Company’s business, results of operations, financial condition, and liquidity. All forward-looking statements speak only as of the date they are made. We do not intend to update or revise any forward-looking statements as a result of new information, future events, or otherwise. These cautionary statements qualify all forward-looking statements attributable to us or persons acting on our behalf.

Item 1A. RISK FACTORS

Our businesses involve a high degree of risk. You should consider and read carefully the risks and uncertainties described below together with all of the other information contained in this Annual Report on Form 10-K. If any of the following risks, or any risk described elsewhere in this Annual Report on Form 10-K, actually occur, our business, prospects, financial condition, results of operations, or cash flows could be materially adversely affected. In any such case, the trading price of our common stock could decline. The risks described below are not the only ones facing our company. Additional risks not currently known to us or that we currently deem immaterial may also adversely affect us.

OPERATING RISKS

Our operations are subject to operational hazards that could expose us to potentially significant losses.

Our operations are subject to potential operational hazards and risks inherent in refining operations, in transporting and storing crude oil and refined products, and in producing natural gas and oil. Any of these risks, such as fires, explosions, maritime disasters, security breaches, cyber threats, pipeline ruptures and spills, mechanical failure of equipment, and severe weather and natural disasters at our or third-party facilities could result in business interruptions or shutdowns and damage to our properties and the properties of others. The scientific consensus suggests that some of these physical risks to our facilities and third party facilities, especially risks associated with extreme weather, may increase as a result of climate change. A serious accident at our facilities could also result in serious injury or death to our employees or contractors and could expose us to significant liability for personal injury claims and reputational risk. Any such event or unplanned shutdown could have a material adverse effect on our business, financial condition, and results of operations.

The volatility of crude oil prices and refined product prices and changes in the demand for such products may have a material adverse effect on our cash flow and results of operations.

Earnings and cash flows from our refining segment depend on a number of factors, including to a large extent the cost of crude oil and other refinery feedstocks which has fluctuated significantly in recent years. While prices for refined products are influenced by the price of crude oil, the constantly changing margin between the price we pay for crude oil and other refinery feedstocks and the prices we receive for refined products, the crack spread, also fluctuates significantly. The prices we pay and prices we receive depend on numerous factors beyond our control, including the global supply and demand for crude oil, gasoline, and other refined products, which are subject to, among other things:

- changes in the global economy and the level of foreign and domestic production of crude oil and refined products;
- availability of crude oil and refined products and the infrastructure to transport crude oil and refined products;
- local factors, including market conditions, the level of operations of other refineries in our markets, and the volume and price of refined products imported;
- threatened or actual terrorist incidents (including cyber-attacks), acts of war, and other global political conditions;
- changes in the availability or cost of maritime shipping;
- pandemics, public health crises, or other widespread emergencies such as the novel coronavirus (COVID-19);
- government regulations or mandated production curtailments or limitations; and
- weather conditions, hurricanes, or other natural disasters.

For example, the COVID-19 pandemic resulted in significant demand reduction for crude oil and refined products, particularly in the Hawaii market, and abnormal volatility in oil commodity prices, which may continue for the foreseeable future. In addition, the Organization of the Petroleum Exporting Countries (“OPEC”) has agreed to adjust downwards their overall production of crude oil through April 30, 2022, with the agreement to be reassessed in December 2021, to support crude oil prices. And the Alberta government has previously mandated crude oil production cuts in a region where our Washington refinery sources crude oil. Such an action, or any similar actions, could result in an increase in the price we pay for crude oil, which may result in a decrease in the expected earnings and cash flows generated by our refining business.

In addition, we purchase our refinery feedstocks before manufacturing and selling the refined products. Price level changes during the periods between purchasing and selling these refined products could also have a material adverse effect on our business, financial condition, and results of operations.

Our business, financial condition, results of operations, and liquidity have been adversely affected by the COVID-19 pandemic that has caused, and is expected to continue to cause, the global slowdown of economic activity (including the decrease in demand for crude oil and the refined products that we produce and sell), disruptions in global supply chains,

and significant volatility and disruption of financial markets and that also has adversely affected workforces, customers, and regional and local economies.

Because the severity, magnitude, and duration of the COVID-19 pandemic and its economic consequences are uncertain, rapidly changing, and difficult to predict, the impact on our business, results of operations, financial condition, and liquidity remains uncertain and difficult to predict. The ultimate impact of the COVID-19 pandemic on our results of operations and financial condition remains uncertain and depends on numerous evolving factors, many of which are not within our control, and which we may not be able to effectively respond to, including, but not limited to: governmental, business, and individuals' actions that have been and continue to be taken in response to the pandemic (including restrictions on travel and transport, workforce pressures and social distancing, and stay-at-home orders); the effect of the pandemic on economic activity and actions taken in response; the effect on our customers and their demand for our products; the effect of the pandemic on the creditworthiness of our customers; national or global supply chain challenges or disruption; workforce availability; facility closures; commodity cost volatility; general economic uncertainty in key global markets and financial market volatility and ability to access capital markets; global economic conditions and levels of economic growth; and the pace of recovery when the COVID-19 pandemic subsides, as well as response to a potential reoccurrence.

Further, the COVID-19 pandemic, and the volatile regional and global economic conditions stemming from the pandemic, could also precipitate or aggravate the other risk factors that we identify in this Annual Report on Form 10-K, which could materially adversely affect our business, financial condition, results of operations (including revenues and profitability), and liquidity and/or stock price. Additionally, COVID-19 may also affect our operating and financial results in a manner that is not presently known to us or that we currently do not consider to present significant risks to our operations.

Instability in the global economic and political environment can lead to volatility in the cost and availability of crude oil and prices for refined products, which could adversely impact our results of operations.

Instability in the global economic and political environment can lead to volatility in the cost and availability of crude oil and in the price and demand for refined products. This may place downward pressure on our results of operations. This is particularly true of developments in and relating to oil-producing countries, including terrorist activities, military conflicts, embargoes, internal instability, or actions or reactions of the U.S. or foreign governments in anticipation of, or in response to, such developments. Any such events may limit or disrupt markets, which could negatively impact our ability to access global crude oil commodity flows or sell our refined products.

Many of our refined products could cause serious injury or death if mishandled or misused by us or our purchasers, or if defects occur during manufacturing.

While we produce, store, transport, and deliver all of our refined products in a safe manner, many of our refined products are highly flammable or explosive and could cause significant damage to persons or property if mishandled. Defects in our products (such as gasoline or jet fuel) or misuse by us or by end purchasers could lead to fatalities or serious damage to property. We may be held liable for such occurrences, which could have a material adverse effect on our business and results of operations.

Our business is impacted by increased risks of spills, discharges, or other releases of petroleum or hazardous substances in our refining and logistics operations.

The operation of refineries, pipelines, and refined products terminals is subject to increased risks of spills, discharges, or other inadvertent releases of petroleum or hazardous substances, and we operate in and around environmentally sensitive coastal waters that are closely regulated and monitored. These events could occur in connection with the operation of our refineries, pipelines, or refined products terminals. If any of these events occur, or is found to have previously occurred, we could be liable for costs and penalties associated with their remediation under federal, state, and local environmental laws or common law, and could be liable for property damage to third parties caused by contamination from releases and spills. The penalties and clean-up costs that we may have to pay for releases or the amounts that we may have to pay to third parties for damages to their property could be significant and have a material adverse effect on our business, financial condition, or results of operations.

Our operations, including the operation of underground storage tanks, are also subject to the risk of environmental litigation and investigations which could affect our results of operations.

From time to time, we may be subject to litigation or investigations with respect to environmental and related matters, the costs of which could be material. We operate fueling stations with underground storage tanks used primarily for storing and dispensing refined fuels. In addition, some fueling stations where we sell fuel are owned or operated by third parties who are

not under our control. Federal and state regulations and legislation govern the storage tanks and compliance with these requirements can be costly. The operation of underground storage tanks poses certain risks, including leaks. Leaks from underground storage tanks, which may occur at one or more of our fueling stations, may impact soil or groundwater and could result in fines or civil liability for us.

Our insurance coverage may be inadequate to protect us from the liabilities that could arise in our business.

We carry property, casualty, business interruption, and other lines of insurance, but we do not maintain insurance coverage against all potential losses. Marine vessel charter agreements do not include indemnity provisions for oil spills so we also carry marine charterer's liability insurance. We could suffer losses for uninsurable or uninsured risks or in amounts in excess of existing insurance coverage. Claims covered by insurance are subject to deductibles, the aggregate amount of which could be material. Insurance policies are also subject to compliance with certain conditions, the failure of which could lead to a denial of coverage as to a particular claim or the voiding of a particular insurance policy. There also can be no assurance that existing insurance coverage can be renewed at commercially reasonable rates or that available coverage will be adequate to cover future claims. The occurrence of an event that is not fully covered by insurance or failure by one or more insurers to honor its coverage commitments for an insured event could have a material adverse effect on our business, financial condition, and results of operations.

We are subject to interruptions of supply and increased costs as a result of our reliance on third-party transportation of crude oil and refined products to and from our refineries.

Our refineries receive and transport crude oil and refined products via tankers, barges, pipelines, and railcars. In addition to environmental risks, we could experience an interruption of supply or an increased cost to deliver refined products to market if such transportation is disrupted because of adverse weather, accidents, governmental regulation or sanctions, or third-party action. A prolonged disruption could have a material adverse effect on our business, financial condition, and results of operations.

The financial and operating results of our refineries, including the products they refine and sell, can be seasonal.

Demand for gasoline in the Rockies and Northwest United States is generally higher during the summer months than during the winter months due to seasonal increases in highway traffic. The Wyoming and Washington refineries' financial and operating results for the first and fourth calendar quarters may be lower than those for the second and third calendar quarters of each year as a result of this seasonality. Conversely, the demand for the products the Hawaii refinery refines and sells, and the financial and operating results for the Hawaii refinery, are often strongest in the first and fourth calendar quarters.

We rely upon certain critical information systems for the operation of our business and the failure of any critical information system, including a cyber security breach, may result in harm to our business.

We are heavily dependent on our technology infrastructure and maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include data network and telecommunications, internet access and our websites, and various computer hardware equipment and software applications, including those that are critical to the safe operation of our refineries and our pipelines and terminals. Our retail business collects certain customer data, including credit card numbers, for business purposes. The integrity and protection of our customer, employee, and company data is critical to our business.

Our information systems are subject to damage or interruption from a number of potential sources including natural disasters, ransomware, software viruses or other malware, power failures, cyber attacks, and other events. To the extent that these information systems are under our control, we have implemented measures, such as virus protection software and intrusion detection systems, to address the outlined risks. However, security measures for information systems cannot be guaranteed to be failsafe. Our systems and procedures for protecting against such attacks and mitigating such risks may prove to be insufficient in the future and such attacks could have an adverse impact on our business and operations, including damage to our reputation and competitiveness, remediation costs, litigation, or regulatory. Any compromise of our data security or our inability to use or access these information systems at critical points in time could unfavorably impact the timely and efficient operation of our business and subject us to additional costs and liabilities, which could adversely affect our business, financial condition, and results of operations. In addition, as technologies evolve, and cyber-attacks become more sophisticated, we may incur significant costs to upgrade or enhance our security measures to protect against such attacks and we may face difficulties in fully anticipating or implementing adequate preventive measures or mitigating potential harm. Finally, federal legislation relating to cyber security threats could impose additional requirements on our operations.

Through our investment in Laramie Energy, we are subject to all of the risks of natural gas and oil exploration and production, but we lack the ability to control Laramie Energy's operations and our ability to extract value is limited.

Through our investment in Laramie Energy, we are exposed to all of the risks inherent in natural gas and oil exploration and production, including the risks that: exploration and development drilling may not result in commercially productive reserves; the operator may act in ways contrary to our best interest; the marketability of our natural gas products depends mostly on the availability, proximity, and capacity of natural gas gathering systems, pipelines, and processing facilities, which are owned by third parties, as well as adequate water supplies; we have no long-term contracts to sell natural gas or oil; compliance with environmental and other governmental regulatory or legislative requirements could result in increased costs of operation or curtailment, delay, or cancellation of development and producing operations; and a decline in demand for natural gas and oil could adversely affect our financial condition and results of operations. Additionally, the ability of Laramie Energy to make distributions to its owners, including us, is currently prohibited by the terms of Laramie Energy's credit facility and the terms of its limited liability company agreement.

REGULATORY RISK

Meeting the requirements of evolving environmental, health, and safety laws and regulations, including those related to climate change and marine protection, could adversely affect our performance.

Consistent with the experience of other U.S. refineries, environmental laws and regulations have raised operating costs and may require significant capital investments at our refineries. We may be required to address conditions that may be discovered in the future and require a response. Potentially material expenditures could be required in the future as a result of evolving environmental, health, and safety and energy laws, regulations, or requirements that may be adopted or imposed in the future. Future developments in federal and state laws and regulations governing environmental, health and safety, and energy matters are especially difficult to predict.

Currently, multiple legislative and regulatory measures to address GHG emissions (including CO₂, methane, and NO_x) are in various phases of consideration, promulgation, or implementation. These include actions to develop national, statewide, or regional programs, each of which could require reductions in our GHG emissions. Requiring reductions in our GHG emissions could result in increased costs to (i) operate and maintain our facilities, (ii) install new emission controls at our facilities, and/or (iii) administer and manage any GHG emissions programs, including acquiring emission credits or allotments. Requiring reductions in our GHG emissions and increased use of renewable fuels which can be supplied by producers and marketers in other industries that supply alternative forms of energy and fuels to satisfy the requirements of our industrial, commercial, and individual customers could also decrease the demand for our refined products, and could have a material adverse impact on our business, financial condition, and results of operations.

Additionally, legislation designed to protect animal and plant species, such as the Magnuson amendment to the Marine Mammal Protection Act, may limit or restrict our ability to construct or expand new oil terminals and oil-by-rail infrastructure in the state of Washington, which could have a material impact on our business, financial condition, and results of operations.

Renewable fuels mandates may reduce demand for the petroleum fuels we produce, which could have a material adverse effect on our business results of operations and financial condition.

The RFS program sets annual quotas for the quantity of renewable fuels that must be blended into transportation fuels consumed in the U.S. A RIN is assigned to each gallon of renewable fuel produced in or imported into the U.S. As a producer of petroleum-based transportation fuels, we are obligated to blend renewable fuels into the petroleum fuels we produce and sell in the U.S. To the extent we do not, we are required to purchase RINs in the market to satisfy our obligations under the RFS program. During 2021, we incurred \$118.8 million of RINs expense for our Hawaii, Wyoming, and Washington refineries. On December 21, 2021, the EPA published proposed renewable volume obligations ("RVO") for 2021 consistent with amounts of renewable fuels actually blended that year. Until that rule is finalized and the RVO is set, however, the potential associated expense associated with meeting the 2021 obligations remains uncertain. In addition, as a result of the annual volume mandates, we may experience a decrease in demand for refined products due to refined products being replaced by renewable fuels.

We are exposed to the volatility in the market price of RINs and are unable to predict the future prices of RINs. RINs prices are dependent upon a variety of factors, including EPA regulations, the availability of RINs for purchase, and levels of transportation fuels produced, which can vary significantly from quarter to quarter. The ultimate outcome of the 2021 RVO rule will also likely affect RIN prices. If sufficient RINs are unavailable for purchase, if we have to pay a significantly higher price for RINs, or if we are otherwise unable to meet the EPA's RFS mandates, our results of operations and cash flows could be adversely affected. The current administration has also been critical of exemptions from the RFS mandates granted to small refineries during the previous administration. While litigation over the issue is currently before the U.S. Supreme Court, the

EPA under the current administration may be less willing to grant such waivers going forward and may increase the RVO in future years. To the extent fewer waivers are granted in the future or the RVO is increased, the demand for and the price of RINs would likely also increase, and our results of operations and cash flows could be adversely affected. Ongoing litigation and regulatory activity regarding the standards for 2016, 2017, 2018, 2019, and 2020 creates some potential that the final volumes of renewable fuels that the EPA established will be revised for one or more of those years. In addition, the EPA is considering changes to the existing RFS program regulations and other regulatory initiatives under the RFS program that could impact future standards. Although uncertain, any of these events may cause the price of RINs to rise and result in additional costs in connection with RFS compliance for prior years, costs that exceed our estimates in connection with RFS compliance for 2021, and/or increased compliance costs in future years. Such increased costs could be material and may have a material adverse impact on our business, financial condition, and results of operations. All RIN transactions are recorded in the EPA Moderated Transaction System (“EMTS”). Under this system, purchasers of RINs are required to self-certify their validity without verification by the EPA, and are responsible for any invalid RINs submitted to the EPA for compliance. We believe that the RINs we purchase are from reputable sources, are valid, and serve to demonstrate compliance with applicable RFS requirements. However, if this belief proves incorrect and the RINs that we purchase are not valid or in compliance with applicable RFS requirements, our financial condition and cash flows may be adversely affected.

Several states, including Washington and Hawaii, have pursued or are considering initiatives designed to reduce the carbon intensity of the transportation sector by encouraging increased use of renewable fuels or electric vehicles or by requiring reductions in transportation fuel-related GHG emissions in the state. Since 2006, the State of Washington has required that denatured ethanol make up at least 2% of total gasoline sold in the state and that biodiesel comprise at least 2% of total diesel sold in the state, and the Washington Department of Ecology is authorized to increase these requirements if certain conditions are met. In 2020 and 2021 the State of Washington adopted several statutes that are relevant to our Tacoma, Washington location including a law approving new regulatory requirements regarding zero emission vehicles and a low-carbon fuel standard designed to reduce the carbon intensity of transportation fuels by twenty percent by 2038. Legislation signed in March of 2020 directed the Washington Department of Ecology to adopt California’s vehicle emission standards including requirements to increase zero emission vehicles sold in the state. Washington Department of Ecology adopted by reference California’s zero emission vehicle standard starting with model year 2025 in a rule issued on November 29, 2021. In 2014, the State of Hawaii signed a memorandum of understanding with the U.S. Department of Energy to collaborate to produce 70% of the state’s energy needs from energy-efficient and renewable sources by 2030 and 100% of the state’s energy needs from energy-efficient and renewable sources by 2045. In addition, Hawaii’s alternative fuels standard requires the State to facilitate the development of alternate fuels so such fuels provide 20% of highway fuel demand by 2020 and 30% by 2030. These state programs could increase the cost of consuming, and thereby reduce demand for, our refined petroleum products, which could have a material adverse effect on our business, results of operations, and financial condition.

Potential legislative and regulatory actions addressing climate change could increase our costs, reduce our revenue and cash flow from natural gas and oil sales, or otherwise alter the way we conduct our business.

Currently, multiple legislative and regulatory measures to address GHG, including CO₂, methane, and NO_x, and other emissions are in various phases of consideration, promulgation, or implementation at various levels of the federal and state government. These include actions to develop international, federal, regional, or statewide programs, which could require reductions in our GHG or other emissions, establish a carbon tax and decrease the demand for our refined products. Requiring reductions in these emissions could result in increased costs to (i) operate and maintain our facilities, (ii) install new emission controls at our facilities, and (iii) administer and manage any emissions programs, including acquiring emission credits or allotments.

For example, in 2015, the U.S., Canada, and the U.K. participated in the United Nations Conference on Climate Change, which led to the creation of the Paris Agreement. The Paris Agreement, which was signed by the U.S. in April 2016, requires countries to review and “represent a progression” in their intended nationally determined contributions (which set GHG emission reduction goals) every five years beginning in 2020. In November 2020, the United States’ previously-announced withdrawal from the Paris Agreement became effective. On January 20, 2021, President Biden announced that the United States would be reentering the Paris Agreement. This reentry became effective on February 19, 2021. Restrictions on emissions of methane or carbon dioxide that have been or may be imposed in various U.S. states, at the U.S. federal level, or in other countries could adversely affect the oil and gas industry.

The EPA has issued a notice of finding and determination that emissions of CO₂, methane, and other GHGs present an endangerment to human health and the environment. In response, the EPA has adopted regulations under existing provisions of the federal Clean Air Act that, among other things, establish Prevention of Significant Deterioration (“PSD”) construction and Title V operating permit program requiring reviews for GHG emissions from certain large stationary sources. Facilities required to obtain PSD permits for their GHG emissions will also be required to meet “best available control technology” standards,

which will be established by the states or, in some instances, by the EPA on a case-by-case basis. In addition, the EPA has adopted rules requiring the monitoring and reporting of GHG emissions from specified large GHG emission sources in the U.S., including petroleum refineries and certain onshore petroleum and natural gas production activities, on an annual basis. We monitor for GHG emissions at our refineries and believe we are in substantial compliance with the applicable GHG reporting requirements. Certain of the third-party drilling and production entities in which we hold a working interest also may be subject to reporting of GHG emissions in the U.S. These EPA policies and rulemakings could adversely affect our operations and restrict or delay our ability to obtain air permits for new or modified facilities.

In addition, from time to time, the U.S. Congress has considered and may in the future consider and adopt “cap and trade” legislation that would establish an economy-wide cap on GHG emissions in the U.S. and would require most sources of GHG emissions to obtain emission “allowances” corresponding to their annual GHG emissions. For those GHG sources that are unable to meet the required limitations, such legislation could impose substantial financial burdens. Any laws or regulations that may be adopted to restrict or reduce GHG emissions would likely require us to incur increased operating costs and could have an adverse effect on demand for our production. The adoption of any legislation or regulations that limits emissions of GHG from our or such drilling and production entities’ facilities, equipment, and operations could require us or such entities to incur costs to reduce emissions of GHG associated with our or such entities’ operations or could adversely affect demand for the refined petroleum products that we produce or the crude oil or natural gas that such drilling and production entities in which we hold a working interest produce.

At the state level, the State of Hawaii has announced its intention to reduce statewide GHG emissions to 1990 levels by 2020. Other states, including Washington, have passed low carbon fuel standard legislation and other initiatives to reduce emissions from the transportation sector. We could also face increased climate-related litigation with respect to our operations or products. If we are unable to pass the costs of compliance on to our customers, sufficient credits are unavailable for purchase, we have to pay a significantly higher price for credits, or we are otherwise unable to meet our compliance obligation, our financial condition and results of operations could be adversely affected.

Federal, regional, and state climate change and air emissions goals and regulatory programs are complex, subject to change, and create uncertainty due to a number of factors including technological feasibility, legal challenges, and potential changes in federal policy. Nevertheless, stricter regulation can be expected in the future and any of these or similar changes may have a material adverse impact on our business, results of operations, and financial condition.

Regulatory and other requirements concerning the transportation of crude oil and other commodities by rail may cause increases in transportation costs or limit the amount of crude oil that we can transport by rail.

We rely on a variety of systems to transport crude oil, including rail. Rail transportation is regulated by federal, state, and local authorities. New regulations or changes in existing regulations could result in increased compliance expenditures. For example, in 2019 Washington enacted a law that limits crude oil by rail deliveries through a cap on off-loadings from existing facilities and new specifications regarding the vapor pressure of crude oils permitted to be shipped through the state. These or other regulations that require the reduction of volatile or flammable constituents in crude oil that is transported by rail, change the design or standards for rail cars used to transport the crude oil we purchase, change the routing or scheduling of trains carrying crude oil, or require any other changes that detrimentally affect the economics of delivering North American crude oil by rail, could increase the time required to move crude oil from production areas to our refineries, increase the cost of rail transportation, and decrease the efficiency of shipments of crude oil by rail within our operations. Any of these outcomes could have a material adverse effect on our business, results of operations, and financial condition.

In connection with the WRC Acquisition, we will be required to undertake significant remediation and other corrective actions with respect to certain environmental matters.

In connection with the July 14, 2016 purchase of Hermes Consolidated, LLC (d/b/a Wyoming Refining Company) and, indirectly, Wyoming Refining Company’s wholly owned subsidiary, Wyoming Pipeline Company, LLC (collectively, “Wyoming Refining” or “WRC”) (the “WRC Acquisition”), there are several environmental conditions that will require us to undertake significant remediation efforts and other corrective actions. The Wyoming refinery is subject to a number of consent decrees, orders, and settlement agreements involving the EPA and/or the Wyoming Department of Environmental Quality, some of which date back to the late 1970s and several of which remain in effect, requiring further actions at the Wyoming refinery.

As is typical of older, small refineries like the Wyoming refinery, the largest cost component arising from these various decrees relates to the investigation, monitoring, and remediation of soil, groundwater, surface water, and sediment contamination associated with the facility’s historic operations. Investigative work by Wyoming Refining and negotiations with the relevant agencies as to remedial approaches remain ongoing on a number of aspects of the contamination, meaning that

investigation, monitoring, and remediation costs are not reasonably estimable for some elements of these efforts. As of December 31, 2021, we have accrued \$15.6 million for the well-understood components of these efforts based on current information, approximately one-third of which we expect to incur in the next five years and the remainder to be incurred over approximately 30 years.

Additionally, we believe the Wyoming refinery will need to modify or close a series of wastewater impoundments in the next several years and to replace those impoundments with a new wastewater treatment system. Based on current information, reasonable estimates we have received suggest costs of approximately \$11.6 million to design and construct a new wastewater treatment system.

Finally, among the various historic consent decrees, orders, and settlement agreements into which the Wyoming refinery has entered, there are several penalty orders associated with exceedances of permitted limits by the Wyoming refinery's wastewater discharges. The frequency of these exceedances appears to be declining over time, but we may become subject to new penalty enforcement action in the future.

We may incur significant costs and liabilities resulting from performance of pipeline integrity programs and related repairs.

Pipeline and Hazardous Materials Safety Administration ("PHMSA") has established a series of rules requiring pipeline operators to develop and implement integrity management programs for hazardous liquid pipelines that, in the event of a pipeline leak or rupture, could affect high consequence areas ("HCAs"), which are areas where a release could have the most significant adverse consequences, including high-population areas, certain drinking water sources, and unusually sensitive ecological areas. These regulations require operators of covered pipelines to:

- perform ongoing assessments of pipeline integrity;
- identify and characterize applicable threats to pipeline segments that could impact an HCA;
- improve data collection, integration, and analysis;
- repair and remediate the pipeline as necessary; and
- implement preventive and mitigating actions.

In addition, certain states have also adopted regulations similar to existing PHMSA regulations for intrastate gathering and transmission lines. These requirements could require us to install new or modified safety controls, pursue additional capital projects, or conduct maintenance programs on an accelerated basis, any or all of which tasks could result in us incurring increased operating costs that could be significant and have a material adverse effect on our financial position or results of operations.

Moreover, changes to pipeline safety laws by Congress and regulations by PHMSA that result in more stringent or costly safety standards could result in our incurring increased operating costs that could have a material adverse effect on our financial position or results of operations.

Compliance with and changes in tax laws could materially and adversely affect our financial condition, results of operations and cash flows.

We are subject to extensive tax liabilities imposed by multiple jurisdictions including, without limitation, income taxes, indirect taxes (excise/duty, sales/use, gross receipts), payroll taxes, franchise taxes, withholding taxes, and ad valorem taxes. New tax laws and regulations and changes in existing tax laws and regulations are continuously being enacted or proposed that could result in increased expenditures for tax liabilities in the future. Many of these liabilities are subject to periodic audits by the respective taxing authority. Although we believe we have used reasonable interpretations and assumptions in calculating our tax liabilities, the final determination of these tax audits and any related proceedings cannot be predicted with certainty. Any adverse outcome of such tax audits or related proceedings could result in unforeseen tax-related liabilities that may, individually or in the aggregate, materially affect our cash tax liabilities, results of operations, and financial condition. Additionally, tax rates or tax interpretations in the various jurisdictions in which we operate may change significantly as a result of political or economic factors beyond our control.

BUSINESS RISKS

The locations of our refineries and related assets in certain limited geographic areas create an exposure to localized economic risks.

Because of the locations of our refineries in Hawaii, Washington, and Wyoming, we primarily market our refined products in relatively limited geographic areas. As a result, we are more susceptible to regional economic conditions than the operations of more geographically diversified competitors and any unforeseen events or circumstances that affect our operating areas could also materially adversely affect our revenues and our business and operating results. These factors include, among other things, changes in the economy, weather conditions, demographics and population, refined product mix demand, increased supply of refined products from competitors, and reductions in the supply of crude oil.

We must make substantial capital expenditures at our refineries and related assets to maintain their reliability and efficiency. If we are unable to complete capital projects at their expected costs or in a timely manner, or if the market conditions assumed in our project economics deteriorate, our financial condition, results of operations, or cash flows could be adversely affected.

Our refineries and related assets have been in operation for many years. Equipment, even if properly maintained, may require significant capital expenditures and expenses to keep the refineries operating at optimum efficiency. These costs do not result in increases in unit capacities, but rather are focused on trying to maintain safe, reliable operations.

Delays or cost increases related to the engineering, procurement, and construction of new facilities, or improvements and repairs to our existing facilities and equipment, could have a material adverse effect on our business, financial condition, or results of operations. Such delays or cost increases may arise as a result of unpredictable factors in the marketplace, many of which are beyond our control, including:

- denial or delay in obtaining regulatory approvals and/or permits;
- difficulties in executing the capital projects;
- unplanned increases in the cost of equipment, materials, or labor;
- disruptions in transportation of equipment and materials;
- severe adverse weather conditions, natural disasters, or other events (such as equipment malfunctions, explosions, fires, or spills) affecting our facilities, or those of our vendors and suppliers;
- shortages of sufficiently skilled labor, or labor disagreements resulting in unplanned work stoppages;
- market-related increases in a project's debt or equity financing costs; and/or
- non-performance or force majeure by, or disputes with, our vendors, suppliers, contractors, or sub-contractors.

Any one or more of these occurrences noted above could have a significant impact on our business. If we are unable to make up the delays or to recover the related costs, or if market conditions change, it could materially and adversely affect our financial position, results of operations, or cash flows.

The retail market is diverse and highly competitive. Aggressive competition and the development of alternative fuels could adversely impact our business.

We face strong competition in the market for the sale of retail gasoline, diesel fuel, and merchandise. Our competitors include outlets owned or operated by fully integrated major oil companies or their dealers and other well-recognized national or regional retail outlets, often selling products at very competitive prices. We compete with a number of integrated national and international oil companies who produce crude oil, some of which is used in their refining operations. Unlike these oil companies, we must purchase all of our crude oil from unaffiliated sources. Because these oil companies benefit from increased commodity prices, have greater access to capital, and have stronger capital structures, they are able to better withstand poor and volatile market conditions, such as a lower refining margin environment, shortages of crude oil and other feedstocks, or extreme price fluctuations.

Additionally, non-traditional retailers such as supermarkets, club stores, and mass merchants are also in the retail business, and these non-traditional gasoline retailers have obtained a significant share of the transportation fuels market. These retailers may use integration of operations, greater financial resources, promotional pricing or discounts, or other advantages to withstand volatile market conditions or levels of no or low profitability. The development of alternative and competing fuels in the retail market could also adversely impact our business. Increased competition from these alternatives as a result of governmental regulations, technological advances, and consumer demand could have an impact on pricing and demand for our products and our profitability.

If we are unable to obtain crude oil supplies for our refineries without the benefit of certain intermediation agreements, the capital required to finance our crude oil supply could negatively impact our liquidity.

All of the crude oil delivered at our Hawaii refinery is subject to our Supply and Offtake Agreement with J. Aron and certain deliveries of crude oil at our Washington refinery are subject to the Washington Refinery Intermediation Agreement (together, the “Intermediation Agreements”). If we are unable to obtain our crude oil supply for our refineries under these agreements, our exposure to crude oil pricing risks may increase as the number of days between when we pay for the crude oil and when the crude oil is delivered to us increases. Such increased exposure could negatively impact our liquidity position due to the increase in working capital used to acquire crude oil inventory for our refineries.

The Intermediation Agreements expose us to counterparty credit and performance risk.

We have the Supply and Offtake Agreement with J. Aron, pursuant to which J. Aron will intermediate crude oil supplies and refined product inventories at our Hawaii refinery. J. Aron will own all of the crude oil in our tanks and substantially all of our refined product inventories prior to our sale of the inventories. Upon termination of the Supply and Offtake Agreement, which terminates on May 31, 2024 unless extended by mutual agreement for an additional one year term, we are obligated to repurchase all crude oil and refined product inventories then owned by J. Aron and located at the specified storage facilities at then current market prices. This repurchase obligation could have a material adverse effect on our business, results of operations, or financial condition. We also have the Washington Refinery Intermediation Agreement with MLC whereby our Washington refinery purchases certain crude oil supplies from third-party suppliers and MLC provides credit support for such purchases in exchange for our pledge of all crude oil and refined products inventories from such refinery. An adverse change in the business, results of operations, liquidity, or financial condition of our intermediation counterparties could adversely affect the ability of such counterparties to perform their obligations, which could consequently have a material adverse effect on our business, results of operations, or liquidity and, as a result, our business and operating results.

Inadequate liquidity could materially and adversely affect our business operations in the future.

If our cash flow and capital resources are insufficient to fund our obligations, we may be forced to reduce our capital expenditures, seek additional equity or debt capital, or restructure our indebtedness. We cannot assure you that any of these remedies could, if necessary, be affected on commercially reasonable terms, or at all. Our liquidity is constrained by our need to satisfy our obligations under our debt agreements and the Intermediation Agreements. The availability of capital when the need arises will depend upon a number of factors, some of which are beyond our control. These factors include general economic and financial market conditions, the crack spread, natural gas and crude oil prices, our credit ratings, interest rates, market perceptions of us or the industries in which we operate, our market value, and our operating performance. We may be unable to execute our long-term operating strategy if we cannot obtain capital from these or other sources when the need arises.

Our ability to generate cash and repay our indebtedness or fund capital expenditures depends on many factors beyond our control and any failure to do so could harm our business, financial condition, and results of operations.

Our ability to fund future capital expenditures and repay our indebtedness when due will depend on our ability to generate sufficient cash flow from operations, borrowings under our debt agreements, and distributions from our subsidiaries. To a certain extent, this is subject to general economic, financial, competitive, legislative, and regulatory conditions and other factors that are beyond our control, including the crack spread.

We cannot assure you that our businesses will generate sufficient cash flow from operations, that our subsidiaries can or will make sufficient distributions to us, or that future borrowings will be available to us in an amount sufficient to repay our indebtedness or fund our other liquidity needs. If our cash flow and capital resources are insufficient to fund our needs, we may be forced to reduce our planned capital expenditures, sell assets, seek additional equity or debt capital, or restructure our debt. We cannot assure you that any of these remedies could, if necessary, be affected on commercially reasonable terms, or at all, which could cause us to default on our obligations and could impair our liquidity.

Our substantial level of indebtedness could adversely affect our financial condition.

We have a substantial amount of indebtedness, which requires significant interest payments. As of December 31, 2021, we had \$564.6 million of indebtedness and Interest expense and financing costs, net for the year ended December 31, 2021 was \$66.5 million.

Our substantial level of indebtedness could have important consequences, including the following:

- we must use a substantial portion of our cash flow from operations to pay interest and principal on our indebtedness and obligations under the Intermediation Agreements, which reduces funds available to us for other purposes, such as working capital, capital expenditures, other general corporate purposes, and potential acquisitions;
- our ability to refinance such indebtedness or to obtain additional financing for working capital, capital expenditures, acquisitions, or general corporate purposes may be impaired;
- our leverage may be greater than that of some of our competitors, which may put us at a competitive disadvantage and reduce our flexibility in responding to current and changing industry and financial market conditions;
- we may be more vulnerable to economic downturns and adverse developments in our business; and
- we may be unable to comply with financial and other restrictive covenants in our debt agreements, some of which require us to maintain specified financial ratios and limit our ability to incur additional debt and sell assets, which could result in an event of default that, if not cured or waived, would have an adverse effect on our business and prospects and could result in bankruptcy.

Our ability to meet expenses, to remain in compliance with the covenants under our debt agreements, and to make future principal and interest payments in respect of our debt depends on, among other things, our operating performance, competitive developments, and financial market conditions, all of which are significantly affected by financial, business, economic, and other factors. We are not able to control many of these factors. If industry and economic conditions deteriorate, our cash flow may not be sufficient to allow us to pay principal and interest on our debt and meet our other obligations.

This increase in our indebtedness may reduce our flexibility to respond to changing business and economic conditions or to fund capital expenditure or working capital needs because we will require additional funds to service our outstanding indebtedness and may not be able to obtain additional financing.

Despite our current debt levels, we may still incur substantially more debt or take other actions which would intensify the risks associated with our substantial leverage.

Despite our current consolidated debt levels, we may be able to incur significant additional indebtedness in the future. Although our debt agreements contain restrictions on the incurrence of additional indebtedness and entering into certain types of other transactions, these restrictions are subject to a number of qualifications and exceptions. Additional indebtedness incurred in compliance with these restrictions could be substantial. These restrictions also do not prevent us or our subsidiaries from incurring obligations, such as trade payables, that do not constitute indebtedness as defined under our debt agreements. To the extent new debt is added to our current debt levels, the substantial leverage risks associated with our indebtedness would increase.

Our debt agreements impose significant operating and financial restrictions on us.

Our debt agreements impose, and the terms of any future debt may impose, significant operating and financial restrictions on us. These restrictions, among other things, may limit our ability to:

- pay dividends or distributions, repurchase equity, prepay junior debt, and make certain investments;
- incur additional debt or issue certain disqualified stock and preferred stock;
- sell or otherwise dispose of assets, including capital stock of subsidiaries;
- incur liens on assets;
- merge or consolidate with another company or sell all or substantially all assets;
- enter into certain transactions with affiliates; and
- enter into agreements that would restrict the ability of our subsidiaries to pay dividends or make other payments to the Issuers.

All of these covenants may adversely affect our ability to finance our operations, meet or otherwise address our capital needs, pursue business opportunities, react to market conditions, or otherwise restrict activities or business plans. A breach of any of these covenants could result in a default in respect of the related indebtedness. If a default occurs, the requisite lenders could elect to declare the indebtedness, together with accrued interest and other fees, to be immediately due and payable and proceed against any collateral securing that indebtedness. If repayment of our indebtedness is accelerated as a result of such default, we cannot assure you that we would have sufficient assets or access to credit to repay such indebtedness.

We may incur losses and incur additional costs as a result of our forward-contract activities and derivative transactions.

We enter into derivative contracts from time to time primarily to reduce our exposure to fluctuations in interest rates and in the price of crude oil and refined products. If the instruments we use to hedge our exposure are not effective, or if our counterparties are unable to satisfy their obligations to us, we may incur losses. We may also be required to incur additional costs in connection with future regulation of derivative instruments to the extent such regulation is applicable to us. Additionally, our commodity derivative activities may produce significant period-to-period earnings volatility that is not necessarily reflective of our underlying operational performance.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly and otherwise impact our ability to incur indebtedness for acquisitions and working capital needs.

We are subject to interest rate risk in connection with borrowings under certain of our debt agreements, which bear interest at variable rates. Interest rate changes will not affect the market value of indebtedness incurred under such debt agreements, but could affect the amount of our interest payments and, accordingly, our future earnings and cash flows, assuming other factors are held constant. Increases in interest rates could also impact our ability to incur indebtedness to fund acquisitions and working capital needs. A significant increase in prevailing interest rates that results in a substantial increase in the interest rates applicable to our indebtedness could substantially increase our interest expense and have a material adverse effect on our financial condition, results of operations, and cash flows.

We cannot be certain that our net operating loss tax carryforwards will continue to be available to offset our tax liability.

As of December 31, 2021, we estimated that we had approximately \$1.6 billion of net operating loss (“NOL”) tax carryforwards. In order to utilize the NOLs, we must generate taxable income that can offset such carryforwards. The availability of NOLs to offset taxable income would be substantially reduced or eliminated if we were to undergo an “ownership change” within the meaning of Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”). We will be treated as having had an “ownership change” if there is more than a 50% increase in stock ownership during any three year “testing period” by “5% shareholders.” In order to help us preserve our NOLs, our certificate of incorporation contains stock transfer restrictions designed to reduce the risk of an ownership change for purposes of Section 382 of the Code. We expect that the restrictions will remain in place for the foreseeable future. We cannot assure you, however, that these restrictions will prevent an ownership change.

Our ability to utilize a significant portion of our NOLs to offset future taxable income is subject to various limitations, including that certain NOLs will expire in various amounts, if not used, between 2028 through 2036. During 2018, the Internal Revenue Service (“IRS”) completed an audit of our tax returns for the tax years ending 2014 through 2016, which included those returns for the years in which the losses giving rise to the NOLs were reported. Although the IRS made no challenge of the availability of our NOLs during this audit, we cannot assure you that we would prevail if the IRS were to challenge the availability of the NOLs in the event of future audits. If the IRS were successful in challenging our NOLs, all or some portion of the NOLs would not be available to offset any future consolidated income, which would negatively impact our results of operations and cash flows. Certain provisions of the Tax Cuts and Jobs Act, enacted in 2017, may also limit our ability to utilize our net operating tax loss carryforwards.

We may be unable to successfully identify, execute, or effectively integrate future acquisitions, which may negatively affect our results of operations.

We will continue to pursue acquisitions in the future. Although we regularly engage in discussions with, and submit proposals to, acquisition candidates, suitable acquisitions may not be available in the future on reasonable terms. If we do identify an appropriate acquisition candidate, we may be unable to successfully negotiate the terms of an acquisition, finance the acquisition, or, if the acquisition occurs, effectively integrate the acquired business into our existing businesses. Negotiations of potential acquisitions and the integration of acquired business operations may require a disproportionate amount of management’s attention and our resources. Even if we complete additional acquisitions, continued acquisition financing may not be available or available on reasonable terms, any new businesses may not generate the anticipated level of revenues, the anticipated cost efficiencies, or synergies may not be realized, and these businesses may not be integrated successfully or operated profitably. Our inability to successfully identify, execute, or effectively integrate future acquisitions may negatively affect our results of operations.

Acquisitions may prove to be worth less than we paid because of uncertainties in evaluating potential liabilities.

Our recent growth is due in large part to acquisitions, such as the acquisitions of our Wyoming refining business, our Pacific Northwest retail business, and U.S. Oil and assets related to the Hawaii refinery. We expect acquisitions to be

instrumental to our future growth. Successful acquisitions require an assessment of a number of factors, including estimates of potential unknown and contingent liabilities. Such assessments are inexact and their accuracy is inherently uncertain. In connection with our assessments, we perform due diligence reviews of acquired businesses and assets that we believe are generally consistent with industry practices. However, such reviews will not reveal all existing or potential problems. In addition, our reviews may not permit us to become sufficiently familiar with potential environmental problems or other contingent and unknown liabilities that may exist or arise. As a result, there may be unknown and contingent liabilities related to acquired businesses and assets of which we are unaware. We could be liable for unknown obligations relating to acquisitions for which indemnification is not available, which could materially adversely affect our business, results of operations, and cash flows.

A substantial portion of our refining workforce is unionized and we may face labor disruptions that would interfere with our operations.

As of December 31, 2021, we employed approximately 1,336 people, 226 of whom are covered by collective bargaining agreements. At our Hawaii and Washington refineries, all 226 employees covered by collective bargaining agreements are represented by the USW with collective bargaining agreements which expired on January 31, 2022 and are currently subject to automatic extension periods while the parties continue negotiations. However, we may not be able to prevent a strike or work stoppage in the future and any such work stoppage could cause disruptions in our business and have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Adverse changes in global economic conditions and the demand for transportation fuels may impact our business and financial condition in ways that we currently cannot predict.

A recession or prolonged economic downturn would adversely affect the business and economic environment in which we operate. These conditions increase the risks associated with the creditworthiness of our suppliers, customers, and business partners. The consequences of such adverse effects could include interruptions or delays in our suppliers' performance of our contracts, reductions and delays in customer purchases, delays in or the inability of customers to obtain financing to purchase our products, and bankruptcy of customers. Any of these events may adversely affect our financial condition, cash flows, and profitability.

RISKS RELATED TO OUR COMMON STOCK

Because we have no near term plans to pay cash dividends on our common stock, investors must look solely to stock appreciation for a return on their investment in us.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business and do not anticipate declaring or paying any cash dividends on our common stock in the near term. Any future determination as to the declaration and payment of cash dividends will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, results of operations, contractual restrictions, capital requirements, business prospects, and other factors that our board of directors considers relevant.

If securities or industry analysts do not publish research or reports about our business, if they adversely change their recommendations regarding our common stock, or if our operating results do not meet their expectations, our stock price could decline.

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline. Moreover, if one or more of the analysts who cover our company downgrades our common stock or if our operating results do not meet their expectations, our stock price could decline.

The price of our common stock historically has been volatile. This volatility may affect the price at which you could sell your common stock.

The market price for our common stock has varied between a high of \$19.74 on March 11, 2021, and a low of \$12.91 on May 19, 2021, during the year ended December 31, 2021. This volatility may affect the price at which you could sell your common stock. Our stock price is likely to continue to be volatile and subject to significant price and volume fluctuations in response to market and other factors; variations in our quarterly operating results from our expectations or those of securities

analysts or investors; downward revisions in securities analysts' estimates; and announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, or capital commitments.

An impairment of an equity investment, a long-lived asset, or goodwill could reduce our earnings or negatively impact the value of our common stock.

Consistent with U.S. generally accepted accounting principles ("GAAP"), we evaluate our goodwill for impairment at least annually and our equity investments and long-lived assets, including intangible assets with finite useful lives, whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. For the investments we account for under the equity method, such as Laramie Energy, the impairment test requires us to consider whether the fair value of the equity investment as a whole, not the underlying net assets, has declined and whether that decline is other than temporary. If we determine that an other-than-temporary impairment is indicated, we would be required to recognize a non-cash charge to earnings with a correlative effect on equity and balance sheet leverage as measured by debt to total capitalization. As a result of the global economic impact of the COVID-19 pandemic and a steep decline in current and forecasted prices and demand for crude oil and refined products, the goodwill at our refining reporting units in Hawaii and Washington was fully impaired and the goodwill associated with our retail reporting unit in Washington and Idaho was partially impaired, resulting in a charge of \$67.9 million in our consolidated statement of operations for the year ended December 31, 2020. Additionally, as a result of our impairment evaluations of our investment in Laramie Energy, we recorded impairment charges of \$45.3 million and \$81.5 million on our consolidated statement of operations for the years ended December 31, 2020 and 2019, respectively. Any additional impairment charges could have a negative impact on the price of our common stock. Additionally, there can be no assurance that no future impairment charge will be made with respect to our equity investments, goodwill, and long-lived assets.

The market for our common stock has been historically illiquid, which may affect your ability to sell your shares.

The volume of trading in our common stock has historically been low. In addition, a substantial amount of our common stock is beneficially owned by two shareholders. The lack of substantial liquidity can adversely affect the price of our stock at a time when you might want to sell your shares. There is no guarantee that an active trading market for our common stock will develop or be maintained on the NYSE, or that the volume of trading will be sufficient to allow for timely trades. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active or if trading volume is limited. In addition, if trading volume in our common stock is limited, trades of relatively small numbers of shares may have a disproportionate effect on the market price of our common stock.

Delaware law, our charter documents, and concentrated stock ownership may impede or discourage a takeover, which could reduce the market price of our common stock.

We are a Delaware corporation and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third party to acquire control of us, even if a change in control would be beneficial to our existing stockholders. For example, the change in ownership limitations contained in Article 11 of our certificate of incorporation could have the effect of discouraging or impeding an unsolicited takeover proposal. In addition, our board of directors or a committee thereof has the power, without stockholder approval, to designate the terms of one or more series of preferred stock and issue shares of preferred stock. The ability of our board of directors or a committee thereof to create and issue a new series of preferred stock and certain provisions of Delaware law and our certificate of incorporation and bylaws could impede a merger, takeover, or other business combination involving us or discourage a potential acquirer from making a tender offer for our common stock, which, under certain circumstances, could reduce the market price of our common stock.

Zell Credit Opportunities Master Fund, L.P. ("ZCOF") and Blackrock, Inc., together with their respective affiliates, each owned or had the right to acquire as of December 31, 2021 approximately 19.8% and 12.6%, respectively, of our outstanding common stock. The level of their combined ownership of shares of our common stock could have the effect of discouraging or impeding an unsolicited acquisition proposal.

We may issue preferred stock with terms that could adversely affect the voting power or value of our common stock and any future issuances of our common stock may reduce our stock price.

Our certificate of incorporation authorizes us to issue, without the approval of our stockholders, one or more classes or series of preferred stock having such designations, preferences, limitations, and relative rights, including preferences over our common stock respecting dividends and distributions, as our board of directors may determine. The terms of one or more classes or series of preferred stock could adversely impact the voting power or value of our common stock.

Additionally, we are not restricted from issuing additional shares of common stock, or securities convertible into common stock, under a registration statement declared effective by the SEC. We cannot predict the size of future issuances of our common stock. However, one or more large issuances of our common stock, or securities convertible into our common stock, may adversely affect the prevailing market price of our common stock.

Investor sentiment towards climate change, fossil fuels, sustainability, and other Environmental, Social, and Governance (“ESG”) matters could adversely affect our business and our stock price.

There have been efforts in recent years aimed at the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities, and other groups, to promote the divestment of shares of energy companies, as well as to pressure lenders and other financial services companies to limit or curtail activities with energy companies. As a result, some financial intermediaries, investors, and other capital markets participants have reduced or ceased lending to, or investing in, companies that operate in industries with higher perceived environmental exposure, such as the energy industry. If divestment efforts are continued, the price of our common stock or debt securities, and our ability to access capital markets or to otherwise obtain new investment or financing, may be negatively impacted.

Members of the investment community are also increasing their focus on ESG practices and disclosures, including practices and disclosures related to GHGs and climate change in the energy industry in particular, and diversity and inclusion initiatives and governance standards among companies more generally. As a result, we may face increasing pressure regarding our ESG practices and disclosures. Additionally, members of the investment community may screen companies such as ours for ESG performance before investing in our common stock or debt securities or lending to us. Over the past few years there has also been an acceleration in investor demand for ESG investing opportunities, and many large institutional investors have committed to increasing the percentage of their portfolios that are allocated towards ESG-focused investments. As a result, there has been a proliferation of ESG-focused investment funds seeking ESG-oriented investment products.

If we are unable to meet the ESG standards or investment or lending criteria set by these investors and funds, we may lose investors, investors may allocate a portion of their capital away from us, our cost of capital may increase, the price of our common stock and debt securities may be negatively impacted, and our reputation may also be negatively affected.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

Please read “Item 1. — Business” of this Form 10-K for the location and general character of the properties used in our refining, logistics, and retail segments. Our corporate headquarters are located at 825 Town & Country Lane, Suite 1500, Houston, Texas 77024. We believe that these properties and facilities are adequate for our operations and are maintained in a good state of repair.

Natural Gas and Oil Properties

Laramie Energy

All of the assets held by Laramie Energy are located in Garfield, Mesa, and Rio Blanco counties, Colorado. All of the natural gas, natural gas liquids, and condensate are produced primarily from the Mesaverde formation and to a lesser extent the Mancos formation and some of the acreage is contiguous. The geology of the Piceance Basin is characterized as highly consistent and predictable over large areas, which generally equates to reliable timing and cost expectations during drilling and completion activities, as well as minimal well-to-well variance in production and reserves when completed with the same methodology. As of December 31, 2019, Laramie Energy ceased all drilling activities due to unfavorable market conditions. During the year ended December 31, 2020, we discontinued the application of the equity method of accounting for our investment in Laramie Energy. As of December 31, 2021, the balance of our investment in Laramie Energy on our consolidated balance sheets was zero.

Other

We also own certain immaterial minority interests in wells located in Colorado.

Item 3. LEGAL PROCEEDINGS

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of our business. As of the date of this Annual Report on Form 10-K, no legal proceedings are pending against us that we believe individually or collectively could have a materially adverse effect upon our financial condition, results of operations, or cash flows. Any litigation pending at the time we emerged from Chapter 11 was transferred to the General Trust for resolution and settlement. For more information, please read “Item 1. — Business—Bankruptcy and Plan of Reorganization – General Recovery Trust” and Note 17—Commitments and Contingencies to our consolidated financial statements under Item 8 of this Form 10-K.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

On February 20, 2018, our common stock began trading on the NYSE under the symbol "PARR." Prior to that date, our common stock was traded on the NYSE American under the symbol "PARR." As of February 18, 2022, there were 139 common stockholders of record. On February 18, 2022, the closing price of our common stock was \$14.91 per share on the NYSE.

Dividends

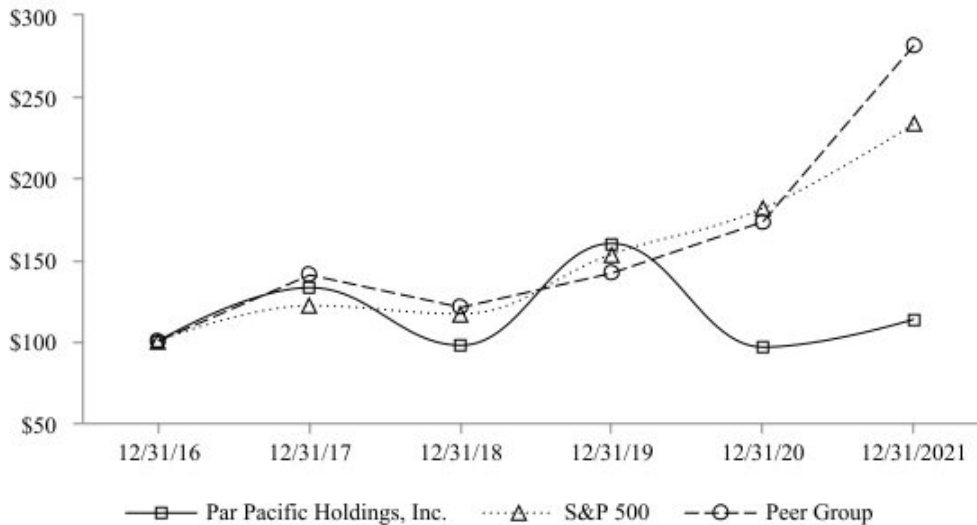
We have not paid dividends on our common stock and we do not expect to do so in the foreseeable future.

Stock Performance Graph

The following performance graph and related information shall not be deemed "soliciting material" or "filed" with the SEC, nor shall such information be deemed to be incorporated by reference into any future filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, each as amended.

This performance graph and the related textual information are based on historical data and are not indicative of future performance. The following line graph compares the cumulative total return on an investment in our common stock against the cumulative total return of the S&P 500 Composite Index and an index of peer companies (that we selected) for the five fiscal years ended December 31, 2021. The performance graph of our peer group is weighted by market value at the beginning of the period and our peer group consists of the following companies: Alto Ingredients, Inc., Calumet Specialty Products Partners, L.P., Casey's General Stores, Inc., CVR Energy, Inc., Darling Ingredients Inc., Delek US Holdings, Inc., FutureFuel Corp., Green Plains Inc., Macquarie Infrastructure Holdings, LLC, Methanex Corporation, Renewable Energy Group, Inc., REX American Resources Corporation, Stepan Company, and Westlake Chemical Corporation. We believe our peer group, which is made up of oil and gas refining and marketing companies, retailers, and companies that are generally similar to our operating segments, provides for meaningful comparability to our business as a whole.

COMPARISON OF 5-YEAR CUMULATIVE TOTAL RETURN*
Among Par Pacific, the S&P 500 Index, and a Peer Group



*\$100 invested on December 31, 2016 in stock or index, including reinvestment of dividends.

Recent Sales of Unregistered Securities

During the year ended December 31, 2021, we did not have any sales of securities in transactions that were not registered under the Securities Act that have not been reported on Form 8-K or Form 10-Q.

Issuer Purchases of Equity Securities

The following table sets forth certain information with respect to repurchases of our common stock during the quarter ended December 31, 2021:

Period	Total number of shares (or units) purchased (1)	Average price paid per share (or unit)	Total number of shares (or units) purchased as part of publicly announced plans or programs (1)	Maximum number (or approximate dollar value) of shares (or units) that may yet be purchased under the plans or programs (1)
October 1 - October 31, 2021	816	\$ 15.41	—	\$ —
November 1 - November 30, 2021	—	—	—	—
December 1 - December 31, 2021	58,922	13.46	58,804	49,208,741
Total	59,738	\$ 13.49	58,804	\$ 49,208,741

(1) Shares repurchased not associated with the share repurchase program were surrendered by employees to pay taxes withheld upon the vesting of restricted stock awards. On November 10, 2021, the Board authorized and approved a share repurchase program for up to \$50 million of the currently outstanding shares of the Company's common stock, with no specified end date. Please read Note 18—Stockholders' Equity for further information.

Item 6. [RESERVED]

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

We are a growth-oriented company based in Houston, Texas, that owns and operates market-leading energy and infrastructure businesses. For more information, please read "Part I—Item 1. — Business—Overview" of this Form 10-K.

Known Trends or Uncertainties

While the market indices presented below under "Item 7. — Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations" are representative of the results of our refineries, each refinery's realized gross margin on a per barrel basis will differ from the benchmark due to a variety of factors that affect the performance of the specific refinery. These factors include, but are not limited to, the actual type and timing of crude oil throughput; product yields; transportation and storage costs; fuel burn; product premiums or discounts; inventory fluctuations; feedstock and product purchases; commodity price risk-management activities; crude oil purchase financing activities; and other factors not reflected in the benchmark refining margin. We operate in logistically complex, niche markets and, as such, each of our refineries has unique cost advantages and disadvantages as compared to their respective relevant market indices.

Recent Events Affecting Comparability of Periods

COVID-19 Pandemic

The ongoing spread of COVID-19, in conjunction with related government and other preventative measures taken to mitigate the spread of the virus, continued to cause severe disruptions in the worldwide economy in 2021, including the global demand for crude oil and refined products, the movement of people and goods in the United States, and the global supply chain for industrial and commercial production, all of which have in turn disrupted our businesses and operations. During 2021, vaccine availability and acceptance and easing of government responses to the pandemic such as travel restrictions led to increased travel in the regions in which we operate. The increase in travel has resulted in higher demand for refined products, an important driver in key aspects of our operations, including sales volumes and the prices of crude oil and refined products. Full recovery to pre-pandemic levels of global demand remains uncertain, however, as additional variants may emerge that cause a resurgence of COVID-19 and travel restrictions continue to limit international travel. For more information, please read "Item 1. — Business — Markets" of this Form 10-K.

We have undertaken additional liquidity-enhancing measures in response to the COVID-19 pandemic, including deferring or delaying certain capital expenditures related to turnaround activities at our Washington refinery. We closed sale-leaseback transactions (the "Sale-Leaseback Transactions") in the first quarter of 2021, in which we sold twenty-two (22) retail convenience store/fuel station properties located in Hawaii (the "Sale-Leaseback Properties") for \$112.8 million, net of fees. We also entered into a lease on the properties for fifteen (15) years, unless earlier terminated, with up to four 5-year renewal options. On March 19, 2021, we sold 5.75 million shares of common stock in an underwritten public offering at a public offering price of \$16.00 per share resulting in net proceeds to us of approximately \$87.2 million, after deducting underwriting discounts and commissions and offering expenses.

We believe the steps we have taken strengthen our ability to operate through current conditions. We continue to maintain existing processes and procedures including, but not limited to, processes and procedures around protection of our technology systems and proprietary data, even though many of our employees are working from home. The health and well-being of our employees and customers are our top priorities as we continue navigating the challenges presented by the COVID-19 pandemic.

The financial results contained in this Annual Report on Form 10-K reflect the continued impacts on our business of the COVID-19 pandemic experienced during 2021 in the regions in which we operate. The COVID-19 pandemic is ongoing and we continue to actively monitor the impacts of the virus on our people, operations, financial condition, liquidity, suppliers, customers, and industry. Due to the rapid development and fluidity of the situation, the full magnitude of the COVID-19 impact on our financial condition, future results of operations, and future cash flows and liquidity is uncertain and has been and may continue to be material.

Washington Acquisition

On January 11, 2019, we completed the Washington Acquisition for total consideration of \$326.5 million, including acquired working capital, consisting of cash consideration of \$289.5 million and approximately 2.4 million shares of our

common stock with a fair value of \$37.0 million issued to the seller of U.S. Oil. The results of operations for U.S. Oil were included in our refining and logistics segments commencing January 11, 2019. Please read Note 4—Acquisitions to our consolidated financial statements under Item 8 of this Form 10-K for more information.

In connection with the consummation of the Washington Acquisition, we assumed the Washington Refinery Intermediation Agreement with MLC that provides a structured financing arrangement based on U.S. Oil's crude oil and refined products inventories and associated accounts receivable. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Second Amended and Restated J. Aron Supply and Offtake Agreement

Prior to July 1, 2021, under the first amended and restated supply and offtake agreement we had the right to defer payments owed to J. Aron under a deferred payment arrangement up to the lesser of \$165 million or 85% of eligible accounts receivable and inventory. On June 1, 2021, we entered into the Second Amended and Restated Supply and Offtake Agreement (the "Supply and Offtake Agreement"), which provided for a discretionary draw facility to be available to PHR (the "Discretionary Draw Facility") commencing as of July 1, 2021. Under the Discretionary Draw Facility, J. Aron agreed to make advances to PHR in an aggregate principal amount at any one time outstanding not to exceed the lesser of \$165 million or the sum of the borrowing base, which is calculated as (x) 85% of the eligible accounts receivables, plus (y) the lesser of \$82.5 million and 85% of eligible hydrocarbon inventory, minus (z) such reserves as established by J. Aron in respect of eligible receivables and eligible hydrocarbon inventory. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Results of Operations

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Net Loss. Our financial results for the year ended December 31, 2021 improved from a net loss of \$409.1 million for the year ended December 31, 2020 to a net loss of \$81.3 million for the year ended December 31, 2021. The improvement was primarily driven by favorable refined product sales pricing and feedstock costs at our Hawaii refinery, partially offset by higher inventory financing costs at our Washington refinery related to rising inventory financing and product costs. Other factors impacting our results period over period include a 2021 gain on sale of assets of \$63.9 million primarily related to the Sale-Leaseback Transactions we closed in the first quarter of 2021, asset impairment charges of \$1.8 million in 2021 as compared to our 2020 goodwill impairment of \$67.9 million and asset impairment charges of \$17.9 million, and an other-than-temporary impairment of \$45.3 million related to our equity investment in Laramie Energy in 2020.

Adjusted EBITDA and Adjusted Net Loss. For the year ended December 31, 2021, Adjusted EBITDA was \$61.5 million compared to a loss of \$86.7 million for the year ended December 31, 2020. The improvement was primarily related to favorable realized refined product crack spreads at all our refineries, favorable feedstock, purchased product and derivative costs at our Hawaii refinery, and higher refined product sales volumes at our Wyoming refinery, partially offset by unfavorable inventory financing and environmental compliance costs and higher operating expenses.

For the year ended December 31, 2021, Adjusted Net Loss was \$100.3 million compared to \$249.8 million for the year ended December 31, 2020. The change was primarily related to the same factors described above for the increase in Adjusted EBITDA.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Net Income (Loss). Our net income decreased from \$40.8 million for the year ended December 31, 2019 to a net loss of \$409.1 million for the year ended December 31, 2020. The decrease in our net income (loss) was primarily driven by lower refining sales volumes and unfavorable crack spreads related to COVID-19 demand destruction, increased RINs expenses and derivative costs, goodwill and asset impairments of \$85.8 million, and an unfavorable change in lower of cost and net realizable value adjustments, partially offset by cost reductions across our businesses in response to COVID-19 and higher retail fuel margins. In addition, we incurred an other-than-temporary impairment of \$45.3 million related to our equity investment in Laramie Energy in 2020, as compared to an other-than-temporary impairment of \$83.2 million in 2019. Other factors impacting our results period over period include a \$49.0 million reduction in our income tax benefit and lower debt extinguishment and commitment costs.

Adjusted EBITDA and Adjusted Net Income (Loss). For the year ended December 31, 2020, Adjusted EBITDA was a loss of \$86.7 million compared to earnings of \$258.8 million for the year ended December 31, 2019. The change was primarily

related to lower refining sales volumes and unfavorable crack spreads related to COVID-19 demand destruction, partially offset by lower operating expense and higher retail fuel margins.

For the year ended December 31, 2020, Adjusted Net Income (Loss) was a loss of \$249.8 million compared to income of \$90.2 million for the year ended December 31, 2019. The change was primarily related to the same factors described above for the decrease in Adjusted EBITDA and higher depreciation, depletion, and amortization (“DD&A”) due to recently completed capital projects, including turnaround projects, partially offset by a \$4.6 million decrease in interest expense and financing costs and a \$5.8 million decrease in our Equity losses from Laramie Energy, excluding our share of unrealized gains or losses on derivatives and excluding impairment changes associated with our investment in Laramie Energy.

The following table summarizes our consolidated results of operations for the years ended December 31, 2021, 2020, and 2019 (in thousands). The following should be read in conjunction with our consolidated financial statements under Item 8 of this Annual Report on Form 10-K.

	Year Ended December 31,		
	2021	2020	2019
Revenues	\$ 4,710,089	\$ 3,124,870	\$ 5,401,516
Cost of revenues (excluding depreciation)	4,338,474	2,947,697	4,803,589
Operating expense (excluding depreciation)	299,669	277,427	312,899
Depreciation, depletion, and amortization	94,241	90,036	86,121
Impairment expense	1,838	85,806	—
Gain on sale of assets, net	(64,697)	—	—
General and administrative expense (excluding depreciation)	48,096	41,288	46,223
Acquisition and integration costs	87	614	4,704
Total operating expenses	<u>4,717,708</u>	<u>3,442,868</u>	<u>5,253,536</u>
Operating income (loss)	(7,619)	(317,998)	147,980
Other income (expense)			
Interest expense and financing costs, net	(66,493)	(70,222)	(74,839)
Debt extinguishment and commitment costs	(8,144)	—	(11,587)
Gain on curtailment of pension obligation	2,032	—	—
Other income (expense), net	(52)	1,049	2,516
Change in value of common stock warrants	—	4,270	(3,199)
Equity earnings (losses) from Laramie Energy, LLC	—	(46,905)	(89,751)
Total other expense, net	<u>(72,657)</u>	<u>(111,808)</u>	<u>(176,860)</u>
Loss before income taxes	(80,276)	(429,806)	(28,880)
Income tax benefit (expense)	(1,021)	20,720	69,689
Net income (loss)	<u><u>\$ (81,297)</u></u>	<u><u>\$ (409,086)</u></u>	<u><u>\$ 40,809</u></u>

The following tables summarize our operating income (loss) by segment for the years ended December 31, 2021, 2020, and 2019 (in thousands). The following should be read in conjunction with our consolidated financial statements under Item 8 of this Annual Report on Form 10-K.

Year ended December 31, 2021	Refining	Logistics (1)	Retail	Corporate, Eliminations and Other (2)	Total
Revenues	\$ 4,471,111	\$ 184,734	\$ 456,416	\$ (402,172)	\$ 4,710,089
Cost of revenues (excluding depreciation)	4,306,371	96,828	337,476	(402,201)	4,338,474
Operating expense (excluding depreciation)	213,102	14,722	71,845	—	299,669
Depreciation, depletion, and amortization	58,258	22,044	10,880	3,059	94,241
Impairment expense	1,838	—	—	—	1,838
Loss (gain) on sale of assets, net	(19,659)	(19)	(45,034)	15	(64,697)
General and administrative expense (excluding depreciation)	—	—	—	48,096	48,096
Acquisition and integration costs	—	—	—	87	87
Operating income (loss)	\$ (88,799)	\$ 51,159	\$ 81,249	\$ (51,228)	\$ (7,619)

Year ended December 31, 2020	Refining	Logistics (1)	Retail	Corporate, Eliminations and Other (2)	Total
Revenues	\$ 2,886,701	\$ 180,909	\$ 363,713	\$ (306,453)	\$ 3,124,870
Cost of revenues (excluding depreciation)	2,908,870	110,385	234,885	(306,443)	2,947,697
Operating expense (excluding depreciation)	199,738	13,581	64,108	—	277,427
Depreciation, depletion, and amortization	53,930	21,899	10,692	3,515	90,036
Impairment expense	55,989	—	29,817	—	85,806
General and administrative expense (excluding depreciation)	—	—	—	41,288	41,288
Acquisition and integration costs	—	—	—	614	614
Operating income (loss)	\$ (331,826)	\$ 35,044	\$ 24,211	\$ (45,427)	\$ (317,998)

Year ended December 31, 2019	Refining	Logistics (1)	Retail	Corporate, Eliminations and Other (2)	Total
Revenues	\$ 5,167,942	\$ 199,226	\$ 458,889	\$ (424,541)	\$ 5,401,516
Cost of revenues (excluding depreciation)	4,783,747	112,124	332,302	(424,584)	4,803,589
Operating expense (excluding depreciation)	234,582	11,010	67,307	—	312,899
Depreciation, depletion, and amortization	55,832	17,017	10,035	3,237	86,121
General and administrative expense (excluding depreciation)	—	—	—	46,223	46,223
Acquisition and integration costs	—	—	—	4,704	4,704
Operating income (loss)	\$ 93,781	\$ 59,075	\$ 49,245	\$ (54,121)	\$ 147,980

(1) Our logistics operations consist primarily of intercompany transactions which eliminate on a consolidated basis.

(2) Includes eliminations of intersegment Revenues and Cost of revenues (excluding depreciation) of \$402.2 million, \$306.5 million, and \$424.5 million for the years ended December 31, 2021, 2020, and 2019, respectively.

Below is a summary of key operating statistics for the refining segment for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,		
	2021	2020	2019
Total Refining Segment			
Feedstocks Throughput (Mbpd) (1)	135.2	124.1	163.8
Refined product sales volume (Mbpd) (1)	138.8	136.7	176.8
Hawaii Refineries			
Combined Feedstocks Throughput (Mbpd)	82.0	72.7	109.0
Par East Throughput (Mbpd)	82.0	66.5	71.5
Par West Throughput (Mbpd)	—	6.2	37.5
Yield (% of total throughput)			
Gasoline and gasoline blendstocks	24.8 %	24.6 %	23.0 %
Distillates	45.0 %	42.2 %	44.4 %
Fuel oils	26.6 %	29.5 %	20.3 %
Other products	0.6 %	(0.7)%	8.7 %
Total yield	<u>97.0 %</u>	<u>95.6 %</u>	<u>96.4 %</u>
Refined product sales volume (Mbpd)			
On-island sales volume	82.6	83.5	114.1
Exports sales volume	—	0.6	5.7
Total refined product sales volume	<u>82.6</u>	<u>84.1</u>	<u>119.8</u>
Adjusted Gross Margin per bbl (\$/throughput bbl) (2)	\$ 3.24	\$ (1.63)	\$ 3.30
Production costs per bbl (\$/throughput bbl) (3)	3.98	4.03	3.25
DD&A per bbl (\$/throughput bbl)	0.66	0.55	0.40
Washington Refinery			
Feedstocks Throughput (Mbpd) (1)	36.3	39.1	38.9
Yield (% of total throughput)			
Gasoline and gasoline blendstocks	23.7 %	23.4 %	23.6 %
Distillates	34.5 %	35.3 %	35.6 %
Asphalt	20.7 %	18.8 %	18.9 %
Other products	18.3 %	19.8 %	19.4 %
Total yield	<u>97.2 %</u>	<u>97.3 %</u>	<u>97.5 %</u>
Refined product sales volume (Mbpd) (1)	39.6	39.6	41.1
Adjusted Gross Margin per bbl (\$/throughput bbl) (2)	\$ 1.96	\$ 3.88	\$ 11.26
Production costs per bbl (\$/throughput bbl) (3)	3.86	3.50	4.52
DD&A per bbl (\$/throughput bbl)	1.57	1.39	1.56

	Year Ended December 31,		
	2021	2020	2019
Wyoming Refinery			
Feedstocks Throughput (Mbpd)	16.9	12.3	17.0
Yield (% of total throughput)			
Gasoline and gasoline blendstocks	47.3 %	49.2 %	49.6 %
Distillates	45.7 %	45.2 %	44.5 %
Fuel oil	2.2 %	1.9 %	1.7 %
Other products	1.7 %	1.3 %	1.6 %
Total yield	<u>96.9 %</u>	<u>97.6 %</u>	<u>97.4 %</u>
Refined product sales volume (Mbpd)	16.6	13.0	17.0
Adjusted Gross Margin per bbl (\$/throughput bbl) (2)	\$ 12.66	\$ 3.94	\$ 18.82
Production costs per bbl (\$/throughput bbl) (3)	6.22	8.69	6.32
DD&A per bbl (\$/throughput bbl)	2.86	4.34	2.93
Market Indices (average \$ per barrel)			
3-1-2 Singapore Crack Spread (4)	\$ 6.22	\$ 3.15	\$ 10.80
Pacific Northwest 5-2-2-1 Index (5)	15.95	11.44	15.02
Wyoming 3-2-1 Index (6)	29.00	17.80	24.90
Crude Oil Prices (average \$ per barrel)			
Brent	\$ 70.95	\$ 43.21	\$ 64.19
WTI	68.11	39.65	57.08
ANS	71.49	41.77	65.72
Bakken Clearbrook	68.20	37.19	56.04
WCS Hardisty	54.61	27.45	43.18
Brent M1-M3	1.12	(0.98)	1.00

- (1) Feedstocks throughput and sales volumes per day for the Washington refinery for the year ended December 31, 2019 are calculated based on the 355-day period for which we owned the Washington refinery in 2019. The amounts for the total refining segment represent the sum of the Hawaii, Washington, and Wyoming refineries' throughput or sales volumes averaged over the years ended December 31, 2021, 2020, and 2019.
- (2) 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.
- (3) 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.
- (4) In 2020, following the implementation of IMO 2020, we established 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)) as a new benchmark for our Hawaii operations. By removing the high sulfur fuel oil reference in the index, we believe the 3-1-2 Singapore Crack Spread is the most representative market indicator for our operations in Hawaii.

- (5) 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. The 2019 prices for the year ended December 31, 2019 represent the price averaged over the period from January 11, 2019 to December 31, 2019.
- (6) 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.

Below is a summary of key operating statistics for the retail segment for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,		
	2021	2020	2019
Retail Segment			
Retail sales volumes (thousands of gallons)	109,150	102,798	125,313

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. Beginning in 2020, Adjusted Gross Margin also includes the contango gains and backwardation losses associated with our Washington inventory and intermediation obligation. Prior to 2020, contango gains, and backwardation (losses) captured by our Washington intermediation agreement were excluded from Adjusted Gross Margin (as part of the inventory valuation adjustment). This change to our non-GAAP information was made to reflect the favorable or unfavorable impact of the market structure on the profitability of our Washington refinery consistent with the presentation of such impacts on our other refineries. Also beginning in 2020, Adjusted Gross Margin excludes the LIFO layer liquidation impacts associated with our Washington inventory. We have recast the non-GAAP information for the year ended December 31, 2019 to conform to the current period presentation.

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):

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 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 gain on derivatives	(4,804)	—	—
Adjusted Gross Margin (1)	\$ 31,144	\$ 70,524	\$ 128,828

Year ended December 31, 2019	Refining	Logistics	Retail
Operating income	\$ 93,781	\$ 59,075	\$ 49,245
Operating expense (excluding depreciation)	234,582	11,010	67,307
Depreciation, depletion, and amortization	55,832	17,017	10,035
Inventory valuation adjustment	11,938	—	—
RINs gain in excess of net obligation	(3,398)	—	—
Unrealized loss on derivatives	8,988	—	—
Adjusted Gross Margin (1)	\$ 401,723	\$ 87,102	\$ 126,587

(1) For the years ended December 31, 2021, 2020 and 2019, there was no LIFO liquidation adjustment. For the years ended December 31, 2020 and 2019, there was no loss (gain) on sale of assets. For the year ended December 31, 2019, there was no impairment expense.

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. Beginning in 2020, Adjusted Net Income (Loss) also includes the contango gains and backwardation

losses associated with our Washington inventory and intermediation obligation. Prior to 2020, contango gains, and backwardation (losses) captured by our Washington intermediation agreement were excluded from Adjusted Net Income (Loss) (as part of the inventory valuation adjustment). This change to our non-GAAP information was made to reflect the favorable or unfavorable impact of the market structure on the profitability of our Washington refinery consistent with the presentation of such impacts on our other refineries. Also beginning in 2020, Adjusted Net Income (Loss) excludes the LIFO layer liquidation impacts associated with our Washington inventory. We have recast the non-GAAP information for the year ended December 31, 2019 to conform to the current period presentation.

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):

	Year Ended December 31,		
	2021	2020	2019
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809
Inventory valuation adjustment	17,089	14,046	11,938
RINs loss (gain) in excess of net obligation	16,967	44,071	(3,398)
Unrealized loss (gain) on derivatives	1,517	(4,804)	8,988
Acquisition and integration costs	87	614	4,704
Debt extinguishment and commitment costs	8,144	—	11,587
Changes in valuation allowance and other deferred tax items (1)	—	(20,896)	(68,792)
Change in value of common stock warrants	—	(4,270)	3,199
Severance costs	84	512	—
Impairment expense	1,838	85,806	—
Impairment of Investment in Laramie Energy, LLC (2)	—	45,294	83,152
Par's share of Laramie Energy's unrealized loss (gain) on derivatives (2)	—	(1,110)	(1,969)
Gain on sale of assets	(64,697)	—	—
Adjusted Net Income (Loss) (3)	(100,268)	(249,823)	90,218
Depreciation, depletion, and amortization	94,241	90,036	86,121
Interest expense and financing costs, net	66,493	70,222	74,839
Equity losses (earnings) from Laramie Energy, LLC, excluding Par's share of unrealized loss (gain) on derivatives and impairment losses	—	2,721	8,568
Income tax expense (benefit)	1,021	176	(897)
Adjusted EBITDA	\$ 61,487	\$ (86,668)	\$ 258,849

- (1) Includes 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 benefits are included in Income tax expense (benefit) on our consolidated statements of operations.
- (2) Includes our share of Laramie Energy's unrealized loss (gain) on derivatives, impairment losses on our investment in Laramie Energy, and our share of Laramie Energy's asset impairment losses in excess of our basis difference. These impairment losses and our share of Laramie Energy's unrealized loss (gain) on derivatives are included in Equity earnings (losses) from Laramie Energy, LLC on our consolidated statements of operations.
- (3) For the years ended December 31, 2021, 2020, and 2019, there was no LIFO liquidation adjustment or change in value of contingent consideration.

Discussion of Operating Income (Loss) by Segment

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Refining. Operating loss for our refining segment was \$88.8 million for the year ended December 31, 2021, an improvement of \$243.0 million compared to operating loss of \$331.8 million for the year ended December 31, 2020. The increase in profitability was primarily driven by favorable realized product crack spreads across all our refineries, favorable purchased product and feedstock costs at our Hawaii refinery, favorable derivative costs, and a 28% increase in refining sales volume at our Wyoming refinery, partially offset by higher inventory financing costs related to the rising cost of crude oil. Other factors impacting our results period over period include asset impairment charges of \$1.8 million in 2021 from discontinued capital projects as compared to our 2020 goodwill impairment of \$38.1 million and asset impairment charges of \$17.9 million, and a 2021 gain on sale of assets of \$19.7 million primarily related to the Sale-Leaseback Transactions we closed in the first quarter of 2021.

Logistics. Operating income for our logistics segment was \$51.2 million for the year ended December 31, 2021, an increase of \$16.2 million compared to operating income of \$35.0 million for the year ended December 31, 2020. The increase is

primarily due to net 12% and 32% higher throughput across our Hawaii and Wyoming logistics assets, respectively, related to increased demand as a result of reduced COVID-19-related travel restrictions and lower lease costs on barges in Hawaii.

Retail. Operating income for our retail segment was \$81.2 million for the year ended December 31, 2021, an increase of \$57.0 million compared to operating income of \$24.2 million for the year ended December 31, 2020. The increase in profitability was primarily due to a gain on sale of assets of \$45.0 million primarily related to the Sale-Leaseback Transactions we closed in the first quarter of 2021, a 2020 goodwill impairment of \$29.8 million with no corresponding impairment in 2021, and an increase in sales volumes of 6%, partially offset by a decrease in fuel margins of 17% related to rising fuel costs and market-driven margin compression and additional rent expense related to the Sale-Leaseback Transactions that we closed in the first quarter of 2021.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Refining. Operating loss for our refining segment was \$331.8 million for the year ended December 31, 2020, a decrease of \$425.6 million compared to operating income of \$93.8 million for the year ended December 31, 2019. The decrease in profitability was primarily driven by lower refining sales volumes at our Hawaii and Wyoming refineries related to COVID-19 demand destruction and turnarounds in both locations, unfavorable crude oil differentials and crack spreads, increased RINs expenses and derivative costs, goodwill impairment charges of \$38.1 million, asset impairment charges of \$17.9 million, and unfavorable lower of cost and net realizable value adjustments of \$10.6 million, partially offset by improved energy-related cost of sales and operating expense reductions across our refineries in response to COVID-19.

Logistics. Operating income for our logistics segment was \$35.0 million for the year ended December 31, 2020, a decrease of \$24.1 million compared to operating income of \$59.1 million for the year ended December 31, 2019. The decrease is primarily due to a net 30% and 25% lower throughput across our Hawaii and Wyoming logistics assets, respectively, and lower neighbor island sales in Hawaii related to COVID-19 demand destruction, major turnarounds in both locations, and higher DD&A, partially offset by a net 9% increase in throughput across our Washington logistics assets.

Retail. Operating income for our retail segment was \$24.2 million for the year ended December 31, 2020, a decrease of \$25.0 million compared to operating income of \$49.2 million for the year ended December 31, 2019. The decrease in profitability was primarily due to goodwill impairment charges of \$29.8 million and an 18% decline in sales volumes, partially offset by an increase in fuel margins of 25% and operating expense reductions in response to the economic impacts of COVID-19 on our businesses.

Discussion of Adjusted Gross Margin by Segment

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Refining. For the year ended December 31, 2021, our refining Adjusted Gross Margin was approximately \$200.3 million, an increase of \$169.2 million compared to \$31.1 million for the year ended December 31, 2020. The increase in profitability was primarily driven by favorable realized product crack spreads across all our refineries and favorable feedstock and purchased product costs in Hawaii, partially offset by unfavorable feedstock and inventory financing costs in Washington. Adjusted gross margin for the Hawaii refinery improved from \$(1.63) per barrel in 2020 to \$3.24 per barrel in 2021 primarily due to favorable product crack spreads and feedstock, purchased product, and derivative costs. Adjusted gross margin for the Wyoming refinery increased by \$8.72 per barrel primarily due to favorable product crack spreads and a 28% increase in sales volumes. Adjusted gross margin for the Washington refinery decreased by \$1.92 per barrel primarily due to higher inventory financing and feedstock costs, partially offset by favorable realized product crack spreads and lower logistics costs.

Logistics. For the year ended December 31, 2021, our logistics Adjusted Gross Margin was approximately \$87.9 million, an increase of \$17.4 million compared to \$70.5 million for the year ended December 31, 2020. The increase was primarily driven by net 12% and 32% higher throughput across our Hawaii and Wyoming logistics assets, respectively, due to increased sales volumes in both regions driven by reduced COVID-19-related travel restrictions, and lower lease costs on barges in Hawaii.

Retail. For the year ended December 31, 2021, our retail Adjusted Gross Margin was approximately \$118.9 million, a decrease of \$9.9 million compared to \$128.8 million for the year ended December 31, 2020. The decrease was primarily due to a 17% decrease in fuel margins due to rising fuel costs and market-driven margin compression, partially offset by a 6% increase in sales volumes.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Refining. For the year ended December 31, 2020, our refining Adjusted Gross Margin was approximately \$31.1 million, a decrease of \$370.6 million compared to \$401.7 million for the year ended December 31, 2019. The decrease in profitability was primarily driven by a 23% decline in sales volumes and declines in crack spreads. Adjusted gross margin for the Hawaii refinery decreased from \$3.30 per barrel in 2019 to \$(1.63) per barrel in 2020 primarily due to 30% lower sales volumes, an increase in RINs expenses, and unfavorable crude oil differentials. Adjusted gross margin for the Wyoming refinery decreased \$14.88 per barrel primarily due to a 24% decline in sales volumes, an increase in RINs expenses, and a decrease in crack spreads. The decline in refining sales volumes in Hawaii and Wyoming was driven by COVID-19 demand destruction and turnarounds in both locations. Adjusted gross margin for the Washington refinery decreased \$7.38 per barrel primarily due to unfavorable crack spreads and higher RINs expenses, partially offset by favorable derivative costs.

Logistics. For the year ended December 31, 2020, our logistics Adjusted Gross Margin was approximately \$70.5 million, a decrease of \$16.6 million compared to \$87.1 million for the year ended December 31, 2019. The decrease was primarily driven by a net 30% and 25% lower throughput across our Hawaii and Wyoming logistics assets, respectively, and lower neighbor island sales in Hawaii related to COVID-19 demand destruction and major turnarounds at both locations, partially offset by a net 9% increase in throughput across our Washington logistics assets.

Retail. For the year ended December 31, 2020, our retail Adjusted Gross Margin was approximately \$128.8 million, an increase of \$2.2 million compared to \$126.6 million for the year ended December 31, 2019. The increase was primarily due to a 25% increase in fuel margins, partially offset by a decline in sales volumes of 18% due to COVID-19 demand destruction.

Discussion of Consolidated Results

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenues. For the year ended December 31, 2021, revenues were \$4.7 billion, a \$1.6 billion increase compared to \$3.1 billion for the year ended December 31, 2020. The increase was primarily the result of an increase of \$1.5 billion in third-party revenues at our refining segment primarily as a result of increases in Brent and WTI crude oil prices. Brent crude oil prices recovered from COVID-19-related lows, averaging \$70.95 per barrel for the year ended December 31, 2021 compared to \$43.21 per barrel for the year ended December 31, 2020, and WTI crude oil prices averaged \$68.11 per barrel during the year ended December 31, 2021 compared to \$39.65 in the year ended December 31, 2020. Other factors contributing to the increase in revenues at our refining segment include a 28% increase in refining sales volume at our Wyoming refinery and improved realized product crack spreads across all our refineries. Revenues in our retail segment increased \$92.7 million primarily due to a 23% increase in fuel prices and a 6% increase in sales volume.

Cost of Revenues (Excluding Depreciation). For the year ended December 31, 2021, cost of revenues (excluding depreciation) was \$4.3 billion, a \$1.4 billion increase compared to \$2.9 billion for the year ended December 31, 2020. The increase was primarily due to increases in Brent and WTI crude oil prices and refining sales volumes at our Wyoming refinery as discussed above, higher inventory financing costs, and 6% higher sales volumes at our Retail segment, partially offset by favorable purchased product and feedstock costs at our Hawaii refinery and favorable derivative costs.

Operating Expense (Excluding Depreciation). For the year ended December 31, 2021, operating expense (excluding depreciation) was approximately \$299.7 million, an increase of \$22.3 million compared to \$277.4 million for the year ended December 31, 2020. The increase was primarily due to higher utilities and maintenance expenses at our Hawaii refinery and increased rent expenses driven by new leases from the Sale-Leaseback Transactions we completed in the first quarter of 2021.

Depreciation, Depletion, and Amortization. For the year ended December 31, 2021, DD&A expense was approximately \$94.2 million, an increase of \$4.2 million compared to \$90.0 million for the year ended December 31, 2020. The increase was primarily due to amortization of our Hawaii refinery turnaround completed in 2020.

Impairment Expense. During the year ended December 31, 2021, we recorded asset impairment charges of \$1.8 million primarily related to discontinued capital projects. During the year ended December 31, 2020, we recorded goodwill and asset impairment charges totaling \$85.8 million related to our Refining and Retail segments. Please read Note 10—Goodwill and Intangible Assets and Note 8—Property, Plant, and Equipment and Impairment of Long-Lived Assets to our consolidated financial statements under Item 8 of this Form 10-K for further discussion on our 2020 goodwill impairment and our 2021 and 2020 asset impairment charges, respectively.

Gain on Sale of Assets, Net. For the year ended December 31, 2021, the gain on sale of assets, net was approximately \$64.7 million and primarily related to the gain recognized as a result of the Sale-Leaseback Transactions we closed on

February 23 and March 12, 2021. Please read Note 16—Leases to our consolidated financial statements under Item 8 of this Form 10-K for further discussion on the Sale-Leaseback Transactions. No such transaction occurred during the year ended December 31, 2020.

General and Administrative Expense (Excluding Depreciation). For the year ended December 31, 2021, general and administrative expense (excluding depreciation) was approximately \$48.1 million, an increase of \$6.8 million compared to \$41.3 million for the year ended December 31, 2020. The increase was primarily due to higher employee costs, an increase in the use of outside services, and higher information technology infrastructure costs.

Interest Expense and Financing Costs, Net. For the year ended December 31, 2021, our interest expense and financing costs were approximately \$66.5 million, a decrease of \$3.7 million compared to \$70.2 million for the year ended December 31, 2020. The decrease was primarily due to lower outstanding debt balances driven by the maturity of our outstanding 5.00% Convertible Senior Notes in June 2021, the repayment of the PHL, Mid Pac, and Retail Property Term Loans and interest rate swap related to the Retail Property Term Loan in the first quarter of 2021, and quarterly principal payments on our Term Loan B Facility. These decreases were partially offset by higher interest expense related to the 12.875% Senior Secured Notes issued in June 2020 and an increase of \$1.1 million related to increased borrowings under our inventory financing agreements. Please read Note 11—Inventory Financing Agreements and Note 13—Debt to our consolidated financial statements under Item 8 of this Form 10-K for further discussion on our inventory financing and indebtedness, respectively.

Change in Value of Common Stock Warrants. For the year ended December 31, 2020, the change in value of common stock warrants resulted in a gain of \$4.3 million. During January and March 2020, one of our stockholders and its affiliates exercised the remaining 354,350 common stock warrants in exchange for 350,542 shares of common stock. We estimated the fair value of our outstanding common stock warrants and the income recognized upon exercise using the difference between the strike price of the warrant and the market price of our common stock. During the three months ended March 31, 2020, our stock price decreased from \$23.24 per share on December 31, 2019 to \$7.10 per share on March 31, 2020. During the year ended December 31, 2021, there were no common stock warrants outstanding.

Debt extinguishment and commitment costs. For the year ended December 31, 2021, our debt extinguishment and commitment costs were approximately \$8.1 million and primarily represent \$6.6 million in extinguishment costs associated with the early repayment of a portion of the outstanding 12.875% Senior Secured Notes on June 14, 2021 and \$1.4 million in extinguishment costs associated with the early repayment of the Retail Property Term Loan on February 23, 2021. Please read Note 13—Debt to our consolidated financial statements under Item 8 of this Form 10-K for further discussion. There were no debt extinguishment and commitment costs for the year ended December 31, 2020.

Gain on curtailment of pension obligation. During the year ended December 31, 2021, we recorded a gain on curtailment of pension obligation of \$2.0 million related to the amendment to the Wyoming Refining defined benefit plan. Please read Note 19—Benefit Plans to our consolidated financial statements under Item 8 of this Form 10-K for further discussion on the gain on curtailment of pension obligation. There was no gain on curtailment of pension obligation for the year ended December 31, 2020.

Equity Earnings (Losses) from Laramie Energy, LLC. For the year ended December 31, 2020, equity losses from Laramie Energy were approximately \$46.9 million. During the year ended December 31, 2020, we recorded an other-than-temporary impairment charge of \$45.3 million related to our investment in Laramie Energy. As of June 30, 2020, we discontinued the application of the equity method of accounting for our investment in Laramie Energy because the book value of such investment has been reduced to zero. As such, there were no earnings or losses from Laramie Energy recorded during the year ended December 31, 2021. Please read Note 3—Investment in Laramie Energy, LLC to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Income Taxes. For the year ended December 31, 2021, we recorded an income tax expense of \$1.0 million primarily driven by foreign withholding taxes. For the year ended December 31, 2020, we recorded an income tax benefit of \$20.7 million primarily driven by an increase in our net operating loss carryforwards that do not expire and the change in our indefinitely-lived goodwill due to the impairments.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Revenues. For the year ended December 31, 2020, revenues were \$3.1 billion, a \$2.3 billion decrease compared to \$5.4 billion for the year ended December 31, 2019. The decrease was primarily the result of a decrease of \$2.2 billion in third-party revenues at our refining segment primarily as a result of decreases in Brent and WTI crude oil prices and lower sales volumes related to COVID-19 demand destruction. Refined product sales volumes decreased 23% from 176.8 Mbpd in the year

ended December 31, 2019 to 136.7 Mbpd in the year ended December 31, 2020. Brent crude oil prices averaged \$43.21 per barrel for the year ended December 31, 2020 compared to \$64.19 per barrel for the year ended December 31, 2019, with similar decreases experienced for WTI crude oil prices. Revenues in our retail segment decreased \$95.2 million primarily due to 18% declines in both sales volumes and fuel prices.

Cost of Revenues (Excluding Depreciation). For the year ended December 31, 2020, cost of revenues (excluding depreciation), was \$2.9 billion, a \$1.9 billion decrease compared to \$4.8 billion for the year ended December 31, 2019. The decrease was primarily due to the decreases in Brent and WTI crude oil prices and lower refining sales volumes discussed above. These decreases were partially offset by unfavorable crude oil differentials, higher RINs expenses, increased derivative costs, and an unfavorable lower of cost and net realizable value adjustment of \$10.6 million. Cost of revenues at our retail segment decreased \$97.4 million primarily due to lower fuel costs and an 18% decline in sales volumes.

Operating Expense (Excluding Depreciation). For the year ended December 31, 2020, operating expense (excluding depreciation) was approximately \$277.4 million, a decrease of \$35.5 million compared to \$312.9 million for the year ended December 31, 2019. The decrease was primarily due to lower utilities and repairs and maintenance expenses and COVID-19- related reductions in travel, employee costs, and the use of outside services.

Depreciation, Depletion, and Amortization. For the year ended December 31, 2020, DD&A expense was approximately \$90.0 million, an increase of \$3.9 million compared to \$86.1 million for the year ended December 31, 2019. The increase was primarily due to recently completed capital projects, including three turnarounds during 2019 and 2020 and our Washington renewables logistics project.

Impairment Expense. During the year ended December 31, 2020, we recorded goodwill and asset impairment charges totaling \$85.8 million related to our Refining and Retail segments. Please read Note 10—Goodwill and Intangible Assets and Note 8—Property, Plant, and Equipment and Impairment of Long-Lived Assets to our consolidated financial statements under Item 8 of this Form 10-K for further discussion on the goodwill impairment of \$67.9 million and asset impairment of \$17.9 million, respectively. There was no impairment expense for the year ended December 31, 2019.

General and Administrative Expense (Excluding Depreciation). For the year ended December 31, 2020, general and administrative expense (excluding depreciation) was approximately \$41.3 million, a decrease of \$4.9 million compared to \$46.2 million for the year ended December 31, 2019. The decrease was primarily due to COVID-19-related reductions in travel and employee costs and a reduction in the use of outside services.

Acquisition and Integration Costs. For the year ended December 31, 2020, we incurred approximately \$0.6 million of expenses primarily related to integration costs for the Washington Acquisition. For the year ended December 31, 2019, we incurred approximately \$4.7 million of expenses primarily related to acquisition and integration costs for the Washington and Par West Acquisitions. Please read Note 4—Acquisitions to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Interest Expense and Financing Costs, Net. For the year ended December 31, 2020, our interest expense and financing costs were approximately \$70.2 million, a decrease of \$4.6 million compared to \$74.8 million for the year ended December 31, 2019. The decrease was primarily due to a \$4.0 million decrease in due to the exchange of a portion of our outstanding 5.00% Convertible Senior Notes during 2019, a decrease of \$4.7 million due to reduced borrowings under our inventory financing agreements, and a decrease of \$4.3 million due to the reduced principal and lower variable interest rates on our Term Loan B Facility. These decreases were partially offset by interest expense of \$8.1 million related to the 12.875% Senior Secured Notes issued in June 2020. Please read Note 11—Inventory Financing Agreements and Note 13—Debt to our consolidated financial statements under Item 8 of this Form 10-K for further discussion on our inventory financing and indebtedness, respectively.

Change in Value of Common Stock Warrants. For the year ended December 31, 2020, the change in value of common stock warrants resulted in a gain of approximately \$4.3 million, a change of \$7.5 million compared to a loss of \$3.2 million for the year ended December 31, 2019. During January and March 2020, one of our stockholders and its affiliates exercised the remaining 354,350 common stock warrants in exchange for 350,542 shares of common stock. We estimated the fair value of our outstanding common stock warrants and the income recognized upon exercise using the difference between the strike price of the warrant and the market price of our common stock. During the year ended December 31, 2019, our stock price increased from \$14.18 per share on December 31, 2018 to \$23.24 per share on December 31, 2019, which resulted in an increase in the value of the common stock warrants.

Debt extinguishment and commitment costs. For the year ended December 31, 2019, our debt extinguishment and commitment costs were approximately \$11.6 million and represent the commitment and other fees associated with the financing

of the Washington Acquisition and the extinguishment costs associated with the exchange of a portion of our outstanding 5.00% Convertible Senior Notes. There were no debt extinguishment and commitment costs for the year ended December 31, 2020.

Equity Earnings (Losses) from Laramie Energy, LLC. For the year ended December 31, 2020, equity losses from Laramie Energy were approximately \$46.9 million, a difference of \$42.9 million compared to equity losses of \$89.8 million for the year ended December 31, 2019. During the years ended December 31, 2020 and 2019, we recorded other-than-temporary impairment charges of \$45.3 million and \$81.5 million related to our investment in Laramie Energy, respectively. As of June 30, 2020, we have discontinued the application of the equity method of accounting for our investment in Laramie Energy because the book value of such investment has been reduced to zero. Please read Note 3—Investment in Laramie Energy, LLC to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Income Taxes. For the year ended December 31, 2020, we recorded an income tax benefit of \$20.7 million primarily driven by an increase in our net operating loss carryforwards that do not expire and the change in our indefinitely-lived goodwill due to the impairments. For the year ended December 31, 2019, we recorded an income tax benefit of \$69.7 million primarily driven by a \$64.2 million benefit associated with a partial release of our valuation allowance in connection with the Washington Acquisition.

Condensed Consolidating Financial Information

On December 21, 2017, Par Petroleum, LLC (the “Issuer”) issued its 7.75% Senior Secured Notes due 2025 in a private offering under Rule 144A and Regulation S of the Securities Act. On January 11, 2019, the Issuers (defined below) entered into a term loan and guaranty agreement with Goldman Sachs Bank USA, as administrative agent, and the lenders party thereto with respect to a \$250.0 million term loan (the “Term Loan B”). On June 5, 2020, the Issuers issued their 12.875% Senior Secured Notes due 2026 in a private offering under Rule 144A and Regulation S of the Securities Act. The 7.75% Senior Secured Notes, the Term Loan B, and the 12.875% Senior Secured Notes were co-issued by Par Petroleum Finance Corp. (together with the Issuer, the “Issuers”), which has no independent assets or operations. The 7.75% Senior Secured Notes, Term Loan B, and 12.875% Senior Secured Notes are guaranteed on a senior unsecured basis only as to payment of principal and interest by Par Pacific Holdings, Inc. (the “Parent”) and are guaranteed on a senior secured basis by all of the subsidiaries of Par Petroleum, LLC (other than Par Petroleum Finance Corp.).

The following supplemental condensed consolidating financial information reflects (i) the Parent’s separate accounts, (ii) Par Petroleum, LLC and its consolidated subsidiaries’ accounts (which are all guarantors of the 7.75% Senior Secured Notes, Term Loan B, and 12.875% Senior Secured Notes), (iii) the accounts of subsidiaries of the Parent that are not guarantors of the 7.75% Senior Secured Notes, Term Loan B, or 12.875% Senior Secured Notes and consolidating adjustments and eliminations, and (iv) the Parent’s consolidated accounts for the dates and periods indicated. For purposes of the following condensed consolidating information, the Parent’s investment in its subsidiaries is accounted for under the equity method of accounting (dollar amounts in thousands).

As of December 31, 2021

	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
ASSETS				
Current assets				
Cash and cash equivalents	\$ 4,086	\$ 108,105	\$ 30	\$ 112,221
Restricted cash	330	3,670	—	4,000
Trade accounts receivable	—	195,104	4	195,108
Inventories	—	790,317	—	790,317
Prepaid and other current assets	15,664	12,864	(3)	28,525
Due from related parties	94,676	—	(94,676)	—
Total current assets	114,756	1,110,060	(94,645)	1,130,171
Property, plant, and equipment				
Property, plant, and equipment	19,535	1,156,906	3,956	1,180,397
Less accumulated depreciation, depletion, and amortization	(13,869)	(307,091)	(2,932)	(323,892)
Property, plant, and equipment, net	5,666	849,815	1,024	856,505
Long-term assets				
Operating lease right-of-use (“ROU”) assets	3,280	380,544	—	383,824
Investment in subsidiaries	207,483	—	(207,483)	—
Intangible assets, net	—	16,234	—	16,234
Goodwill	—	124,664	2,598	127,262
Other long-term assets	724	57,382	(1,851)	56,255
Total assets	\$ 331,909	\$ 2,538,699	\$ (300,357)	\$ 2,570,251
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Current maturities of long-term debt	\$ —	\$ 10,841	\$ —	\$ 10,841
Obligations under inventory financing agreements	—	737,704	—	737,704
Accounts payable	1,386	151,676	1,481	154,543
Accrued taxes	48	28,593	—	28,641
Operating lease liabilities	608	53,032	—	53,640
Other accrued liabilities	9,805	360,246	373	370,424
Due to related parties	50,195	10,261	(60,456)	—
Total current liabilities	62,042	1,352,353	(58,602)	1,355,793
Long-term liabilities				
Long-term debt, net of current maturities	—	553,717	—	553,717
Finance lease liabilities	17	12,192	(4,518)	7,691
Operating lease liabilities	4,150	330,944	—	335,094
Other liabilities	—	63,098	(10,842)	52,256
Total liabilities	66,209	2,312,304	(73,962)	2,304,551
Commitments and contingencies				
Stockholders' equity				
Preferred stock	—	—	—	—
Common stock	602	—	—	602
Additional paid-in capital	821,713	409,686	(409,686)	821,713
Accumulated earnings (deficit)	(559,117)	(185,096)	185,096	(559,117)
Accumulated other comprehensive income (loss)	2,502	1,805	(1,805)	2,502
Total stockholders' equity	265,700	226,395	(226,395)	265,700
Total liabilities and stockholders' equity	\$ 331,909	\$ 2,538,699	\$ (300,357)	\$ 2,570,251

As of December 31, 2020

ASSETS	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
ASSETS				
Current assets				
Cash and cash equivalents	\$ 480	\$ 67,147	\$ 682	\$ 68,309
Restricted cash	330	1,670	—	2,000
Trade accounts receivable	—	111,654	3	111,657
Inventories	—	429,855	—	429,855
Prepaid and other current assets	16,983	7,171	494	24,648
Due from related parties	107,995	—	(107,995)	—
Total current assets	125,788	617,497	(106,816)	636,469
Property, plant, and equipment				
Property, plant, and equipment	21,477	1,124,587	37,814	1,183,878
Less accumulated depreciation, depletion, and amortization	(14,368)	(233,927)	(2,818)	(251,113)
Property, plant, and equipment, net	7,109	890,660	34,996	932,765
Long-term assets				
Operating lease right-of-use (“ROU”) assets	3,714	367,850	(14,398)	357,166
Investment in subsidiaries	209,010	—	(209,010)	—
Intangible assets, net	—	18,892	—	18,892
Goodwill	—	125,399	2,598	127,997
Other long-term assets	723	59,849	—	60,572
Total assets	\$ 346,344	\$ 2,080,147	\$ (292,630)	\$ 2,133,861
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Current maturities of long-term debt	\$ 47,301	\$ 11,048	\$ 1,584	\$ 59,933
Obligations under inventory financing agreements	—	423,686	—	423,686
Accounts payable	2,401	103,067	1,477	106,945
Accrued taxes	49	27,371	20	27,440
Operating lease liabilities	750	60,449	(4,234)	56,965
Other accrued liabilities	10,907	194,114	(1,310)	203,711
Due to related parties	33,757	36,124	(69,881)	—
Total current liabilities	95,165	855,859	(72,344)	878,680
Long-term liabilities				
Long-term debt, net of current maturities	—	608,353	40,307	648,660
Finance lease liabilities	77	7,848	—	7,925
Operating lease liabilities	4,783	309,736	(10,164)	304,355
Other liabilities	45	87,382	(39,460)	47,967
Total liabilities	100,070	1,869,178	(81,661)	1,887,587
Commitments and contingencies				
Stockholders' equity				
Preferred stock	—	—	—	—
Common stock	540	—	—	540
Additional paid-in capital	726,504	307,967	(307,967)	726,504
Accumulated earnings (deficit)	(477,028)	(94,086)	94,086	(477,028)
Accumulated other comprehensive income (loss)	(3,742)	(2,912)	2,912	(3,742)
Total stockholders' equity	246,274	210,969	(210,969)	246,274
Total liabilities and stockholders' equity	\$ 346,344	\$ 2,080,147	\$ (292,630)	\$ 2,133,861

	Year Ended December 31, 2021			
	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Revenues	\$ —	\$ 4,710,039	\$ 50	\$ 4,710,089
Operating expenses				
Cost of revenues (excluding depreciation)	—	4,338,474	—	4,338,474
Operating expense (excluding depreciation)	—	300,386	(717)	299,669
Depreciation, depletion, and amortization	2,452	91,550	239	94,241
Impairment expense	—	1,838	—	1,838
Loss (gain) on sale of assets, net	15	(10,949)	(53,763)	(64,697)
General and administrative expense (excluding depreciation)	12,435	35,661	—	48,096
Acquisition and integration costs	87	—	—	87
Total operating expenses	<u>14,989</u>	<u>4,756,960</u>	<u>(54,241)</u>	<u>4,717,708</u>
Operating income (loss)	(14,989)	(46,921)	54,291	(7,619)
Other income (expense)				
Interest expense and financing costs, net	(2,600)	(64,209)	316	(66,493)
Debt extinguishment and commitment costs	—	(6,728)	(1,416)	(8,144)
Gain on curtailment of pension obligation	—	2,032	—	2,032
Other income (expense), net	(33)	(19)	—	(52)
Equity earnings (losses) from subsidiaries	(63,649)	—	63,649	—
Total other income (expense), net	<u>(66,282)</u>	<u>(68,924)</u>	<u>62,549</u>	<u>(72,657)</u>
Income (loss) before income taxes	(81,271)	(115,845)	116,840	(80,276)
Income tax benefit (expense) (1)	(26)	24,835	(25,830)	(1,021)
Net income (loss)	<u>\$ (81,297)</u>	<u>\$ (91,010)</u>	<u>\$ 91,010</u>	<u>\$ (81,297)</u>
Adjusted EBITDA	\$ (12,468)	\$ 73,188	\$ 767	\$ 61,487

	Year Ended December 31, 2020			
	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Revenues	\$ —	\$ 3,124,870	\$ —	\$ 3,124,870
Operating expenses				
Cost of revenues (excluding depreciation)	—	2,947,697	—	2,947,697
Operating expense (excluding depreciation)	—	282,159	(4,732)	277,427
Depreciation, depletion, and amortization	2,900	86,622	514	90,036
Impairment expense	—	85,806	—	85,806
General and administrative expense (excluding depreciation)	11,097	30,191	—	41,288
Acquisition and integration costs	—	614	—	614
Total operating expenses	13,997	3,433,089	(4,218)	3,442,868
Operating income (loss)	(13,997)	(308,219)	4,218	(317,998)
Other income (expense)				
Interest expense and financing costs, net	(4,982)	(61,856)	(3,384)	(70,222)
Other income (expense), net	(3)	1,052	—	1,049
Change in value of common stock warrants	4,270	—	—	4,270
Equity earnings (losses) from subsidiaries	(394,197)	—	394,197	—
Equity losses from Laramie Energy, LLC	—	—	(46,905)	(46,905)
Total other income (expense), net	(394,912)	(60,804)	343,908	(111,808)
Income (loss) before income taxes	(408,909)	(369,023)	348,126	(429,806)
Income tax benefit (expense) (1)	(177)	80,914	(60,017)	20,720
Net income (loss)	\$ (409,086)	\$ (288,109)	\$ 288,109	\$ (409,086)
Adjusted EBITDA	\$ (10,943)	\$ (80,457)	\$ 4,732	\$ (86,668)

	Year Ended December 31, 2019			
	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Revenues	\$ —	\$ 5,401,446	\$ 70	\$ 5,401,516
Operating expenses				
Cost of revenues (excluding depreciation)	—	4,803,589	—	4,803,589
Operating expense (excluding depreciation)	—	315,659	(2,760)	312,899
Depreciation, depletion, and amortization	2,969	82,843	309	86,121
Loss (gain) on sale of assets, net	—	(37,382)	37,382	—
General and administrative expense (excluding depreciation)	20,017	26,007	199	46,223
Acquisition and integration costs	28	4,676	—	4,704
Total operating expenses	23,014	5,195,392	35,130	5,253,536
Operating income (loss)	(23,014)	206,054	(35,060)	147,980
Other income (expense)				
Interest expense and financing costs, net	(9,952)	(62,098)	(2,789)	(74,839)
Debt extinguishment and commitment costs	(6,091)	(5,354)	(142)	(11,587)
Other income (expense), net	2,303	213	—	2,516
Change in value of common stock warrants	(3,199)	—	—	(3,199)
Equity earnings (losses) from subsidiaries	81,097	—	(81,097)	—
Equity losses from Laramie Energy, LLC	—	—	(89,751)	(89,751)
Total other income (expense), net	64,158	(67,239)	(173,779)	(176,860)
Income (loss) before income taxes	41,144	138,815	(208,839)	(28,880)
Income tax benefit (expense) (1)	(335)	(26,507)	96,531	69,689
Net income (loss)	\$ 40,809	\$ 112,308	\$ (112,308)	\$ 40,809
Adjusted EBITDA	\$ (17,714)	\$ 273,932	\$ 2,631	\$ 258,849

(1) The income tax benefit (expense) of the Parent Guarantor and Issuer and Subsidiaries is determined using the separate return method. The Non-Guarantor Subsidiaries and Eliminations column includes tax benefits recognized at the Par consolidated level that are primarily associated with changes to the consolidated valuation allowance and other deferred tax balances.

Non-GAAP Financial Measures

Adjusted EBITDA for the supplemental consolidating condensed financial information, which is segregated at the “Parent Guarantor,” “Issuer and Subsidiaries,” and “Non-Guarantor Subsidiaries and Eliminations” levels, is calculated in the same manner as for the Par Pacific Holdings, Inc. Adjusted EBITDA calculations. See “Results of Operations — Non-GAAP Performance Measures — Adjusted Net Income (Loss) and Adjusted EBITDA” above.

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

	Year Ended December 31, 2021			
	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Net income (loss)	\$ (81,297)	\$ (91,010)	\$ 91,010	\$ (81,297)
Inventory valuation adjustment	—	17,089	—	17,089
RINs loss in excess of net obligation	—	16,967	—	16,967
Unrealized loss on derivatives	—	1,517	—	1,517
Acquisition and integration costs	87	—	—	87
Debt extinguishment and commitment costs	—	6,728	1,416	8,144
Severance costs	—	84	—	84
Impairment expense	—	1,838	—	1,838
Loss (gain) on sale of assets, net	15	(10,949)	(53,763)	(64,697)
Depreciation, depletion, and amortization	2,452	91,550	239	94,241
Interest expense and financing costs, net	2,600	64,209	(316)	66,493
Equity losses (income) from subsidiaries	63,649	—	(63,649)	—
Income tax expense (benefit)	26	(24,835)	25,830	1,021
Adjusted EBITDA (3)	\$ (12,468)	\$ 73,188	\$ 767	\$ 61,487

	Year Ended December 31, 2020			
	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Net income (loss)	\$ (409,086)	\$ (288,109)	\$ 288,109	\$ (409,086)
Inventory valuation adjustment	—	14,046	—	14,046
RINs loss in excess of net obligation	—	44,071	—	44,071
Unrealized gain on derivatives	—	(4,804)	—	(4,804)
Acquisition and integration costs	—	614	—	614
Changes in valuation allowance and other deferred tax items (1)	—	—	(20,896)	(20,896)
Change in value of common stock warrants	(4,270)	—	—	(4,270)
Severance costs	157	355	—	512
Impairment expense	—	85,806	—	85,806
Impairments of Laramie Energy, LLC (2)	—	—	45,294	45,294
Par's share of Laramie Energy's unrealized gain on derivatives (2)	—	—	(1,110)	(1,110)
Depreciation, depletion, and amortization	2,900	86,622	514	90,036
Interest expense and financing costs, net	4,982	61,856	3,384	70,222
Equity losses from Laramie Energy, LLC, excluding Par's share of unrealized gain on derivatives and impairment losses	—	—	2,721	2,721
Equity losses (income) from subsidiaries	394,197	—	(394,197)	—
Income tax expense (benefit)	177	(80,914)	80,913	176
Adjusted EBITDA (3)	\$ (10,943)	\$ (80,457)	\$ 4,732	\$ (86,668)

	Year Ended December 31, 2019			
	Parent Guarantor	Issuer and Subsidiaries	Non-Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Net income (loss)	\$ 40,809	\$ 112,308	\$ (112,308)	\$ 40,809
Inventory valuation adjustment	—	11,938	—	11,938
RINs gain in excess of net obligation	—	(3,398)	—	(3,398)
Unrealized loss on derivatives	—	8,988	—	8,988
Acquisition and integration costs	28	4,676	—	4,704
Debt extinguishment and commitment costs	6,091	5,354	142	11,587
Changes in valuation allowance and other deferred tax items (1)	—	—	(68,792)	(68,792)
Change in value of common stock warrants	3,199	—	—	3,199
Loss (gain) on sale of assets, net	—	(37,382)	37,382	—
Impairment of Investment in Laramie Energy, LLC (2)	—	—	83,152	83,152
Par's share of Laramie Energy's unrealized gain on derivatives (2)	—	—	(1,969)	(1,969)
Depreciation, depletion, and amortization	2,969	82,843	309	86,121
Interest expense and financing costs, net	9,952	62,098	2,789	74,839
Equity losses from Laramie Energy, LLC, excluding Par's share of unrealized gain on derivatives and impairment losses	—	—	8,568	8,568
Equity losses (income) from subsidiaries	(81,097)	—	81,097	—
Income tax expense (benefit)	335	26,507	(27,739)	(897)
Adjusted EBITDA (3)	\$ (17,714)	\$ 273,932	\$ 2,631	\$ 258,849

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- (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 expense (benefit) on our consolidated statements of operations.
 - (2) Includes impairment losses on our investment in Laramie Energy and our share of Laramie Energy's asset impairment losses in excess of our basis difference. These impairment losses and our share of Laramie Energy's unrealized loss (gain) on derivatives are included in Equity earnings (losses) from Laramie Energy, LLC on our consolidated statements of operations.
 - (3) For the year ended December 31, 2021, there were no changes in valuation allowance and other deferred tax items, changes in value of common stock warrants, or equity losses from Laramie Energy, including impairment losses and our share of Laramie Energy's unrealized losses (gains) on derivatives. For the year ended December 31, 2020, there were no debt extinguishment and commitment costs or losses (gains) on sale of assets. For the year ended December 31, 2019, there was no impairment expense or severance costs. There was no LIFO liquidation adjustment or change in value of contingent consideration for the years ended December 31, 2021, 2020, and 2019.

Liquidity and Capital Resources

Our liquidity and capital requirements are primarily a function of our debt maturities and debt service requirements and contractual obligations, capital expenditures, turnaround outlays, and working capital needs. Examples of working capital needs include purchases and sales of commodities and associated margin and collateral requirements, facility maintenance costs, and other costs such as payroll. Our primary sources of liquidity are cash flows from operations, cash on hand, amounts available under our credit agreements, and access to capital markets.

Our liquidity position as of December 31, 2021 was \$178.7 million and consisted of \$174.6 million at Par Petroleum, LLC and subsidiaries, \$4.1 million at Par Pacific Holdings, and an immaterial amount at all our other subsidiaries.

As of December 31, 2021, we had access to the J. Aron Discretionary Draw Facility, the ABL Credit Facility, the MLC receivable advances, and cash on hand of \$112.2 million. In addition, we have the Supply and Offtake Agreement with J. Aron and the Washington Refinery Intermediation Agreement, which are used to finance the majority of the inventory at our Hawaii and Washington refineries, respectively. Generally, the primary uses of our capital resources have been in the operations of our refining and retail segments, payments related to acquisitions, and to repay or refinance indebtedness.

We believe our cash flows from operations and available capital resources will be sufficient to meet our current capital and turnaround expenditures, working capital, and debt service requirements for the next 12 months. We may seek to raise additional debt or equity capital to fund any other significant changes to our business or to refinance existing debt. We cannot offer any assurances that such capital will be available in sufficient amounts or at an acceptable cost.

In the first quarter of 2021, we closed on the sale and leaseback of twenty-two (22) of our retail properties in Hawaii for an aggregate cash purchase price of approximately \$112.8 million net of transaction fees (the "Sale-Leaseback Transactions"). We used approximately \$53.1 million of the net cash proceeds to repay the certain financing arrangements which were related to certain of the retail properties and the remainder for general corporate purposes. Please read Note 16—Leases to our consolidated financial statements under Item 8 of this Form 10-K for additional discussion on the Sale-Leaseback Transactions.

On March 19, 2021, we sold 5.75 million shares of common stock in an underwritten public offering at a public offering price of \$16.00 per share, resulting in net proceeds of approximately \$87.2 million (the "Equity Offering"), after deducting underwriting discounts and commissions and offering expenses. We used the net proceeds from the Equity Offering to repay the remaining \$48.7 million in aggregate principal amount of 5.00% Convertible Senior Notes at maturity in June 2021 and \$36.8 million in aggregate principal amount of 12.875% Senior Secured Notes, and the remainder for other general corporate purposes, including capital expenditures, and funding working capital. Please read Note 18—Stockholders' Equity to our consolidated financial statements under Item 8 of this Form 10-K for additional discussion on the Equity Offering.

During the years ended December 31, 2021, 2020, and 2019, we had significant activity related to our inventory financing and debt agreements. Please read Note 11—Inventory Financing Agreements and Note 13—Debt to our consolidated financial statements under Item 8 of this Form 10-K for further discussion of significant activity related to our inventory financing and debt agreements, respectively.

We may from time to time seek to retire or purchase our 7.75% Senior Secured Notes, our 12.875% Senior Secured Notes, or our common stock through cash purchases and/or exchanges for equity securities, in open market purchases, privately

negotiated transactions, or otherwise. Such repurchases or exchanges, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions, and other factors. The amounts involved may be material. On November 10, 2021, the Board authorized and approved a share repurchase program for up to \$50 million of the currently outstanding shares of our common stock, with no specified end date. Please read Note 18—Stockholders' Equity for further information. The Term Loan B Facility may also require annual prepayments of principal with a variable percentage of our excess cash flow, 50% or 25% depending on our consolidated year end secured leverage ratio (as defined in the Term Loan B Facility agreement).

Cash Flows

The following table summarizes cash activities for the years ended December 31, 2021, 2020, and 2019 (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Net cash provided by (used in) operating activities	\$ (27,622)	\$ (37,214)	\$ 105,630
Net cash provided by (used in) investing activities	74,628	(63,464)	(353,229)
Net cash provided by (used in) financing activities	(1,094)	42,559	300,208

Net cash used in operating activities was approximately \$27.6 million for the year ended December 31, 2021, which resulted from a net loss of approximately \$81.3 million, partially offset by non-cash charges to operations of approximately \$41.6 million and net cash provided by changes in operating assets and liabilities of approximately \$12.1 million. The change in our operating assets and liabilities for the year ended December 31, 2021 was primarily due to a net increase in our Supply and Offtake Agreement and Washington Refinery Intermediation Agreement obligations of \$252.9 million, an increase in our environmental credit obligations of \$160.5 million, and increases in accounts payable and other current liabilities of \$49.0 million, partially offset by an increase in inventories of \$350.7 million, an increase in our trade receivables of \$84.0 million, and \$9.5 million in deferred turnaround costs associated with the Hawaii and Wyoming turnarounds. The increases in accounts receivable, inventory, Supply and Offtake Agreement, and accounts payable and other current liabilities were primarily driven by the increases in crude oil prices in 2021 and an overall increase in sales, purchases, and inventory volumes. The increase in our environmental credit obligations was primarily driven by current year production and increases in RINs prices. Net cash used in operating activities was approximately \$37.2 million for the year ended December 31, 2020, which resulted from a net loss of approximately \$409.1 million, partially offset by non-cash charges to operations of approximately \$219.1 million and net cash provided by changes in operating assets and liabilities of approximately \$152.8 million. Net cash provided by operating activities was approximately \$105.6 million for the year ended December 31, 2019, which resulted from net income of approximately \$40.8 million and non-cash charges to operations of approximately \$144.9 million, partially offset by net cash used for changes in operating assets and liabilities of approximately \$80.1 million.

For the year ended December 31, 2021, net cash provided by investing activities was approximately \$74.6 million and primarily related to proceeds received from the Sale-Leaseback Transactions partially offset by additions to property, plant, and equipment totaling approximately \$29.5 million. Net cash used in investing activities was approximately \$63.5 million for the year ended December 31, 2020 and was primarily related to additions to property, plant, and equipment totaling approximately \$63.5 million. Net cash used in investing activities was approximately \$353.2 million for the year ended December 31, 2019 and was primarily related to \$273.4 million for the Washington Acquisition and additions to property, plant, and equipment totaling approximately \$83.9 million.

Net cash used in financing activities for the year ended December 31, 2021 was approximately \$1.1 million and consisted primarily of proceeds of \$87.2 million from our March 2021 equity offering of common stock partially offset by net repayments on our debt agreements, J. Aron deferred payment arrangement and Discretionary Draw Facility, and MLC receivable advances of \$81.4 million and \$5.6 million in extinguishment costs related to the repayment of the Retail Property Term Loan and a portion of the 12.875% Senior Secured Notes. Net cash provided by financing activities for the year ended December 31, 2020 of approximately \$42.6 million consisted primarily of proceeds from net borrowings on our debt agreements, J. Aron deferred payment arrangement, and MLC receivable advances of \$49.3 million, partially offset by deferred loan costs of \$6.3 million related to the issuance of the 12.875% Senior Secured Notes. Net cash provided by financing activities for the year ended December 31, 2019 of approximately \$300.2 million consisted primarily of proceeds from net borrowings on our debt agreements, J. Aron deferred payment arrangement, and MLC receivable advances of \$313.0 million and the exercise of employee stock options of \$8.2 million, partially offset by deferred loan costs of \$13.5 million and payments of \$8.1 million in commitment and other fees related to the funding for the Washington Acquisition and the financing costs related to the repurchase and cancellation of a portion of our 5.00% Convertible Senior Notes.

Cash Requirements

We have various cash requirements stemming from investment strategies, contractual obligations, and financial commitments in the normal course of our operations and financing activities. Contractual obligations include future cash payments required under existing contractual arrangements, such as debt and lease agreements. These cash requirements and obligations may result from both general financing activities and from commercial arrangements that are directly related to our operating activities. We also continue to seek strategic investments in business opportunities, however the amount and timing of those investments are not predictable. Our material cash requirements as of December 31, 2021 include:

Debt and Interest Payments. Current and long-term debt includes the scheduled principal payments related to our outstanding debt obligations and letters of credit. Our estimated interest payments due for 2022 are \$46.6 million and our total estimated undiscounted future interest payments will be \$194.0 million on the debt obligations held as of December 31, 2021 and using interest rates in effect as of December 31, 2021. Please read Note 13—Debt to our consolidated financial statements under Item 8 of this Form 10-K for further discussion.

Capital Expenditures and Turnaround Costs. Our deferred turnaround costs and capital expenditures, excluding acquisitions, for the year ended December 31, 2021, totaled approximately \$39.0 million and were primarily related to the 2021 turnaround and related scheduled maintenance work at our Washington refinery, capital projects at our Hawaii refinery, and underground tank replacements, rebranding, and point of sale and other equipment upgrades at our Retail segment. Our capital expenditures and deferred turnaround costs budget for 2022 ranges from \$70 to \$80 million and primarily relates to the 2022 turnaround at our Washington refinery, scheduled maintenance, and other capital projects related to regulatory compliance, information technology, and growth. We expect to spend approximately \$35 to \$45 million annually on maintenance and sustaining capital projects and approximately \$80 to \$90 million on planned turnaround expenditures over the next five years.

Operating Lease Liabilities. Operating lease liabilities primarily include obligations associated with the lease of land, office space, retail facilities, and other facilities used in the storage and transportation of crude oil and refined products. Please read Note 16—Leases to our consolidated financial statements under Item 8 of this Form 10-K for further discussion.

Finance Lease Liabilities. Finance lease liabilities primarily include obligations associated with the lease of retail facilities and vehicles. Please read Note 16—Leases to our consolidated financial statements under Item 8 of this Form 10-K for further discussion.

Purchase Commitments. Purchase commitments primarily consist of contracts executed as of December 31, 2021 for the purchase of crude oil for use at our refineries that are scheduled for delivery in 2022. As of December 31, 2021, we have material purchase commitments of \$1.2 billion, with required cash outlays primarily expected in the next twelve months.

Supply and Offtake Agreement. We have a supply and offtake agreement with J. Aron to support the operations of our Hawaii refinery. On June 1, 2021, we and J. Aron entered into a Second Amended and Restated Supply and Offtake Agreement (the “Supply and Offtake Agreement”) which expires on May 31, 2024 with a one-year extension option. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Washington Refinery Intermediation Agreement. In connection with the consummation of the Washington Acquisition on January 11, 2019, we assumed the Washington Refinery Intermediation Agreement with MLC to support the operations of our Washington refinery. On November 1, 2019, we amended the Washington Refinery Intermediation Agreement and extended the term through June 30, 2021. We further amended the Washington Refinery Intermediation Agreement on February 11, 2021 and extended the term through March 31, 2022. On December 17, 2021, we and MLC amended the Washington Refinery Intermediation Agreement to further extend the term through December 21, 2022 with an automatic extension to March 31, 2023 upon an ABL extension event and revises certain other terms and conditions in the Washington Refinery Intermediation Agreement. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Environmental Matters. Our operations are subject to extensive and periodically-changing federal, state, and local environmental laws and regulations including but not limited to air emissions, wastewater discharges, and solid and hazardous waste management activities. Additionally, we have asset retirement obligations in the period in which we have a legal obligation, whether by government or regulatory action or contractual arrangement, to incur these costs and can make a reasonable estimate of the fair value of the liability. Please read Note 9—Asset Retirement Obligations and Note 17—Commitments and Contingencies to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations were based on the consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements required us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses. Our significant accounting policies are described in Note 2—Summary of Significant Accounting Policies to our audited consolidated financial statements under Item 8 of this Form 10-K. We have identified certain estimates as being of particular importance to the portrayal of our financial position and results of operations and which require the application of significant judgment by management. We analyze our estimates on a periodic basis, including those related to fair value, impairments, natural gas and crude oil reserves, bad debts, natural gas and oil properties, income taxes, derivatives, contingencies, and litigation and base our estimates on historical experience and various other assumptions that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting estimates affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Inventory and Obligations Under Inventory Financing Agreements

Commodity inventories, excluding commodity inventories at the Washington refinery, are stated at the lower of cost and net realizable value using the FIFO accounting method. Commodity inventories at the Washington refinery are stated at the lower of cost and net realizable value using the LIFO inventory accounting method. We value merchandise along with spare parts, materials, and supplies at average cost. Estimating the net realizable value of our inventory requires management to make assumptions about the timing of sales and the expected proceeds that will be realized for these sales. Please read Note 6—Inventories to our consolidated financial statements under Item 8 of this Form 10-K for additional information.

All of the crude oil utilized at the Hawaii refinery is financed by J. Aron under procurement contracts. The crude oil remains in the legal title of J. Aron and is stored in our storage tanks governed by a storage agreement. Legal title to the crude oil passes to us at the tank outlet. After processing, J. Aron takes title to the refined products stored in our storage tanks until they are sold to our retail locations or to third parties. We record the inventory owned by J. Aron on our behalf as inventory with a corresponding accrued liability on our balance sheet because we maintain the risk of loss until the refined products are sold to third parties and we have an obligation to repurchase it. The valuation of our repurchase obligation requires that we make estimates of the prices and differentials assuming settlement occurs at the end of the reporting period.

In connection with the consummation of the Washington Acquisition, we became a party to the Washington Refinery Intermediation Agreement with MLC. Under this arrangement, U.S. Oil purchases crude oil supplied from third-party suppliers and MLC provides credit support for certain of these purchases. U.S. Oil holds title to all crude oil and refined products inventories at all times and pledges such inventories, together with all receivables arising from the sales of these inventories, exclusively to MLC. The valuation of our terminal obligation requires that we make estimates of the prices and differentials for our then monthly forward purchase obligations.

Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for additional information regarding both our Hawaii and Washington inventory financing agreements.

Fair Value Measurements

We measure certain assets and liabilities at their fair market value. Assets and liabilities measured at fair value on a recurring basis include derivative instruments and environmental credit obligations. We also measure certain assets and liabilities at fair value on a nonrecurring basis when specific triggering events occur, such as business combinations and events which indicate that a reporting unit's carrying value exceeds its estimated fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. In estimating fair value, we use discounted cash flow projections, recent comparable market transactions, if available, or quoted prices. We consider assumptions that third parties would make in estimating fair value, including the highest and best use of the asset. The assumptions used by another party could differ significantly from our assumptions.

We classify fair value balances based on the classification of the inputs used to calculate the fair value of a transaction. The inputs used to measure fair value have been placed in a hierarchy based on priority. The hierarchy gives the highest priority to unadjusted, readily observable quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement). Please read Note 15—Fair Value Measurements to our consolidated financial statements under Item 8 of this Form 10-K for additional information.

Business Combinations

We recognize assets acquired and liabilities assumed in business combinations separately from goodwill at their estimated fair values as of the date of acquisition. Significant judgment is required in estimating the fair value of assets acquired. We obtain the assistance of third-party valuation specialists in estimating fair values of tangible and intangible assets based on available historical information and on expectations and assumptions about the future, considering the perspectives of marketplace participants. These valuation methods require management to make estimates and assumptions regarding characteristics of the acquired property and future revenues and expenses. Changes in these estimates and assumptions would result in different amounts allocated to the related assets and liabilities. The measurement period may be up to one year from the acquisition date; we may record adjustments to the preliminary purchase price allocation during this time, concluding at the end of the one year period or final determination of the values of consideration transferred and assets and liabilities assumed, whichever comes first. Subsequent adjustments, if any, are recorded to the consolidated statement of operations. Please read Note 4—Acquisitions and Note 15—Fair Value Measurements to our consolidated financial statements under Item 8 of this Form 10-K for further information.

Impairment of Goodwill and Long-lived Assets

We assess the recoverability of the carrying value of goodwill during the fourth quarter of each year or whenever events or changes in circumstances indicate that the carrying amount of the goodwill of a reporting unit may not be fully recoverable. We first assess qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying value. If the qualitative assessment indicates that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, a quantitative test is required. Under the quantitative test, we compare the carrying value of the net assets of the reporting unit to the estimated fair value of the reporting unit. If the carrying value exceeds the estimated fair value of the reporting unit, an impairment loss is recorded. The fair value of a reporting unit is determined using the income approach and the market approach. Under the income approach, we estimate the present value of expected future cash flows using a market participant discount rate. Under the market approach, we estimate fair value using observable multiples for comparable companies within our industry. These valuation methods require us to make significant estimates and assumptions regarding future cash flows, capital projects, commodity prices, long-term growth rates, and discount rates. Please read Note 10—Goodwill and Intangible Assets to our consolidated financial statements under Item 8 of this Form 10-K for further information, including the goodwill impairment we recorded in the first quarter of 2020.

We review property, plant, and equipment, operating leases, and other long-lived assets whenever events or changes in business circumstances indicate the carrying value of the assets may not be recoverable. We use a cash flows model to estimate value because there is usually a lack of quoted market prices for long-lived assets. Future cash flows estimates used for impairment reviews are based on assessments requiring judgment, including future production volumes, commodity prices, operating costs, margins, discount rates, expected capital expenditures, and other factors based on all available information available as of the date of the review. Impairment is indicated when the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying value. If this occurs, an impairment loss is recognized for the difference between the fair value and carrying value. The fair value of long-lived assets is determined using the income approach. Please read Note 8—Property, Plant, and Equipment and Impairment of Long-Lived Assets to our consolidated financial statements under Item 8 of this Form 10-K for further information, including the asset impairment we recorded in the first quarter of 2020.

Impairment of our Investment in Laramie Energy

We evaluate our investment in Laramie Energy for impairment when factors indicate that a decrease in the value of our investment has occurred and the carrying amount of our investment may not be recoverable. The fair value of our investment in Laramie Energy is determined using the income approach and/or the market approach. Under the income approach, we estimate the present value of expected future cash flows using a market participant discount rate. Other significant inputs used in the income approach include proved and unproved reserves information and forecasts of operating expenditures obtained from Laramie Energy's management. Under the market approach, we estimate fair value using observable multiples for comparable companies within our industry. These valuation methods require us to make significant estimates and assumptions regarding future cash flows, capital projects, commodity prices, long-term growth rates, and discount rates. An impairment loss, based on the difference between the carrying value and the estimated fair value of the investment, is recognized in earnings when an impairment is deemed to be other than temporary. Please read Note 3—Investment in Laramie Energy, LLC to our consolidated financial statements under Item 8 of this Form 10-K for further information.

Environmental Matters and Asset Retirement Obligations

We record liabilities when environmental assessments and/or remedial efforts are probable and can be reasonably

estimated. Cost estimates are based on the expected timing and extent of remedial actions required by governing agencies, experience gained from similar sites for which environmental assessments or remediation have been completed, and the amount of our anticipated liability considering the proportional liability and financial abilities of other responsible parties. Usually, the timing of these accruals coincides with the completion of a feasibility study or our commitment to a formal plan of action. Please read Note 17—Commitments and Contingencies to our consolidated financial statements under Item 8 of this Form 10-K for further information about our environmental liabilities and assessments.

We record asset retirement obligations (“AROs”) at fair value in the period in which we have a legal obligation, whether by government action or contractual arrangement, to incur these costs and can make a reasonable estimate of the fair value of the liability. Estimating the cost and timing of future remedial efforts is difficult and related technologies, costs, regulatory and other compliance considerations, timing, discount rates, and other inputs into the valuations are subject to change. Please read Note 2—Summary of Significant Accounting Policies, “Asset Retirement Obligations,” to our consolidated financial statements under Item 8 of this Form 10-K for further information.

Income Taxes

We use the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and net operating loss (“NOL”) and tax credit carry forwards. The realizability of deferred tax assets is evaluated quarterly based on a “more likely than not” standard and, to the extent this threshold is not met, a valuation allowance is recorded. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. These liabilities are recorded based on our assessment of existing tax laws and regulations. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which these temporary differences become deductible and may vary from our estimates for a number of reasons, including different interpretations of tax laws and regulations. New tax laws and regulations, and changes to existing tax laws and regulations, are proposed and promulgated continuously. The implementation of future tax laws and regulatory initiatives, as well as future interpretations on historical tax laws and regulations, could result in increased tax liabilities that cannot be predicted at this time. Please read Note 2—Summary of Significant Accounting Policies, “Income Taxes,” to our consolidated financial statements under Item 8 of this Form 10-K for further information.

Based upon the level of historical taxable income and projections for future results of operations over the periods in which the deferred tax assets are deductible, among other factors, management concluded that we did not meet the “more likely than not” requirement in order to recognize deferred tax assets and therefore, a valuation allowance has been recorded for substantially all of our net deferred tax assets at December 31, 2021 and 2020.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Commodity Price Risk

Our earnings, cash flows, and liquidity are significantly affected by commodity price volatility. Our Revenues fluctuate with refined product prices and our Cost of revenues (excluding depreciation) fluctuates with movements in crude oil and feedstock prices. Assuming all other factors remain constant, a \$1 per barrel change in average gross refining margins, based on our throughput of 135 Mbpd for the full year of 2021, would change annualized operating income by approximately \$48.7 million. This analysis may differ from actual results.

In order to manage commodity price risks, we utilize exchange-traded futures, options, and over-the-counter (“OTC”) swaps to manage commodity price risks associated with:

- the price for which we sell our refined products;
- the price we pay for crude oil and other feedstocks;
- our crude oil and refined products inventory; and
- our fuel requirements for our refineries.

All of our futures and OTC swaps are executed to economically hedge our physical commodity purchases, sales, and inventory. Our open futures and OTC swaps will expire in April 2022.

Based on our net open futures positions at December 31, 2021, a \$1 change in the price of crude oil, assuming all other factors remain constant, would result in \$2.1 million change to the fair value of our derivative instruments and Cost of revenues (excluding depreciation).

Our predominant variable operating cost is the cost of fuel consumed in the refining process, which is included in Cost of revenues (excluding depreciation) on our consolidated statements of operations. For the year ended December 31, 2021, we consumed approximately 135 Mbpd of crude oil during the refining process across all our refineries. We internally consumed approximately 3% of this throughput in the refining process, which is accounted for as a fuel cost. We have executed option collars to economically hedge our internally consumed fuel cost at all our refineries. Please read Note 14—Derivatives to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Compliance Program Price Risk

We are exposed to market risks related to the volatility in the price of RINs required to comply with the Renewable Fuel Standard. Our renewable volume obligation (“RVO”) is based on a percentage of our Hawaii, Wyoming, and Washington refineries’ production of on-road transportation fuel. The EPA sets the RVO percentages annually. On December 21, 2021, EPA published proposed RFS that include retroactive cuts to earlier 2020 quotas, set 2021 targets at levels of renewable fuels that were actually used, and would establish significantly higher volume requirements for 2022. Whether that rule will be finalized as proposed and how the final rule will fare in the courts may significantly alter our obligations to blend renewable fuels or purchase RINs. To the degree we are unable to blend the required amount of biofuels to satisfy our RVO, we must purchase RINs on the open market. To mitigate the impact of this risk on our results of operations and cash flows, we may purchase RINs when the price of these instruments is deemed favorable. Some of these contracts are derivative instruments, however, we elect the normal purchases normal sales exception and do not record these contracts at their fair values.

Interest Rate Risk

As of December 31, 2021, we had \$215.6 million of indebtedness that was subject to floating interest rates. We also had interest rate exposure in connection with our liability under the J. Aron Supply and Offtake Agreement and the MLC Washington Refinery Intermediation Agreement for which we pay charges based on three-month LIBOR. An increase of 1% in the variable rate on our indebtedness, after considering the instruments subject to minimum interest rates, would result in an increase to our Cost of revenues (excluding depreciation) and Interest expense and financing costs, net of approximately \$3.8 million and \$3.6 million per year, respectively.

We may utilize interest rate swaps to manage our interest rate risk. As of December 31, 2020, we had entered into an interest rate swap at an average fixed rate of 3.91% in exchange for the floating interest rate on the notional amounts due under the Retail Property Term Loan. This swap was set to expire on April 1, 2024, the maturity date of the Retail Property Term Loan. On February 23, 2021, we terminated and repaid all amounts outstanding under the Retail Property Term Loan and the related interest rate swap.

We have several contracts that reference London Interbank Offered Rate (“LIBOR”), some of which terminate after LIBOR is anticipated to cease being reported in 2023. Our facilities that currently reference LIBOR include transition language consistent with the scheduled transition. We do not expect the transition away from LIBOR to have a material impact on our financial condition, results of operations, or cash flows.

Credit Risk

We are subject to the risk of loss resulting from nonpayment or nonperformance by our counterparties. We will continue to closely monitor the creditworthiness of customers to whom we grant credit and establish credit limits in accordance with our credit policy.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements and schedule required by this item are set forth beginning on page F-1.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures are designed with the objective of ensuring that all information required to be disclosed in our reports filed under the Securities Exchange Act of 1934, as amended (“Exchange Act”), such as this report, is recorded, processed, summarized, and reported within the time periods specified by the SEC. In connection with the preparation of this Annual Report on Form 10-K, as of December 31, 2021, an evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of December 31, 2021.

Changes in Internal Control over Financial Reporting

There were no changes during the quarter ended December 31, 2021, in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934). The Company's internal control system was designed to provide reasonable assurance to the Company's management and Board of Directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework (2013). Based on such assessment, the Company's management concluded that, as of December 31, 2021, the Company's internal control over financial reporting was effective based on those criteria.

Deloitte & Touche LLP, the Company's independent registered public accounting firm that audited the Company's financial statements included in this Annual Report on Form 10-K, has issued an audit report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2021, which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Par Pacific Holdings, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Par Pacific Holdings, Inc. and subsidiaries (the "Company") as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2021, of the Company and our report dated February 25, 2022, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Houston, Texas
February 25, 2022

Item 9B. OTHER INFORMATION

None.

Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

The information required by this item is incorporated in this Annual Report on Form 10-K by reference to our definitive proxy statement or an amendment to this Annual Report on Form 10-K to be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2021.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated in this Annual Report on Form 10-K by reference to our definitive proxy statement or an amendment to this Annual Report on Form 10-K to be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2021.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated in this Annual Report on Form 10-K by reference to our definitive proxy statement or an amendment to this Annual Report on Form 10-K to be filed with the Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2021.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated in this Annual Report on Form 10-K by reference to our definitive proxy statement or an amendment to this Annual Report on Form 10-K to be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2021.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated in this Annual Report on Form 10-K by reference to our definitive proxy statement or an amendment to this Annual Report on Form 10-K to be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2021.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as part of this report:
- (1) Consolidated Financial Statements (Included under Item 8). The Index to the Consolidated Financial Statements is included on page [F-1](#) of this Annual Report on Form 10-K and is incorporated herein by reference.
 - (2) Financial Statement Schedules

Schedule I – Condensed Financial Information of Registrant

- 2.1 [Third Amended Joint Chapter 11 Plan of Reorganization of Delta Petroleum Corporation and Its Debtor Affiliates dated August 16, 2012. Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on September 7, 2012.](#)
- 2.2 [Membership Interest Purchase Agreement dated as of June 17, 2013, by and among Tesoro Corporation, Tesoro Hawaii, LLC, and Hawaii Pacific Energy, LLC. Incorporated by reference to Exhibit 2.4 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2013, filed on August 14, 2013.](#)
- 2.3 [Agreement and Plan of Merger dated as of June 2, 2014, by and among the Company, Bogey, Inc., Koko'oha Investments, Inc., and Bill D. Mills, in his capacity as the Shareholders' Representative. Incorporated by reference to Exhibit 2.5 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2014, filed on August 11, 2014.](#)
- 2.4 [Amendment of Agreement and Plan of Merger dated as of September 9, 2014, by and among the Company, Bogey, Inc., Koko'oha Investments, Inc., and Bill D. Mills, in his capacity as the Shareholders' Representative. Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on September 10, 2014.](#)
- 2.5 [Second Amendment of Agreement and Plan of Merger dated as of December 31, 2014, by and among Par Petroleum Corporation, Bogey, Inc., Koko'oha Investments, Inc., and Bill D. Mills, in his capacity as the Shareholder's Representative. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 7, 2015.](#)
- 2.6 [Third Amendment to Agreement and Plan of Merger dated as of March 31, 2015, by and among the Company, Bogey, Inc., Koko'oha Investments, Inc., and Bill D. Mills, in his capacity as the Shareholders' Representative. Incorporated by reference to Exhibit 2.4 to the Company's Current Report on Form 8-K filed on April 2, 2015.](#)
- 2.7 [Unit Purchase Agreement, dated as of June 13, 2016, between Par Wyoming, LLC and Black Elk Refining, LLC. Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on June 15, 2016.](#)
- 2.8 [First Amendment to Unit Purchase Agreement dated as of July 14, 2016, between Par Wyoming, LLC and Black Elk Refining, LLC. Incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed on July 15, 2016.](#)
- 2.9 [Purchase and Sale Agreement dated as of November 26, 2018, among Par Petroleum, LLC, TrailStone NA Oil & Refining Holdings, LLC, and solely for certain purposes specified therein, the Company. Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K/A filed on November 30, 2018.#](#)
- 2.10 [Amendment No. 1 to Purchase and Sale Agreement dated as of January 11, 2019, among Par Petroleum, LLC, TrailStone NA Oil & Refining Holdings, LLC, and Par Pacific Holdings, Inc. Incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed on January 14, 2019.](#)
- 3.1 [Restated Certificate of Incorporation of the Company dated October 20, 2015. Incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on October 20, 2015.](#)
- 3.2 [Second Amended and Restated Bylaws of the Company dated October 20, 2015. Incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed on October 20, 2015.](#)
- 4.1 [Form of the Company's Common Stock Certificate. Incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K filed on March 31, 2014.](#)

- 4.2 [Registration Rights Agreement effective as of August 31, 2012, by and among the Company, Zell Credit Opportunities Master Fund, L.P., Waterstone Capital Management, L.P., Pandora Select Partners, LP, Iam Mini-Fund 14 Limited, Whitebox Multi-Strategy Partners, LP, Whitebox Credit Arbitrage Partners, LP, HFR RVA Combined Master Trust, Whitebox Concentrated Convertible Arbitrage Partners, LP, and Whitebox Asymmetric Partners, LP. Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on September 7, 2012.](#)
- 4.3 [First Amendment to Registration Rights Agreement dated as of December 19, 2018, by and among the Company and the holders party thereto. Incorporated by reference to Exhibit 4.3 to the Company's registration statement on Form S-3 filed on December 21, 2018.](#)
- 4.4 [Stockholders Agreement dated April 10, 2015. Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on April 13, 2015.](#)
- 4.5 [Indenture, dated June 21, 2016, between Par Pacific Holdings, Inc. and Wilmington Trust, National Association, as Trustee. Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on June 22, 2016.](#)
- 4.6 [Indenture, dated December 21, 2017, among Par Petroleum, LLC, Par Petroleum Finance Corp., the Guarantors \(as defined therein\), and Wilmington Trust, National Association, as Trustee and Collateral Trustee. Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 22, 2017.](#)
- 4.7 [First Supplemental Indenture, dated November 20, 2018, among Par Petroleum, LLC, Par Petroleum Finance Corp., the Guarantors \(as defined therein\), and Wilmington Trust, National Association, as Trustee. Incorporated by reference to Exhibit 4.21 to the Company's registration statement on Form S-3 filed on December 21, 2018.](#)
- 4.8 [Stockholders Agreement dated April 10, 2015. Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on April 13, 2015.](#)
- 4.9 [Second Supplemental Indenture, dated January 11, 2019, among Par Tacoma, LLC \(f/k/a TrailStone NA Asset Finance I, LLC\), U.S. Oil & Refining Co., McChord Pipeline Co., Par Petroleum, LLC, Par Petroleum Finance Corp., Par Pacific Holdings, Inc., the other guarantors party thereto, and Wilmington Trust, National Association. Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on January 14, 2019.](#)
- 4.10 [Third Supplemental Indenture, dated August 15, 2019, among Par Hawaii, LLC \(successor by conversion to Par Hawaii, Inc.\), Par Petroleum, LLC, Par Petroleum Finance Corp., Par Pacific Holdings, Inc., the other guarantors party thereto, and Wilmington Trust, National Association. Incorporated by reference to Exhibit 4.23 to the Company's Quarterly Report on Form 10-Q filed on August 10, 2020.](#)
- 4.11 [Indenture, dated as of June 5, 2020, among Par Petroleum, LLC, Par Petroleum Finance Corp., the Guarantors \(as defined therein\) and Wilmington Trust, National Association, as Trustee and Collateral Trustee. Incorporated by reference to Exhibit 4.1 to the Company's current report on Form 8-K filed on June 8, 2020.](#)
- 4.12 [Description of Registrant's Securities.*](#)
- 10.1 [Fourth Amended and Restated Limited Liability Company Agreement of Laramie Energy, LLC, dated as of October 18, 2018, by and among Par Piceance Energy Equity LLC and the other members party thereto. Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on November 7, 2018.](#)
- 10.2 [Delta Petroleum General Recovery Trust Agreement dated August 27, 2012, by and among the Company, DPCA LLC, Delta Exploration Company, Inc., Delta Pipeline, LLC, DLC, Inc., CEC, Inc., Castle Texas Production Limited Partnership, Amber Resources Company of Colorado, Castle Exploration Company, Inc., and John T. Young. Incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed on September 7, 2012.](#)
- 10.3 [Par Pacific Holdings, Inc. Amended and Restated 2012 Long Term Incentive Plan. Incorporated by reference to Appendix A to the Company's Proxy Statement on Schedule 14A filed on April 21, 2016.****](#)
- 10.4 [Par Pacific Holdings, Inc. Second Amended and Restated 2012 Long Term Incentive Plan. Incorporated by reference to Exhibit 4.1 to the Company's registration statement on Form S-8 filed on May 18, 2018.****](#)
- 10.5 [Par Pacific Holdings, Inc. 2018 Employee Stock Purchase Plan. Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 filed on May 18, 2018.****](#)
- 10.6 [Form of Indemnification Agreement between the Company and its Directors and Executive Officers. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 19, 2012.****](#)
- 10.7 [Letter Agreement dated as of September 17, 2013 but effective as of January 1, 2013, by and between Equity Group Investments and the Company. Incorporated by reference to Exhibit 10.17 to the Company's Quarterly Report on Form 10-Q filed on November 14, 2013.](#)

- 10.8 [Environmental Agreement dated as of September 25, 2013, by and among Tesoro Corporation, Tesoro Hawaii, LLC, and Hawaii Pacific Energy, LLC. Incorporated by reference to Exhibit 10.16 to the Company's Quarterly Report on Form 10-Q filed on November 14, 2013.](#)
- 10.9 [Employment Offer Letter with William Monteleone dated September 25, 2013. Incorporated by reference to Exhibit 10.43 to the Company's Amendment No. 3 to Annual Report on Form 10-K/A filed on July 2, 2014.****](#)
- 10.10 [Employment Offer Letter with Joseph Israel dated December 12, 2014. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 17, 2014.****](#)
- 10.11 [Employment Offer Letter with James Matthew Vaughn dated July 3, 2014. Incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q filed on May 5, 2016.****](#)
- 10.12 [Employment Offer Letter with Jim Yates dated March 10, 2015. Incorporated by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q filed on May 5, 2016.****](#)
- 10.13 [Initial Award with Jim Yates dated May 8, 2015. Incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q filed on May 5, 2016.****](#)
- 10.14 [Form of Award of Restricted Stock \(Discretionary Long Term Incentive Plan\). Incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K filed on March 2, 2020.****](#)
- 10.15 [Form of Award of Restricted Stock Units \(Discretionary Long Term Incentive Plan\). Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on April 2, 2015.****](#)
- 10.16 [Form of Nonstatutory Stock Option Agreement \(Discretionary Long Term Incentive Plan\). Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on April 2, 2015.****](#)
- 10.17 [Par Petroleum \(and subsidiaries\) Incentive Compensation Plan. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 12, 2015.****](#)
- 10.18 [Second Amended and Restated Supply and Offtake Agreement dated as of June 1, 2021, between Par Hawaii Refining, LLC and J. Aron & Company, LLC. Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 5, 2021.](#)
- 10.19 [Amended and Restated Guaranty dated June 1, 2021 in favor of J. Aron & Company LLC by Par Petroleum, LLC. Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 5, 2021.](#)
- 10.20 [Environmental Indemnity Agreement dated as of June 1, 2015, by Hawaii Independent Energy, LLC in favor of J. Aron & Company. Incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed June 2, 2015.](#)
- 10.21 [Employment Offer Letter with William C. Pate dated October 12, 2015. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed October 14, 2015.****](#)
- 10.22 [Amendment to Employment Offer Letter with Joseph Israel dated October 12, 2015. Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed October 14, 2015.****](#)
- 10.23 [Par Pacific Holdings, Inc. Non-Qualified Deferred Compensation Plan. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 6, 2017.****](#)
- 10.24 [Par Pacific Holdings, Inc. Severance Plan for Senior Officers. Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on March 6, 2017. ****](#)
- 10.25 [Asset Purchase Agreement dated as of January 9, 2018 by and among CHS Inc., Par Hawaii, Inc., and Par Pacific Holdings, Inc. Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 10, 2018. #](#)
- 10.26 [First Amendment to Asset Purchase Agreement dated as of March 23, 2018 by and among CHS Inc., Par Hawaii, Inc., and Par Pacific Holdings, Inc. Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on May 10, 2018. #](#)
- 10.27 [Term Loan and Guaranty Agreement, dated as of January 11, 2019, among Par Petroleum, LLC, Par Petroleum Finance Corp., the guarantors party thereto, Par Pacific Holdings, Inc. solely for the limited purposes set forth therein, the lenders party thereto, and Goldman Sachs Bank USA, as administrative agent. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 14, 2019.](#)

- 10.28 [Collateral Trust and Intercreditor Agreement, dated as of December 21, 2017, among Par Petroleum, LLC, Par Petroleum Finance Corp., the guarantors from time to time party thereto, Wilmington Trust, National Association, as indenture trustee and as collateral trustee, J. Aron & Company LLC, and Goldman Sachs Bank USA. Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on January 14, 2019.](#)
- 10.29 [Conformed Copy of First Lien ISDA Master Agreement dated as of January 11, 2019, between Merrill Lynch Commodities, Inc. and U.S. Oil & Refining Co. Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on January 14, 2019.](#)
- 10.30 [Ninth Amendment to First Lien ISDA 2002 Master Agreement entered into as of November 1, 2019 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 4, 2019.](#)
- 10.31 [Eighteenth Amendment to First Lien ISDA 2002 Master Agreement entered into as of December 17, 2021 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 20, 2021](#)
- 10.32 [Nineteenth Amendment to First Lien ISDA 2002 Master Agreement entered into as of February 24, 2022 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc.*](#)
- 10.33 [Topping Unit Purchase Agreement by and among IES Downstream, LLC, Eagle Island, LLC, Par Hawaii Refining, LLC, and Par Pacific Holdings, Inc., dated as of August 29, 2018. Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 7, 2018. #](#)
- 10.34 [Pledge and Security Agreement dated as of December 21, 2017 among Par Petroleum, LLC, the other grantors party thereto, and Wilmington Trust, National Association, as collateral trustee. Incorporated by reference to Exhibit 10.45 to the Company's Annual Report on Form 10-K filed on March 8, 2021.](#)
- 10.35 [Amendment No. 1 and Assumption Agreement to Pledge and Security Agreement dated as of August 19, 2019, among Par Petroleum, LLC, and the other grantors party thereto and Wilmington Trust, National Association, as collateral trustee.*](#)
- 10.36 [Amendment No. 2 and Assumption Agreement to Pledge and Security Agreement dated as of May 12, 2020, among Par Petroleum, LLC, and the other grantors party thereto and Wilmington Trust, National Association, as collateral trustee.*](#)
- 10.37 [Amendment No. 3 and Assumption Agreement to Pledge and Security Agreement dated as of June 4, 2020, among Par Petroleum, LLC, and the other grantors party thereto and Wilmington Trust, National Association, as collateral trustee.*](#)
- 10.38 [Purchase Agreement and Escrow Instructions, dated as of February 11, 2021, by and among Par Hawaii, LLC, Par Pacific Hawaii Property Company, LLC, MDC Coast HI 1, LLC, and Fidelity National Title Insurance Company. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 16, 2021.](#)
- 10.39 [Amended and Restated Master Land and Building Lease Agreement, dated as of March 12, 2021, by and among Par Hawaii, LLC, Par Petroleum, LLC and MDC Coast HI 1, LLC. Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on Form 8-K filed on May 7, 2021.](#)
- 10.40 [Amended and Restated Loan and Security Agreement dated as of February 2, 2022, among Par Petroleum, LLC, Par Hawaii, LLC, Hermes Consolidated, LLC, Wyoming Pipeline Company LLC, the guarantors party thereto, the financial institutions party thereto, as lenders, and Bank of America, N.A., as administrative agent. Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 4, 2022.](#)
- 10.41 [Thirteenth Amendment to First Lien ISDA 2002 Master Agreement entered into as of February 11, 2021, by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on Form 8-K filed on February 16, 2021.](#)
- 10.42 [Second Amended and Restated Pledge and Security Agreement dated June 1, 2021 in favor of J. Aron & Company LLC by Par Hawaii Refining, LLC.*](#)
- 14.1 [Par Pacific Holdings, Inc. Code of Business Conduct and Ethics for Employees, Executive Officers and Directors, effective December 3, 2015. Incorporated by reference to Exhibit 14.1 to the Company's Annual Report on Form 10-K filed March 3, 2016.](#)
- 21.1 [Subsidiaries of the Registrant.*](#)
- 23.1 [Consent of Deloitte & Touche LLP*](#)
- 31.1 [Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*](#)

31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 ***
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.***
101.INS	Inline XBRL Instance Document the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.*
101.SCH	Inline XBRL Taxonomy Extension Schema Documents.*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.*
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.*
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).*
*	Filed herewith.
***	Furnished herewith.
****	Management contract or compensatory plan or arrangement.
#	Portions of this exhibit have been redacted in accordance with Item 601(b)(10) of Regulation S-K.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS
For the Years Ended December 31, 2021, 2020, and 2019

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Par Pacific Holdings, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Par Pacific Holdings, Inc. and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, cash flows and changes in stockholders' equity for each of the three years in the period ended December 31, 2021, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 25, 2022 expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and

we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill — Certain Reporting Units — Refer to Notes 2 and 10 to the financial statements.

Critical Audit Matter Description

The Company's evaluation of goodwill for impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company determines the fair value of its reporting units using the discounted cash flow model and the market approach. The determination of the fair value using the discounted cash flow model requires management to make significant estimates and assumptions related to discount rates and long-term growth rates as well as forecasts of future gross margin, capital expenditures, and operating expenses. The determination of the fair value using the market approach requires management to make significant assumptions related to valuation multiples. Changes in these assumptions could have a significant impact on either the fair value, or the amount of any goodwill impairment charge, or both. The goodwill balance was \$127.3 million as of December 31, 2021. No impairment loss was recorded during the year ended December 31, 2021.

We identified goodwill associated with certain reporting units as a critical audit matter because of the significant judgments made by management to estimate the fair value of the reporting units and, consequently, the difference between their fair value and carrying value. The audit procedures performed to evaluate the reasonableness of management's estimates and assumptions related to the selection of discount rates, long-term growth rates, valuation multiples, and forecasts of future gross margin, capital expenditures, and operating expenses required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the discount rates, long-term growth rates, valuation multiples, and forecasts of future gross margin, capital expenditures, and operating expenses used by management to estimate the fair value of certain reporting units included the following, among others:

- We tested the effectiveness of controls over management's goodwill impairment evaluation, including those over the determination of the underlying assumptions, such as management's selection of the discount rates, long-term growth rates, and valuation multiples as well as forecasts of future gross margin, capital expenditures, and operating expenses.
- We evaluated management's ability to accurately forecast future gross margin, capital expenditures, and operating expenses by comparing actual results to management's historical forecasts.
- We evaluated the reasonableness of management's forecasts by comparing the forecasts to:
 - Historical financial results.
 - Internal communications to management and the Board of Directors.
 - Forecasted information included in Company press releases as well as in analyst and industry reports for the Company and certain of its peer companies.
- We evaluated the impact of changes in management's forecasts from the measurement date to December 31, 2021.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the discount rates, long-term growth rates, and valuation multiples by:

- Testing the source information underlying the determination of the discount rates, long-term growth rates, and valuation multiples and the mathematical accuracy of the calculations.
- Developing a range of independent estimates and comparing those to the discount rates, long-term growth rates, and valuation multiples selected by management.

/s/ DELOITTE & TOUCHE LLP

Houston, Texas
February 25, 2022

We have served as the Company's auditor since 2013.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	December 31, 2021	December 31, 2020
ASSETS		
Current assets		
Cash and cash equivalents	\$ 112,221	\$ 68,309
Restricted cash	4,000	2,000
Total cash, cash equivalents, and restricted cash	116,221	70,309
Trade accounts receivable, net of allowances of \$0.4 million and \$0.6 million at December 31, 2021 and December 31, 2020, respectively	195,108	111,657
Inventories	790,317	429,855
Prepaid and other current assets	28,525	24,648
Total current assets	1,130,171	636,469
Property, plant, and equipment		
Property, plant, and equipment	1,180,397	1,183,878
Less accumulated depreciation, depletion, and amortization	(323,892)	(251,113)
Property, plant, and equipment, net	856,505	932,765
Long-term assets		
Operating lease right-of-use ("ROU") assets	383,824	357,166
Intangible assets, net	16,234	18,892
Goodwill	127,262	127,997
Other long-term assets	56,255	60,572
Total assets	\$ 2,570,251	\$ 2,133,861
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current maturities of long-term debt	\$ 10,841	\$ 59,933
Obligations under inventory financing agreements	737,704	423,686
Accounts payable	154,543	106,945
Accrued taxes	28,641	27,440
Operating lease liabilities	53,640	56,965
Other accrued liabilities	370,424	203,711
Total current liabilities	1,355,793	878,680
Long-term liabilities		
Long-term debt, net of current maturities	553,717	648,660
Finance lease liabilities	7,691	7,925
Operating lease liabilities	335,094	304,355
Other liabilities	52,256	47,967
Total liabilities	2,304,551	1,887,587
Commitments and Contingencies (Note 17)		
Stockholders' equity		
Preferred stock, \$0.01 par value: 3,000,000 shares authorized, none issued	—	—
Common stock, \$0.01 par value; 500,000,000 shares authorized at December 31, 2021 and December 31, 2020, 60,161,955 shares and 54,002,538 shares issued at December 31, 2021 and December 31, 2020, respectively	602	540
Additional paid-in capital	821,713	726,504
Accumulated deficit	(559,117)	(477,028)
Accumulated other comprehensive income (loss)	2,502	(3,742)
Total stockholders' equity	265,700	246,274
Total liabilities and stockholders' equity	\$ 2,570,251	\$ 2,133,861

See accompanying notes to consolidated financial statements.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Year Ended December 31,		
	2021	2020	2019
Revenues	\$ 4,710,089	\$ 3,124,870	\$ 5,401,516
Operating expenses			
Cost of revenues (excluding depreciation)	4,338,474	2,947,697	4,803,589
Operating expense (excluding depreciation)	299,669	277,427	312,899
Depreciation, depletion, and amortization	94,241	90,036	86,121
Impairment expense	1,838	85,806	—
Gain on sale of assets, net	(64,697)	—	—
General and administrative expense (excluding depreciation)	48,096	41,288	46,223
Acquisition and integration costs	87	614	4,704
Total operating expenses	<u>4,717,708</u>	<u>3,442,868</u>	<u>5,253,536</u>
Operating income (loss)	(7,619)	(317,998)	147,980
Other income (expense)			
Interest expense and financing costs, net	(66,493)	(70,222)	(74,839)
Debt extinguishment and commitment costs	(8,144)	—	(11,587)
Gain on curtailment of pension obligation	2,032	—	—
Other income (expense), net	(52)	1,049	2,516
Change in value of common stock warrants	—	4,270	(3,199)
Equity losses from Laramie Energy, LLC	—	(46,905)	(89,751)
Total other expense, net	<u>(72,657)</u>	<u>(111,808)</u>	<u>(176,860)</u>
Loss before income taxes	(80,276)	(429,806)	(28,880)
Income tax benefit (expense)	(1,021)	20,720	69,689
Net income (loss)	<u>\$ (81,297)</u>	<u>\$ (409,086)</u>	<u>\$ 40,809</u>
Income (loss) per share			
Basic	\$ (1.40)	\$ (7.68)	\$ 0.80
Diluted	\$ (1.40)	\$ (7.68)	\$ 0.80
Weighted-average number of shares outstanding			
Basic	58,268	53,295	50,352
Diluted	58,268	53,295	50,470

See accompanying notes to consolidated financial statements.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Year Ended December 31,		
	2021	2020	2019
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809
Other comprehensive income (loss):			
Other post-retirement benefits income (loss), net of tax	6,244	(4,324)	(2,091)
Total other comprehensive income (loss), net of tax	6,244	(4,324)	(2,091)
Comprehensive income (loss)	<u>\$ (75,053)</u>	<u>\$ (413,410)</u>	<u>\$ 38,718</u>

See accompanying notes to consolidated financial statements.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2021	2020	2019
Cash flows from operating activities:			
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809
Adjustments to reconcile net income (loss) to cash provided by (used in) operating activities:			
Depreciation, depletion, and amortization	94,241	90,036	86,121
Impairment expense	1,838	85,806	—
Debt extinguishment and commitment costs	8,144	—	11,587
Non-cash interest expense	5,663	6,902	9,118
Non-cash lower of cost and net realizable value adjustment	(10,132)	10,595	(3,752)
Change in value of common stock warrants	—	(4,270)	3,199
Deferred taxes	(260)	(20,895)	(66,886)
Gain on sale of assets, net	(64,697)	—	—
Stock-based compensation	8,165	7,342	6,437
Unrealized (gain) loss on derivative contracts	(1,393)	(3,322)	9,350
Equity losses from Laramie Energy, LLC	—	46,905	89,751
Net changes in operating assets and liabilities:			
Trade accounts receivable	(83,955)	117,801	(36,652)
Collateral posted with broker for derivative transactions	4,564	7,035	(8,797)
Prepaid and other assets	(10,885)	29,465	(24,121)
Inventories	(350,652)	171,880	(191,688)
Deferred turnaround expenditures	(9,451)	(49,770)	(9,800)
Obligations under inventory financing agreements	252,920	(190,831)	121,985
Accounts payable, other accrued liabilities, and operating lease ROU assets and liabilities	209,565	67,193	68,969
Net cash provided by (used in) operating activities	(27,622)	(37,214)	105,630
Cash flows from investing activities:			
Acquisitions of businesses, net of cash acquired	—	—	(273,399)
Proceeds related to asset acquisition	—	—	3,226
Capital expenditures	(29,533)	(63,522)	(83,920)
Proceeds from sale of assets	104,161	58	864
Net cash provided by (used in) investing activities	74,628	(63,464)	(353,229)
Cash flows from financing activities:			
Proceeds from sale of common stock, net of offering costs	87,193	—	—
Proceeds from borrowings	186,773	250,387	510,906
Repayments of borrowings	(329,315)	(159,489)	(241,336)
Net borrowings (repayments) on deferred payment arrangements and receivable advances	61,098	(41,645)	43,422
Payment of deferred loan costs	(346)	(6,266)	(13,450)
Exercise of stock options	—	—	8,171
Payments for debt extinguishment and commitment costs	(5,618)	—	(8,087)
Other financing activities, net	(879)	(428)	582
Net cash provided by (used in) financing activities	(1,094)	42,559	300,208
Net increase (decrease) in cash, cash equivalents, and restricted cash	45,912	(58,119)	52,609
Cash, cash equivalents, and restricted cash at beginning of period	70,309	128,428	75,819
Cash, cash equivalents, and restricted cash at end of period	<u>\$ 116,221</u>	<u>\$ 70,309</u>	<u>\$ 128,428</u>
Supplemental cash flow information:			
Net cash received (paid) for:			
Interest	\$ (65,221)	\$ (54,256)	\$ (58,250)
Taxes	(795)	190	(136)
Non-cash investing and financing activities:			
Accrued capital expenditures	\$ 8,177	\$ 4,686	\$ 6,386
Value of warrants reclassified to equity	—	3,936	—
ROU assets obtained in exchange for new finance lease liabilities	1,936	3,476	963
ROU assets obtained in exchange for new operating lease liabilities	97,011	22,529	79,382
ROU assets terminated in exchange for release from finance lease liabilities	—	—	—
ROU assets terminated in exchange for release from operating lease liabilities	6,847	7,738	193
Common stock issued for business combination	—	—	36,980
Common stock issued to repurchase convertible notes	—	—	74,290

See accompanying notes to consolidated financial statements.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Equity
	Shares	Amount				
Balance, January 1, 2019	46,984	\$ 470	\$ 617,937	\$ (108,751)	\$ 2,673	\$ 512,329
Issuance of common stock in connection with acquisition	2,364	23	36,957	—	—	36,980
Issuance of common stock for convertible notes repurchase, net (1)	3,243	32	45,585	—	—	45,617
Issuance of common stock for employee stock purchase plan	68	1	1,489	—	—	1,490
Stock-based compensation	202	3	6,210	—	—	6,213
Purchase of common stock for retirement	(54)	—	(1,276)	—	—	(1,276)
Exercise of stock options	447	4	8,167	—	—	8,171
Other comprehensive loss	—	—	—	—	(2,091)	(2,091)
Net income	—	—	—	40,809	—	40,809
Balance, December 31, 2019	53,254	533	715,069	(67,942)	582	648,242
Issuance of common stock for employee stock purchase plan	145	2	1,551	—	—	1,553
Exercise of common stock warrants	351	3	3,933	—	—	3,936
Stock-based compensation	322	3	7,106	—	—	7,109
Purchase of common stock for retirement	(69)	(1)	(1,155)	—	—	(1,156)
Other comprehensive loss	—	—	—	—	(4,324)	(4,324)
Net loss	—	—	—	(409,086)	—	(409,086)
Balance, December 31, 2020	54,003	540	726,504	(477,028)	(3,742)	246,274
Common stock offering, net of issuance costs	5,750	58	87,135	—	—	87,193
Issuance of common stock for employee stock purchase plan	85	1	1,420	—	—	1,421
Stock-based compensation	443	4	7,948	—	—	7,952
Purchase of common stock for retirement	(123)	(1)	(1,352)	(792)	—	(2,145)
Exercise of stock options	4	—	58	—	—	58
Other comprehensive income	—	—	—	—	6,244	6,244
Net loss	—	—	—	(81,297)	—	(81,297)
Balance, December 31, 2021	60,162	\$ 602	\$ 821,713	\$ (559,117)	\$ 2,502	\$ 265,700

(1) The issuance of common stock for the repurchase of a portion of our 5.00% Convertible Senior Notes during the year ended December 31, 2019, is presented net of a \$28.7 million write-off associated with the equity component of the repurchased notes.

See accompanying notes to consolidated financial statements.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
For the Years Ended December 31, 2021, 2020, and 2019

Note 1—Overview

Par Pacific Holdings, Inc. and its wholly owned subsidiaries (“Par” or the “Company”) own and operate market-leading energy and infrastructure businesses. Our strategy is to acquire and develop businesses in logistically complex, niche markets. Currently, we operate in three primary business segments:

1) **Refining** - We own and operate three refineries with total operating crude oil throughput capacity of 154 thousand barrels per day (“Mbpd”). Our refinery in Kapolei, Hawaii, produces gasoline, jet fuel, ultra-low sulfur diesel (“ULSD”), marine fuel, low sulfur fuel oil (“LSFO”), and other associated refined products primarily for consumption in Hawaii. Our refinery in Newcastle, Wyoming, produces gasoline, jet fuel, ULSD, and other associated refined products that are primarily marketed in Wyoming and South Dakota. Our refinery in Tacoma, Washington, produces gasoline, jet fuel, ULSD, asphalt, and other associated refined products primarily marketed in the Pacific Northwest.

2) **Retail** - We operate 119 retail outlets in Hawaii, Washington, and Idaho. Our fuel retail outlets in Hawaii sell gasoline and diesel throughout the islands of Oahu, Maui, Hawaii, and Kauai. We operate convenience stores at 34 of our Hawaii retail fuel outlets under our proprietary “nomnom” brand that sell merchandise such as soft drinks, prepared foods, and other sundries. Our Hawaii retail network includes Hele and “76” branded retail sites, “nomnom” branded company-operated convenience stores, 7-Eleven operated convenience stores, other sites operated by third parties, and unattended cardlock stations. 42 of our sites operate under our proprietary Hele (the Hawaiian word for movement or “let’s go”) fuel brand. Our eight cardlock locations on Kauai are branded Kauai Automated Fuels (“KAF”).

We operate convenience stores at all 29 of our retail fuel outlets in Washington and Idaho. As part of our 2018 acquisition of these retail outlets, we entered into a multi-year branded petroleum marketing agreement for the continued supply of Cenex®-branded refined products to the acquired Cenex® Zip Trip convenience stores. As of December 31, 2021, we had completed the rebranding of all of our retail outlets in Washington and Idaho from the “Cenex®” and “Zip Trip®” brand names to our proprietary “nomnom” brand. As these stores were rebranded, we began self-supplying the fuel with equity barrels and/or unbranded fuels procured in the open market.

3) **Logistics** - We operate an extensive multi-modal logistics network spanning the Pacific, the Northwest, and the Rocky Mountain regions. We own and operate terminals, pipelines, a single point mooring (“SPM”), and trucking operations to distribute refined products throughout the islands of Oahu, Maui, Hawaii, Molokai, and Kauai. We lease marine vessels for the movement of petroleum, refined products, and ethanol between the U.S. West Coast and Hawaii. We own and operate a crude oil pipeline gathering system, a refined products pipeline, storage facilities, and loading racks in Wyoming and a jet fuel storage facility and pipeline that serve Ellsworth Air Force Base in South Dakota. We own and operate logistics assets in Washington, including a marine terminal, a unit train-capable rail loading terminal, storage facilities, a truck rack, and a proprietary pipeline that serves Joint Base Lewis McChord.

As of December 31, 2021, we owned a 46.0% equity investment in Laramie Energy, LLC (“Laramie Energy”), a joint venture entity operated by Laramie Energy II, LLC (“Laramie”). Laramie Energy is focused on producing natural gas in Garfield, Mesa, and Rio Blanco counties, Colorado.

Our Corporate and Other reportable segment primarily includes general and administrative costs.

Note 2—Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation

The consolidated financial statements include the accounts of Par Pacific Holdings, Inc. and its subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Certain amounts previously reported in our consolidated financial statements for prior periods have been reclassified to conform to the current presentation.

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Use of Estimates

The preparation of our consolidated financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses and the related disclosures. Actual amounts could differ from these estimates.

The worldwide spread and severity of the COVID-19 coronavirus, and certain developments in the global crude oil markets have impacted our businesses, people, and operations. We are actively responding to these ongoing matters and many uncertainties remain. Due to the rapid development and fluidity of the situation, the full magnitude of the COVID-19 pandemic’s impact on our estimates and assumptions, financial condition, future results of operations, and future cash flows and liquidity is uncertain and has been and may continue to be material.

Cash and Cash Equivalents

Cash and cash equivalents consist of all highly liquid investments with original maturities of three months or less. The carrying value of cash equivalents approximates fair value because of the short-term nature of these investments.

Restricted Cash

Restricted cash consists of cash not readily available for general purpose cash needs. Restricted cash relates to cash held at commercial banks to support letter of credit facilities and certain ongoing bankruptcy recovery trust claims.

Allowance for Credit Losses

We are exposed to credit losses primarily through our sales of refined products. Credit limits and/or prepayment requirements are set based on such factors as the customer’s financial results, credit rating, payment history, and industry and are reviewed annually for customers with material credit limits. Credit allowances are reviewed at least quarterly based on changes in the customer’s creditworthiness due to economic conditions, liquidity, and business strategy as publicly reported and through discussions between the customer and the Company. We establish provisions for losses on trade receivables based on the estimated credit loss we expect to incur over the life of the receivable. We did not have a material change in our allowances on trade receivables during the years ended December 31, 2021, 2020, or 2019.

Inventories

Commodity inventories, excluding commodity inventories at the Washington refinery, are stated at the lower of cost and net realizable value (“NRV”) using the first-in, first-out (“FIFO”) inventory accounting method. Commodity inventories at the Washington refinery are stated at the lower of cost and NRV using the last-in, first-out (“LIFO”) inventory accounting method. We value merchandise along with spare parts, materials, and supplies at average cost.

All of the crude oil utilized at the Hawaii refinery is financed by J. Aron & Company LLC (“J. Aron”) under the Supply and Offtake Agreement as described in Note 11—Inventory Financing Agreements. The crude oil remains in the legal title of J. Aron and is stored in our storage tanks governed by a storage agreement. Legal title to the crude oil passes to us at the tank outlet. After processing, J. Aron takes title to the refined products stored in our storage tanks until they are sold to our retail locations or to third parties. We record the inventory owned by J. Aron on our behalf as inventory with a corresponding obligation on our balance sheet because we maintain the risk of loss until the refined products are sold to third parties and we are obligated to repurchase the inventory.

In connection with the consummation of the Washington Acquisition (as defined in Note 4—Acquisitions), we became a party to an intermediation arrangement (the “Washington Refinery Intermediation Agreement”) with Merrill Lynch Commodities, Inc. (“MLC”) as described in Note 11—Inventory Financing Agreements. Under this arrangement, U.S. Oil (as defined in Note 4—Acquisitions) purchases crude oil supplied from third-party suppliers and MLC provides credit support for certain crude oil purchases. MLC’s credit support can consist of either providing a payment guaranty, causing the issuance of a letter of credit from a third-party issuing bank, or purchasing crude oil directly from third parties on our behalf. U.S. Oil holds title to all crude oil and refined products inventories at all times and pledges such inventories, together with all receivables arising from the sales of these inventories, exclusively to MLC.

We enter into refined product and crude oil exchange agreements with other oil companies. Exchange receivables or payables are stated at cost and are presented within Trade accounts receivable and Accounts payable on our consolidated balance sheets.

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Environmental Credits and Obligations

Inventories also include Renewable Identification Numbers (“RINs”), sulfur credits, and other environmental credits. Our RINs assets, which include RINs purchased in the open market and RINs obtained by purchasing biofuels which are later blended into our refined products, are presented as Inventories on our consolidated balance sheets and stated at the lower of cost and NRV as of the end of the reporting period. Our sulfur credits and other environmental credits generated as part of our refining process are presented as Inventories on our consolidated balance sheets and stated at the lower of cost and NRV as of the end of the reporting period. Our renewable volume obligation and other environmental credit obligations to comply with the U.S. Environmental Protection Agency (“EPA”) regulations (as discussed in Note 17—Commitments and Contingencies) are presented in Other accrued liabilities on our consolidated balance sheets and measured at fair value as of the end of the reporting period. The net cost of environmental credits is recognized within Cost of revenues (excluding depreciation) on our consolidated statements of operations.

Investment in Laramie Energy, LLC

Prior to June 30, 2020, we accounted for our Investment in Laramie Energy, LLC using the equity method as we have the ability to exert significant influence, but do not control its operating and financial policies. Our proportionate share of the net income (loss) of this entity was included in Equity losses from Laramie Energy, LLC in the consolidated statements of operations. As of June 30, 2020, we discontinued the application of the equity method of accounting for our investment in Laramie Energy because the book value of such investment had been reduced to zero. The investment is reviewed for impairment when events or changes in circumstances indicate that there may have been an other-than-temporary decline in the value of the investment. During the years ended December 31, 2020 and 2019, we recorded impairment charges of \$45.3 million and \$81.5 million in our consolidated statement of operations due to the significant decline in natural gas prices during the first quarter of 2020 and during the second and third quarters of 2019, respectively. Please read Note 3—Investment in Laramie Energy, LLC for further information.

Property, Plant, and Equipment

We capitalize the cost of additions, major improvements, and modifications to property, plant, and equipment. The cost of repairs and normal maintenance of property, plant, and equipment is expensed as incurred. Major improvements and modifications of property, plant, and equipment are those expenditures that either extend the useful life, increase the capacity, or improve the operating efficiency of the asset or the safety of our operations. We compute depreciation of property, plant, and equipment using the straight-line method, based on the estimated useful life of each asset as follows:

Assets	Lives in Years
Refining	2 to 47
Logistics	3 to 30
Retail	3 to 40
Corporate	3 to 7
Software	3 to 5

Impairment of Long-Lived Assets

We review property, plant, and equipment, operating leases, deferred turnaround costs, and other long-lived assets for impairment whenever events or changes in business circumstances indicate the carrying value of the assets may not be recoverable. Impairment is indicated when the undiscounted cash flows estimated to be generated by those assets are less than the assets’ carrying value. If this occurs, an impairment loss is recognized for the difference between the fair value and carrying value. Factors that indicate potential impairment include a significant decrease in the market value of the asset, operating or cash flow losses associated with the use of the asset, and a significant change in the asset’s physical condition or use.

Simultaneously with our review of our property, plant, and equipment, operating leases, deferred turnaround costs, and other long-lived assets for impairment, we evaluate whether an abandonment has occurred. Abandonment occurs either when a business terminates its operations or an asset is no longer profitable to operate. When the act of abandonment occurs, we determine if the assets have a shortened useful life or should be considered abandoned and accelerate depreciation or write off the asset balance and any associated accumulated depreciation and record an impairment loss.

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Lease Liabilities and Right-of-Use Assets

We determine whether a contract is or contains a lease when we have the right to control the use of the identified asset in exchange for consideration. Lease liabilities and right-of-use assets (“ROU assets”) are recognized at the commencement date based on the present value of lease payments over the lease term. We use our incremental borrowing rate in the calculation of present value unless the implicit rate can be readily determined, however, the lease liability associated with leases calculated through the use of implicit rates is not significant. Certain leases include provisions for variable payments based upon percentage of sales and/or other operating metrics; escalation provisions to adjust rental payments to reflect changes in price indices and fair market rents; and provisions for the renewal, termination, and/or purchase of the leased asset. We only consider fixed payments and those options that are reasonably certain to be exercised in the determination of the lease term and the initial measurement of lease liabilities and ROU assets. Expense for finance leases is recognized as amortization expense on a straight-line basis and interest expense on an effective rate basis over the lease term. Expense for operating lease payments is recognized as lease expense on a straight-line basis over the lease term. We do not separate lease and nonlease components of a contract. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Finance lease ROU assets are presented within Property, plant, and equipment and operating lease ROU assets within Operating lease right-of-use assets on our consolidated balance sheets. Please read Note 16—Leases for further disclosures and information on leases.

Asset Retirement Obligations

We record asset retirement obligations (“AROs”) at fair value in the period in which we have a legal obligation, whether by government action or contractual arrangement, to incur these costs and can make a reasonable estimate of the fair value of the liability. Our AROs arise from our refining, logistics, and retail operations. AROs are calculated based on the present value of the estimated removal and other closure costs using our credit-adjusted risk-free rate. When the liability is initially recorded, we capitalize the cost by increasing the book value of the related long-lived tangible asset. The liability is accreted to its estimated settlement value with accretion expense recognized in Depreciation, depletion, and amortization (“DD&A”) on our consolidated statements of operations and the related capitalized cost is depreciated over the asset’s useful life. The difference between the settlement amount and the recorded liability is recorded as a gain or loss on asset disposals in our consolidated statements of operations. We estimate settlement dates by considering our past practice, industry practice, contractual terms, management’s intent, and estimated economic lives.

We cannot currently estimate the fair value for certain AROs primarily because we cannot estimate settlement dates (or ranges of dates) associated with these assets. These AROs include hazardous materials disposal (such as petroleum manufacturing by-products, chemical catalysts, and sealed insulation material containing asbestos) and removal or dismantlement requirements associated with the closure of our refining facilities, terminal facilities, or pipelines, including the demolition or removal of certain major processing units, buildings, tanks, pipelines, or other equipment.

Deferred Turnaround Costs

Refinery turnaround costs, which are incurred in connection with planned major maintenance activities at our refineries, are deferred and amortized on a straight-line basis over the period of time estimated until the next planned turnaround (generally three to five years). During 2021, 2020, and 2019, we recognized deferred turnaround costs of approximately \$9.5 million, \$49.8 million, and \$9.8 million, respectively. Deferred turnaround costs are presented within Other long-term assets on our consolidated balance sheets.

Goodwill and Other Intangible Assets

Goodwill represents the amount the purchase price exceeds the fair value of net assets acquired in a business combination. Goodwill is not amortized, but is tested for impairment annually on October 1. We assess the recoverability of the carrying value of goodwill during the fourth quarter of each year or whenever events or changes in circumstances indicate that the carrying amount of the goodwill of a reporting unit may not be fully recoverable. We first assess qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying value. If the qualitative assessment indicates that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, a quantitative test is required. Under the quantitative test, we compare the carrying value of the net assets of the reporting unit to the estimated fair value of the reporting unit. If the carrying value exceeds the estimated fair value of the reporting unit, an impairment loss is recorded. During the year ended December 31, 2020, we recorded goodwill impairment charges of \$67.9 million related to our Refining and Retail segments. Please read Note 10—Goodwill and Intangible Assets for further discussion on the goodwill impairment.

Our intangible assets include relationships with customers, trade names, and trademarks. These intangible assets are amortized over their estimated useful lives on a straight-line basis. We evaluate the carrying value of our intangible assets when

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impairment indicators are present. When we believe impairment indicators may exist, projections of the undiscounted future cash flows associated with the use of and eventual disposition of the intangible assets are prepared. If the projections indicate that their carrying values are not recoverable, we reduce the carrying values to their estimated fair values.

Environmental Matters

We capitalize environmental expenditures that extend the life or increase the capacity of facilities as well as expenditures that prevent environmental contamination. We expense costs that relate to an existing condition caused by past operations and that do not contribute to current or future revenue generation. We record liabilities when environmental assessments and/or remedial efforts are probable and can be reasonably estimated. Cost estimates are based on the expected timing and extent of remedial actions required by governing agencies, experience gained from similar sites for which environmental assessments or remediation have been completed, and the amount of our anticipated liability considering the proportional liability and financial abilities of other responsible parties. Usually, the timing of these accruals coincides with the completion of a feasibility study or our commitment to a formal plan of action. Estimated liabilities are not discounted to present value and are presented within Other liabilities on our consolidated balance sheets. Environmental expenses are recorded in Operating expense (excluding depreciation) on our consolidated statements of operations.

Derivatives and Other Financial Instruments

We are exposed to commodity price risk related to crude oil and refined products. We manage this exposure through the use of various derivative commodity instruments. These instruments include exchange traded futures and over-the-counter (“OTC”) swaps, forwards, and options.

For our forward contracts that are derivatives, we have elected the normal purchase normal sale exclusion, as it is our policy to fulfill or accept the physical delivery of the product and we will not net settle. Therefore, we did not recognize the unrealized gains or losses related to these contracts in our consolidated financial statements.

All derivative instruments not designated as normal purchases or sales are recorded in the balance sheet as either assets or liabilities measured at their fair values. Changes in the fair value of these derivative instruments are recognized currently in earnings. We have not designated any derivative instruments as cash flow or fair value hedges and, therefore, do not apply hedge accounting treatment.

In addition, we may have other financial instruments, such as warrants or embedded debt features, that may be classified as liabilities when either (a) the holders possess rights to net cash settlement, (b) physical or net equity settlement is not in our control, or (c) the instruments contain other provisions that cause us to conclude that they are not indexed to our equity. Our embedded derivatives include our obligations to repurchase crude oil and refined products from J. Aron at the termination of the Supply and Offtake Agreement and to repay MLC for monthly crude oil and refined product financing under the Washington Refinery Intermediation Agreement. These liabilities were initially recorded at fair value and subsequently adjusted to fair value at the end of each reporting period through earnings.

Please read Note 14—Derivatives and Note 15—Fair Value Measurements for information regarding our derivatives and other financial instruments.

Income Taxes

We use the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and net operating loss (“NOL”) and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the years in which those differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in income tax rates is recognized in the results of operations in the period that includes the enactment date. The realizability of deferred tax assets is evaluated quarterly based on a “more likely than not” standard and, to the extent this threshold is not met, a valuation allowance is recorded.

We have determined that any uncertain tax positions outstanding at December 31, 2021 and 2020 would not have a material impact on our financial condition, results of operations, or cash flows as any uncertain tax positions taken would have been fully covered by the Company’s deferred tax assets related to its historical net operating losses and corresponding valuation allowance.

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As a general rule, our open years for Internal Revenue Service (“IRS”) examination purposes are 2018, 2019, and 2020. However, since we have NOL carryforwards, the IRS has the ability to make adjustments to items that originate in a year otherwise barred by the statute of limitations in order to re-determine tax for an open year to which those items are carried. Therefore, in a year in which a NOL deduction is claimed, the IRS may examine the year in which the NOL was generated and adjust it accordingly for purposes of assessing additional tax in the year the NOL deduction was claimed. Any penalties or interest as a result of an examination will be recorded in the period assessed.

Stock-Based Compensation

We recognize the cost of share-based payments on a straight-line basis over the period the employee provides service, generally the vesting period, and include such costs in General and administrative expense (excluding depreciation) and Operating expense (excluding depreciation) in the consolidated statements of operations. We account for forfeitures as they occur. The grant date fair value of restricted stock awards is equal to the market price of our common stock on the date of grant. The fair value of stock options is estimated using the Black-Scholes option-pricing model as of the date of grant. The fair value of the discount offered on the employee stock purchase plan is equal to 15% of the market price of our common stock on the purchase date.

Revenue Recognition

Refining and Retail

Our refining and retail segment revenues are primarily associated with the sale of refined products. We recognize revenues upon physical delivery of refined products to a customer, which is the point in time at which control of the refined products is transferred to the customer. The pricing of our refined products is variable and primarily driven by commodity prices. The refining segment’s contracts with its customers state the terms of the sale, including the description, quantity, delivery terms, and price of each product sold. Payments from refining and bulk retail customers are generally due in full within 2 to 30 days of product delivery or invoice date. Payments from our other retail customers occur at the point of sale and are typically collected in cash or occur by credit or debit card. As such, we have no significant financing element to our revenues and have immaterial product returns and refunds.

We account for certain transactions on a net basis under Financial Accounting Standards Board (“FASB”) ASC Topic 845, “Nonmonetary Transactions.” These transactions include nonmonetary crude oil and refined product exchange transactions, certain crude oil buy/sell arrangements, and sale and purchase transactions entered into with the same counterparty that are deemed to be in contemplation with one another.

We made an accounting policy election to apply the sales tax practical expedient, whereby all taxes assessed by a governmental authority that are both imposed on and concurrent with a revenue-producing transaction and collected from our customers will be recognized on a net basis within Cost of revenues (excluding depreciation).

Logistics

We recognize transportation and storage fees as services are provided to a customer. Substantially all of our logistics revenues represent intercompany transactions that are eliminated in consolidation.

Cost Classifications

Cost of revenues (excluding depreciation) includes 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 environmental credit obligations, and certain hydrocarbon fees and taxes. Cost of revenues (excluding depreciation) also includes the unrealized gains and losses on derivatives and inventory valuation adjustments. Certain direct operating expenses related to our logistics segment are also included in Cost of revenues (excluding depreciation).

Operating expense (excluding depreciation) includes direct costs of labor, maintenance and services, energy and utility costs, property taxes, and environmental compliance costs, as well as chemicals and catalysts and other direct operating expenses.

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The following table summarizes depreciation and finance lease amortization expense excluded from each line item in our consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Cost of revenues	\$ 21,903	\$ 21,755	\$ 16,882
Operating expense	52,338	56,637	55,181
General and administrative expense	2,972	3,429	3,145

Benefit Plans

We recognize an asset for the overfunded status or a liability for the underfunded status of our defined benefit pension plans. The funded status is recorded within Other liabilities on our consolidated balance sheets. Certain changes in the plans' funded status are recognized in Other comprehensive income (loss) in the period the change occurs.

Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). Fair value measurements are categorized with the highest priority given to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority given to unobservable inputs. The three levels of the fair value hierarchy are as follows:

- Level 1 – Assets or liabilities for which the item is valued based on quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 – Assets or liabilities valued based on observable market data for similar instruments.
- Level 3 – Assets or liabilities for which significant valuation assumptions are not readily observable in the market; instruments valued based on the best available data, some of which is internally-developed and considers risk premiums that a market participant would require.

The level in the fair value hierarchy within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of the fair value of assets and liabilities and their placement within the fair value hierarchy levels. Our policy is to recognize transfers in and/or out of fair value hierarchy levels as of the end of the reporting period for which the event or change in circumstances caused the transfer. We have consistently applied these valuation techniques for the periods presented. The fair value of the J. Aron repurchase obligation and Washington Refinery Intermediation Agreement derivatives are measured using estimates of the prices and differentials assuming settlement at the end of the reporting period.

Income (Loss) Per Share

Basic income (loss) per share ("EPS") is computed by dividing net income (loss) attributable to common stockholders by the sum of the weighted-average number of common shares outstanding and the weighted-average number of shares issuable under the warrants. The common stock warrants were included in the calculation of basic EPS because they were issuable for minimal consideration. Basic and diluted EPS are computed taking into account the effect of participating securities. Participating securities include restricted stock that has been issued but has not yet vested. Please read Note 20—Income (Loss) Per Share for further information.

Foreign Currency Transactions

We may, on occasion, enter into transactions denominated in currencies other than the U.S. dollar, which is our functional currency. Gains and losses resulting from changes in currency exchange rates between the functional currency and the currency in which a transaction is denominated are included in Other income (expense), net, in the accompanying consolidated statement of operations in the period in which the currency exchange rates change.

Accounting Principles Not Yet Adopted

In March 2021, FASB issued ASU No. 2021-04, *Earnings Per Share (Topic 260), Debt - Modifications and Extinguishments (Subtopic 470-50), Compensation - Stock Compensation (Topic 718), and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options* ("ASU 2021-04"). This ASU clarifies that "modifications or exchanges of

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freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange” be accounted for “as an exchange of the original instrument for a new instrument.” If the modification or exchange is part of or directly related to a modification or exchange of an existing debt instrument, revolving debt facility, or line-of-credit, the effect is measured as “the difference between the fair value of the written call option immediately before its modified or exchanged.” The effect of all other modifications or exchanges should be measured as the excess of fair value of the modified option over the fair value of the same option immediately before modification or exchange. In both cases, the effect should be calculated as if cash had been paid in the transaction. The guidance in ASU 2021-04 is effective for fiscal years beginning after December 15, 2021, with early adoption permitted. This ASU will change the policy under which we account for derivative contracts classified in equity, of which we have none as of December 31, 2021.

In October 2021, the FASB issued Accounting Standards Update (“ASU”) No. 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers* (“ASU 2021-08”). ASU 2021-08 updates the current guidance to require that an entity recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with FASB Accounting Standards Codification (“ASC”) Topic 606 “Revenue from Contracts with Customers” as if the acquiring entity had originated the contracts. This ASU improves comparability by providing consistent guidance between revenue contracts with customers acquired in a business combination and those not acquired in a business combination. The guidance in ASU 2021-08 is effective for fiscal years beginning after December 15, 2022, with early adoption permitted. This ASU will change the policy under which we account for future business combinations.

Accounting Principles Adopted

On December 31, 2020, we adopted ASU No. 2018-14, *Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans* (“ASU 2018-14”), using the required retrospective transition method. This ASU amended, added, and removed certain disclosure requirements under FASB ASC Topic 715 “Compensation—Retirement Benefits.” Our adoption of ASU 2018-14 did not have a material impact on our financial condition, results of operations, cash flows, or related disclosures.

On January 1, 2021, we adopted ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* (“ASU 2019-12”). We adopted this ASU under the prospective method and information that was presented prior to January 1, 2021 has not been restated and continues to be reported under the accounting standards in effect for that period. This ASU simplified the accounting for income taxes by removing certain exceptions to general principles and clarified and amended guidance to improve consistency under FASB ASC Topic 740 “Income Taxes.” Our adoption of ASU 2019-12 did not have a material impact on our financial condition, results of operations, and cash flows.

On February 11, 2021, we adopted ASU No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (“ASU 2020-04”) and ASU No. 2021-01, *Reference Rate Reform (Topic 848)* (“ASU 2021-01”) following our execution of an amendment to the Washington Refinery Intermediation Agreement which included transition guidance on the interest rate of the MLC receivable advances to U.S. Oil (as defined in Note 4—Acquisitions) to be based on another industry standard benchmark rate that will be effective upon the three-month London Interbank Offered Rate’s (“LIBOR”) scheduled retirement in 2023. These ASUs provide for optional expedients and allowable exceptions to GAAP to ease the potential burden in recognizing the effects of reference rate reform, especially in regards to the cessation of LIBOR. ASU 2020-04 and ASU 2021-01 are applicable to contract modifications that meet certain requirements and are entered into between March 12, 2020 and December 31, 2022. Our adoption of ASUs 2020-04 and 2021-01 did not have a material impact on our financial condition, results of operations, and cash flows.

Note 3—Investment in Laramie Energy, LLC

As of December 31, 2021, we owned a 46.0% ownership interest in Laramie Energy, a joint venture entity focused on developing and producing natural gas in Garfield, Mesa, and Rio Blanco counties, Colorado. As of December 31, 2020, Laramie Energy had a \$400.0 million revolving credit facility secured by a lien on its natural gas and crude oil properties and related assets with a borrowing base set at \$139.7 million. On November 20, 2020, Laramie Energy amended its revolving credit facility, reducing the borrowing base to \$140.0 million, resulting in a borrowing base deficiency of \$60.0 million. In conjunction with the borrowing base deficiency, Laramie entered into a forbearance agreement through June 15, 2021 with its lenders. As of December 31, 2020, the balance outstanding on the revolving credit facility was approximately \$139.7 million.

On July 1, 2021, Laramie Energy entered into a term loan agreement which provided a term loan in the principal amount of \$160 million. Laramie Energy used the proceeds from the term loan to repay the outstanding balance on its revolving credit facility. The term loan is secured by a lien on its natural gas and crude oil properties and related assets. Under the terms

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of the term loan, Laramie Energy is generally prohibited from making future cash distributions to its owners, including us, except for certain permitted tax distributions. Laramie Energy's term loan matures on July 1, 2025. As of December 31, 2021, the term loan had an outstanding balance of \$140.1 million.

At March 31, 2020, we conducted an impairment evaluation of our investment in Laramie Energy because of (i) the global economic impact of the COVID-19 pandemic, (ii) an increase in the weighted-average cost of capital for energy companies, and (iii) continuing declines in natural gas prices through the first quarter of 2020. Based on our evaluation, we determined that the estimated fair value of our investment in Laramie Energy was \$1.9 million, compared to a carrying value of \$47.2 million at March 31, 2020. The fair value estimate was determined using a discounted cash flow analysis based on natural gas forward strip prices as of March 31, 2020 for the years 2020 and 2021 of the forecast, and a blend of forward strip pricing and third-party analyst pricing for the years 2022 through 2028. Other significant inputs used in the discounted cash flow analysis included proved and unproved reserves information, forecasts of operating expenditures, and the applicable discount rate. As a result, we recorded an other-than temporary impairment charge of \$45.3 million in Equity losses from Laramie Energy, LLC on our consolidated statement of operations for the year ended December 31, 2020. Please read Note 15—Fair Value Measurements for further information. During the quarter ended June 30, 2020, Laramie Energy incurred additional losses that reduced the book value of our investment to zero and, as such, as of June 30, 2020, we discontinued the application of the equity method of accounting for our investment in Laramie Energy.

During the fourth quarter of 2019, Laramie Energy recorded an impairment loss of \$355.2 million associated with the carrying value of proved reserves. As a result of Laramie Energy's impairment loss and the liquidity impact associated with the previous maturity of the revolving credit facility in December 2020, we updated the impairment evaluation of our investment in Laramie Energy as of December 31, 2019. The fair value estimate was determined using a discounted cash flow analysis based on reserves volumes and natural gas forward strip prices as of December 31, 2019. Based on our evaluation, we determined that the estimated fair value of our investment in Laramie Energy approximated carrying value as of December 31, 2019.

At September 30, 2019, we conducted an impairment evaluation of our investment in Laramie Energy because of the significant decline in natural gas prices over the second quarter of 2019 and continued deterioration in the third quarter of 2019. Based on our evaluation, we determined that the estimated fair value of our investment in Laramie Energy was \$51.8 million, compared to a carrying value of \$133.3 million at September 30, 2019. The fair value estimate was determined using a discounted cash flow analysis based on natural gas forward strip prices as of September 30, 2019 for two years through December 31, 2021. A blend of 2021 forward strip pricing and third-party analyst pricing was used for years after 2021 through December 31, 2028. Other significant inputs used in the discounted cash flow analysis included proved and unproved reserves information, forecasts of operating expenditures, and the applicable discount rate. Based on the significant decline in natural gas prices and the reduced likelihood that natural gas prices would recover in the near term, we concluded that the decline in the fair value of our investment in Laramie Energy was other than temporary. As a result, we recorded an impairment charge of \$81.5 million in Equity earnings (losses) from Laramie Energy, LLC on our consolidated statement of operations for the year ended December 31, 2019. Please read Note 15—Fair Value Measurements for further information.

On March 4, 2019, Laramie entered into a binding agreement to divest an insignificant amount of producing property for approximately \$17.5 million. This divestiture did not result in a change in our ownership percentage.

The change in our equity investment in Laramie Energy is as follows (in thousands):

	Year Ended December 31,	
	2020	2019
Beginning balance	\$ 46,905	\$ 136,656
Equity earnings (losses) from Laramie Energy (1)	(1,611)	(175,018)
Accretion of basis difference	—	5,018
Adjustment of basis difference (2)	—	161,764
Impairment of our investment in Laramie Energy	(45,294)	(81,515)
Ending balance (1)	\$ —	\$ 46,905

(1) As of June 30, 2020, we have discontinued the application of the equity method of accounting for our investment in Laramie Energy because the book value of such investment has been reduced to zero.

(2) Represents the reduction in our basis difference resulting from the asset impairment loss recorded by Laramie Energy for the year ended December 31, 2019.

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Summarized financial information for Laramie Energy is as follows (in thousands):

	December 31,	
	2021	2020
	(Unaudited)	
Current assets	\$ 68,779	\$ 34,573
Non-current assets	328,571	355,538
Current liabilities	107,976	217,523
Non-current liabilities	177,503	93,193

	Year Ended December 31,		
	2021	2020	2019
	(Unaudited)		
Natural gas and oil revenues	\$ 221,176	\$ 121,893	\$ 193,906
Income (loss) from operations	99,133	(2,994)	(360,967)
Net income (loss)	32,476	(22,589)	(380,473)

Laramie Energy's net income (loss) includes (in thousands):

	Year Ended December 31,		
	2021	2020	2019
	(Unaudited)		
Asset impairment loss	\$ —	\$ —	\$ 355,220
Depreciation, depletion, and amortization	26,458	34,966	82,632
Unrealized (gain) loss on derivative instruments	32,417	4,245	(4,283)

Note 4—Acquisitions

Washington Acquisition

On November 26, 2018, we entered into a Purchase and Sale Agreement to acquire U.S. Oil & Refining Co. and certain affiliated entities (collectively, "U.S. Oil"), a privately-held downstream business (the "Washington Acquisition"). The Washington Acquisition included a 42 Mbpd refinery, a marine terminal, a unit train-capable rail loading terminal, and 2.9 MMBbls of refined product and crude oil storage. The refinery and associated logistics system are strategically located in Tacoma, Washington, and currently serve the Pacific Northwest market. On January 11, 2019, we completed the Washington Acquisition for a total purchase price of \$326.5 million, including acquired working capital, consisting of cash consideration of \$289.5 million and approximately 2.4 million shares of Par's common stock with a fair value of \$37.0 million issued to the seller of U.S. Oil. The cash consideration was funded in part through cash on hand, proceeds from borrowings under a new term loan facility entered into with Goldman Sachs Bank USA, as administrative agent, of \$250.0 million (the "Term Loan B"), and proceeds from borrowings under a term loan from the Bank of Hawaii of \$45.0 million (the "Par Pacific Term Loan"). Please read Note 13—Debt for further information on the Term Loan B and Par Pacific Term Loan. During December 2018 and January 2019, we incurred \$4.2 million and \$5.4 million of commitment fees associated with the funding of the Washington Acquisition, respectively. Such commitment fees are presented as Debt extinguishment and commitment costs on our consolidated statements of operations for the years ended December 31, 2019 and 2018.

In connection with the consummation of the Washington Acquisition, we assumed the Washington Refinery Intermediation Agreement with MLC that provides a structured financing arrangement based on U.S. Oil's crude oil and refined products inventories and associated accounts receivable. Please read Note 11—Inventory Financing Agreements for further information on the Washington Refinery Intermediation Agreement.

We accounted for the Washington Acquisition as a business combination whereby the purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values on the date of the acquisition. Goodwill recognized in the transaction was attributable to opportunities expected to arise from combining our operations with those of the Washington refinery and the utilization of our net operating loss carryforwards, as well as other intangible assets that do not

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qualify for separate recognition. Goodwill recognized as a result of the Washington Acquisition is not expected to be deductible for income tax reporting purposes.

A summary of the fair value of the assets acquired and liabilities assumed is as follows (in thousands):

Cash	\$ 16,146
Accounts receivable	34,954
Inventories	98,367
Prepaid and other assets	5,320
Property, plant, and equipment	412,766
Operating lease right-of-use assets	62,337
Goodwill (1)	42,522
Total assets (2)	672,412
Obligations under inventory financing agreements	(116,873)
Accounts payable	(55,357)
Current operating lease liabilities	(21,571)
Other current liabilities	(18,411)
Long-term operating lease liabilities	(40,766)
Deferred tax liability	(92,103)
Other non-current liabilities	(804)
Total liabilities	(345,885)
Total	\$ 326,527

- (1) We allocated \$24.7 million and \$17.8 million of goodwill to our refining and logistics segments, respectively.
(2) We allocated \$403.9 million and \$268.5 million of total assets to our refining and logistics segments, respectively.

As of December 31, 2019, we finalized the Washington Acquisition purchase price allocation. We incurred \$2.2 million and \$2.6 million of acquisition costs related to the Washington Acquisition for the years ended December 31, 2019 and 2018, respectively. These costs are included in Acquisition and integration costs on our consolidated statements of operations.

The results of operations of U.S. Oil were included in our results beginning on January 11, 2019. For the year ended December 31, 2019, our results of operations included revenues of \$1.2 billion and income before income taxes of \$65.8 million related to U.S. Oil. The following unaudited pro forma financial information presents our consolidated revenues and net income (loss) as if the Washington Acquisition had been completed on January 1, 2018 (in thousands except per share information):

	Year Ended December 31,	
	2019	2018
Revenues	\$ 5,429,530	\$ 4,709,850
Net income (loss)	(4,547)	88,174
Income (loss) per share		
Basic	\$ (0.09)	\$ 1.81
Diluted	\$ (0.09)	\$ 1.79

These pro forma results were based on estimates and assumptions that we believe are reasonable. They are not necessarily indicative of our consolidated results of operations in future periods or the results that actually would have been realized had we been a combined company during the periods presented. The pro forma results for the years ended

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December 31, 2019 and 2018, include adjustments to remeasure U.S. Oil's LIFO inventory reserve as if the Washington Acquisition had been completed on January 1, 2018, record interest and other debt extinguishment costs related to issuance of the Term Loan B and Par Pacific Term Loan, and adjust U.S. Oil's historical depreciation expense as a result of the fair value adjustment to Property, plant, and equipment, net. The pro forma results for the year ended December 31, 2019 also include an adjustment to eliminate the \$64.2 million tax benefit associated with a partial release of our valuation allowance in connection with the Washington Acquisition.

Note 5—Revenue Recognition

As of December 31, 2021 and 2020, receivables from contracts with customers were \$189.9 million and \$104.9 million, respectively. Our refining segment recognizes deferred revenues when cash payments are received in advance of delivery of products to the customer. Deferred revenue was \$10.1 million and \$4.1 million as of December 31, 2021 and 2020, respectively. We have elected to apply a practical expedient not to disclose the value of unsatisfied performance obligations for (i) contracts with an original expected duration of less than one year and (ii) contracts where the variable consideration has been allocated entirely to our unsatisfied performance obligation.

The following table provides information about disaggregated revenue by major product line and includes a reconciliation of the disaggregated revenues to total segment revenues (in thousands):

Year Ended December 31, 2021	Refining	Logistics	Retail
<u>Product or service:</u>			
Gasoline	\$ 1,472,335	\$ —	\$ 333,396
Distillates (1)	1,927,851	—	27,057
Other refined products (2)	1,065,555	—	—
Merchandise	—	—	92,004
Transportation and terminalling services	—	184,734	—
Other revenue	5,370	—	3,959
Total segment revenues (3)	\$ 4,471,111	\$ 184,734	\$ 456,416
Year Ended December 31, 2020	Refining	Logistics	Retail
<u>Product or service:</u>			
Gasoline	\$ 846,294	\$ —	\$ 241,003
Distillates (1)	1,256,618	—	30,739
Other refined products (2)	753,591	—	—
Merchandise	—	—	90,173
Transportation and terminalling services	—	180,909	—
Other revenue	30,198	—	1,798
Total segment revenues (3)	\$ 2,886,701	\$ 180,909	\$ 363,713
Year Ended December 31, 2019	Refining	Logistics	Retail
<u>Product or service:</u>			
Gasoline	\$ 1,416,706	\$ —	\$ 326,304
Distillates (1)	2,503,981	—	40,189
Other refined products (2)	1,242,401	—	—
Merchandise	—	—	90,480
Transportation and terminalling services	—	199,226	—
Other revenue	4,854	—	1,916
Total segment revenues (3)	\$ 5,167,942	\$ 199,226	\$ 458,889

(1) Distillates primarily include diesel and jet fuel.

(2) Other refined products include fuel oil, gas oil, asphalt, and naphtha.

(3) Refer to Note 22—Segment Information for the reconciliation of segment revenues to total consolidated revenues.

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Note 6—Inventories

Inventories at December 31, 2021 and 2020 consisted of the following (in thousands):

	<u>Titled Inventory</u>	<u>Supply and Offtake Agreement (1)</u>	<u>Total</u>
December 31, 2021			
Crude oil and feedstocks	\$ 102,085	\$ 199,282	\$ 301,367
Refined products and blendstock	179,737	142,872	322,609
Warehouse stock and other (2)	166,341	—	166,341
Total	<u>\$ 448,163</u>	<u>\$ 342,154</u>	<u>\$ 790,317</u>
December 31, 2020			
Crude oil and feedstocks	\$ 88,307	\$ 75,340	\$ 163,647
Refined products and blendstock	112,146	83,601	195,747
Warehouse stock and other (2)	70,461	—	70,461
Total	<u>\$ 270,914</u>	<u>\$ 158,941</u>	<u>\$ 429,855</u>

(1) Please read Note 11—Inventory Financing Agreements for further information.

(2) Includes \$120.1 million and \$26.7 million of RINs and environmental credits, reported at the lower of cost or NRV, as of December 31, 2021 and 2020, respectively. Our renewable volume obligation and other gross environmental credit obligations of \$311.0 million and \$150.5 million, reported at market value, are included in Other accrued liabilities on our consolidated balance sheets as of December 31, 2021 and 2020, respectively.

Our reserve for the lower of cost and NRV of inventory was \$0.5 million and \$10.6 million as of December 31, 2021 and 2020, respectively. As of December 31, 2021, the current replacement cost exceeded the LIFO inventory carrying value by approximately \$46.0 million. Our LIFO inventories, net of the lower of cost or NRV reserve, were equal to current cost as of December 31, 2020.

Note 7—Prepaid and Other Current Assets

Prepaid and other current assets at December 31, 2021 and 2020 consisted of the following (in thousands):

	<u>December 31,</u>	
	<u>2021</u>	<u>2020</u>
Collateral posted with broker for derivative instruments (1)	\$ 6,053	\$ 1,489
Prepaid insurance	14,110	14,932
Derivative assets	1,260	1,346
Deferred inventory financing charges	4,073	—
Other	3,029	6,881
Total	<u>\$ 28,525</u>	<u>\$ 24,648</u>

(1) Our cash margin that is required as collateral deposits on our commodity derivatives cannot be offset against the fair value of open contracts except in the event of default. Please read Note 14—Derivatives for further information.

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Note 8—Property, Plant, and Equipment and Impairment of Long-Lived Assets

Major classes of property, plant, and equipment, including assets acquired under finance leases, consisted of the following (in thousands):

	December 31,	
	2021	2020
Land	\$ 153,254	\$ 188,096
Buildings and equipment (1)	1,007,608	974,305
Other (1)	19,535	21,477
Total property, plant, and equipment	1,180,397	1,183,878
Less accumulated depreciation, depletion, and amortization	(323,892)	(251,113)
Property, plant, and equipment, net	<u>\$ 856,505</u>	<u>\$ 932,765</u>

(1) Please read Note 16—Leases for further disclosures and information on finance leases.

Depreciation and finance lease amortization expense was approximately \$77.2 million, \$81.8 million, and \$75.2 million for the years ended December 31, 2021, 2020, and 2019, respectively.

The Par West refinery was idled in the first quarter of 2020 due to the reduction in demand resulting from the COVID-19 global pandemic's effect on the economy. Pursuant to GAAP accounting guidelines, this refinery was deemed abandoned in the fourth quarter of 2020 due to the following factors: the idling of the assets for more than an insignificant amount of time, the significant cost to restart the refinery, and a lack of a current plan or timeline to restart the refinery. As a result, in the year ended December 31, 2020, we recorded impairment charges of \$10.7 million, \$5.0 million, and \$2.2 million in Impairment expense on our consolidated statement of operations related to the write-offs of Par West property, plant, and equipment, deferred turnaround costs, and inventory, respectively. For the year ended December 31, 2021, we recorded additional impairment charges of \$0.2 million in Impairment expense on our consolidated statement of operations related to the this idling. Please read Note 15—Fair Value Measurements for additional information.

For the year ended December 31, 2021, we recorded \$1.7 million of Impairment expense on our consolidated statement of operations related to the impairment of a separate capital project.

Note 9—Asset Retirement Obligations

The table below summarizes the changes in our recorded asset retirement obligations (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Beginning balance	\$ 10,636	\$ 10,180	\$ 9,985
Accretion expense	873	490	331
Revision in estimate	3,602	—	—
Liabilities settled during period	(697)	(34)	(136)
Ending balance	<u>\$ 14,414</u>	<u>\$ 10,636</u>	<u>\$ 10,180</u>

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Note 10—Goodwill and Intangible Assets

During the years ended December 31, 2021, 2020, and 2019, the change in the net carrying amount of goodwill was as follows (in thousands):

Balance at January 1, 2019	\$	153,397
Acquisition of U.S. Oil (1)		42,522
Balance at December 31, 2019		195,919
Impairment expense		(67,922)
Balance at December 31, 2020		127,997
Reclassified to assets held for sale		(735)
Balance at December 31, 2021	\$	127,262

(1) Please read Note 4—Acquisitions for further discussion.

The gross carrying value of goodwill was \$160.4 million as of January 1, 2019 and \$202.9 million as of December 31, 2019, 2020, and 2021. As of January 1 and December 31, 2019, we had accumulated impairment charges of \$7.0 million, and as of December 31, 2020 and 2021, we had accumulated impairment charges of \$74.9 million and \$75.6 million, respectively.

At March 31, 2020, we performed a quantitative goodwill impairment test of all of our reporting units due to (i) the global economic impact of the COVID-19 pandemic and (ii) a steep decline in current and forecasted prices and demand for crude oil and refined products. As part of our quantitative impairment test, we compared the carrying value of the net assets of the reporting unit to the estimated fair value of the reporting unit. In assessing the fair value of the reporting units, we primarily utilized a market approach based on observable multiples for comparable companies within our industry. Our refining reporting units in Hawaii and Washington were fully impaired and the goodwill associated with our retail reporting unit in Washington and Idaho was partially impaired, resulting in a charge of \$67.9 million in our consolidated statement of operations for the year ended December 31, 2020. The goodwill impairment expense was allocated to the Refining segment (\$38.1 million) and to the Retail segment (\$29.8 million).

Intangible assets consisted of the following (in thousands):

	December 31,	
	2021	2020
Intangible assets:		
Trade names and trademarks	\$ 6,267	\$ 6,267
Customer relationships	32,064	32,064
Other	261	261
Total intangible assets	38,592	38,592
Accumulated amortization:		
Trade name and trademarks	(5,297)	(5,210)
Customer relationships	(17,061)	(14,490)
Other	—	—
Total accumulated amortization	(22,358)	(19,700)
Net:		
Trade name and trademarks	970	1,057
Customer relationships	15,003	17,574
Other	261	261
Total intangible assets, net	\$ 16,234	\$ 18,892

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Amortization expense was approximately \$2.7 million for each of the years ended December 31, 2021, 2020, and 2019. Our intangible assets related to customer relationships and trade names have an average useful life of 13.5 years. Expected amortization expense for each of the next five years and thereafter is as follows (in thousands):

Year Ended	Amount
2022	\$ 2,658
2023	2,658
2024	1,400
2025	979
2026	979
Thereafter	7,560
	\$ 16,234

Note 11—Inventory Financing Agreements

The following table summarizes our outstanding obligations under our inventory financing agreements (in thousands):

	December 31,	
	2021	2020
Supply and Offtake Agreements	\$ 569,158	\$ 312,185
Washington Refinery Intermediation Agreement	168,546	111,501
Obligations under inventory financing agreements	\$ 737,704	\$ 423,686

Supply and Offtake Agreement

We have an agreement with J. Aron to support our Hawaii refining operations. Under the agreement, J. Aron may enter into agreements with third parties whereby J. Aron remits payments to these third parties for refinery procurement contracts for which we will become immediately obligated to reimburse J. Aron. As of December 31, 2021, we had no obligations due to J. Aron under this contractual undertakings agreement. On May 4, 2021, we amended the first amended and restated supply and offtake agreement and extended the term expiry date from May 31, 2021, to June 30, 2021.

On June 1, 2021, we entered into the Second Amended and Restated Supply and Offtake Agreement (“Supply and Offtake Agreement”), which amended and restated the first amended and restated supply and offtake agreement in its entirety. The Supply and Offtake Agreement expires May 31, 2024 (as extended, the “Expiration Date”), subject to a one-year extension at the mutual agreement of the parties at least 120 days prior to the Expiration Date. Under the Supply and Offtake Agreement, we are subject to an early termination fee if we terminate the Supply and Offtake Agreement on or prior to May 31, 2023. Under the Supply and Offtake Agreement, Par Hawaii Refining, LLC (“PHR”) is required to maintain minimum liquidity of not less than \$15 million for any three consecutive business days, with at least \$7.5 million of such liquidity consisting of cash and cash equivalents. Commencing on July 1, 2021 (the “Adjustment Date”), the Supply and Offtake Agreement makes available a discretionary draw facility (the “Discretionary Draw Facility”) to PHR.

During the term of the Supply and Offtake Agreement, J. Aron and we will identify mutually acceptable contracts for the purchase of crude oil from third parties. Per the agreement, J. Aron will provide up to 150 Mbpd of crude oil to our Hawaii refinery. Additionally, we agreed to sell and J. Aron agreed to buy, at market prices, refined products produced at our Hawaii refinery. We will then repurchase the refined products from J. Aron prior to selling the refined products to our retail operations or to third parties. The agreement also provides for the lease of crude oil and certain refined product storage facilities to J. Aron. Following the expiration or termination of the agreement, we are obligated to purchase the crude oil and refined product inventories then owned by J. Aron and located at the leased storage facilities at then-current market prices.

Though title to the crude oil and certain refined product inventories resides with J. Aron, the Supply and Offtake Agreement is accounted for similar to a product financing arrangement; therefore, the crude oil and refined products inventories will continue to be included in our consolidated balance sheets until processed and sold to a third party. Each reporting period, we record a liability in an amount equal to the amount we expect to pay to repurchase the inventory held by J. Aron based on current market prices.

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Prior to July 1, 2021, the supply and offtake agreements also included a deferred payment arrangement whereby we could defer payments owed under the agreements up to the lesser of \$165 million or 85% of the eligible accounts receivable and inventory. The deferred amounts under the deferred payment arrangement bore interest at a rate equal to three-month LIBOR plus 3.50% per annum. We also paid a deferred payment availability fee equal to 0.75% of the unused capacity under the deferred payment arrangement. As of December 31, 2020, the capacity of the deferred payment arrangement was \$80.1 million and we had \$78.6 million outstanding.

Effective July 1, 2021, the Discretionary Draw Facility became available to PHR up to but excluding the Expiration Date (the “Discretionary Draw Commitment Period”). Under the Discretionary Draw Facility, J. Aron agreed to make advances to PHR from time to time at the request of PHR, subject to the satisfaction of certain conditions precedent, in an aggregate principal amount at any one time outstanding not to exceed the lesser of \$165 million or the sum of the borrowing base, which is calculated as (x) 85% of the eligible accounts receivables, plus (y) the lesser of \$82.5 million and 85% of eligible hydrocarbon inventory, minus (z) such reserves as established by J. Aron in respect of eligible receivables and eligible hydrocarbon inventory. The advances under the Discretionary Draw Facility bear interest at a rate equal to three-month LIBOR plus 4.00% per annum until May 31, 2022. Beginning on June 1, 2022, the advances will bear interest at a rate equal to LIBOR (or LIBOR equivalent) plus an applicable spread between 3.50% and 4.00% to be determined annually based on certain financial ratios. We also agreed to pay a discretionary draw availability fee equal to 0.75% of the unused capacity under the Discretionary Draw Facility. Amounts outstanding under the Discretionary Draw Facility are included in Obligations under inventory financing agreements on our consolidated balance sheets. Changes in the amount outstanding under the Obligations under inventory financing agreements are included within Cash flows from financing activities on the consolidated statements of cash flows. As of December 31, 2021, our outstanding balance under the Discretionary Draw Facility was equal to our borrowing base of \$126.2 million.

Under the supply and offtake agreements, we pay or receive certain fees from J. Aron based on changes in market prices over time. In 2017, we fixed the market fee for the period from June 1, 2018 through May 2021 for an additional \$2.2 million. In 2020, we fixed the market fee for the period from February 1, 2020 through April 1, 2021 for an additional \$0.8 million to be settled in fifteen payments. In 2021, we entered into multiple contracts to fix certain market fees for the period from May 2021 through May 2022 for \$18.2 million. The amount due to or from J. Aron was recorded as an adjustment to our Obligations under inventory financing agreements as allowed under the Supply and Offtake Agreement. As of December 31, 2021 and 2020, we had a payable of \$6.2 million and a receivable of \$0.5 million, respectively.

Washington Refinery Intermediation Agreement

In connection with the consummation of the Washington Acquisition, we became a party to the Washington Refinery Intermediation Agreement with MLC that provides a structured financing arrangement based on U.S. Oil’s crude oil and refined products inventories and associated accounts receivable. Under this arrangement, U.S. Oil purchases crude oil supplied from third-party suppliers and MLC provides credit support for such crude oil purchases. MLC’s credit support can consist of either providing a payment guaranty, causing the issuance of a letter of credit from a third-party issuing bank, or purchasing crude oil directly from third parties on our behalf. U.S. Oil holds title to all crude oil and refined products inventories at all times and pledges such inventories, together with all receivables arising from the sales of the same, exclusively to MLC. On February 11, 2021, we and MLC amended the Washington Refinery Intermediation Agreement and extended the term through March 31, 2022. This amendment also included transition guidance on the interest rate of the MLC receivable advances to be based on another industry standard benchmark rate that will be effective upon the scheduled retirement of three-month LIBOR in 2023. On December 17, 2021, we and MLC amended the Washington Refinery Intermediation Agreement to further extend the term through December 21, 2022, with an automatic extension to March 31, 2023, upon an ABL extension event, and to revise certain other terms and conditions in the Washington Refinery Intermediation Agreement.

During the remaining term of the Washington Refinery Intermediation Agreement, MLC will make receivable advances to U.S. Oil based on an advance rate of 95% of eligible receivables, up to a total receivables advance maximum of \$90.0 million (the “MLC receivable advances”), and additional advances based on crude oil and products inventories. Changes in the amount outstanding under the MLC receivable advances are included within Cash flows from financing activities on the consolidated statements of cash flows. The MLC receivable advances bear interest at a rate equal to three-month LIBOR plus 3.25% per annum. We also agreed to pay an availability fee equal to 1.50% of the unused capacity under the MLC receivable advances. As part of the November 1, 2019 amendment, the availability fee was amended to equal 0.75% of the unused capacity under the MLC receivable advances. As of December 31, 2021 and 2020, our outstanding balance included in our Obligations under inventory financing agreements on our consolidated balance sheets under the MLC receivable advances was equal to our borrowing base of \$54.5 million and \$41.1 million, respectively. Additionally, as of December 31, 2021 and 2020, we had approximately \$167.0 million and \$93.6 million in letters of credit outstanding through MLC’s credit support, respectively.

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The following table summarizes the inventory intermediation fees, which are included in Cost of revenues (excluding depreciation) on our consolidated statements of operations, and Interest expense and financing costs, net related to the intermediation agreements (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Net fees and expenses:			
Supply and Offtake Agreement			
Inventory intermediation fees	\$ 21,612	\$ 12,034	\$ 35,459
Interest expense and financing costs, net	3,015	3,044	5,863
Washington Refinery Intermediation Agreement			
Inventory intermediation fees	\$ 3,236	\$ 4,112	\$ 3,734
Interest expense and financing costs, net	4,900	2,791	6,359

The Supply and Offtake Agreement and the Washington Refinery Intermediation Agreement also provide us with the ability to economically hedge price risk on our inventories and crude oil purchases. Please read Note 14—Derivatives for further information.

Note 12—Other Accrued Liabilities

Other accrued liabilities at December 31, 2021 and 2020 consisted of the following (in thousands):

	December 31,	
	2021	2020
Accrued payroll and other employee benefits	\$ 19,710	\$ 14,916
Gross environmental credit obligations (1)	311,014	150,482
Other	39,700	38,313
Total	\$ 370,424	\$ 203,711

(1) Gross environmental credit obligations are stated at market as of December 31, 2021 and 2020. Please read Note 15—Fair Value Measurements for further information. A portion of these obligations are expected to be settled with our RINs assets and other environmental credits, which are presented as Inventories on our consolidated balance sheet and are stated at the lower of cost and net realizable value. The carrying costs of these assets were \$120.1 million and \$26.7 million as of December 31, 2021 and 2020, respectively.

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Note 13—Debt

The following table summarizes our outstanding debt (in thousands):

	December 31,	
	2021	2020
5.00% Convertible Senior Notes due 2021	\$ —	\$ 48,665
ABL Credit Facility due 2022	—	—
Retail Property Term Loan due 2024	—	42,494
7.75% Senior Secured Notes due 2025	296,000	300,000
Term Loan B due 2026	215,625	228,125
12.875% Senior Secured Notes due 2026	68,250	105,000
Mid Pac Term Loan due 2028	—	1,399
PHL Term Loan due 2030	—	5,840
Principal amount of long-term debt	579,875	731,523
Less: unamortized discount and deferred financing costs	(15,317)	(22,930)
Total debt, net of unamortized discount and deferred financing costs	564,558	708,593
Less: current maturities, net of unamortized discount and deferred financing costs	(10,841)	(59,933)
Long-term debt, net of current maturities	\$ 553,717	\$ 648,660

Annual maturities of our long-term debt for the next five years and thereafter are as follows (in thousands):

Year Ended	Amount Due
2022	\$ 12,500
2023	12,500
2024	12,500
2025	308,500
2026	233,875
Thereafter	—
Total	\$ 579,875

Additionally, as of December 31, 2021 and 2020, we had approximately \$18.5 million and \$1.7 million in letters of credit outstanding, respectively, under the Loan and Security Agreement dated as of December 21, 2017 with certain lenders and Bank of America, N.A., as administrative agent and collateral agent (the “ABL Credit Facility”). We had \$5.9 million and \$3.6 million in cash-collateralized letters of credit and surety bonds outstanding as of December 31, 2021 and December 31, 2020, respectively, under agreements with MLC and under certain other facilities.

Under the ABL Credit Facility, the indentures governing the 7.75% Senior Secured Notes and 12.875% Senior Secured Notes, and the Term Loan B Facility, our subsidiaries are restricted from paying dividends or making other equity distributions, subject to certain exceptions.

5.00% Convertible Senior Notes Due 2021

In June 2016, we completed the issuance and sale of \$115 million in aggregate principal amount of the 5.00% Convertible Senior Notes in a private placement under Rule 144A (the “Notes Offering”). Affiliates of funds managed by or on behalf of Highbridge Capital Management, LLC (“Highbridge”) and Whitebox Advisors, LLC (“Whitebox”), our related parties, purchased an aggregate of \$47.5 million and \$40.4 million, respectively, principal amount of the 5.00% Convertible Senior Notes in the Notes Offering.

The 5.00% Convertible Senior Notes bore interest at a rate of 5.00% per year (payable semi-annually in arrears on June 15 and December 15 of each year, beginning on December 15, 2016) and matured on June 15, 2021. During May, June, and December 2019, we entered into privately negotiated exchange agreements with a limited number of holders (the “Noteholders”) to repurchase \$66.3 million in aggregate principal amount of the 5.00% Convertible Senior Notes held by the Noteholders for an aggregate of \$18.6 million in cash and approximately 3.2 million shares of Par’s common stock with a fair

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value of \$74.3 million. We recognized a loss of approximately \$6.1 million related to the extinguishment of the repurchased 5.00% Convertible Senior Notes in the year ended December 31, 2019. On June 15, 2021, the remaining \$48.7 million aggregate principal amount of the 5.00% Convertible Senior Notes was paid in full at maturity.

ABL Credit Facility

Under the ABL Credit Facility, we have a revolving credit facility that provides for revolving loans and for the issuance of letters of credit (the “ABL Revolver”) with a maximum principal amount at any time outstanding of \$85 million subject to a borrowing base. As of December 31, 2021, the ABL Revolver had no outstanding balance and a borrowing base of approximately \$85.0 million.

The revolving loans under the ABL Revolver bear interest at a fluctuating rate per annum equal to (i) during the periods such revolving loan is a base rate loan, the base rate plus the applicable margin in effect from time to time, and (ii) during the periods such revolving loan is a LIBOR Loan, at LIBOR for the applicable interest period plus the applicable margin in effect from time to time. The base rate is equal to (i) daily LIBOR (“LIBOR Daily Floating Rate”) or (ii) if the LIBOR Daily Floating Rate is unavailable for any reason, a rate as calculated per the agreement (the “Prime Rate”) for such day. We also pay a *de minimis* fee for any undrawn amounts available under the ABL Revolver. The maturity date of the ABL Revolver is December 21, 2022, on which date all revolving loans will be due and payable in full. The average effective interest rate for 2021 and 2020 on the ABL Revolver loan was 2.6% and 2.3%, respectively.

The applicable margins for the ABL Credit Facility and advances under the ABL Revolver are as specified below:

Level	Arithmetic Mean of Daily Availability (as a percentage of the borrowing base)	Applicable Margin for LIBOR Loans and Base Rate Loans Subject to LIBOR Daily Floating Rate	Applicable Margin for Base Rate Loans Subject to the Prime Rate
1	>50%	1.75%	0.75%
2	>30% but ≤50%	2.00%	1.00%
3	≤30%	2.25%	1.25%

The obligations of the ABL Borrowers are guaranteed by Par and Par Petroleum, LLC’s existing and future direct or indirect domestic subsidiaries that are not borrowers under the ABL Credit Facility. The loans and letters of credit issued under the ABL Credit Facility are secured by a first-priority security interest in and lien on certain assets of the borrowers and the guarantors, including, among other items, cash and cash equivalents, accounts receivables, and inventory, and excluding the assets of PHR and U.S. Oil.

On February 2, 2022, Par Petroleum, LLC, Par Hawaii, LLC (“PHL”, formerly known as Par Hawaii, Inc. and includes the assets previously owned by the dissolved entities Mid Pac Petroleum, LLC and HIE Retail, LLC), Hermes Consolidated, LLC, and Wyoming Pipeline Company, LLC (collectively, the “ABL Borrowers”), entered into the Amended and Restated Loan and Security Agreement (as amended from time to time, the “ABL Loan Agreement”) dated as of February 2, 2022. The ABL Loan Agreement increased the maximum principal amount at any time outstanding under the ABL Revolver to \$105 million, extended the maturity date of the ABL Revolver to February 2, 2025, and modified the ABL Revolver interest rate definitions to be based on the secured overnight financing rate (“SOFR”) as administered by the Federal Reserve Bank of New York, among other modifications. Please read Note 24—Subsequent Events for additional information.

Par Pacific Term Loan Agreement

On January 9, 2019, we entered into a loan agreement (the “Par Pacific Term Loan Agreement”) with Bank of Hawaii (“BOH”), pursuant to which BOH made a loan to the Company in the principal amount of \$45.0 million, the net proceeds of which were used to finance the Washington Acquisition (the “Par Pacific Term Loan”).

We terminated and repaid all amounts outstanding under the Par Pacific Term Loan Agreement on March 29, 2019 using the proceeds from the Retail Property Term Loan (as defined below). We recognized approximately \$0.1 million of debt extinguishment costs related to the unamortized deferred financing costs associated with the Par Pacific Term Loan Agreement in the year ended December 31, 2019.

Retail Property Term Loan

On March 29, 2019, Par Pacific Hawaii Property Company, LLC (“Par Property LLC”), our wholly owned subsidiary, entered into a term loan agreement (the “Retail Property Term Loan”) with BOH, which provided a term loan in the principal

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amount of \$45.0 million. The proceeds from the Retail Property Term Loan were used to repay and terminate the Par Pacific Term Loan Agreement.

The Retail Property Term Loan bore interest based on a floating rate equal to the applicable LIBOR for a one-month interest period plus 1.5%. The average effective interest rate for 2021 on the Retail Property Term Loan was 1.6%. Principal and interest payments were payable monthly based on a 20-year amortization schedule, principal prepayments were allowed subject to applicable prepayment penalties, and the remaining unpaid principal, plus any unpaid interest or other charges, was due on April 1, 2024, the maturity date of the Retail Property Term Loan. On February 23, 2021, we terminated and repaid all amounts outstanding under the Retail Property Term Loan. We recognized approximately \$1.4 million of debt extinguishment costs in the year ended December 31, 2021 related to our prepayment of the loan principal.

7.75% Senior Secured Notes Due 2025

Our 7.75% Senior Secured Notes bear interest at a rate of 7.750% per year (payable semi-annually in arrears on June 15 and December 15 of each year, beginning on June 15, 2018) and will mature on December 15, 2025. During the year ended December 31, 2021, we repurchased and cancelled \$4 million in aggregate principal amount of the 7.75% Senior Secured Notes through two repurchases. As of December 31, 2021, the 7.75% Senior Secured Notes had an outstanding principal balance of \$296.0 million.

The indenture governing the 7.75% Senior Secured Notes contains restrictive covenants limiting the ability of Par Petroleum, LLC and its Restricted Subsidiaries (as defined in the indenture) to, among other things, incur additional indebtedness, issue certain preferred shares, create liens on certain assets to secure debt, sell or otherwise dispose of all or substantially all assets, or pay dividends.

The 7.75% Senior Secured Notes are secured on a *pari passu* basis by first priority liens (subject to the relative priority of permitted liens) on substantially all of the property and assets of the Issuers and the subsidiary guarantors, including but not limited to, material real property now owned or hereafter acquired by the Issuers or subsidiary guarantors and their equipment, intellectual property, and equity interests, but excluding certain property which is collateral under the ABL Credit Facility, the Supply and Offtake Agreement, and the Washington Refinery Intermediation Agreement. The 7.75% Senior Secured Notes are fully and unconditionally guaranteed on a senior secured basis, jointly and severally, by each of Par Petroleum, LLC's existing wholly owned subsidiaries (other than Par Petroleum Finance Corp.), and are guaranteed on a senior unsecured basis only as to the payment of principal and interest by Par Pacific Holdings, Inc. In the future, the 7.75% Senior Secured Notes will be guaranteed on a senior secured basis by additional subsidiaries of Par Petroleum, LLC that guarantee material indebtedness of the Issuers or otherwise become obligated with respect to material indebtedness under a credit facility, subject to certain exceptions.

Term Loan B Facility due 2026

On January 11, 2019, Par Petroleum, LLC and Par Petroleum Finance Corp. (collectively, the "Issuers") entered into a new term loan facility with Goldman Sachs Bank USA, as administrative agent, and the lenders party thereto from time to time (the "Term Loan B Facility"). Pursuant to the Term Loan B Facility, the lenders made a term loan to the borrowers in the amount of \$250.0 million ("Term Loan B") on the closing date. The net proceeds from Term Loan B totaled \$232.0 million after deducting the original issue discount, deferred financing costs, and commitment and other fees.

Loans under the Term Loan B bear interest at a rate per annum equal to Adjusted LIBOR (as defined in the Term Loan B Facility) plus an applicable margin of 6.75% or at a rate per annum equal to Alternate Base Rate (as defined in the Term Loan B Facility) plus an applicable margin of 5.75%. The average effective interest rate for 2021 on the Term Loan B was 7.0%.

In addition to the quarterly interest payments, the Term Loan B requires quarterly principal payments of \$3.1 million. The Term Loan B matures on January 11, 2026.

The obligations of the borrowers under the Term Loan B Facility are guaranteed by Par Petroleum, LLC's and Par Petroleum Finance Corp.'s existing and future direct or indirect domestic subsidiaries and, by Par Pacific Holdings, Inc., with respect to principal and interest only. The Term Loan B Facility is secured on a *pari passu* basis by first priority liens (subject to the relative priority of permitted liens) on substantially all of the property and assets of Par Petroleum, LLC, Par Petroleum Finance Corp., and their subsidiary guarantors, but excluding certain property which is collateral under the ABL Credit Facility, the Supply and Offtake Agreement, and the Washington Refinery Intermediation Agreement.

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12.875% Senior Secured Notes due 2026

On June 5, 2020, the Issuers completed the issuance and sale of \$105.0 million in aggregate principal amount of 12.875% Senior Secured Notes in a private placement under Rule 144A and Regulation S of the Securities Act of 1933, as amended. The net proceeds of \$98.8 million from the sale were used for general corporate purposes.

The 12.875% Senior Secured Notes bear interest at an annual rate of 12.875% per year (payable semi-annually in arrears on January 15 and July 15 of each year, beginning on January 15, 2021) and will mature on January 15, 2026. The indenture for the 12.875% Senior Secured Notes also allows for optional early redemptions, some of which require the Issuers to pay a premium and some of which have certain other restrictions related to timing and the maximum redeemable principal amount.

On June 14, 2021, we redeemed \$36.8 million aggregate principal amount of 12.875% Senior Secured Notes at a redemption price of 112.875% of the aggregate principal amount of the notes redeemed, plus the accrued and unpaid interest as of the redemption date. On the redemption date, we paid a premium of approximately \$4.7 million and incurred additional debt extinguishment costs of \$1.9 million, which were recorded in Debt extinguishment and commitment costs on our consolidated statement of operations for the year ended December 31, 2021. As of December 31, 2021, \$68.3 million in aggregate principal amount of the 12.875% Senior Secured Notes remained outstanding.

The obligations of the borrowers under the 12.875% Senior Secured Notes are guaranteed by the Issuers' existing and future direct or indirect domestic subsidiaries (other than Par Petroleum Finance Corp.) and by Par Pacific Holdings, Inc., with respect to principal and interest only. The 12.875% Senior Secured Notes are secured on a *pari passu* basis by first priority liens (subject to the relative priority of permitted liens) on substantially all of the property and assets of the Issuers and the subsidiary guarantors, but excluding certain assets which are collateral under the ABL Credit Facility, the Supply and Offtake Agreement, and the Washington Refinery Intermediation Agreement.

Mid Pac Term Loan

Our Mid Pac Term Loan with American Savings Bank, F.S.B. was payable monthly, bore interest at an annual rate of 4.375%, was secured by a first-priority lien on the real property purchased with the funds, including leases and rents on the property and the property's fixed assets and fixtures, and was guaranteed by Par Petroleum, LLC. The Mid Pac Term Loan was scheduled to mature on October 18, 2028. On March 12, 2021, we terminated and repaid all amounts outstanding under the Mid Pac Term Loan.

PHL Term Loan

On April 13, 2020, PHL, our wholly owned subsidiary, entered into a Term Loan Agreement ("PHL Term Loan") with American Savings Bank F.S.B., which provided a term loan in the principal amount of approximately \$6.0 million. The proceeds from the PHL Term Loan were used to finance PHL's equity in certain real property.

The PHL Term Loan bore interest at a fixed rate of 2.750% per annum. Principal and interest payments were payable monthly based on a 25-year amortization schedule, principal prepayments were allowed with no prepayment charge, and the remaining principal, plus any unpaid interest or other charges, was due on April 15, 2030, the maturity date of the PHL Term Loan. The PHL Term Loan was guaranteed by Par Petroleum, LLC. On February 23, 2021, we terminated and repaid all amounts outstanding under the PHL Term Loan.

Cross Default Provisions

Included within each of our debt agreements are affirmative and negative covenants and customary cross default provisions that require the repayment of amounts outstanding on demand unless the triggering payment default or acceleration is remedied, rescinded, or waived. As of December 31, 2021, we were in compliance with all of our debt instruments.

Guarantors

In connection with our shelf registration statement on Form S-3, which was filed with the Securities and Exchange Commission ("SEC") and declared effective on February 14, 2022 ("Registration Statement"), we may sell non-convertible debt securities and other securities in one or more offerings with an aggregate initial offering price of up to \$750.0 million. Any non-convertible debt securities issued under the Registration Statement may be fully and unconditionally guaranteed (except for customary release provisions), on a joint and several basis, by some or all of our subsidiaries, other than subsidiaries that are "minor" within the meaning of Rule 3-10 of Regulation S-X (the "Guarantor Subsidiaries"). We have no "independent assets or

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operations” within the meaning of Rule 3-10 of Regulation S-X and certain of the Guarantor Subsidiaries may be subject to restrictions on their ability to distribute funds to us, whether by cash dividends, loans, or advances.

Note 14—Derivatives

Commodity Derivatives

We utilize commodity derivative contracts to manage our price exposure in our inventory positions, future purchases of crude oil, future purchases and sales of refined products, and crude oil consumption in our refining process. The derivative contracts that we execute to manage our price risk include exchange traded futures, options, and OTC swaps. Our futures, options, and OTC swaps are marked-to-market and changes in the fair value of these contracts are recognized within Cost of revenues (excluding depreciation) on our consolidated statements of operations.

We are obligated to repurchase the crude oil and refined products from J. Aron at the termination of the Supply and Offtake Agreement. Our Washington Refinery Intermediation Agreement contains forward purchase obligations for certain volumes of crude oil and refined products that are required to be settled at market prices on a monthly basis. We have determined that these obligations under the Supply and Offtake Agreement and Washington Refinery Intermediation Agreement contain embedded derivatives. As such, we have accounted for these embedded derivatives at fair value with changes in the fair value recorded in Cost of revenues (excluding depreciation) on our consolidated statements of operations.

We have entered into forward purchase contracts for crude oil and forward purchases and sales contracts of refined products. We elect the normal purchases normal sales (“NPNS”) exception for all forward contracts that meet the definition of a derivative and are not expected to net settle. Any gains and losses with respect to these forward contracts designated as NPNS are not reflected in earnings until the delivery occurs.

We elect to offset fair value amounts recognized for derivative instruments executed with the same counterparty under a master netting agreement. Our consolidated balance sheets present derivative assets and liabilities on a net basis. Please read Note 15—Fair Value Measurements for the gross fair value and net carrying value of our derivative instruments. Our cash margin that is required as collateral deposits cannot be offset against the fair value of open contracts except in the event of default.

Our open futures and OTC swaps expire in April 2022. At December 31, 2021, our open commodity derivative contracts represented (in thousands of barrels):

<u>Contract type</u>	<u>Purchases</u>	<u>Sales</u>	<u>Net</u>
Futures	1,100	(1,650)	(550)
Swaps	2,100	(3,600)	(1,500)
Total	<u>3,200</u>	<u>(5,250)</u>	<u>(2,050)</u>

At December 31, 2021, we also had option collars that economically hedge a portion of our internally consumed fuel at our refineries. The following table provides information on these option collars at each of our refineries as of December 31, 2021:

	<u>December 31, 2021</u>
Average barrels per month	35,833
Weighted-average strike price - floor (in dollars)	\$ 59.47
Weighted-average strike price - ceiling (in dollars)	\$ 75.34
Commencement date	January 2022
Expiry date	December 2022

Interest Rate Derivatives

We are exposed to interest rate volatility in our ABL Revolver, Term Loan B Facility, Supply and Offtake Agreement, and Washington Refinery Intermediation Agreement. We may utilize interest rate swaps to manage our interest rate risk. As of December 31, 2020, we had entered into an interest rate swap at an average fixed rate of 3.91% in exchange for the floating interest rate on the notional amounts due under the Retail Property Term Loan. This swap was set to expire on April 1, 2024, the maturity date of the Retail Property Term Loan. On February 23, 2021, we terminated and repaid all amounts outstanding under the Retail Property Term Loan and the related interest rate swap.

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Upon redemption of our 5.00% Convertible Senior Notes on or after June 20, 2019 at our election, we were obligated to pay a make-whole premium equal to the present value of the remaining scheduled payments of interest on the 5.00% Convertible Senior Notes to be redeemed from the relevant redemption date to the maturity date of June 15, 2021. We determined that the redemption option and the related make-whole premium represented an embedded derivative that was not clearly and closely related to the 5.00% Convertible Senior Notes. As such, prior to the maturity date of June 15, 2021, we accounted for this embedded derivative at fair value with changes in the fair value recorded in Interest expense and financing costs, net on our consolidated statements of operations. On June 15, 2021, the 5.00% Convertible Senior Notes were repaid in full and the related embedded derivative was settled.

The following table provides information on the fair value amounts (in thousands) of these derivatives as of December 31, 2021 and 2020 and their placement within our consolidated balance sheets.

		December 31,	
		2021	2020
Balance Sheet Location		<i>Asset (Liability)</i>	
Commodity derivatives (1)	Prepaid and other current assets	\$ 1,260	\$ 1,346
Commodity derivatives	Other accrued liabilities	(1,431)	—
J. Aron repurchase obligation derivative	Obligations under inventory financing agreements	(15,151)	(20,797)
MLC terminal obligation derivative	Obligations under inventory financing agreements	(22,170)	(10,161)
Interest rate derivatives	Other accrued liabilities	—	(966)
Interest rate derivatives	Other liabilities	—	(2,027)

(1) Does not include cash collateral of \$6.1 million and \$1.5 million recorded in Prepaid and other current assets and \$9.5 million and \$9.5 million in Other long-term assets as of December 31, 2021 and 2020, respectively.

The following table summarizes the pre-tax gains (losses) recognized in Net income (loss) on our consolidated statements of operations resulting from changes in fair value of derivative instruments not designated as hedges charged directly to earnings (in thousands):

		Year Ended December 31,		
		2021	2020	2019
Commodity derivatives	Cost of revenues (excluding depreciation)	\$ (22,417)	\$ (51,902)	\$ (1,547)
J. Aron repurchase obligation derivative	Cost of revenues (excluding depreciation)	5,646	(20,970)	(3,912)
MLC terminal obligation derivative	Cost of revenues (excluding depreciation)	(73,256)	39,820	(19,326)
Interest rate derivatives	Interest expense and financing costs, net	104	(2,265)	(1,506)

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Note 15—Fair Value Measurements

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

Purchase Price Allocation of U.S. Oil

The fair values of the assets acquired and liabilities assumed as a result of the Washington Acquisition were estimated as of January 11, 2019, the date of the acquisition, using valuation techniques described in notes (1) through (6) below.

	Fair Value	Valuation Technique
	(in thousands)	
Net working capital excluding operating leases	\$ (35,854)	(1)
Property, plant, and equipment	412,766	(2)
Operating lease right-of-use assets	62,337	(3)
Goodwill	42,522	(4)
Current operating lease liabilities	(21,571)	(3)
Long-term operating lease liabilities	(40,766)	(3)
Deferred tax liability	(92,103)	(5)
Other non-current liabilities	(804)	(6)
Total	\$ 326,527	

- (1) Current assets acquired and liabilities assumed were recorded at their net realizable value.
- (2) The fair value of personal property was estimated using the cost approach. Key assumptions in the cost approach include determining the replacement cost by evaluating recent purchases of comparable assets or published data, and adjusting replacement cost for economic and functional obsolescence, location, normal useful lives, and capacity (if applicable). The fair value of real property was estimated using the market approach. Key assumptions in the market approach include determining the asset value by evaluating recent purchases of comparable assets under similar circumstances.
- (3) Operating lease right-of-use assets and liabilities were recognized based on the present value of lease payments over the lease term using the incremental borrowing rate at acquisition of 9.6%.
- (4) The excess of the purchase price paid over the fair value of the identifiable assets acquired and liabilities assumed is allocated to goodwill.
- (5) The deferred tax liability was determined based on the differences between the tax bases of the assets acquired and the values of those assets recorded on our consolidated balance sheets as of the date of acquisition.
- (6) Other non-current liabilities are related to pension plan obligations. The underfunded status of the defined benefit plan represents the difference between the fair value of the plan's assets and the projected benefit obligations.

Goodwill

At March 31, 2020, we performed a quantitative goodwill impairment test of all of our reporting units due to (i) the global economic impact of the COVID-19 pandemic and (ii) a steep decline in current and forecasted prices and demand for crude oil and refined products. As part of our quantitative impairment test, we compared the carrying value of the net assets of the reporting unit to the estimated fair value of the reporting unit. In assessing the fair value of the reporting units, we primarily utilized a market approach based on observable multiples for comparable companies within our industry. Our refining reporting units in Hawaii and Washington were fully impaired and the goodwill associated with our retail reporting unit in Washington and Idaho was partially impaired, resulting in a charge of \$67.9 million in our consolidated statement of operations for the year ended December 31, 2020. The goodwill impairment expense was allocated to the Refining segment (\$38.1 million) and to the Retail segment (\$29.8 million). We consider the impairment of our goodwill to be a Level 3 fair value measurement.

Investment in Laramie Energy

We evaluate equity method investments for impairment when factors indicate that a decrease in the value of our investment has occurred and the carrying amount of our investment may not be recoverable. An impairment loss, based on the

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difference between the carrying value and the estimated fair value of the investment, is recognized in earnings when an impairment is deemed to be other than temporary.

At March 31, 2020, we conducted an impairment evaluation of our investment in Laramie Energy because of (i) the global economic impact of the COVID-19 pandemic, (ii) an increase in the weighted-average cost of capital for energy companies, and (iii) continuing declines in natural gas prices through the first quarter of 2020. Based on our evaluation, we determined that the estimated fair value of our investment in Laramie Energy was \$1.9 million, compared to a carrying value of \$47.2 million at March 31, 2020. The fair value estimate was determined using a discounted cash flow analysis based on natural gas forward strip prices as of March 31, 2020 for the years 2020 and 2021 of the forecast, and a blend of forward strip pricing and third-party analyst pricing for the years 2022 through 2028. Other significant inputs used in the discounted cash flow analysis included proved and unproved reserves information, forecasts of operating expenditures, and the applicable discount rate. As part of our evaluation, we considered the likelihood that NYMEX Henry Hub prices, which declined from an average spot price of \$2.29 (\$/MMBtu) at December 31, 2019 to \$2.03 (\$/MMBtu) in the first quarter of 2020, will recover in the near term. A discount rate of 10% was used to reflect the higher cost of capital under the economic conditions as of March 31, 2020. As a result, we recorded an other-than temporary impairment charge of \$45.3 million in Equity losses from Laramie Energy, LLC on our consolidated statement of operations for the year ended December 31, 2020.

At September 30, 2019, we conducted an impairment evaluation of our investment in Laramie Energy because of the significant decline in natural gas prices over the second quarter of 2019 and continued deterioration in the third quarter of 2019. At September 30, 2019, we determined that the estimated fair value of our investment in Laramie Energy was \$51.8 million, compared to a carrying value of \$133.3 million. The fair value estimate was determined using a discounted cash flow analysis based on natural gas forward strip prices as of September 30, 2019 for two years through December 31, 2021. A blend of 2021 forward strip pricing and third-party analyst pricing was used for years after 2021 through December 31, 2028. Other significant inputs used in the discounted cash flow analysis included proved and unproved reserves information, forecasts of operating expenditures, and the applicable discount rate. As part of our evaluation, we considered the likelihood that Colorado Interstate Gas (“CIG”) prices, which declined from an average spot price of \$2.48 (\$/MMBtu) in the first quarter of 2019, to \$1.84 (\$/MMBtu) in the second quarter of 2019 and \$1.77 (\$/MMBtu) in the third quarter of 2019, will recover in the near term. A discount rate of 8% was used to reflect the cost of capital under the economic conditions as of September 30, 2019. As a result, we recorded an impairment charge of \$81.5 million on our statement of operations for the year ended December 31, 2019. We consider the impairments of our investment in Laramie Energy to be Level 3 fair value measurements.

Par West Refinery

Pursuant to GAAP accounting guidelines, the Par West refinery was deemed abandoned in the fourth quarter of 2020 due to the following factors: the idling of the assets for more than an insignificant amount of time, the significant cost to restart the refinery, and a lack of a current plan or timeline to restart the refinery. Given the lack of alternative uses of the Par West refinery assets, we impaired all assets that are not expected to be used as part of our ongoing refining operations in Hawaii down to their salvage value, which is immaterial. As a result of this evaluation, we recorded an impairment charge of \$17.9 million on our statement of operations for the year ended December 31, 2020. For the year ended December 31, 2021, we recorded \$0.2 million of Impairment expense on our consolidated statement of operations related to this idling.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Common stock warrants

As of December 31, 2019, we had 354,350 common stock warrants outstanding. We estimated the fair value of our outstanding common stock warrants using the difference between the strike price of the warrant and the market price of our common stock, which was a Level 3 fair value measurement. As of December 31, 2019, the warrants had a weighted-average exercise price of \$0.09 and a remaining term of 2.67 years. The estimated fair value of the common stock warrants was \$23.16 per share as of December 31, 2019.

During January and March 2020, one of our stockholders and its affiliates exercised 354,350 common stock warrants with a fair value of \$3.9 million. As a result of this cashless transaction, 350,542 shares of common stock were issued. As of December 31, 2021 and 2020, we had no common stock warrants outstanding.

Derivative instruments

We classify financial assets and liabilities according to the fair value hierarchy. Financial assets and liabilities classified as Level 1 instruments are valued using quoted prices in active markets for identical assets and liabilities. These include our exchange traded futures. Level 2 instruments are valued using quoted prices for similar assets and liabilities in

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active markets and inputs other than quoted prices that are observable for the asset or liability. Our Level 2 instruments include OTC swaps and options. These derivatives are valued using market quotations from independent price reporting agencies and commodity exchange price curves that are corroborated with market data. Level 3 instruments are valued using significant unobservable inputs that are not supported by sufficient market activity. The valuation of the embedded derivatives related to our J. Aron repurchase and MLC terminal obligations is based on estimates of the prices and differentials assuming settlement at the end of the reporting period. Estimates of the J. Aron and MLC settlement prices are based on observable inputs, such as Brent and WTI indices, and unobservable inputs, such as contractual price differentials as defined in the Supply and Offtake Agreement and Washington Refinery Intermediation Agreement. Such contractual differentials vary by location and by the type of product and range from a discount of \$5.64 per barrel to a premium of \$56.77 per barrel as of December 31, 2021. Contractual price differentials are considered unobservable inputs; therefore, these embedded derivatives are classified as Level 3 instruments. We do not have other commodity derivatives classified as Level 3 at December 31, 2021 or 2020. Please read Note 14—Derivatives for further information on derivatives.

Gross Environmental credit obligations

Estimates of our gross environmental credit obligations are based on the amount of RINs or other environmental credits required to comply with EPA regulations and the market prices of those RINs or other environmental credits as of the end of the reporting period. The gross environmental credit obligations are classified as a Level 2 instruments as we obtain the pricing inputs for our RINs and other environmental credits from brokers based on market quotes on similar instruments. Please read Note 17—Commitments and Contingencies for further information on the EPA regulations related to greenhouse gases.

Financial Statement Impact

Fair value amounts by hierarchy level as of December 31, 2021 and 2020 are presented gross in the tables below (in thousands):

	December 31, 2021						
	Level 1	Level 2	Level 3	Gross Fair Value	Effect of Counter-party Netting	Net Carrying Value on Balance Sheet (1)	
Assets							
Commodity derivatives	\$ 4,283	\$ 4,513	\$ —	\$ 8,796	\$ (7,536)	\$ 1,260	
Liabilities							
Commodity derivatives	\$ (3,964)	\$ (5,003)	\$ —	\$ (8,967)	\$ 7,536	\$ (1,431)	
J. Aron repurchase obligation derivative	—	—	(15,151)	(15,151)	—	(15,151)	
MLC terminal obligation derivative	—	—	(22,170)	(22,170)	—	(22,170)	
Gross environmental credit obligations (2)	—	(311,014)	—	(311,014)	—	(311,014)	
Total (3)	\$ (3,964)	\$ (316,017)	\$ (37,321)	\$ (357,302)	\$ 7,536	\$ (349,766)	

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December 31, 2020							
	Level 1	Level 2	Level 3	Gross Fair Value	Effect of Counter-party Netting	Net Carrying Value on Balance Sheet (1)	
Assets							
Commodity derivatives	\$ 616	\$ 1,573	\$ —	\$ 2,189	\$ (843)	\$	1,346
Liabilities							
Commodity derivatives	\$ (3)	\$ (840)	\$ —	\$ (843)	\$ 843	\$	—
J.Aron repurchase obligation derivative	—	—	(20,797)	(20,797)	—	—	(20,797)
MLC terminal obligation derivative	—	—	(10,161)	(10,161)	—	—	(10,161)
Interest rate derivatives	—	(2,993)	—	(2,993)	—	—	(2,993)
Gross environmental credit obligations (2)	—	(150,482)	—	(150,482)	—	—	(150,482)
Total	\$ (3)	\$ (154,315)	\$ (30,958)	\$ (185,276)	\$ 843	\$	(184,433)

- (1) Does not include cash collateral of \$15.6 million and \$11.0 million as of December 31, 2021 and 2020, respectively, included within Prepaid and other current assets and Other long-term assets on our consolidated balance sheets.
- (2) Does not include RINs assets and other environmental credits of \$120.1 million and \$26.7 million presented as Inventories on our consolidated balance sheet and stated at the lower of cost and net realizable value as of December 31, 2021 and 2020, respectively.
- (3) The interest rate derivative was settled in February 2021, therefore, there is no asset or liability related to the interest rate derivative at December 31, 2021. Please read Note 14—Derivatives for further information.

A roll forward of Level 3 derivative instruments measured at fair value on a recurring basis is as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Balance, beginning of period	\$ (30,958)	\$ (22,750)	\$ (922)
Settlements	61,247	(31,328)	13,263
Acquired	—	—	(8,654)
Total gains (losses) included in earnings	(67,610)	23,120	(26,437)
Balance, end of period	\$ (37,321)	\$ (30,958)	\$ (22,750)

The carrying value and fair value of long-term debt and other financial instruments as of December 31, 2021 and 2020 are as follows (in thousands):

	December 31, 2021	
	Carrying Value	Fair Value
ABL Credit Facility due 2022	\$ —	\$ —
7.75% Senior Secured Notes due 2025 (1)	290,621	299,700
Term Loan B Facility due 2026 (1)	208,903	214,827
12.875% Senior Secured Notes due 2026 (1)	65,034	75,758

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	December 31, 2020	
	Carrying Value	Fair Value
5.00% Convertible Senior Notes due 2021 (1) (3)	\$ 47,301	\$ 50,311
ABL Credit Facility due 2022	—	—
Retail Property Term Loan due 2024 (2)	41,891	41,891
7.75% Senior Secured Notes due 2025 (1)	293,289	289,521
Term Loan B Facility due 2026 (1)	219,708	215,578
12.875% Senior Secured Notes due 2026 (1)	99,213	112,901
Mid Pac Term Loan due 2028 (2)	1,399	1,399
PHL Term Loan due 2030 (2)	5,792	5,792

- (1) The fair value measurements of the 5.00% Convertible Senior Notes, 7.75% Senior Secured Notes, Term Loan B Facility, and 12.875% Senior Secured Notes are considered Level 2 measurements in the fair value hierarchy as discussed below.
- (2) The fair value measurements of the ABL Credit Facility, Mid Pac Term Loan, Retail Property Term Loan, and PHL Term Loan are considered Level 3 measurements in the fair value hierarchy.
- (3) The carrying value of the 5.00% Convertible Senior Notes excludes the fair value of the equity component, which was classified as equity upon issuance.

The fair value of the 5.00% Convertible Senior Notes was determined by aggregating the fair value of the liability and equity components of the notes. The fair value of the liability component of the 5.00% Convertible Senior Notes was determined using a discounted cash flow analysis in which the projected interest and principal payments were discounted at an estimated market yield for a similar debt instrument without the conversion feature. The equity component was estimated based on the Black-Scholes model for a call option with strike price equal to the conversion price, a term matching the remaining life of the 5.00% Convertible Senior Notes, and an implied volatility based on market values of options outstanding as of the measurement date. The outstanding aggregate principal amount of the 5.00% Convertible Senior Notes were paid in full at maturity on June 15, 2021. The fair value of the 5.00% Convertible Senior Notes was considered a Level 2 measurement in the fair value hierarchy.

The fair value of the 7.75% Senior Secured Notes, Term Loan B Facility, and 12.875% Senior Secured Notes were determined using a market approach based on quoted prices. The inputs used to measure the fair value are classified as Level 2 inputs within the fair value hierarchy because the 7.75% Senior Secured Notes, Term Loan B Facility, and 12.875% Senior Secured Notes may not be actively traded.

The carrying values of our Retail Property, Mid Pac, and PHL Term Loans were determined to approximate fair value as of December 31, 2020. The Retail Property and PHL Term Loans were repaid in full on February 23, 2021 and the Mid Pac Term Loan was repaid in full on March 12, 2021. The fair value of all non-derivative financial instruments recorded in current assets, including cash and cash equivalents, restricted cash, and trade accounts receivable, and current liabilities, including accounts payable, approximate their carrying value due to their short-term nature.

Note 16—Leases

We have cancellable and non-cancellable finance and operating lease liabilities for the lease of land, vehicles, office space, retail facilities, and other facilities used in the storage and transportation of crude oil and refined products. Most of our leases include one or more options to renew, with renewal terms that can extend the lease term from one to 30 years or more. There are no material lease arrangements where we are the lessor and no material residual value guarantees associated with any of our leases.

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The following table provides information on the amounts (in thousands, except lease term and discount rates) of our ROU assets and liabilities as of December 31, 2021 and 2020 and their placement within our consolidated balance sheets:

Lease type	Balance Sheet Location	December 31, 2021	December 31, 2020
Assets			
Finance	Property, plant, and equipment	\$ 20,556	\$ 14,998
Finance	Accumulated amortization	(8,397)	(6,486)
Finance	Property, plant, and equipment, net	\$ 12,159	\$ 8,512
Operating	Operating lease right-of-use assets	383,824	357,166
Total right-of-use assets		<u>\$ 395,983</u>	<u>\$ 365,678</u>
Liabilities			
Current			
Finance	Other accrued liabilities	\$ 1,540	\$ 1,491
Operating	Operating lease liabilities	53,640	56,965
Long-term			
Finance	Finance lease liabilities	7,691	7,925
Operating	Operating lease liabilities	335,094	304,355
Total lease liabilities		<u>\$ 397,965</u>	<u>\$ 370,736</u>
Weighted-average remaining lease term (in years)			
Finance		6.29	6.97
Operating		11.28	10.52
Weighted-average discount rate			
Finance		7.46 %	7.93 %
Operating		6.70 %	7.59 %

The following table summarizes the lease costs recognized in our consolidated statements of operations (in thousands):

Lease cost type	Year Ended December 31,		
	2021	2020	2019
Finance lease cost			
Amortization of finance lease ROU assets	\$ 1,913	\$ 2,007	\$ 1,896
Interest on lease liabilities	655	654	521
Operating lease cost	91,882	106,256	100,384
Variable lease cost	6,716	9,802	11,663
Short-term lease cost	1,013	1,926	1,874
Net lease cost	<u>\$ 102,179</u>	<u>\$ 120,645</u>	<u>\$ 116,338</u>

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The following table summarizes the supplemental cash flow information related to leases as follows (in thousands):

Lease type	Year Ended December 31,		
	2021	2020	2019
Cash paid for amounts included in the measurement of liabilities			
Financing cash flows from finance leases	\$ 1,914	\$ 1,932	\$ 2,167
Operating cash flows from finance leases	658	656	507
Operating cash flows from operating leases	89,677	103,270	99,713
Non-cash supplemental amounts			
ROU assets obtained in exchange for new finance lease liabilities	1,936	3,476	963
ROU assets obtained in exchange for new operating lease liabilities	97,011	22,529	79,382
ROU assets terminated in exchange for release from finance lease liabilities	—	—	—
ROU assets terminated in exchange for release from operating lease liabilities	6,847	7,738	193

The table below includes the estimated future undiscounted cash flows for finance and operating leases as of December 31, 2021 (in thousands):

For the year ending December 31,	Finance leases	Operating leases	Total
2022	\$ 2,139	\$ 77,382	\$ 79,521
2023	2,161	60,257	62,418
2024	1,857	52,398	54,255
2025	1,702	51,291	52,993
2026	1,235	46,696	47,931
Thereafter	2,657	236,780	239,437
Total lease payments	11,751	524,804	536,555
Less amount representing interest	(2,520)	(136,070)	(138,590)
Present value of lease liabilities	\$ 9,231	\$ 388,734	\$ 397,965

Additionally, we have \$15.6 million and \$0.4 million in future undiscounted cash flows for operating leases and finance leases that have not yet commenced, respectively. These leases are expected to commence when the lessor has made the equipment or location available to us to operate or begin construction, respectively.

Sale-Leaseback Transaction

On February 11, 2021, PHL and Par Hawaii Property Company, LLC (collectively, the “Sellers”), both our wholly owned subsidiaries, entered into a Purchase Agreement and Escrow Instructions with MDC Coast HI 1, LLC, a subsidiary of Realty Income Corporation (the “Buyer”), and Fidelity National Title Insurance Company, pursuant to which the Sellers and Buyer agreed to consummate a sale-leaseback transaction (the “Sale-Leaseback Transactions”). Under the terms of the Purchase Agreement, the Sellers agreed to sell to the Buyer a total of twenty-two (22) retail convenience store/fuel station properties located in Hawaii (the “Sale-Leaseback Properties”) for an aggregate cash purchase price of \$112.8 million, net of transaction fees.

On February 23, 2021, the Sellers and Buyer closed the Sale-Leaseback Transactions with respect to twenty-one (21) Sale-Leaseback Properties for an aggregate cash purchase price of approximately \$107.0 million, net of transaction fees. On March 12, 2021, the Sellers and Buyer closed the sale of one additional property for an aggregate cash purchase price of approximately \$5.8 million, net of transaction fees. We recognized a gain of \$63.9 million as a result of these transactions, which is included in Loss (gain) on sale of assets, net on our consolidated statements of operations for the year ended December 31, 2021.

Upon the closings of the sales of the Sale-Leaseback Properties, PHL entered into a Master Land and Building Lease Agreement (the “Lease Agreement”) with the Buyer, pursuant to which, among other things, PHL leased the Sale-Leaseback Properties from the Buyer, on a commercial triple-net basis, for 15 years unless earlier terminated. The initial lease term may be extended for up to four five-year renewal terms in accordance with the terms of the Lease Agreement. Under the terms of the

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Lease Agreement, PHL is responsible for monthly rent and all expenses related to the leased facilities, including, but not limited to, insurance premiums, taxes, and other expenses, such as utilities. As a result of the Sale-Leaseback Transactions, we recorded operating ROU assets and lease liabilities of \$81.3 million. Certain of the Sale-Leaseback Properties were treated as failed sale-leaseback transactions based on the terms of the lease. As such, we retained the book value of the assets and recognized a finance liability of \$12.4 million included in Other accrued liabilities and Other liabilities on our consolidated balance sheet.

In connection with PHL's entry into the Lease Agreement, Par Petroleum, LLC, our wholly owned subsidiary, entered into a guaranty agreement in favor of the Buyer, pursuant to which, among other things, Par Petroleum, LLC guaranteed the payment when due of the monthly rent, and all other additional rent, interest, and charges payable by PHL to the Buyer under the Lease Agreement, and the performance by PHL of all the material terms, conditions, covenants, and agreements of the Lease Agreement.

Note 17—Commitments and Contingencies

In the ordinary course of business, we are a party to various lawsuits and other contingent matters. We establish accruals for specific legal matters when we determine that the likelihood of an unfavorable outcome is probable and the loss is reasonably estimable. It is possible that an unfavorable outcome of one or more of these lawsuits or other contingencies could have a material impact on our financial condition, results of operations, or cash flows.

Tax and Related Matters

We are also party to various other legal proceedings, claims, and regulatory, tax or government audits, inquiries and investigations that arise in the ordinary course of business. On January 4, 2022, U.S. Oil & Refining Co. received a letter of determination from the Washington Department of Revenue related to a tax audit of certain sales of raw vacuum gas oil ("RVGO") between January 13, 2014 and September 30, 2016. The audit determined that U.S. Oil & Refining Co. did not pay certain taxes on certain sales of RVGO. We dispute the results of the audit and intend to appeal. By opinion dated September 22, 2021, the Hawaii Attorney General reversed a prior 1964 opinion exempting various business transactions conducted in Hawaii free trade zones from certain state taxes. We understand that we and other similarly situated state taxpayers who had previously claimed such exemptions may anticipate an audit of their state tax returns filed for such prior tax periods. Similarly, on September 30, 2021, we received notice of a complaint filed on May 17, 2021, on camera and under seal in the first circuit court of the state of Hawaii alleging that Par Hawaii Refining, LLC, Par Pacific Holdings, Inc. and certain unnamed defendants made false claims and statements in connection with various state tax returns related to our business conducted within the Hawaii free trade zones, and seeking unspecified damages, penalties, interest and injunctive relief. We dispute the allegations in the complaint and intend to vigorously defend ourselves in such proceeding. We believe the likelihood of an unfavorable outcome in these matters to be neither probable nor reasonably estimable.

Environmental Matters

Like other petroleum refiners, our operations are subject to extensive and periodically-changing federal, state, and local environmental laws and regulations governing air emissions, wastewater discharges, and solid and hazardous waste management activities. Many of these regulations are becoming increasingly stringent and the cost of compliance can be expected to increase over time.

Periodically, we receive communications from various federal, state, and local governmental authorities asserting violations of environmental laws and/or regulations. These governmental entities may also propose or assess fines or require corrective actions for these asserted violations. We intend to respond in a timely manner to all such communications and to take appropriate corrective action. Except as disclosed below, we do not anticipate that any such matters currently asserted will have a material impact on our financial condition, results of operations, or cash flows.

Wyoming Refinery

Our Wyoming refinery is subject to a number of consent decrees, orders, and settlement agreements involving the EPA and/or the Wyoming Department of Environmental Quality, some of which date back to the late 1970s and several of which remain in effect, requiring further actions at the Wyoming refinery. The largest cost component arising from these various decrees relates to the investigation, monitoring, and remediation of soil, groundwater, surface water and sediment contamination associated with the facility's historic operations. Investigative work by Hermes Consolidated LLC, and its wholly owned subsidiary, Wyoming Pipeline Company (collectively, "WRC" or "Wyoming Refining") and negotiations with the relevant agencies as to remedial approaches remain ongoing on a number of aspects of the contamination, meaning that investigation, monitoring, and remediation costs are not reasonably estimable for some elements of these efforts. As of December 31, 2021, we have accrued \$15.6 million for the well-understood components of these efforts based on current

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information, approximately one-third of which we expect to incur in the next five years and the remainder to be incurred over approximately 30 years.

Additionally, we believe the Wyoming refinery will need to modify or close a series of wastewater impoundments in the next several years and replace those impoundments with a new wastewater treatment system. Based on current information, reasonable estimates we have received suggest costs of approximately \$11.6 million to design and construct a new wastewater treatment system.

Finally, among the various historic consent decrees, orders, and settlement agreements into which Wyoming Refining has entered, there are several penalty orders associated with exceedances of permitted limits by the Wyoming refinery's wastewater discharges. Although the frequency of these exceedances has declined over time, Wyoming Refining may become subject to new penalty enforcement action in the next several years, which could involve penalties in excess of \$300,000.

Regulation of Greenhouse Gases

The EPA regulates greenhouse gases ("GHG") under the federal Clean Air Act ("CAA"). New construction or material expansions that meet certain GHG emissions thresholds will likely require that, among other things, a GHG permit be issued in accordance with the federal CAA regulations and we will be required, in connection with such permitting, to undertake a technology review to determine appropriate controls to be implemented with the project in order to reduce GHG emissions.

Furthermore, the EPA is currently developing refinery-specific GHG regulations and performance standards that are expected to impose GHG emission limits and/or technology requirements. These control requirements may affect a wide range of refinery operations. Any such controls could result in material increased compliance costs, additional operating restrictions for our business, and an increase in the cost of the products we produce, which could have a material adverse effect on our financial condition, results of operations, or cash flows.

Additionally, the EPA's final rule updating standards that control toxic air emissions from petroleum refineries imposed additional controls and monitoring requirements on flaring operations, storage tanks, sulfur recovery units, delayed coking units and required fence-line monitoring. Compliance with this rule has not had a material impact on our financial condition, results of operations, or cash flows to date.

In 2007, the State of Hawaii passed Act 234, which required that GHG emissions be rolled back on a statewide basis to 1990 levels by the year 2020. In June of 2014, the Hawaii Department of Health ("DOH") adopted regulations that require each major facility to reduce CO₂ emissions by 16% by 2020 relative to a calendar year 2010 baseline (the first year in which GHG emissions were reported to the EPA under 40 CFR Part 98). The Hawaii refinery's capacity to materially reduce fuel use and GHG emissions is limited because most energy conservation measures have already been implemented over the past 20 years. The regulation allows for "partnering" with other facilities (principally power plants) that have already dramatically reduced greenhouse emissions or are on schedule to reduce CO₂ emissions in order to comply independently with the state's Renewable Portfolio Standards.

In addition to the Hawaii GHG legislation, the State of Washington and its political subdivisions have passed several climate-focused laws in 2021 that are relevant to our Tacoma, Washington location. These include a low-carbon fuel standard designed to reduce the carbon intensity of transportation fuels by twenty percent by 2038 and a "cap and trade"-style program for GHG emissions covering industrial facilities starting in 2023. As both legislative programs are presently undergoing rulemaking processes at the Washington Department of Ecology, the contours of both sets of requirements are not yet clear. In addition to action by the State, on November 16, 2021, the Tacoma City Council adopted its Tideflats and Industrial Land Use Regulations, which prohibits new petroleum storage and allows for only limited additions of clean fuel infrastructure.

In 2007, the U.S. Congress passed the Energy Independence and Security Act (the "EISA") which, among other things, set a target fuel economy standard of 35 miles per gallon for the combined fleet of cars and light trucks in the U.S. by model year 2020 and contained an expanded Renewable Fuel Standard (the "RFS"). In August 2012, the EPA and National Highway Traffic Safety Administration ("NHTSA") jointly adopted regulations that establish vehicle carbon dioxide emissions standards and an average industry fuel economy of 54.5 miles per gallon by model year 2025. On August 8, 2018, the EPA and NHTSA jointly proposed to revise existing fuel economy standards for model years 2021-2025 and to set standards for 2026 for the first time. On March 31, 2020, the agencies released updated fuel economy and vehicle emissions standards, which provide for an increase in stringency by 1.5% each year through model year 2026, as compared with the standards issued in 2012 that required 5% annual increases. Higher fuel economy standards have the potential to reduce demand for our refined transportation fuel products.

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Under EISA, the RFS requires an increasing amount of renewable fuel to be blended into the nation's transportation fuel supply, up to 36 billion gallons by 2022. Over time, higher annual RFS requirements have the potential to reduce demand for our refined transportation fuel products. In the near term, the RFS will be satisfied primarily with fuel ethanol blended into gasoline. We, and other refiners subject to the RFS, may meet the RFS requirements by blending the necessary volumes of renewable fuels produced by us or purchased from third parties. To the extent that refiners will not or cannot blend renewable fuels into the products they produce in the quantities required to satisfy their obligations under the RFS program, those refiners must purchase renewable credits, referred to as RINs, to maintain compliance. To the extent that we exceed the minimum volumetric requirements for blending of renewable fuels, we have the option of retaining these RINs for current or future RFS compliance or selling those RINs on the open market. On December 21, 2021, EPA published proposed RFS that include retroactive cuts to earlier 2020 quotas, set 2021 targets at levels of renewable fuels that were actually used, and would establish significantly higher volume requirements for 2022. Whether that rule will be finalized as proposed and how the final rule will fare in the courts may significantly alter our obligations to blend renewable fuels or purchase RINs. The RFS may present production and logistics challenges for both the renewable fuels and petroleum refining and marketing industries in that we may have to enter into arrangements with other parties or purchase D3 waivers from the EPA to meet our obligations to use advanced biofuels, including biomass-based diesel and cellulosic biofuel, with potentially uncertain supplies of these new fuels.

In October 2010, the EPA issued a partial waiver decision under the federal CAA to allow for an increase in the amount of ethanol permitted to be blended into gasoline from 10% ("E10") to 15% ("E15") for 2007 and newer light duty motor vehicles. In 2019, the EPA approved year-round sales of E15. There are numerous issues, including state and federal regulatory issues, that need to be addressed before E15 can be marketed on a large scale for use in traditional gasoline engines; however, increased renewable fuel in the nation's transportation fuel supply could reduce demand for our refined products.

In March 2014, the EPA published a final Tier 3 gasoline standard that requires, among other things, that gasoline contain no more than 10 parts per million ("ppm") sulfur on an annual average basis and no more than 80 ppm sulfur on a per-gallon basis. The standard also lowers the allowable benzene, aromatics, and olefins content of gasoline. The effective date for the new standard was January 1, 2017, however, approved small volume refineries had until January 1, 2020 to meet the standard. The Hawaii refinery was required to comply with Tier 3 gasoline standards within 30 months of June 21, 2016, the date it was disqualified from small volume refinery status. On March 19, 2015, the EPA confirmed the small refinery status of our Wyoming refinery. The Hawaii refinery, our Wyoming refinery, and our Washington refinery, acquired in January 2019, were all granted small refinery status by the EPA for 2018. Owing to the receipt of these small refinery exemptions, our net income for the year ended December 31, 2019 includes \$5.3 million of net RINs benefit. All of our refineries were compliant with the final Tier 3 gasoline standard.

Beginning on June 30, 2014, new sulfur standards for fuel oil used by marine vessels operating within 200 miles of the U.S. coastline (which includes the entire Hawaiian Island chain) were lowered from 10,000 ppm (1%) to 1,000 ppm (0.1%). The sulfur standards began at the Hawaii refinery and were phased in so that by January 1, 2015, they were to be fully aligned with the International Marine Organization ("IMO") standards and deadline. The more stringent standards apply universally to both U.S. and foreign-flagged ships. Although the marine fuel regulations provided vessel operators with a few compliance options such as installation of on-board pollution controls and demonstration unavailability, many vessel operators will be forced to switch to a distillate fuel while operating within the Emission Control Area ("ECA"). Beyond the 200 mile ECA, large ocean vessels are still allowed to burn marine fuel with up to 3.5% sulfur. Our Hawaii refinery is capable of producing the 1% sulfur residual fuel oil that was previously required within the ECA. Although our Hawaii refinery remains in a position to supply vessels traveling to and through Hawaii, the market for 0.1% sulfur distillate fuel and 3.5% sulfur residual fuel is much more competitive.

In addition to U.S. fuels requirements, the IMO has also adopted newer standards that further reduce the global limit on sulfur content in maritime fuels to 0.5% beginning in 2020 ("IMO 2020"). Like the rest of the refining industry, we are focused on meeting these standards and may incur costs in producing lower-sulfur fuels.

There will be compliance costs and uncertainties regarding how we will comply with the various requirements contained in the EISA, RFS, IMO 2020, and other fuel-related regulations. We may experience a decrease in demand for refined petroleum products due to an increase in combined fleet mileage or due to refined petroleum products being replaced by renewable fuels.

Environmental Agreement

On September 25, 2013, Par Petroleum, LLC (formerly Hawaii Pacific Energy, a wholly owned subsidiary of Par created for purposes of the PHR acquisition), Tesoro, and PHR entered into an Environmental Agreement ("Environmental

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Agreement”) that allocated responsibility for known and contingent environmental liabilities related to the acquisition of PHR, including a consent decree.

Indemnification

In addition to its obligation to reimburse us for capital expenditures incurred pursuant to a consent decree, Tesoro agreed to indemnify us for claims and losses arising out of related breaches of Tesoro’s representations, warranties, and covenants in the Environmental Agreement, certain defined “corrective actions” relating to pre-existing environmental conditions, third-party claims arising under environmental laws for personal injury or property damage arising out of or relating to releases of hazardous materials that occurred prior to the date of the closing of the PHR acquisition, any fine, penalty, or other cost assessed by a governmental authority in connection with violations of environmental laws by PHR prior to the date of the closing of the PHR acquisition, certain groundwater remediation work, fines, or penalties imposed on PHR by a consent decree related to acts or omissions of Tesoro prior to the date of the closing of the PHR acquisition, and claims and losses related to the Pearl City Superfund Site.

Tesoro’s indemnification obligations are subject to certain limitations as set forth in the Environmental Agreement. These limitations include a deductible of \$1 million and a cap of \$15 million for certain of Tesoro’s indemnification obligations related to certain pre-existing conditions, as well as certain restrictions regarding the time limits for submitting notice and supporting documentation for remediation actions.

Recovery Trusts

We emerged from the reorganization of Delta Petroleum Corporation (“Delta”) on August 31, 2012 (“Emergence Date”), when the plan of reorganization (“Plan”) was consummated. On the Emergence Date, we formed the Delta Petroleum General Recovery Trust (“General Trust”). The General Trust was formed to pursue certain litigation against third parties, including preference actions, fraudulent transfer and conveyance actions, rights of setoff and other claims, or causes of action under the U.S. Bankruptcy Code and other claims and potential claims that Delta and its subsidiaries (collectively, “Debtors”) hold against third parties. On February 27, 2018, the Bankruptcy Court entered its final decree closing the Chapter 11 bankruptcy cases of Delta and the other Debtors, discharging the trustee for the General Trust, and finding that all assets of the General Trust were resolved, abandoned, or liquidated and have been distributed in accordance with the requirements of the Plan. In addition, the final decree required the Company or the General Trust, as applicable, to maintain the current accruals owed on account of the remaining claims of the U.S. Government and Noble Energy, Inc.

As of December 31, 2021, two related claims totaling approximately \$22.4 million remained to be resolved and we have accrued approximately \$0.5 million representing the estimated value of claims remaining to be settled which are deemed probable and estimable at period end.

One of the two remaining claims was filed by the U.S. Government for approximately \$22.4 million relating to ongoing litigation concerning a plugging and abandonment obligation in Pacific Outer Continental Shelf Lease OCS-P 0320, comprising part of the Sword Unit in the Santa Barbara Channel, California. The second unliquidated claim, which is related to the same plugging and abandonment obligation, was filed by Noble Energy Inc., the operator and majority interest owner of the Sword Unit. We believe the probability of issuing stock to satisfy the full claim amount is remote, as the obligations upon which such proof of claim is asserted are joint and several among all working interest owners and Delta, our predecessor, only owned an approximate 3.4% aggregate working interest in the unit.

The settlement of claims is subject to ongoing litigation and we are unable to predict with certainty how many shares will be required to satisfy all claims. Pursuant to the Plan, allowed claims are settled at a ratio of 54.4 shares per \$1,000 of claim.

Major Customers

We sell a variety of refined products to a diverse customer base. For each of the years ended December 31, 2021 and 2020, we had one customer in our refining segment that accounted for 13% of our consolidated revenue. No other customer accounted for more than 10% of our consolidated revenues during the years ended December 31, 2021, 2020, and 2019.

Note 18—Stockholders’ Equity

Common Stock

Our certificate of incorporation contains restrictions on the transfer of certain of our securities in order to preserve the net operating loss carryovers, capital loss carryovers, general business credit carryovers, and foreign tax credit carryovers, as

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well as any “net unrealized built-in loss” within the meaning of Section 382 of the Internal Revenue Service Code, of us or any direct or indirect subsidiary thereof. These restrictions include provisions regarding approval by our Board of Directors of transfers of common stock by holders of five percent or more of the outstanding common stock. Our debt agreements restrict the payment of dividends.

Registration Rights Agreement

In connection with our emergence from bankruptcy on August 31, 2012, we entered into a registration rights agreement (“Registration Rights Agreement”) providing the stockholders party thereto (“Stockholders”) with certain registration rights.

The Registration Rights Agreement states that at any time after the consummation of a qualified public offering, any Stockholder or group of Stockholders that, together with its or their affiliates, holds more than fifteen percent of the Registrable Shares (as defined in the Registration Rights Agreement), will have the right to require us to file with the SEC a registration statement for a public offering of all or part of its Registrable Shares (each a “Demand Registration”), by delivery of written notice to the company (each, a “Demand Request”).

Within 90 days after receiving the Demand Request, we must file with the SEC the registration statement with respect to the Demand Registration, subject to certain limitations as set forth in the Registration Rights Agreement. We are required to use commercially reasonable efforts to cause the registration statement to be declared effective as soon as practicable after such filing.

In addition, subject to certain exceptions, if we propose to register any class of common stock for sale to the public, we are required, subject to certain conditions, to include all Registrable Shares with respect to which we have received written requests for inclusion.

In connection with the closing of a private placement, we entered into an additional registration rights agreement with the purchasers of the shares. Under this registration rights agreement, we agreed to file a registration statement relating to the shares of common stock with the SEC within 60 days after the closing date of the sale which would be declared effective within 180 days of the closing date of the sale. We also agreed to use commercially reasonable efforts to keep the registration statement effective until the earliest to occur of (i) the disposition of all registrable securities, (ii) the availability under Rule 144 of the Securities Act of 1933, as amended, for each holder of registrable securities to immediately freely resell such registrable securities without volume restrictions, or (iii) the third anniversary of the effective date of the registration statement.

This registration rights agreement also provides the right for a holder or group of holders of more than \$50 million of registrable securities to demand that we conduct an underwritten public offering of the registrable securities. However, the demanding holders are limited to a total of three such underwritten offerings, with no more than one demand request for an underwritten offering made in any 365 day period. Additionally, this registration rights agreement contains customary indemnification rights and obligations for both us and the holders of registrable securities.

If this registration statement does not remain effective for the applicable effectiveness period described above then from that date until cured, we must pay, as liquidated damages and not as a penalty, an amount in cash equal to 0.25% of the purchaser’s allocated purchase price per calendar month, not to exceed 0.75% of the allocated purchase price.

The registration rights granted in each rights agreement are subject to customary indemnification and contribution provisions, as well as customary restrictions such as suspension periods and, if a registration is for an underwritten offering, limitations on the number of shares to be included in the underwritten offering imposed by the managing underwriter.

Issuance of Common Stock

On March 16, 2021, we entered into an underwriting agreement with J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC, as representatives of the several underwriters named therein, in connection with an underwritten public offering (the “Equity Offering”) of 5.75 million shares of common stock, par value \$0.01 per share, at a public offering price of \$16.00 per share. We completed the issuance of these shares on March 19, 2021. The net proceeds from the Equity Offering were approximately \$87.2 million, after deducting underwriting discounts and commissions and offering expenses. We used the net proceeds from the Equity Offering to repay the remaining \$48.7 million in aggregate 5.00% Convertible Senior Notes due at maturity in June 2021 and \$36.8 million in aggregate principal amount of 12.875% Senior Secured Notes, and the remainder for general corporate purposes, including capital expenditures and funding working capital.

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Share Repurchase Program

On November 10, 2021, the Board authorized and approved a share repurchase program for up to \$50 million of the currently outstanding shares of the Company's common stock. Under the share repurchase program, the Company intends to repurchase shares through open market purchases, privately negotiated transactions, block purchases, or otherwise in accordance with applicable federal and state laws. The share repurchase program does not have a specified end date and may be limited or terminated at any time without prior notice. During the year ended December 31, 2021, we repurchased 59 thousand shares for a total of \$0.8 million.

Incentive Plans

Our incentive compensation plans are described below.

Long Term Incentive Plan

Under the Par Petroleum Corporation 2012 Long Term Incentive Plan ("Incentive Plan" or "LTIP"), as amended and restated, the Board, or a committee of the Board, may grant incentive stock options, nonstatutory stock options, restricted stock, restricted stock units, and performance restricted stock units to directors and other employees or those of our subsidiaries. The maximum number of shares that may be granted under the LTIP is 9.0 million shares of common stock. At December 31, 2021, 3.9 million shares were available for future grants and awards under the LTIP.

Restricted stock and restricted stock units awarded under the Incentive Plan are subject to restrictions, terms, and conditions, including forfeitures, as may be determined by the Board. During the period in which such restrictions apply, unless specifically provided otherwise in accordance with the terms of the Incentive Plan, the recipient of the restricted stock would be the record owner of the shares and have all of the rights of a stockholder with respect to the shares, including the right to vote and the right to receive dividends or other distributions made or paid with respect to the shares. The recipient of restricted stock units shall not have any of the rights of a stockholder of the Company until such units vest and convert into shares of common stock. The fair value of the restricted stock and stock units is generally determined based upon the quoted market price of our common stock on the date of grant. Restricted stock awards generally vest ratably over a four-year period. Restricted stock units do not vest ratably, rather they generally vest in full at the end of three years, while some restricted stock units vest over the same period of time with a one-year cliff.

Stock options are issued with an exercise price equal to the fair market value of our common stock on the date of grant and are subject to such other terms and conditions as may be determined by the Board. The options generally expire eight years from the grant date, unless granted by the Board for a shorter term. Option grants generally vest ratably over a four-year period.

Stock Purchase Plan

The Stock Purchase Plan (as amended, the "SPP") is limited to the Company's qualifying executive officers and directors who qualify as accredited investors under Rule 501(a) of the Securities Act of 1933, as amended. The SPP provides that each participant may, subject to compliance with securities laws and other regulations and only during "window periods" as described in our insider trading policy as in effect from time to time, until the later to occur of (a) December 31, 2015 or (b) the eighteen month anniversary of the date that the participant commenced his or her employment or service with us, purchase, in a single transaction, up to \$1 million of shares of our common stock ("the SPP Shares") at a per share purchase price equal to the closing price of the common stock on the date of purchase. The sale or transfer of the SPP Shares by such participant would be limited for the earlier of (i) two years from the date of purchase or (ii) the termination of the participant's service with us or any affiliates for any reason. Additionally, the SPP provides that each purchasing participant will be granted a number of shares of restricted common stock under the Incentive Plan equal to 20% of the SPP Shares purchased with 50% of the restricted common stock vesting on each of the two annual anniversaries of the date of grant. Each purchasing participant will also be granted nonstatutory stock options with a 5-year term to purchase a number of shares of common stock under the Incentive Plan (with an exercise price equal to the Fair Market Value as defined in the Incentive Plan on the date of grant) equal to certain specified percentages of the SPP Shares purchased based on a Black-Scholes model with 50% of the options vesting on each of the two annual anniversaries of the date of grant. Such percentages are as follows: 50% for a non-employee chairman of the Board, 35% for non-employee members of the Board, and 50% - 70% for executive officers.

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The following table summarizes our compensation costs recognized in General and administrative expense (excluding depreciation) and Operating expense (excluding depreciation) under the Incentive Plan and Stock Purchase Plan (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Restricted Stock Awards	\$ 4,657	\$ 3,939	\$ 3,490
Restricted Stock Units	\$ 1,356	\$ 1,510	\$ 1,269
Stock Option Awards	\$ 1,939	\$ 1,660	\$ 1,454

Employee Stock Purchase Plan

Under the Par Pacific Holdings, Inc. 2018 Employee Stock Purchase Plan (“ESPP”), eligible employees may elect to purchase the Company’s common stock at 85% of the market price on the purchase date. Eligible employees may invest from 0% to 10% of their annual income subject to a \$15 thousand annual maximum. The Board, or a committee of the Board, is authorized to set the market price discount percentages, any holding periods, and other purchasing terms and timing. The Company’s shareholders ratified the ESPP on May 8, 2018. The maximum number of shares that may be issued under the ESPP is 500 thousand shares of common stock. At December 31, 2021, 201 thousand shares remained available under the ESPP.

During each of the years ended December 31, 2021, 2020, and 2019, we recognized \$0.2 million of compensation costs in General and administrative expense (excluding depreciation) and Operating expense (excluding depreciation) related to the 15% discount offered to employees under the ESPP. During the years ended December 31, 2021, 2020, and 2019, employees purchased 85 thousand, 145 thousand, and 68 thousand shares under the ESPP, respectively.

Management Stock Purchase Plan

On February 26, 2019, our Board approved the Par Pacific Holdings, Inc. 2019 Management Stock Purchase Plan (the “MSPP”). The MSPP provides executive management with an opportunity to receive restricted stock units (“RSUs”) by converting a portion of their cash bonus compensation into RSUs (“Deferred RSUs”) and receiving awards of matching RSUs, the amount of which are determined by the amount of compensation converted (“Matching RSUs”). A Deferred RSU and a Matching RSU each represents a right to receive one share of the Company’s common stock in the future, subject to the terms and conditions of the MSPP, including, but not limited to, vesting requirements. Shares of common stock issued pursuant to awards of Deferred RSUs and Matching RSUs will be issued from the shares reserved for issuance under the LTIP. As of December 31, 2021, no Deferred RSUs or Matching RSUs had been issued under the MSPP.

Restricted Stock Awards and Restricted Stock Units

The following tables summarize our restricted stock activity (in thousands, except per share amounts):

	Shares	Weighted-Average Grant Date Fair Value
Unvested balance at December 31, 2020	629	\$ 16.89
Granted	485	16.38
Vested	(292)	14.97
Forfeited	(62)	17.50
Unvested balance at December 31, 2021	760	\$ 17.19

	Years Ended December 31,		
	2021	2020	2019
Weighted-average grant-date fair value per share of restricted stock awards and restricted stock units granted (in dollars)	\$ 16.38	\$ 16.97	\$ 17.43
Fair value of restricted stock awards and restricted stock units vested	\$ 4,370	\$ 3,787	\$ 3,693

As of December 31, 2021 and 2020, there were approximately \$9.0 million and \$7.1 million of total unrecognized compensation costs related to restricted stock awards and restricted stock units, which are expected to be recognized on a straight-line basis over a weighted-average period of 1.74 years and 1.68 years, respectively.

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Performance Restricted Stock Units

The following tables summarize our performance restricted stock activity (in thousands, except per unit amounts):

	Units	Weighted-Average Grant Date Fair Value
Unvested balance at December 31, 2020	139	\$ 18.02
Granted	64	16.52
Vested	(45)	17.34
Forfeited	—	—
Unvested balance at December 31, 2021	158	\$ 17.61

	Years Ended December 31,		
	2021	2020	2019
Weighted-average grant-date fair value per share of performance restricted stock units granted (in dollars)	\$ 16.52	\$ 19.73	\$ 17.00
Fair value of performance restricted stock units granted	\$ 1,053	\$ 919	\$ 811

Performance restricted stock units are subject to certain annual performance targets based on three-year performance periods as defined by our Board. As of December 31, 2021 and 2020, there were approximately \$1.1 million and \$1.0 million of total unrecognized compensation costs related to the performance restricted stock units, which are expected to be recognized on a straight-line basis over a weighted-average period of 1.76 years and 1.75 years, respectively.

Stock Option Grants

The fair value of each option is estimated on the grant date using the Black-Scholes option pricing model. The expected term represents the period of time that options are expected to be outstanding and is based upon the term of the option. The expected volatility represents the extent to which our stock price is expected to fluctuate between the grant date and the expected term of the award. We do not use an expected dividend yield in our fair value measurement as we are restricted from the payment of dividends. The risk-free rate is the implied yield available on U.S. Treasury securities with a remaining term equal to the expected term of the option at the date of grant. The weighted-average assumptions used to measure stock options granted during 2021, 2020, and 2019 are presented below.

	2021	2020	2019
Expected life from date of grant (in years)	5.3	5.3	5.3
Expected volatility	53.2%	33.2%	34.3%
Risk-free interest rate	0.64%	1.31%	2.46%

The following table summarizes our stock option activity (in thousands, except per share amounts and term years):

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term in Years	Aggregate Intrinsic Value
Outstanding balance at December 31, 2020	2,128	\$ 19.26	4.1	\$ —
Issued	382	16.52		
Exercised	(4)	14.60		
Forfeited / canceled / expired	(311)	21.29		
Outstanding balance at December 31, 2021	2,195	\$ 18.50	4.2	\$ 446
Exercisable, end of year	1,400	\$ 19.07	3.0	\$ 446

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The estimated weighted-average grant-date fair value per share of options granted during the year ended December 31, 2021, 2020, and 2019 was \$7.72, \$6.30, and \$5.98, respectively.

As of December 31, 2021 and 2020, there were approximately \$3.8 million and \$2.8 million of total unrecognized compensation costs related to stock option awards, which are expected to be recognized on a straight-line basis over a weighted-average period of 1.76 years and 1.68 years, respectively.

Note 19—Benefit Plans

Defined Contribution Plans

We maintain defined contribution plans for our employees. All eligible employees, including our U.S. Oil & Refining Co. employees beginning January 1, 2020, may participate in our Par plan after thirty days of service. For all employees participating in the Par plan, excluding participating U.S. Oil union employees, we match employee contributions up to a maximum of 6% of the employee's eligible compensation, with the employer contributions vesting at 100%. Beginning in January 2021 and as part of cost reductions in response to the impact of the COVID-19 pandemic on our businesses, we temporarily suspended matching employee contributions for salaried employees with 2020 annual earnings in excess of the IRS highly compensated limit of \$130,000. In January 2022, we resumed matching of all previously-suspended employee contributions. For the years ended December 31, 2021, 2020, and 2019, we made contributions to the plans totaling approximately \$3.1 million, \$5.6 million, and \$5.6 million, respectively.

Defined Benefit Plans

We maintain defined benefit pension plans (the "Benefit Plans") covering eligible Wyoming Refining employees and the employees of U.S. Oil covered by a collective bargaining agreement. Benefits under our Wyoming Refining plan are based on years of service and the employee's highest average compensation received during five consecutive years of the last ten years of employment. Benefits under our U.S. Oil plan are based on the employee's hourly rate of compensation at the beginning of each year of employment. Our funding policy is to contribute annually an amount equal to the pension expense, subject to the minimum funding requirements of the Employee Retirement Income Security Act of 1974 and the tax deductibility of such contributions. In December 2016, the Wyoming Refining plan was amended to freeze all future benefit accruals for salaried employees.

In March 2021, the Wyoming Refining plan was amended (the "Plan Amendment") to freeze all future benefit accruals for hourly plan participants. The Plan Amendment reduced the projected benefit obligation by \$6.0 million. We recorded a \$2.0 million Gain on curtailment of pension obligation in our consolidated statements of operations for the year ended December 31, 2021, and an unrealized actuarial gain of \$4.0 million as Other post-retirement benefits income (loss), net of tax, in our consolidated statements of other comprehensive income for the year ended December 31, 2021. Similar to the evaluation done for the estimate as of December 31, 2020, the projected benefit obligation estimate was determined based on the present value of projected future benefit payments. In determining the discount rate, we used pricing and yield information for high-quality corporate bonds that result in payments similar to the estimated distributions of benefits from our plans. The weighted average discount rate used to determine benefit obligations increased from 2.65% to 3.25%, or 23%, from December 31, 2020 to March 31, 2021. The estimated rate of compensation increase remained 3% at the time of curtailment.

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The changes in the projected benefit obligation and the fair value of plan assets of our Benefit Plans for the years ended December 31, 2021 and 2020 were as follows (in thousands):

	<u>2021</u>	<u>2020</u>
Changes in projected benefit obligation:		
Projected benefit obligation as of the beginning of the period	\$ 60,479	\$ 52,142
Service cost	1,140	1,347
Interest cost	1,538	1,642
Plan amendment	(446)	—
Actuarial loss (gain) (1)	(2,508)	7,038
Benefits paid	(1,760)	(1,690)
Curtailment	(2,032)	—
Projected benefit obligation as of the end of the period	<u>\$ 56,411</u>	<u>\$ 60,479</u>
Changes in fair value of plan assets:		
Fair value of plan assets as of the beginning of the period	\$ 46,161	\$ 42,866
Actual return (loss) on plan assets	5,420	4,860
Employer contributions	—	125
Benefits paid	(1,760)	(1,690)
Fair value of plan assets as of the end of the period	<u>\$ 49,821</u>	<u>\$ 46,161</u>

(1) For the year ended December 31, 2021, the change in the actuarial gain was due to an increase in the discount rate and strong asset performance. For the year ended December 31, 2020, the change in the actuarial loss was due to a decrease in the discount rate, new entrants to the plan, and salary changes, partially offset by demographic assumption changes.

The underfunded status of our Benefit Plans is recorded within Other liabilities on our consolidated balance sheets. The reconciliation of the underfunded status of our Benefit Plans of December 31, 2021 and 2020 was as follows:

	<u>2021</u>	<u>2020</u>
Projected benefit obligation	\$ 56,411	\$ 60,479
Fair value of plan assets	49,821	46,161
Underfunded status	<u>\$ 6,590</u>	<u>\$ 14,318</u>
Gross amounts recognized in accumulated other comprehensive income (loss): (1)		
Net actuarial gain	\$ (704)	\$ (6,946)
Total accumulated other comprehensive income	<u>\$ (704)</u>	<u>\$ (6,946)</u>
Net actuarial gain (loss)	\$ (704)	\$ (6,946)

(1) For the year ended December 31, 2021, we recognized an immaterial amount of service costs in accumulated other comprehensive income.

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Weighted-average assumptions used to measure our projected benefit obligation as of December 31, 2021, 2020, and 2019 and net periodic benefit costs for the years ended December 31, 2021, 2020 and 2019 are as follows:

	2021	2020	2019
Projected benefit obligation:			
Wyoming Refining plan			
Discount rate (1)	2.85 %	2.65 %	3.30 %
Rate of compensation increase	— %	3.00 %	3.00 %
U.S. Oil plan			
Discount rate (1)	2.70 %	2.35 %	3.10 %
Rate of compensation increase	3.00 %	3.00 %	3.00 %
Net periodic benefit costs:			
Wyoming Refining plan			
Discount rate (1)	3.25 %	3.30 %	4.20 %
Expected long-term rate of return (2)	5.75 %	6.25 %	6.50 %
Rate of compensation increase	3.00 %	3.00 %	3.00 %
U.S. Oil plan			
Discount rate (1)	2.35 %	3.10 %	4.10 %
Expected long-term rate of return (2)	6.00 %	6.00 %	6.00 %
Rate of compensation increase	3.00 %	3.00 %	3.00 %

- (1) In determining the discount rate, we use pricing and yield information for high-quality corporate bonds that result in payments similar to the estimated distributions of benefits from our plans.
- (2) The expected long-term rate of return is based on the target asset allocation of each plan and capital market assumptions developed using forward-looking models and historical market data and trends.

The net periodic benefit cost (credit) for the years ended December 31, 2021, 2020, and 2019 includes the following components:

	2021	2020	2019
Components of net periodic benefit cost (credit):			
Service cost	\$ 1,140	\$ 1,347	\$ 910
Interest cost	1,538	1,642	1,794
Expected return on plan assets	(2,375)	(2,323)	(1,972)
Amortization of net loss	245	176	95
Amortization of prior service cost	—	1	3
Effect of curtailment	(2,032)	—	—
Net periodic benefit cost (credit)	<u>\$ (1,484)</u>	<u>\$ 843</u>	<u>\$ 830</u>

The Service cost component of net periodic benefit cost is included in Operating expense (excluding depreciation) on our consolidated statement of operations for the years ended December 31, 2021, 2020, and 2019. The other components of net periodic benefit cost are included in Other income (expense), net on our consolidated statement of operations for the years ended December 31, 2021, 2020, and 2019.

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The weighted-average asset allocation for our Wyoming Refining plan at December 31, 2021 is as follows:

	Target	Actual
Asset category:		
Equity securities	54 %	56 %
Debt securities	35 %	31 %
Real estate	11 %	13 %
Total	100 %	100 %

The weighted-average asset allocation for our U.S. Oil plan at December 31, 2021 is as follows:

	Target	Actual
Asset category:		
Equity securities	56 %	58 %
Debt securities	43 %	42 %
Cash and Cash Equivalents	1 %	— %
Total	100 %	100 %

We have a long-term, risk-controlled investment approach using diversified investment options with minimal exposure to volatile investment options like derivatives. Our Benefit Plans' assets are invested in pooled separate accounts administered by the Benefit Plans' custodians. The underlying assets in the pooled separate accounts are invested in equity securities, debt securities, real estate, or cash and cash equivalents. The pooled separate accounts are valued based upon the fair market value of the underlying investments and are deemed to be Level 2.

We do not intend to make any contributions to the Wyoming Refining plan or U.S. Oil plan during 2022. Based on current data and assumptions, the following benefit payments, which reflect expected future service, as appropriate, are expected to be paid over the next 10 years:

Year Ended	
2022	\$ 2,193
2023	2,297
2024	2,313
2025	2,464
2026	2,661
Thereafter	13,424
	\$ 25,352

Note 20—Income (Loss) Per Share

Basic income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the sum of the weighted-average number of common shares outstanding and the weighted-average number of shares issuable under the common stock warrants, representing 61 thousand shares during the year ended December 31, 2020 and 354 thousand shares during the year ended December 31, 2019. The common stock warrants are included in the calculation of basic income (loss) per share for the years ended December 31, 2020 and 2019 because they were issuable for minimal consideration. As of March 31, 2020, the previously outstanding common stock warrants had been exercised for common stock and no warrants were outstanding.

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The following table sets forth the computation of basic and diluted income (loss) per share (in thousands, except per share amounts):

	Year Ended December 31,		
	2021	2020	2019
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809
Less: Undistributed income allocated to participating securities (1)	—	—	438
Net income (loss) attributable to common stockholders	(81,297)	(409,086)	40,371
Plus: Net income effect of convertible securities	—	—	—
Numerator for diluted income (loss) per common share	\$ (81,297)	\$ (409,086)	\$ 40,371
Basic weighted-average common stock shares outstanding	58,268	53,295	50,352
Plus: dilutive effects of common stock equivalents (2)	—	—	118
Diluted weighted-average common stock shares outstanding	58,268	53,295	50,470
Basic income (loss) per common share	\$ (1.40)	\$ (7.68)	\$ 0.80
Diluted income (loss) per common share	\$ (1.40)	\$ (7.68)	\$ 0.80
Diluted income (loss) per common share excludes the following equity instruments because their effect would be anti-dilutive:			
Shares of unvested restricted stock	925	475	182
Shares of stock options	2,386	2,229	1,577
Common stock equivalents using the if-converted method of settling the 5.00% Convertible Senior Notes	1,230	2,704	5,122

(1) Participating securities include restricted stock that has been issued but had not yet vested. These participating securities were fully vested as of December 31, 2019.

(2) 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 loss per common share for the years ended December 31, 2021 and 2020.

Note 21—Income Taxes

As of December 31, 2021, we had approximately \$1.6 billion in net operating loss carryforwards (“NOL carryforwards”); however, we currently have a valuation allowance against this and substantially all of our other deferred tax assets. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. For the year ended December 31, 2021, we recorded an income tax expense of \$1.0 million primarily driven by foreign withholding taxes. For the year ended December 31, 2020, we recorded an income tax benefit of \$20.7 million primarily driven by an increase in our net operating loss carryforwards and the change in our indefinitely-lived goodwill due to the impairments. For the year ended December 31, 2019, we recorded an income tax benefit of \$69.7 million primarily driven by a \$64.2 million benefit associated with the partial release of our valuation allowance in connection with the recognition of deferred tax liabilities acquired as part of the Washington Acquisition. Management continues to conclude that we did not meet the “more likely than not” requirement in order to recognize deferred tax assets on the remaining amounts and a valuation allowance has been recorded for substantially all of our net deferred tax assets at December 31, 2021 and 2020.

In connection with our emergence from bankruptcy on August 31, 2012, we experienced an ownership change as defined under Section 382 of the Code. Section 382 generally places a limit on the amount of NOL carryforwards and other tax attributes arising before an ownership change that may be used to offset taxable income after an ownership change. We believe that we have qualified for an exception to the general limitation rules under Code Section 382(l)(5) which provides for substantially less restrictive limitations on our NOL carryforwards. Our amended and restated certificate of incorporation places restrictions upon the ability of certain equity interest holders to transfer their ownership interest in us. These restrictions are

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designed to provide us with the maximum assurance that another ownership change does not occur that could adversely impact our NOL carryforwards.

We believe that any adjustment to our uncertain tax positions would not have a material impact on our financial statements given the Company's deferred tax and corresponding valuation allowance position as of December 31, 2021.

Our net taxable income must be apportioned to various states based upon the income tax laws of the states in which we derive our revenue. Our NOL carryforwards will not always be available to offset taxable income apportioned to the various states. The states from which our refining, logistics, and retail revenues are derived are not the same states in which our NOLs were incurred; therefore, we expect to incur state tax liabilities in connection with our refining, logistics, and retail operations.

We will continue to assess the realizability of our deferred tax assets based on consideration of actual operating results. If sufficient positive evidence of improving actual operating results becomes available, the amount of the deferred tax asset considered more likely than not to be recognized would be increased with a corresponding reduction in income tax expense in the period recorded.

Income tax expense (benefit) consisted of the following (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Current:			
U.S.—Federal	\$ —	\$ —	\$ (3,203)
U.S.—State	26	51	400
Foreign	1,255	125	—
Deferred:			
U.S.—Federal	(223)	(20,509)	(58,461)
U.S.—State	(37)	(387)	(8,425)
Total	<u>\$ 1,021</u>	<u>\$ (20,720)</u>	<u>\$ (69,689)</u>

Income tax expense was different from the amounts computed by applying U.S. Federal income tax rate to pretax income as a result of the following:

	Year Ended December 31,		
	2021	2020	2019
Federal statutory rate	21.0 %	21.0 %	21.0 %
State income taxes, net of federal benefit	— %	0.1 %	(1.1)%
Foreign taxes	(1.6)%	— %	— %
Change in valuation allowance related to current activity	(20.1)%	(14.0)%	227.1 %
Permanent items	(0.6)%	(2.3)%	(4.3)%
Provision to return adjustments and other	— %	— %	(1.4)%
Actual income tax rate	<u>(1.3)%</u>	<u>4.8 %</u>	<u>241.3 %</u>

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Deferred tax assets (liabilities) are comprised of the following (in thousands):

	December 31,	
	2021	2020
Deferred tax assets:		
Net operating loss	\$ 424,112	\$ 427,245
Intangible assets	1,912	2,958
Environmental credit obligations	40,097	25,994
Other	16,137	22,551
Total deferred tax assets	482,258	478,748
Valuation allowance	(421,387)	(411,422)
Net deferred tax assets	60,871	67,326
Deferred tax liabilities:		
Inventory	9,820	10,328
Property and equipment	56,436	58,122
Investment in Laramie Energy	—	4,522
Total deferred tax liabilities	66,256	72,972
Total deferred tax liability, net	\$ (5,385)	\$ (5,646)

We have NOL carryforwards as of December 31, 2021 of \$1.6 billion for federal income tax purposes. If not utilized, the NOL carryforwards will expire during 2028 through 2036.

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
For the Years Ended December 31, 2021, 2020, and 2019

Note 22—Segment Information

We report the results for the following four reportable segments: (i) Refining, (ii) Logistics, (iii) Retail, and (iv) Corporate and Other. Commencing January 11, 2019, the results of operations of the Washington Acquisition are included in our refining and logistics segments.

Summarized financial information concerning reportable segments consists of the following (in thousands):

For the year ended December 31, 2021	Refining	Logistics	Retail	Corporate, Eliminations, and Other (1)	Total
Revenues	\$ 4,471,111	\$ 184,734	\$ 456,416	\$ (402,172)	\$ 4,710,089
Cost of revenues (excluding depreciation)	4,306,371	96,828	337,476	(402,201)	4,338,474
Operating expense (excluding depreciation)	213,102	14,722	71,845	—	299,669
Depreciation, depletion, and amortization	58,258	22,044	10,880	3,059	94,241
Impairment expense	1,838	—	—	—	1,838
Loss (gain) on sale of assets, net	(19,659)	(19)	(45,034)	15	(64,697)
General and administrative expense (excluding depreciation)	—	—	—	48,096	48,096
Acquisition and integration costs	—	—	—	87	87
Operating income (loss)	\$ (88,799)	\$ 51,159	\$ 81,249	\$ (51,228)	\$ (7,619)
Interest expense and financing costs, net					(66,493)
Debt extinguishment and commitment costs					(8,144)
Gain on curtailment of pension obligation					2,032
Other expense, net					(52)
Loss before income taxes					(80,276)
Income tax expense					(1,021)
Net loss					\$ (81,297)
Total assets	\$ 1,928,987	\$ 398,182	\$ 228,245	\$ 14,837	\$ 2,570,251
Goodwill	39,821	55,232	32,209	—	127,262
Capital expenditures	15,689	6,801	5,917	1,126	29,533

(1) Includes eliminations of intersegment revenues and cost of revenues of \$402.2 million for the year ended December 31, 2021.

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For the year ended December 31, 2020	Refining	Logistics	Retail	Corporate, Eliminations, and Other (1)	Total
Revenues	\$ 2,886,701	\$ 180,909	\$ 363,713	\$ (306,453)	\$ 3,124,870
Cost of revenues (excluding depreciation)	2,908,870	110,385	234,885	(306,443)	2,947,697
Operating expense (excluding depreciation)	199,738	13,581	64,108	—	277,427
Depreciation, depletion, and amortization	53,930	21,899	10,692	3,515	90,036
Impairment expense	55,989	—	29,817	—	85,806
General and administrative expense (excluding depreciation)	—	—	—	41,288	41,288
Acquisition and integration costs	—	—	—	614	614
Operating income (loss)	\$ (331,826)	\$ 35,044	\$ 24,211	\$ (45,427)	\$ (317,998)
Interest expense and financing costs, net					(70,222)
Debt extinguishment and commitment costs					—
Other income, net					1,049
Change in value of common stock warrants					4,270
Equity losses from Laramie Energy, LLC					(46,905)
Loss before income taxes					(429,806)
Income tax benefit					20,720
Net loss					\$ (409,086)
Total assets	\$ 1,478,603	\$ 444,800	\$ 193,365	\$ 17,093	\$ 2,133,861
Goodwill	39,821	55,232	32,944	—	127,997
Capital expenditures	38,781	20,898	2,547	1,296	63,522

(1) Includes eliminations of intersegment revenues and cost of revenues of \$306.5 million for the year ended December 31, 2020.

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For the year ended December 31, 2019	Refining	Logistics	Retail	Corporate, Eliminations, and Other (1)	Total
Revenues	\$ 5,167,942	\$ 199,226	\$ 458,889	\$ (424,541)	\$ 5,401,516
Cost of revenues (excluding depreciation)	4,783,747	112,124	332,302	(424,584)	4,803,589
Operating expense (excluding depreciation)	234,582	11,010	67,307	—	312,899
Depreciation, depletion, and amortization	55,832	17,017	10,035	3,237	86,121
General and administrative expense (excluding depreciation)	—	—	—	46,223	46,223
Acquisition and integration costs	—	—	—	4,704	4,704
Operating income (loss)	\$ 93,781	\$ 59,075	\$ 49,245	\$ (54,121)	\$ 147,980
Interest expense and financing costs, net					(74,839)
Debt extinguishment and commitment costs					(11,587)
Other income, net					2,516
Change in value of common stock warrants					(3,199)
Change in value of contingent consideration					—
Equity losses from Laramie Energy, LLC					(89,751)
Loss before income taxes					(28,880)
Income tax benefit					69,689
Net income					\$ 40,809
Total assets	\$ 1,907,318	\$ 494,209	\$ 232,150	\$ 66,883	\$ 2,700,560
Goodwill	77,927	55,232	62,760	—	195,919
Capital expenditures	34,492	40,730	6,869	1,829	83,920

(1) Includes eliminations of intersegment revenues and cost of revenues of \$424.5 million for the year ended December 31, 2019.

Note 23—Related Party Transactions

Convertible Notes Offering

In June 2016, we issued \$115 million in aggregate principal amount of our 5.00% Convertible Senior Notes in a private placement under Rule 144A in the Notes Offering. Affiliates of Whitebox and Highbridge purchased an aggregate of \$47.5 million and \$40.4 million, respectively, principal amount of the 5.00% Convertible Senior Notes in the Notes Offering. In June 2021, the remaining aggregate principal amount of the 5.00% Convertible Senior Notes were paid in full at maturity. Please read Note 13—Debt for further discussion.

Equity Group Investments (“EGI”) - Service Agreement

On September 17, 2013, we entered into a letter agreement (“Services Agreement”) with Equity Group Investments (“EGI”), an affiliate of Zell Credit Opportunities Fund, LP (“ZCOF”), which owns 10% or more of our common stock directly or through affiliates. Pursuant to the Services Agreement, EGI agreed to provide us with ongoing strategic, advisory, and consulting services that may include (i) advice on financing structures and our relationship with lenders and bankers, (ii) advice regarding public and private offerings of debt and equity securities, (iii) advice regarding asset dispositions, acquisitions, or other asset management strategies, (iv) advice regarding potential business acquisitions, dispositions, or combinations involving us or our affiliates, or (v) such other advice directly related or ancillary to the above strategic, advisory, and consulting services as may be reasonably requested by us.

EGI does not receive a fee for the provision of the strategic, advisory, or consulting services set forth in the Services Agreement, but may be periodically reimbursed by us, upon request, for (i) travel and out-of-pocket expenses, provided that, in the event that such expenses exceed \$50 thousand in the aggregate with respect to any single proposed matter, EGI will obtain our consent prior to incurring additional costs, and (ii) provided that we provide prior consent to their engagement with respect to any particular proposed matter, all reasonable fees and disbursements of counsel, accountants, and other professionals incurred in connection with EGI’s services under the Services Agreement. In consideration of the services provided by EGI

PAR PACIFIC HOLDINGS, INC. AND SUBSIDIARIES
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under the Services Agreement, we agreed to indemnify EGI for certain losses relating to or arising out of the Services Agreement or the services provided thereunder.

The Services Agreement has a term of one year and will be automatically extended for successive one-year periods unless terminated by either party at least 60 days prior to any extension date. There were no costs incurred related to this agreement during the years ended December 31, 2021, 2020, or 2019.

Note 24—Subsequent Events

On February 2, 2022, Par Petroleum, LLC, PHL, Hermes Consolidated, LLC, and Wyoming Pipeline Company, LLC (collectively, the “ABL Borrowers”), entered into the Amended and Restated Loan and Security Agreement (as amended from time to time, the “ABL Loan Agreement”) dated as of February 2, 2022, with certain lenders and Bank of America, N.A., as administrative agent and collateral agent. The ABL Loan Agreement increases the maximum principal amount of the ABL Revolver at any time outstanding to \$105 million, subject to a borrowing base, including a sublimit of \$15 million for swingline loans and a sublimit of \$65 million for the issuance of standby or commercial letters of credit, and extends the maturity date of the ABL Revolver to February 2, 2025. The ABL Loan Agreement also includes an accordion feature that would allow the ABL Borrowers to increase the size of the facility by up to \$50 million in the aggregate, subject to certain limitations and conditions.

Under the ABL Loan Agreement, the outstanding principal amount of each revolving loan bears interest at a fluctuating rate per annum equal to (i) during the periods such revolving loan is a base rate loan, the base rate plus the applicable margin in effect from time to time, and (ii) during the periods such revolving loan is a Term SOFR Loan, at Term SOFR (as defined in the ABL Loan Agreement) for the applicable interest period plus the applicable margin in effect from time to time. The base rate for any day is a per annum rate equal to the greater of (a) a rate as calculated per the agreement (the “Prime Rate”) for such day; (b) a rate as calculated by the Federal Reserve Bank of New York based on such day’s federal funds transactions by depository institutions (“Federal Funds Rate”) for such day, plus 0.50%; or (c) Term SOFR for a one month interest period as of such day plus 1.0%, subject to the interest rate floor set forth therein; provided, that in no event shall the base rate be less than zero. We also pay a *de minimis* fee for any undrawn amounts available under the ABL Revolver.

Under the ABL Loan Agreement, the applicable margins for the ABL Credit Facility and advances under the ABL Revolver are as specified below:

Level	Arithmetic Mean of Daily Availability (as a percentage of the borrowing base)	Term SOFR Loans	Base Rate Loans
1	>50%	1.25%	0.25%
2	>30% but ≤50%	1.50%	0.50%
3	≤30%	1.75%	0.75%

The ABL Loan Agreement requires the ABL Borrowers to comply with certain customary affirmative, as well as certain negative covenants that, among other things, will restrict, subject to certain exceptions, the ability of the ABL Borrowers and their guarantors to incur indebtedness, grant liens, make investments, engage in acquisitions, mergers or consolidations and pay dividends and other restricted payments. Upon the occurrence of a triggering event whereby availability is less than the greater of (i) \$7.5 million and (ii) 12.5% of the borrowing base, the ABL Borrowers are required to comply for at least 30 days with a minimum fixed charge coverage ratio of 1.00 to 1.00 measured monthly, with respect to (a) Par Petroleum, LLC and its consolidated subsidiaries, and (b) Par Petroleum, LLC and its consolidated subsidiaries, other than PHR, U.S. Oil, and any other Future Intermediation Subsidiary (as defined in the ABL Loan Agreement).

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT
PAR PACIFIC HOLDINGS, INC. (PARENT ONLY)
BALANCE SHEETS
(in thousands, except share data)

	December 31, 2021	December 31, 2020
ASSETS		
Current assets		
Cash and cash equivalents	\$ 4,086	\$ 480
Restricted cash	330	330
Total cash, cash equivalents, and restricted cash	4,416	810
Prepaid and other current assets	15,664	16,983
Due from subsidiaries	94,676	107,995
Total current assets	114,756	125,788
Property, plant, and equipment		
Property, plant, and equipment	19,535	21,477
Less accumulated depreciation, depletion, and amortization	(13,869)	(14,368)
Property, plant, and equipment, net	5,666	7,109
Long-term assets		
Operating lease right-of-use (“ROU”) assets	3,280	3,714
Investment in subsidiaries	207,483	209,010
Other long-term assets	724	723
Total assets	\$ 331,909	\$ 346,344
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current maturities of long-term debt	\$ —	\$ 47,301
Accounts payable	1,386	2,401
Accrued taxes	48	49
Operating lease liabilities	608	750
Other accrued liabilities	9,805	10,907
Due to subsidiaries	50,195	33,757
Total current liabilities	62,042	95,165
Long-term liabilities		
Long-term debt, net of current maturities	—	—
Finance lease liabilities	17	77
Operating lease liabilities	4,150	4,783
Other liabilities	—	45
Total liabilities	66,209	100,070
Stockholders' equity		
Preferred stock, \$0.01 par value: 3,000,000 shares authorized, none issued	—	—
Common stock, \$0.01 par value; 500,000,000 shares authorized at December 31, 2021 and December 31, 2020, 60,161,955 shares and 54,002,538 shares issued at December 31, 2021 and December 31, 2020, respectively	602	540
Additional paid-in capital	821,713	726,504
Accumulated deficit	(559,117)	(477,028)
Accumulated other comprehensive income (loss)	2,502	(3,742)
Total stockholders' equity	265,700	246,274
Total liabilities and stockholders' equity	\$ 331,909	\$ 346,344

This statement should be read in conjunction with the notes to consolidated financial statements.

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT
PAR PACIFIC HOLDINGS, INC. (PARENT ONLY)
STATEMENTS OF OPERATIONS
(in thousands)

	Year Ended December 31,		
	2021	2020	2019
Operating expenses			
Depreciation and amortization	\$ 2,452	\$ 2,900	\$ 2,969
Loss (gain) on sale of assets, net	15	—	—
General and administrative expense (excluding depreciation)	12,435	11,097	20,017
Acquisition and integration costs	87	—	28
Total operating expenses	14,989	13,997	23,014
Operating loss	(14,989)	(13,997)	(23,014)
Other income (expense)			
Interest expense and financing costs, net	(2,600)	(4,982)	(9,952)
Debt extinguishment and commitment costs	—	—	(6,091)
Other income (expense), net	(33)	(3)	2,303
Change in value of common stock warrants	—	4,270	(3,199)
Equity in earnings (losses) from subsidiaries	(63,649)	(394,197)	81,097
Total other income (expense), net	(66,282)	(394,912)	64,158
Income (loss) before income taxes	(81,271)	(408,909)	41,144
Income tax expense	(26)	(177)	(335)
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809

This statement should be read in conjunction with the notes to consolidated financial statements.

**SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT
PAR PACIFIC HOLDINGS, INC. (PARENT ONLY)
STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)**

	Year Ended December 31,		
	2021	2020	2019
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809
Other comprehensive income (loss): (1)			
Other post-retirement benefits income (loss), net of tax	6,244	(4,324)	(2,091)
Total other comprehensive income (loss), net of tax	<u>6,244</u>	<u>(4,324)</u>	<u>(2,091)</u>
Comprehensive income (loss)	<u>\$ (75,053)</u>	<u>\$ (413,410)</u>	<u>\$ 38,718</u>

(1) Other comprehensive income (loss) relates to benefit plans at our subsidiaries.

This statement should be read in conjunction with the notes to consolidated financial statements.

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT
PAR PACIFIC HOLDINGS, INC. (PARENT ONLY)
STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2021	2020	2019
Cash flows from operating activities:			
Net income (loss)	\$ (81,297)	\$ (409,086)	\$ 40,809
Adjustments to reconcile net income (loss) to cash used in operating activities:			
Depreciation and amortization	2,452	2,900	2,969
Debt extinguishment and commitment costs	—	—	6,091
Non-cash interest expense	1,364	2,518	4,600
Change in value of common stock warrants	—	(4,270)	3,199
Loss (gain) on sale of assets, net	15	—	—
Stock-based compensation	8,165	7,342	6,437
Equity in losses (income) of subsidiaries	63,649	394,197	(81,097)
Net changes in operating assets and liabilities:			
Trade accounts receivable	—	—	—
Prepaid and other assets	1,318	(4,253)	1,592
Accounts payable, other accrued liabilities, and operating lease ROU assets and liabilities	(1,380)	(187)	(8,441)
Net cash used in operating activities	(5,714)	(10,839)	(23,841)
Cash flows from investing activities:			
Investments in subsidiaries	(146,056)	—	—
Distributions from subsidiaries	90,183	4,113	16,673
Capital expenditures	(1,126)	(1,296)	(1,829)
Due to (from) subsidiaries	29,752	5,768	(6,519)
Proceeds from sale of assets	—	14	31
Net cash provided by (used in) investing activities	(27,247)	8,599	8,356
Cash flows from financing activities:			
Proceeds from sale of common stock, net of offering costs	87,193	—	—
Proceeds from borrowings	12,364	14,437	63,406
Repayments of borrowings	(62,111)	(18,603)	(76,323)
Payment of deferred loan costs	—	—	(252)
Exercise of stock options	—	—	8,171
Payment for debt extinguishment and commitment costs	—	—	(1,899)
Other financing activities, net	(879)	164	(10)
Net cash provided by (used in) financing activities	36,567	(4,002)	(6,907)
Net increase (decrease) in cash, cash equivalents, and restricted cash	3,606	(6,242)	(22,392)
Cash, cash equivalents, and restricted cash at beginning of period	810	7,052	29,444
Cash, cash equivalents, and restricted cash at end of period	<u>\$ 4,416</u>	<u>\$ 810</u>	<u>\$ 7,052</u>
Supplemental cash flow information:			
Net cash received (paid) for:			
Interest	\$ (1,230)	\$ (2,475)	\$ (5,357)
Taxes	27	(28)	(220)
Non-cash investing and financing activities:			
Accrued capital expenditures	\$ 131	\$ 233	\$ 497
ROU assets obtained in exchange for new finance lease liabilities	—	173	198
ROU assets obtained in exchange for new operating lease liabilities	165	—	134
Common stock issued for business combination	—	—	36,980
Non-cash contribution to subsidiary for business combination	—	—	(36,980)
Common stock issued to repurchase convertible notes	—	—	74,290

This statement should be read in conjunction with the notes to consolidated financial statements.

Item 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on February 25, 2022.

PAR PACIFIC HOLDINGS, INC.

By: /s/ William Pate

William Pate

President and Chief Executive Officer

By: /s/ William Monteleone

William Monteleone

Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Form 10-K has been signed below by the following persons on our behalf and in the capacities indicated and on February 25, 2022.

Signature

Title

/s/ WILLIAM PATE

William Pate

President and Chief Executive Officer
(Principal Executive Officer)

/s/ WILLIAM MONTELEONE

William Monteleone

Chief Financial Officer
(Principal Financial Officer)

/s/ IVAN GUERRA

Ivan Guerra

Chief Accounting Officer
(Principal Accounting Officer)

/s/ MELVYN N. KLEIN

Melvyn N. Klein

Chairman Emeritus

/s/ ROBERT S. SILBERMAN

Robert S. Silberman

Chairman of the Board of Directors

/s/ TIMOTHY CLOSSEY

Timothy Clossey

Director

/s/ L. MELVIN COOPER

L. Melvin Cooper

Director

/s/ CURTIS ANASTASIO

Curtis Anastasio

Director

/s/ WALTER A. DODS, JR.

Walter A. Dods, Jr.

Director

/s/ KATHERINE HATCHER

Katherine Hatcher

Director

/s/ ANTHONY CHASE

Anthony Chase

Director

/s/ PHILIP DAVIDSON

Philip Davidson

Director

DESCRIPTION OF REGISTERED SECURITIES

As of February 18, 2022, Par Pacific Holdings, Inc. (the “Company,” “us,” “we,” or “our”) has one class of securities, our common stock, registered under Section 12 of the Securities Exchange Act of 1934, as amended.

Description of Common Stock

The following description of our common stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Restated Certificate of Incorporation dated October 20, 2015 (the “Certificate of Incorporation”) and our Second Amended and Restated Bylaws dated October 20, 2015 (the “Bylaws”), as well as our stockholders agreement, the allocation agreement with certain of our stockholders (the “Allocation Agreement”), and the registration rights agreement (the “Registration Rights Agreement”) we entered into with certain of our stockholders in August 2012, each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.11 is a part. We encourage you to read our Certificate of Incorporation, our Bylaws, our stockholders agreement, the Allocation Agreement and the Registration Rights Agreement, and the applicable provisions of the General Corporation Law of the State of Delaware (the “DGCL”), for additional information.

General

As of February 18, 2022, our authorized capital consisted of 500,000,000 shares of common stock, par value \$0.01 per share, of which 59,813,700 shares were issued and outstanding, and 3,000,000 shares of undesignated preferred stock, par value \$0.01 per share, none of which were outstanding.

Holders of our common stock are entitled to one vote per share in the election of directors and on all other matters submitted to a vote of stockholders. Such holders do not have the right to cumulate their votes in the election of directors. Holders of our common stock have no redemption or conversion rights, no preemptive or other rights to subscribe for our securities and are not entitled to the benefits of any sinking fund provisions. In the event of our liquidation, dissolution or winding-up, holders of our common stock are entitled to share equally and ratably in all of the assets remaining, if any, after satisfaction of all our debts and liabilities, and of the preferential rights of any series of preferred stock then outstanding. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends when, as and if declared by the Company’s board of directors (the “Board”) out of funds legally available therefor.

The Certificate of Incorporation contains restrictions on the transfer of the Company Securities (as defined therein, and which includes our common stock) by holders who are, or would become as a result of such transfer, a Five-Percent Shareholder (as defined in the Certificate of Incorporation). Such restrictions were put in place in order to preserve our net operating loss carryovers, capital loss carryovers, general business credit carryovers, alternative minimum tax credit carryovers and foreign tax credit carryovers, as well as any “net unrealized built-in loss” within the meaning of Section 382 of the Internal Revenue Code of 1986, as amended.

On November 10, 2014, as permitted by the terms of Article 11 of the Certificate of Incorporation, we entered into the Allocation Agreement with Zell Credit Opportunities Master Fund, L.P. (“ZCOF”), ZCOF Par Petroleum Holdings, L.L.C. and Whitebox Multi-Strategy Partners, L.P. to reallocate the proportionate amount of our common stock that the Five-Percent Shareholders are permitted to transfer among our remaining Five-Percent Shareholders. In accordance with Article 11 of the Certificate of Incorporation, the Board has approved, on a prospective basis, one or more Transfers (as defined in the Certificate of Incorporation) of shares of our common stock by the remaining Five-Percent Shareholders up to the new allocation amounts included on a schedule to the Allocation Agreement.

Preferred Stock

The Board is authorized to establish one or more series of preferred stock and to determine, with respect to any series of preferred stock, the powers, designation, preferences and rights of each series and the qualifications, limitations or restrictions of each series, including:

- the designation of the series and the number of shares to constitute the series;
- the dividend rate of the series, the conditions and dates upon which such dividends shall be payable, the relation which such dividends shall bear to the dividends payable on any other class or classes of stock, and whether such dividends shall be cumulative or noncumulative;
- whether the shares of the series shall be subject to redemption by the Company and, if made subject to such redemption, the times, prices and other terms and conditions of such redemption;
- the terms and amount of any sinking fund provided for the purchase or redemption of the shares of the series;
- whether or not the shares of the series shall be convertible into or exchangeable for shares of any other class or classes or of any other series of any class or classes of stock of the Company, and, if provision be made for conversion or exchange, the times, prices, rates, adjustments and other terms and conditions of such conversion or exchange;
- the extent, if any, to which the holders of the shares of the series shall be entitled to vote with respect to the election of directors or otherwise;
- the restrictions, if any, on the issue or reissue of any additional preferred stock; and
- rights of the holders of the shares of the series upon the dissolution, liquidation, or winding up of the Company.

The authorized shares of preferred stock, as well as shares of common stock, are available for issuance without further action by our stockholders, unless stockholder action is required by the rules of any stock exchange or automated quotation system on which our securities are listed or traded. If the approval of our stockholders is not required for the issuance of shares of preferred stock or common stock, the Board may determine not to seek stockholder approval.

Although the Board has no intention at the present time of doing so, it could issue a series of preferred stock that could, depending on the terms of that series, impede the completion of a merger, tender offer or other takeover attempt. The Board will make any determination to issue shares based on its judgment as to our best interests and the best interests of our stockholders. The Board, in so acting, could issue preferred stock having terms that could discourage an acquisition attempt, including a tender offer or other transaction that some, or a majority of, our stockholders might believe to be in their best interests or that might result in stockholders receiving a premium for their stock over the then current market price of the stock.

Anti-Takeover Provisions

As noted above, because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. The Certificate of

Incorporation and the Bylaws provide that only the chairman of the Board, the chief executive officer, or any officer upon the written request of a majority of the Board, may call a special meeting of the stockholders.

The Certificate of Incorporation requires a 66 2/3% stockholder vote for the amendment or repeal of certain provisions of the Certificate of Incorporation relating to the liability of directors, indemnification of officers and directors, and the transfer restrictions noted above. The Bylaws require a 66 2/3% stockholder vote for the amendment or repeal of certain provisions of the Bylaws. The combination of the lack of cumulative voting and the 66 2/3% stockholder voting requirements will make it more difficult for existing stockholders to replace the Board as well as for another party to obtain control of us by replacing the Board. Because the Board has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for the Board to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us.

These provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of us. These provisions are intended to enhance the likelihood of continued stability in the composition of the Board and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts. Such provisions may also have the effect of preventing changes in our management.

As noted above, the Certificate of Incorporation contains restrictions on the transfer of Company Securities by holders who are, or would become as a result of such transfer, Five-Percent Shareholders. These restrictions on transfer may have the effect of preserving effective control of us by our principal stockholders and preserving the tenure of the board of directors and management.

In addition, we are subject to Section 203 of the DGCL which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the Board of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested holder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the Board and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 of the DGCL defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 of the DGCL defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or is an affiliate or associate of the corporation and within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Stockholders Agreement

We entered into a stockholders agreement in April 2015 for the benefit of the holders of any of our securities entitled to vote for members of the Board providing that in the event that we are no longer required to file annual and quarterly reports with the SEC, we will provide, as soon as reasonably practicable, comparable audited reports on an annual basis, unaudited reports on a quarterly basis (which annual and quarterly reports shall contain substantially similar descriptions of business and management discussion and analysis provisions as are then required to be included in relevant filings with the SEC), and earnings releases on a quarterly basis, made available to such holders through a secure website and subject to a standard click-through access and confidentiality agreement.

Registration Rights Agreements

The Company and certain of our stockholders (the “Rights Holders”), including affiliates of ZCOF, are parties to the Registration Rights Agreement providing the Rights Holders with certain registration rights.

Pursuant to the Registration Rights Agreement, among other things, any Rights Holder or group of Rights Holders that, together with its or their affiliates, holds more than fifteen percent (15%) of the Registrable Shares (as defined in the Registration Rights Agreement), will have the right to require the Company to file with the SEC, a registration statement on Form S-1 or S-3, or any other appropriate form under the Securities Act or the Exchange Act for a public offering of all or part of its Registrable Shares (a “Demand Registration”) by delivery of written notice to the Company (a “Demand Request”).

Within 90 days after receiving the Demand Request, we are required to file with the SEC the registration statement, on any form for which we then qualify and which is available for the sale of the Registrable Shares in accordance with the intended methods of distribution thereof, with respect to the Demand Registration. We are required to use commercially reasonable efforts to cause the registration statement to be declared effective as soon as practicable after such filing. We will not be obligated (i) to effect a Demand Registration within ninety (90) days after the effective date of a previous Demand Registration, other than for a shelf registration, or (ii) to effect a Demand Registration unless the Demand Request is for a number of Registrable Shares with an expected market value that is equal to at least (x) \$15 million as of the date of such Demand Request or is for one hundred percent of

the demanding holders' Registrable Shares with respect to any demand registration made on Form S-1 or (y) \$5 million as of the date of such Demand Request with respect to any Demand Registration made on Form S-3.

Upon receipt of any Demand Request, we are required to give written notice, within ten (10) days of such Demand Request, to all other holders of Registrable Shares, who will have the right to elect to include in any subsequent Demand Registration such portion of their Registrable Shares as they may request, subject to certain exceptions.

In addition, subject to certain exceptions, if we propose to register any class of our common stock for sale to the public, we are required, subject to certain conditions, to include all Registrable Shares with respect to which the Company has received written requests for inclusion.

The rights of a holder of Registrable Shares may be transferred, assigned or otherwise conveyed to any transferee or assignee of such Registrable Shares, subject to applicable state and federal securities laws and regulations and the Certificate of Incorporation. We will be responsible for expenses relating to the registrations contemplated by the Registration Rights Agreement.

The registration rights granted in the Registration Rights Agreement are subject to customary indemnification and contribution provisions, as well as customary restrictions such as suspension periods and, if a registration is for an underwritten offering, limitations on the number of shares to be included in the underwritten offering imposed by the managing underwriter.

Pursuant to the Registration Rights Agreement, a registration statement relating to resales by affiliates of ZCOF of the shares received by them in connection with our emergence from bankruptcy on August 31, 2012 was declared effective by the SEC on June 23, 2015.

Listing

Our common stock is quoted on the NYSE under the symbol "PARR."

Transfer Agent and Registrar

American Stock Transfer & Trust Company is the transfer agent and registrar for our common stock.

**NINETEENTH AMENDMENT TO
FIRST LIEN ISDA 2002 MASTER AGREEMENT**

This **NINETEENTH AMENDMENT TO FIRST LIEN ISDA 2002 MASTER AGREEMENT** (this “*Amendment*”) is entered into as of February 24, 2022, by and among **U.S. OIL & REFINING CO.**, a Delaware corporation (“*Party B*”) and **MERRILL LYNCH COMMODITIES, INC.**, a Delaware corporation (“*Party A*”) and is acknowledged and agreed to by the Guarantors signatory hereto. Capitalized terms used but not defined in this Amendment have the meanings assigned to them in the First Lien ISDA Master Agreement (as defined below).

RECITALS

WHEREAS, Party A has entered into certain intermediation arrangements with Party B pursuant to the terms of that certain First Lien ISDA 2002 Master Agreement, dated as of March 17, 2016, by and between Party A and Party B (including the schedule, exhibits, attachments and annexes thereto and the transactions thereunder, and as amended by that certain First Amendment to First Lien ISDA 2002 Master Agreement, dated as of July 18, 2016, that certain Second Amendment to the First Lien ISDA 2002 Master Agreement, dated as of September 29, 2016, that certain Third Amendment to the First Lien ISDA 2002 Master Agreement, dated as of April 1, 2017, that certain Fourth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of March 13, 2018, that certain Fifth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of June 5, 2018, that certain Sixth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of September 1, 2018, that certain Seventh Amendment to the First Lien ISDA 2002 Master Agreement, dated as of October 2, 2018, that certain Eighth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of January 11, 2019, that certain Ninth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of November 1, 2019, that certain Tenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of April 21, 2020, that certain Eleventh Amendment to the First Lien ISDA 2002 Master Agreement, dated as of July 28, 2020, that certain Twelfth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of February 1, 2021, that certain Thirteenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of February 11, 2021, that certain Fourteenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of April 27, 2021, that certain Fifteenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of August 16, 2021, that certain Sixteenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of August 24, 2021, that certain Seventeenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of October 22, 2021, that certain Eighteenth Amendment to the First Lien ISDA 2002 Master Agreement, dated as of December 17, 2021, and as subsequently further amended, restated, supplemented, replaced or otherwise modified from time to time, the “*First Lien ISDA Master Agreement*”); and

WHEREAS, the parties desire to adjust the TD Forward Maximum Volumes specified in the First Lien ISDA Master Agreement.

NOW, THEREFORE, in consideration of the mutual agreements contained herein and in the Transaction Documents and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, hereby agree as follows:

SECTION 1. Amendments. Effective on and after the Effective Date (as defined below) the First Lien ISDA Master Agreement is hereby amended as follows:

1.1 Part 3 (TD Forward Initial Volume; TD Forward Maximum Volume) of Attachment 1 (Hydrocarbons) shall be deleted in its entirety and replaced with the following:

Hydrocarbon Group	TD Forward Initial Volume (bbls)	TD Forward Maximum Volume (bbls)
Crude	1,092,873	1,360,000
Gasolines	239,389	330,000
Ethanol	N/A	200,000
Distillates	74,545	160,000
Fuel Oil	127,178	70,000
Jet	99,478	150,000
Asphalt	131,949	190,000
Vacuum Gas Oil	86,588	200,000

SECTION 2. Effectiveness. This Amendment shall become effective as of the date hereof upon the satisfaction, or waiver in writing by Party A, of each of the conditions set forth in this Section 2 (the “*Effective Date*”):

2.1 Documentation. Party B and Party A shall have executed and delivered this Amendment.

2.2 Representations and Warranties. After giving effect to this Amendment, each of the representations and warranties contained in Section 3 hereof shall be true and correct in all material respects.

SECTION 3. Representations and Warranties of Party B. To induce Party A to grant this Amendment, Party B hereby represents and warrants as follows:

3.1 Authority; No Conflicts. The execution, delivery and performance by Party B of this Amendment is within its organizational powers, has been duly authorized by all necessary action, and does not (a) require any consent or approval of any holders of Equity Interests of Party B, other than those already obtained; (b) contravene the organizational documents of Party B; (c) violate any Applicable Law; or (d) result in or require the imposition of any Lien on any property of Party B other than Permitted Liens.

3.2 Enforceability. Party B has duly executed and delivered this Amendment. This Amendment constitutes the legal, valid and binding obligation of Party B enforceable in accordance with its terms, except as enforceability may be limited by any applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors’ rights generally and by general principles of equity.

3.3 No Default. As of the date hereof, immediately prior to and after giving effect to this Amendment, no Event of Default, Potential Event of Default or Termination Event has occurred and is continuing under the First Lien ISDA Master Agreement or any other Transaction Document.

3.4 Other Representations and Warranties. All representations and warranties of Party B and the other Transaction Parties (and, as applicable, Par LLC) set forth in Section 3 of

the First Lien ISDA Master Agreement (including the Additional Representations in Part 14) and any other documents and transactions entered into in connection herewith or contemplated hereby, are, after giving effect to this Amendment, true and correct in all material respects on and as of the date hereof to the same extent as though made on and as of such date, except (a) to the extent such representations and warranties specifically relate to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects on and as of such earlier date, and (b) to the extent that such representations and warranties are qualified as to “materiality” or “material adverse effect” (or words of like import) shall be satisfied in all respects as so qualified.

SECTION 4. Covenants.

4.1 Expenses. On or within ten (10) Business Days after the later of (a) the Effective Date and (b) Party B’s receipt of any invoice in respect of Permitted Fees and Expenses (as defined below) (such later date, the “*Expense Payment Date*”), Party B shall pay or reimburse Party A for all reasonable and documented out-of-pocket expenses (including the reasonable and documented out of pocket legal fees and expenses of Stroock & Stroock & Lavan LLP, special counsel to Party A, to the extent Party B has received an invoice in respect of such fees and expenses) incurred by Party A in connection with the preparation, negotiation, execution, delivery and administration of this Amendment, any other Transaction Documents and any other Collateral Documents or any amendment, amendment and restatement, modification or waiver of the provisions thereof (collectively, the “*Permitted Fees and Expenses*”).

SECTION 5. Effect on the First Lien ISDA Master Agreement and Other Transaction Documents.

5.1 Except as expressly modified hereby, the First Lien ISDA Master Agreement and other Transaction Documents are and shall continue to be in full force and effect and are hereby in all respects ratified and confirmed.

5.2 The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a modification to any right, power or remedy of Party A under the First Lien ISDA Master Agreement or any of the other Transaction Documents, nor constitute a waiver of any provision of the First Lien ISDA Master Agreement or any of the other Transaction Documents.

5.3 Each Grantor hereby agrees that this Amendment and the terms and conditions herein contained shall in no manner affect (other than expressly provided herein) or impair the Obligations (as defined in the Collateral Agreement) or the Liens securing the payment and performance thereof.

SECTION 6. Miscellaneous.

6.1 Parties in Interest. All of the terms and provisions of this Amendment shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

6.2 Counterparts. This Amendment may be executed in one or more counterparts and by different parties hereto in separate counterparts each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument; signature pages may be detached from multiple separate counterparts and attached to a single counterpart so that all signature pages are physically attached to the same document. However, this Amendment shall bind no party until Party B and Party A have

executed and delivered a counterpart. Delivery of an executed counterpart of a signature page to this Amendment by telecopier or other electronic transmission (i.e., a “pdf” or “tif” document) shall be effective as delivery of a manually executed counterpart of this Amendment.

6.3 GOVERNING LAW. THIS AMENDMENT AND ANY AND ALL CONTROVERSIES ARISING OUT OF OR IN RELATION TO THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW.

6.4 Headings. Any Section and paragraph headings used herein are for convenience of reference only, are not part of this Amendment and shall not affect the construction of, or be taken into consideration in interpreting, this Amendment.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the date and year first above written.

U.S. OIL & REFINING CO.

By: /s/ Thor A. Nielsen

Name: Thor A. Nielsen

Title: VP & Treasurer

[Signature Page to Nineteenth Amendment to First Lien ISDA 2002 Master Agreement]

MERRILL LYNCH COMMODITIES, INC.

By: /s/ Kent L. Chenevert

Name: Kent L. Chenevert

Title: Managing Director

Acknowledged and Agreed:

PAR PETROLEUM, LLC

By: /s/ Thor A. Nielsen

Name: Thor A. Nielsen

Title: VP & Treasurer

MCCHORD PIPELINE CO.

By: /s/ Thor A. Nielsen

Name: Thor A. Nielsen

Title: VP & Treasurer

AMENDMENT NO. 1 AND ASSUMPTION AGREEMENT TO PLEDGE AND SECURITY AGREEMENT, dated as of August 15, 2019 (this Assumption Agreement), is by and among Par Petroleum, LLC, a Delaware limited liability company (the "Company"), and Par Petroleum Finance Corp., a Delaware corporation ("Finance Corp."), and together with the Company, the "Issuers"), Par Hawaii, LLC, a Delaware limited liability company (the "Additional Grantor") (successor by conversion to Par Hawaii, Inc., a Hawaii corporation), and the other Grantors party hereto, and Wilmington Trust, National Association, as Collateral Trustee (in such capacity, the "Collateral Trustee") for (i) the noteholders under to the Indenture referred to below, and (ii) the other Secured Parties (as defined in the Pledge and Security Agreement). All capitalized terms not defined herein shall have the meaning ascribed to them in such Indenture (as hereinafter defined).

WITNESSETH:

WHEREAS, the Issuers, Par Pacific Holdings, Inc., for the limited purposes set forth therein, the guarantors party thereto, Wilmington Trust, National Association, as trustee, and the Collateral Trustee have entered into an Indenture, dated as of December 21, 2017 (as amended, supplemented, replaced or otherwise modified from time to time, the "Indenture");

WHEREAS, in connection with the Indenture, the Issuers and certain of their Affiliates entered into the Pledge and Security Agreement, dated as of December 21, 2017 (as amended, supplemented or otherwise modified from time to time, the "Pledge and Security Agreement") in favor of the Collateral Trustee for the benefit of the Secured Parties;

WHEREAS, Par Hawaii, Inc., a Hawaii corporation, has converted into a limited liability company formed under the laws of Delaware now known as Par Hawaii, LLC;

WHEREAS, Additional Grantor and Mid Pac Petroleum, LLC, a Delaware limited liability company ("Mid Pac"), have consummated an Agreement and Plan of Merger, dated as of August 15, 2019 whereby Mid Pac has merged with and into Additional Grantor, and Additional Grantor is the surviving entity of such merger;

WHEREAS, Additional Grantor and HIE Retail, LLC, a Hawaii limited liability company ("HIE"), have consummated an Agreement and Plan of Merger, dated as of August 15, 2019, whereby HIE has merged with and into Additional Grantor, and Additional Grantor is the surviving entity of such merger;

WHEREAS, the Indenture requires the Additional Grantor be a party to the Pledge and Security Agreement;

WHEREAS, the Additional Grantor has agreed to execute and deliver this Assumption Agreement in order to continue being a party to the Pledge and Security Agreement; and

WHEREAS, in connection with the entry into this Assumption Agreement, the Grantors desire to amend and restate all Schedules to the Pledge and Security Agreement.

NOW, THEREFORE, IT IS AGREED:

1. Pledge and Security Agreement. By executing and delivering this Assumption Agreement, the Additional Grantor, as provided in Section 9.13 of the Pledge and Security Agreement, hereby becomes a party to the Pledge and Security Agreement as a Grantor thereunder with the same force and effect as if originally named therein as a Grantor and, without limiting the generality of the foregoing, hereby expressly assumes all obligations and liabilities of a Grantor thereunder. The information set forth in Annex 1 hereto hereby amends and restates the information set forth in Schedules 1, 2, 3, 4, 5, 6, 7, and 8 to the Pledge and Security Agreement (as such Schedules may have been amended or supplemented prior to the date hereof). The Additional Grantor hereby represents and warrants that each of the representations and warranties contained in Section 3 of the Pledge and Security Agreement is true and correct on and as the date hereof (after giving effect to this Assumption Agreement) as if made on and as of such date.

2. Amendment and Supplement to Schedules. By executing and delivering this Assumption Agreement, each Grantor, as provided in Section 3 of the Pledge and Security Agreement, hereby amends and restates Schedules 1, 2, 3, 4, 5, 6, 7, and 8 to the Pledge and Security Agreement in their entirety as set forth in Annex 1 hereto.

3. **GOVERNING LAW**. THIS ASSUMPTION AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

4. Successors and Assigns. This Assumption Agreement will be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the Issuers and the Additional Grantor may not assign, transfer or delegate any of their rights or obligations under this Assumption Agreement without the prior written consent of the Collateral Trustee and any such assignment, transfer or delegation without such consent shall be null and void.

[Signature pages follow]

IN WITNESS WHEREOF, the undersigned has caused this Assumption Agreement to be duly executed and delivered as of the date first above written.

ISSUERS:

PAR PETROLEUM, LLC
PAR PETROLEUM FINANCE CORP.

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

GRANTORS:

PAR WYOMING HOLDINGS, LLC
HERMES CONSOLIDATED, LLC
WYOMING PIPELINE COMPANY LLC
PAR TACOMA, LLC
U.S. OIL & REFINING CO.
MCCHORD PIPELINE CO.
USOT WA, LLC
PAR HAWAII REFINING, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

PAR HAWAII SHARED SERVICES, LLC
PAR WYOMING, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Vice President

ADDITIONAL GRANTOR:

PAR HAWAII, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

COLLATERAL TRUSTEE:

WILMINGTON TRUST, NATIONAL ASSOCIATION

By: /s/ Shawn Goffinet
Name: Shawn Goffinet
Title: Assistant Vice President

AMENDMENT NO. 2 TO PLEDGE AND SECURITY AGREEMENT, dated as of May 12, 2020 (this Amendment”), is by and among Par Petroleum, LLC, a Delaware limited liability company (the “Company”), and Par Petroleum Finance Corp., a Delaware corporation (“Finance Corp.”, and together with the Company, the “Issuers”), and the Grantors party hereto, and Wilmington Trust, National Association, as Collateral Trustee (in such capacity, the “Collateral Trustee”) for (i) the noteholders under to the Indenture referred to below, and (ii) the other Secured Parties (as defined in the Pledge and Security Agreement (as hereinafter defined)). All capitalized terms not defined herein shall have the meaning ascribed to them in such Indenture (as hereinafter defined).

WITNESSETH:

WHEREAS, the Issuers, Par Pacific Holdings, Inc., for the limited purposes set forth therein, the guarantors party thereto, Wilmington Trust, National Association, as trustee, and the Collateral Trustee have entered into an Indenture, dated as of December 21, 2017 (as amended, supplemented, replaced or otherwise modified from time to time, the “Indenture”);

WHEREAS, in connection with the Indenture, the Issuers and certain of their Affiliates entered into the Pledge and Security Agreement, dated as of December 21, 2017 (as amended, supplemented or otherwise modified from time to time, the “Pledge and Security Agreement”) in favor of the Collateral Trustee for the benefit of the Secured Parties;

WHEREAS, in connection with the entry into this Amendment, the Issuers and Grantors desire to amend certain Schedules to the Pledge and Security Agreement.

NOW, THEREFORE, IT IS AGREED:

1. Amendment to Schedules. By executing and delivering this Amendment, the Issuers and each Grantor party hereto, as provided in Section 3 of the Pledge and Security Agreement, hereby amends Schedules 1, 2, 3 and 4 to the Pledge and Security Agreement as set forth in Annex 1 hereto.

2. **GOVERNING LAW.** THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

3. Successors and Assigns. This Amendment will be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the Issuers and the Grantors may not assign, transfer or delegate any of their rights or obligations under this Amendment without the prior written consent of the Collateral Trustee and any such assignment, transfer or delegation without such consent shall be null and void.

[Signature pages follow]

IN WITNESS WHEREOF, the undersigned has caused this Amendment to be duly executed and delivered as of the date first above written.

ISSUERS:

PAR PETROLEUM, LLC
PAR PETROLEUM FINANCE CORP.

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

GRANTORS:

HERMES CONSOLIDATED, LLC
WYOMING PIPELINE COMPANY LLC
PAR TACOMA, LLC
U.S. OIL & REFINING CO.
MCCHORD PIPELINE CO.
USOT WA, LLC
PAR HAWAII REFINING, LLC
PAR HAWAII, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

PAR HAWAII SHARED SERVICES, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Vice President

COLLATERAL TRUSTEE:

WILMINGTON TRUST, NATIONAL ASSOCIATION

By: /s/ Barry Somrock
Name: Barry Somrock
Title: Assistant Vice President

AMENDMENT NO. 3 TO PLEDGE AND SECURITY AGREEMENT, dated as of June 4, 2020 (this "Amendment"), is by and among Par Petroleum, LLC, a Delaware limited liability company (the "Company"), and Par Petroleum Finance Corp., a Delaware corporation ("Finance Corp."), and together with the Company, the "Issuers"), the other Grantors party hereto, Wilmington Trust, National Association, as Collateral Trustee (in such capacity, the "Collateral Trustee") for (i) the noteholders under to the Indenture referred to below, and (ii) the other Secured Parties (as defined in the Pledge and Security Agreement (as hereinafter defined)), Wilmington Trust, National Association, as Trustee under the Indenture (as hereinafter defined) (in such capacity, the "Trustee"), and J. Aron & Company LLC ("J. Aron"), as secured representative under the J. Aron Hedge Agreement (as defined in the Collateral Trust Agreement (as hereinafter defined)). Except as otherwise provided herein, all capitalized terms not defined herein shall have the meaning ascribed to them in the Indenture.

WITNESSETH:

WHEREAS, the Issuers, Par Pacific Holdings, Inc., for the limited purposes set forth therein, the guarantors party thereto, the Trustee, and the Collateral Trustee have entered into an Indenture, dated as of December 21, 2017 (as amended, supplemented, replaced or otherwise modified from time to time, the "Indenture");

WHEREAS, in connection with the Indenture, the Issuers and certain of their Affiliates entered into the Pledge and Security Agreement, dated as of December 21, 2017 (as amended, supplemented or otherwise modified from time to time, the "Pledge and Security Agreement") in favor of the Collateral Trustee for the benefit of the Secured Parties;

WHEREAS, in connection with the Indenture, the Issuers and certain of their Affiliates entered into the Collateral Trust and Intercreditor Agreement, dated as of December 21, 2017 (as amended, supplemented or otherwise modified from time to time, the "Collateral Trust Agreement"), among the Company, Finance Corp., the other grantors from time to time party thereto, the Trustee, as indenture trustee under the closing date indenture, each other secured representative from time to time party thereto and the Collateral Trustee;

WHEREAS, the Issuers and Grantors desire to amend the Pledge and Security Agreement; and

WHEREAS, Section 9.01 of the Indenture permits the Trustee, the Issuers and the Guarantors to amend or supplement the Pledge and Security Agreement to cure any ambiguity, omission, mistake, defect or inconsistency or to conform the text of any security document related to the notes under the Indenture to any provision of the "Description of Notes" in the Offering Memorandum.

WHEREAS, the amendments set forth below in paragraph 2 below were included in the Offering Memorandum for the Issuers 7.750% Senior Secured Notes Due 2025, but not included in the Pledge and Security Agreement at the time of execution. A copy of the relevant excerpt from the Offering Memorandum is attached to the Officers' Certificate being delivered by the Issuers as of the date hereof.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Issuers, the Guarantors, and the Collateral Trustee agree as follows:

1. Amendment to Section 1.1(b). Section 1.1(b) of the Pledge and Security Agreement is hereby amended to add the following new defined terms in their appropriate alphabetical order:

"SEC" shall mean the U.S. Securities and Exchange Commission.

"Securities Act" shall mean the Securities Act of 1933, as amended.

2. Amendment to Section 2. Section 2 of the Pledge and Security Agreement is hereby amended to add the following new *clause (d)* at the end of such section:

(d) Notwithstanding anything herein to the contrary, the following limitations shall apply to Pledged Equity Interests:

(i) In the event that Rule 3-16 of Regulation S-X under the Securities Act requires, or is amended, modified or interpreted by the SEC to require (or is replaced with another rule or regulation, or any other law, rule or regulation is adopted, which would require) the filing with the SEC (or any other governmental agency) of separate financial statements of any Subsidiary due to the fact that such Subsidiary's stock, Equity Interests or other securities secure the Secured Obligations, then the stock, Equity Interests and other securities of such Subsidiary shall automatically be deemed not to be part of the Pledged Equity Interests for the benefit of the Secured Parties (but only to the extent necessary to cause such financial statement requirement not to be applicable with respect to such Subsidiary) (such excluded portion of the stock, Equity Interests and other securities is referred to herein as the "Excluded Stock Collateral").

(ii) Notwithstanding the foregoing, if Rule 3-16 of Regulation S-X under the Securities Act (or such other law, rule or regulation) is hereafter amended, modified or interpreted by the SEC (or other applicable governmental agency) to permit (or is replaced with another rule or regulation, or any law, rule or regulation is adopted, which would permit) such Subsidiary's stock, Equity Interests or other securities to secure the Secured Obligations in excess of the amount then pledged without filing with the SEC (or such other governmental agency) of separate financial statements of such Subsidiary, then the stock, Equity Interests and other securities of such Subsidiary shall automatically be deemed to be a part of the Pledged Equity Interests for the benefit of the Secured Parties (but only to the extent not resulting in such financial statement requirement becoming applicable with respect to such Subsidiary), unless otherwise constituting Excluded Assets.

(iii) Upon any Excluded Stock Collateral ceasing to be Excluded Stock Collateral (and thereafter included as Pledged Equity Interests) in accordance with *clause (ii)* above, the applicable Grantor will as promptly as practicable execute and deliver to the Collateral Trustee all documentation necessary or desirable to evidence the grant hereunder of a security interest in such Pledged Equity Interests and the perfection of such security interest in accordance with the terms hereof.

3. Amendment to Section 4.3(c). Section 4.3(c) of the Pledge and Security Agreement is hereby amended to add the following new sentence at the end of such *clause (c)*:

Notwithstanding the foregoing, none of the Issuers or the Guarantors shall be required to take any actions under any laws outside of the United States to grant, perfect or provide for the enforcement of any security interest.

4. Update to Schedule 2. Pursuant to Section 3 of the Pledge and Security Agreement, *Schedule 2* to the Pledge and Security Agreement is hereby amended as set forth on *Annex I* hereto.

5. **GOVERNING LAW; CONSENT TO JURISDICTION; WAIVERS; WAIVER OF JURY TRIAL. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK. SECTIONS 7.13 AND 7.14 OF THE COLLATERAL TRUST AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE, MUTATIS MUTANDIS, AS IF FULLY SET FORTH HEREIN.**

6. Successors and Assigns; Rights and Protections of the Trustee and Collateral Trustee. This Amendment shall be binding upon the successors and assigns of each Grantor and shall inure to the benefit of the parties hereto and their successors and assigns; provided that no Issuer or other Grantor may assign, transfer or delegate any of its rights or obligations under this Amendment without the prior written consent of the Collateral Trustee and any such assignment, transfer or delegation without such consent

shall be null and void. The rights, protections and indemnities afforded the Trustee and Collateral Trustee under the Indenture, other Note Documents and Security Documents shall apply to the execution hereof and any action (or inaction) contemplated hereunder. The Trustee and Collateral Trustee are entering into this Amendment in reliance of the representations, warranties, statements and opinions, as applicable, of the Issuers, the Grantors and their counsel as set forth herein and in the Officers' Certificate and Opinion of Counsel being delivered to the Trustee and Collateral Trustee in connection with this Amendment.

7. Counterparts. This Amendment may be executed by one or more of the parties to this Amendment on any number of separate counterparts (including by facsimile or other electronic imaging means), and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed signature page of this Amendment by facsimile or other electronic transmission (e.g. "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart hereof.

[Signature pages follow]

IN WITNESS WHEREOF, the undersigned has caused this Amendment to be duly executed and delivered as of the date first above written.

ISSUERS:

PAR PETROLEUM, LLC
PAR PETROLEUM FINANCE CORP.

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

GRANTORS:

HERMES CONSOLIDATED, LLC
WYOMING PIPELINE COMPANY LLC
PAR TACOMA, LLC
U.S. OIL & REFINING CO.
MCCHORD PIPELINE CO.
USOT WA, LLC
PAR HAWAII REFINING, LLC
PAR HAWAII, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Chief Financial Officer

PAR HAWAII SHARED SERVICES, LLC

By: /s/ William Monteleone
Name: William Monteleone
Title: Vice President

[Signature page to Amendment No. 3 to Pledge and Security Agreement]

COLLATERAL TRUSTEE:

WILMINGTON TRUST, NATIONAL ASSOCIATION

By: /s/ Barry Somrock
Name: Barry Somrock
Title: Vice President

[Signature page to Amendment No. 3 to Pledge and Security Agreement]

TRUSTEE:

WILMINGTON TRUST, NATIONAL ASSOCIATION

By: /s/ Barry Somrock
Name: Barry Somrock
Title: Vice President

[Signature page to Amendment No. 3 to Pledge and Security Agreement]

J. ARON & COMPANY LLC

By: /s/ Harsha Rajamani
Name: Harsha Rajamani
Title: Attorney in Fact

[Signature page to Amendment No. 3 to Pledge and Security Agreement]

SECOND AMENDED AND RESTATED PLEDGE AND SECURITY AGREEMENT

THIS SECOND AMENDED AND RESTATED PLEDGE AND SECURITY AGREEMENT (this “Agreement”), dated as of June 1, 2021 is made between Par Hawaii Refining, LLC, a Hawaii limited liability company (the “Company”), and J. Aron & Company LLC, a New York limited liability company (“Aron”).

WHEREAS, the Company owns and operates the Refinery for the processing and refining of Crude Oil and other feedstocks and the recovery therefrom of refined products;

WHEREAS, the Company and Aron entered into a Supply and Offtake Agreement, dated as of June 1, 2015, providing for a supply and offtake transaction under which Aron agreed to supply Crude Oil to the Company to be processed at the Refinery and purchase all Products from the Company produced at the Refinery (as amended or otherwise modified from time to time, the “Original S&O Agreement”);

WHEREAS, as a condition precedent to Aron’s obligations under the Original S&O Agreement, the Company and Aron entered into a Pledge and Security Agreement dated as of June 1, 2015 (the “Original Pledge and Security Agreement”), which was amended and restated on December 21, 2017 (as amended or otherwise modified prior to the date hereof, the “First Amended and Restated Pledge and Security Agreement”) in connection with the transactions contemplated by the First Amended and Restated Supply and Offtake Agreement, dated as of December 21, 2017, between the Company and Aron (as amended or otherwise modified prior to the date hereof, the “First Amended and Restated S&O Agreement”);

WHEREAS, the Company and Aron desire to amend and restate in its entirety the First Amended and Restated S&O Agreement and have entered into the Second Amended and Restated Supply and Offtake Agreement, dated as of the date hereof (as amended, supplemented or otherwise modified from time to time, the “S&O Agreement”); and

WHEREAS, it is a condition precedent to effectiveness of the S&O Agreement that the Company and Aron enter into this Agreement amending and restating the First Amended and Restated Pledge and Security Agreement.

NOW, THEREFORE, the parties hereto agree as follows:

SECTION 1 Definitions; Interpretation.

(a) Terms Defined in S&O Agreement. Subject to Section 1(c), all capitalized terms used in this Agreement (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the S&O Agreement.

(b) Certain Defined Terms

. As used in this Agreement, the following terms shall have the following meanings:

“Accounts” means any and all of the Company’s accounts, as such term is defined in Section 9-102 of the UCC.

“Books” means all books, records and other written, electronic or other documentation in whatever form maintained now or hereafter by or for the Company in connection with the ownership of its assets or the conduct of its business or evidencing or containing information relating to the Collateral, including: (i) ledgers; (ii) records indicating, summarizing, or evidencing the Company’s assets (including Inventory and Rights to Payment), business

operations or financial condition; (iii) computer programs and software; (iv) computer discs, tapes, files, manuals, spreadsheets; (v) computer printouts and output of whatever kind; (vi) any other computer prepared or electronically stored, collected or reported information and equipment of any kind; and (vii) any and all other rights now or hereafter arising out of any contract or agreement between the Company and any service bureau, computer or data processing company or other Person charged with preparing or maintaining any of the Company's books or records or with credit reporting, including with regard to the Company's Accounts.

"Chattel Paper" means any and all of the Company's chattel paper, as such term is defined in Section 9-102 of the UCC, including all Electronic Chattel Paper.

"Collateral" has the meaning set forth in Section 2(a).

"Commercial Tort Claims" means any and all of the Company's commercial tort claims, as such term is defined in Section 9-102 of the UCC, including any described in Schedule 1.

"Control Agreement" means any control agreement or other agreement with any securities intermediary, bank or other Person establishing Aron's control with respect to any Deposit Accounts, Letter-of-Credit Rights or Investment Property, for purposes of Article 8 or Sections 9-104, 9-106 and 9-107 of the UCC.

"Controlled Account" means any Deposit Account or securities account of the Company that is subject to a Control Agreement in form and substance satisfactory to Aron.

"Debtor Relief Laws" means the Bankruptcy Code, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief laws of the United States or other applicable jurisdictions from time to time in effect.

"Default" means any event that with the giving of notice or the passing of time or both would be an Event of Default.

"Deposit Account" means any deposit account, as such term is defined in Section 9-102 of the UCC, maintained by or for the benefit of the Company, whether or not restricted or designated for a particular purpose; provided, however, the term "Deposit Account" shall exclude the Excluded Accounts.

"Documents" means any of the Company's documents, as such term is defined in Section 9-102 of the UCC.

"Electronic Chattel Paper" means any and all of the Company's electronic chattel paper, as such term is defined in Section 9-102 of the UCC.

"Equipment" means any and all of the Company's equipment, including any and all fixtures, as such terms are defined in Section 9-102 of the UCC.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Excluded Accounts" means: (i) Deposit Accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the Company's employees (including, without limitation, pension fund accounts and 401(k) accounts), (ii) any Deposit Account exclusively used for the posting of cash collateral to support obligations arising

under cash-collateralized letters of credit or exposure from Hedging Agreements permitted under this Agreement and the S&O Agreement, and (iii) any Note Collateral Account.

“Excluded Assets” means (i) any property (other than equipment or inventory), including any contract, lease, permit, license, license agreement, other agreement or instrument to which the Company is a party or any of its rights or interests thereunder, solely to the extent that the grant of a security interest in such property (A) is prohibited by Applicable Law, (B) requires a consent of any Governmental Authority pursuant to Applicable Law that has not been obtained, or (C) is prohibited by, or constitutes a breach or default under, or results in the termination of or requires any consent not obtained under, any such contract, lease, permit, license, license agreement, other agreement or instrument, or Applicable Law with respect thereto, evidencing, governing, or giving rise to such property; provided that this clause (i) shall not include (x) any contract or other agreement relating to Specified Government Accounts or (y) any contract or other agreement in respect of Inventory, including, but not limited to Crude Oil and Products, (ii) any trademarks, trade names and other intellectual property, (iii) Accounts and CC Receivables (as defined in the Security Agreement (as defined in the Collateral Trust and Intercreditor Agreement)) constituting identifiable proceeds of the Note Collateral, (iv) Equity Interests in any Subsidiary of the Company, (v) Excluded Accounts, and (vi) all RINs and all Environmental Credits and catalyst of the Company; *provided, however*, that (x) with respect to any property that constitutes Excluded Assets solely by operation of clause (i) of this sentence, the Collateral shall include and such security interest shall automatically attach to such property immediately at such time as such prohibition, breach, default, termination (or right of termination) would be rendered ineffective pursuant to Section 9-406, 9-407, 9-408 or 9-409 of the UCC (or any successor provision or provisions) of any relevant jurisdiction or any other Applicable Law, and (y) any such property shall cease to constitute Excluded Assets at such time as the condition causing such prohibition, breach, default, termination (or right of termination) no longer exists and, in each case, to the extent severable, the security interest therein shall attach immediately to any portion of such property that would not result in the above specified consequences and are not subject to such prohibitions specified in this proviso.

“First Amended and Restated Pledge and Security Agreement” has the meaning specified in the recitals hereto.

“First Amended and Restated S&O Agreement” has the meaning specified in the recitals hereto.

“General Intangibles” means any and all of the Company’s general intangibles, as such term is defined in Section 9-102 of the UCC.

“Goods” means any and all of the Company’s goods, as such term is defined in Section 9-102 of the UCC.

“Insolvency Proceeding” means (a) any case, action or proceeding before any court or other Governmental Authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or (b) any general assignment for the benefit of creditors, composition, marshalling of assets for creditors, or other, similar arrangement in respect of any Person’s creditors generally or any substantial portion of such Person’s creditors, in each case undertaken under Debtor Relief Laws.

“Instruments” means any and all of the Company’s instruments, as such term is defined in Section 9-102 of the UCC.

“Inventory” means any of the Company’s inventory, as such term is defined in Section 9-102 of the UCC.

“Investment Property” means any of the Company’s investment property, as such term is defined in Section 9-102 of the UCC.

“Letter-of-Credit Rights” means any and all of the Company’s letter-of-credit rights, as such term is defined in Section 9-102 of the UCC.

“Lien” means any security interest, lien, encumbrance, charge or other claim of any nature.

“Note Collateral Account” means any Collateral Account (as defined in the Indenture as in effect as of the date hereof).

“Original Pledge and Security Agreement” has the meaning specified in the recitals hereto.

“Original S&O Agreement” has the meaning specified in the recitals hereto.

“Par Pacific” means Par Pacific Holdings, Inc., a Delaware corporation.

“Pledged Collateral” means any and all (i) Investment Property of the Company constituting Collateral; (ii) Instruments constituting Collateral; (iii) securities, property, interest, dividends and other payments and distributions issued as an addition to, in redemption of, in renewal or exchange for, in substitution or upon conversion of, or otherwise on account of, any of the foregoing; (iv) certificates and instruments now or hereafter representing or evidencing any of the foregoing; (v) rights, interests and claims with respect to the foregoing, including under any and all related agreements, instruments and other documents, and (vi) cash and non-cash proceeds of any of the foregoing, in each case whether presently existing or owned or hereafter arising or acquired and wherever located, and as from time to time received or receivable by, or otherwise paid or distributed to or acquired by, the Company; *provided* that Pledged Collateral shall not include at any time any Equity Interests in any Subsidiary of the Company.

“Proceeds” means all proceeds, as such term is defined in Section 9-102 of the UCC.

“Proceeds Account” has the meaning set forth in Section 10(c).

“Related Party” means, with respect to any Person, such Person’s Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person’s Affiliates.

“Rights to Payment” means any and all of the Company’s Accounts constituting Collateral and any and all of the Company’s rights and claims to the payment or receipt of money or other forms of consideration of any kind in, to and under or with respect to its Chattel Paper, Documents, General Intangibles, Instruments, Investment Property, Letter-of-Credit Rights, Proceeds and Supporting Obligations, in each case, to the extent constituting Collateral.

“Secured Obligations” means all Obligations of the Company to Aron under or in connection with the S&O Agreement and the other Transaction Documents, including all fees due from the Company thereunder and all other amounts payable by the Company to Aron thereunder or in connection therewith, and, in each case, whether now existing or hereafter arising, and whether due or to become due, absolute or contingent, liquidated or unliquidated, determined or undetermined, and including interest that accrues after the commencement by or against the Company of any Insolvency Proceeding naming such Person as the debtor in such proceeding.

“Supporting Obligations” means all supporting obligations, as such term is defined in Section 9-102 of the UCC.

“S&O Agreement” has the meaning specified in the recitals hereto.

“UCC” means the Uniform Commercial Code as the same may, from time to time, be in effect in the State of New York.

(c) Terms Defined in UCC. Where applicable and except as otherwise defined herein, terms used in this Agreement shall have the meanings assigned to them in the UCC; *provided, however*, that to the extent that the UCC is used to define any term herein and such term is defined differently in different Articles of the UCC, the definition of such term contained in Article 9 shall govern.

(d) Interpretation. The rules of interpretation set forth in Section 1.2 of the S&O Agreement shall be applicable to this Agreement and are incorporated herein by this reference.

(e) Amendment and Restatement. This Agreement amends and restates the First Amended and Restated Pledge and Security Agreement. The obligations of the Company under the First Amended and Restated Pledge and Security Agreement and the grant of security interest in the Collateral by the Company under the First Amended and Restated Pledge and Security Agreement shall continue under this Agreement but solely to the extent of the security interest in the Collateral as defined in this Agreement, and, to such extent, shall not in any event be terminated, extinguished or annulled, but shall hereafter be governed by this Agreement. All references to the First Amended and Restated Pledge and Security Agreement in any Transaction Document (other than this Agreement) or other document or instrument delivered in connection therewith shall be deemed to refer to this Agreement and the provisions hereof. It is understood and agreed that the First Amended and Restated Pledge and Security Agreement is being amended and restated by entry into this Agreement on the date hereof.

SECTION 2 Security Interest.

(a) Grant of Security Interest. As security for the payment and performance of the Secured Obligations, the Company hereby grants to Aron a security interest in all of the Company’s right, title and interest in, to and under the following personal property of the Company, wherever located and whether now existing or owned or hereafter acquired or arising (collectively, the “Collateral”): (i) all Inventory, including, but not limited to Crude Oil and Products; (ii) all Accounts; (iii) all Investment Property, Chattel Paper, General Intangibles, Commercial Tort Claims, Documents and Instruments, in each case, to the extent relating to the items described in clauses (i) and (ii); (iv) all Deposit Accounts and cash and cash equivalents; (v) books and records relating to clauses (i) through (iv); and (vi) all Proceeds of (including (1) products and (2) proceeds of business interruption and other insurance), and Supporting Obligations (including Letter-of-Credit Rights) with respect to, any of the foregoing; *provided, however*, that notwithstanding any other provision set forth in this Section 2, this Agreement shall not at any time constitute a grant of a security interest in any property that is, at such time, an Excluded Asset, and the term “Collateral” and each of the defined terms incorporated therein shall exclude the Excluded Assets.

(b) Company Remains Liable. Anything herein to the contrary notwithstanding, (i) the Company shall remain liable under any contracts, agreements and other documents included in the Collateral, to the extent set forth therein, to perform all of its duties and obligations thereunder to the same extent as if this Agreement had not been executed, (ii) the exercise by Aron of any of the rights granted to Aron hereunder or under any other

Transaction Document shall not release the Company from any of its duties or obligations under any such contracts, agreements and other documents included in the Collateral, and (iii) Aron shall not have any obligation or liability under any such contracts, agreements and other documents included in the Collateral by reason of this Agreement, nor shall Aron be obligated to perform any of the obligations or duties of the Company thereunder or to take any action to collect or enforce any such contract, agreement or other document included in the Collateral hereunder.

(c) Continuing Security Interest. The Company agrees that this Agreement shall create a continuing security interest in the Collateral which shall remain in effect until terminated in accordance with Section 23.

(d) Acknowledgment Agreement. The Company acknowledges and agrees that nothing in this Agreement limits Aron's rights under the Acknowledgment Agreements.

SECTION 3 Perfection and Priority.

(a) Financing Statements, Etc. The Company hereby authorizes Aron to file at any time and from time to time any financing statements describing the Collateral, and the Company shall execute and deliver to Aron, and the Company hereby authorizes Aron to file (with or without the Company's signature) at any time and from time to time, all amendments to financing statements, continuation financing statements, termination statements, assignments, affidavits, reports, notices and all other documents and instruments, in form satisfactory to Aron, as Aron may reasonably request, to perfect and continue perfected, maintain the priority of or provide notice of Aron's security interest in the Collateral and to accomplish the purposes of this Agreement. Without limiting the generality of the foregoing, the Company (i) ratifies and authorizes the filing by Aron of any financing statements filed with respect to the Collateral prior to the date hereof and (ii) shall from time to time take the actions specified in subsections (b) through (j) below.

(b) [Reserved].

(c) Instrument Collateral. Anything to the contrary notwithstanding, so long as no Event of Default shall have occurred and be continuing, (i) the Company may retain for collection in the ordinary course any Instruments received by the Company in the ordinary course of business, and Aron shall, promptly upon request of the Company, make appropriate arrangements for making any other Instruments constituting Collateral available to the payor of any such Instrument for purposes of presentation, collection or renewal (any such arrangement to be effected, to the extent required under Applicable Law to continue perfected Aron's security interest hereunder in such Instruments, against trust receipt or like document), and (ii) the Company may retain any additional Pledged Collateral consisting of Instruments, as long as the aggregate amount of any such Instruments so retained by the Company shall not exceed \$1,000,000.

(d) Transfer of Security Interest Other Than by Delivery. If for any reason Pledged Collateral cannot be delivered to or for the account of Aron as provided in subsection 3(c), the Company shall promptly take such other steps as may be necessary or as shall be reasonably requested from time to time by Aron to effect a transfer of a perfected first priority security interest in and pledge of the Pledged Collateral to Aron pursuant to the UCC. To the extent practicable, the Company shall thereafter deliver the Pledged Collateral to or for the account of Aron as provided in subsection 3(c).

(e) [Reserved].

(f) Documents, Etc. The Company shall deliver to Aron, or an agent designated by it, appropriately endorsed or accompanied by appropriate instruments of transfer or assignment, all Documents and Chattel Paper, and all other Rights to Payment at any time evidenced by promissory notes, trade acceptances or other instruments, in each case, to the extent constituting Collateral and not already delivered hereunder pursuant to this Section 3; *provided, however*, that unless an Event of Default shall have occurred and be continuing, the Company shall not be required to deliver any Document, Chattel Paper, promissory note, trade acceptance or other instrument, as long as the aggregate amount of any such Collateral so retained by the Company shall not exceed \$1,000,000. Upon the request of Aron, the Company shall mark all Documents and Chattel Paper constituting Collateral with such legends as Aron shall reasonably specify.

(g) Bailees. Any Person (other than Aron) at any time and from time to time holding all or any portion of the Collateral shall be deemed to, and shall, hold the Collateral as the agent of, and as pledge holder for, Aron. At any time and from time to time, Aron may give notice to any such Person holding all or any portion of the Collateral that such Person is holding the Collateral as the agent and bailee of, and as pledge holder for, Aron, and obtain such Person's written acknowledgment thereof. Without limiting the generality of the foregoing, the Company will join with Aron in notifying any Person who has possession of any Collateral of Aron's security interest therein and obtaining an acknowledgment from such Person that it is holding the Collateral for the benefit of Aron.

(h) Control. The Company shall cause all Deposit Accounts and securities accounts (other than Excluded Accounts) to be Controlled Accounts, and the Company will cooperate with Aron in obtaining control (as defined in the UCC) of Collateral consisting of any Deposit Accounts, Electronic Chattel Paper, Investment Property (excluding the Equity Interests of any Subsidiary) or Letter-of-Credit Rights, including delivery of Control Agreements, as Aron may reasonably request, to perfect and continue perfected, maintain the priority of or provide notice of Aron's security interest in such Collateral.

(i) [Reserved].

(j) Purchase Money Security Interests. To the extent the Company uses the proceeds of any of the Secured Obligations to purchase Collateral, subject to the requirements of the S&O Agreement, the Company's repayment of the Secured Obligations shall apply on a "first-in, first-out" basis so that the portion of the Secured Obligations used to purchase a particular item of Collateral shall be paid in the chronological order in which the Company purchased the Collateral.

SECTION 4 Representations and Warranties. So long as any of the Secured Obligations (other than contingent indemnification obligations) remain unsatisfied, the Company represents and warrants to Aron that:

(a) Location of Chief Executive Office and Collateral. The Company's chief executive office and principal place of business (as of the Commencement Date) is located at the address set forth in Schedule 1, and all other locations (as of the Commencement Date) where the Company conducts business or Collateral is kept are set forth in Schedule 1.

(b) Locations of Books. All locations where Books pertaining to the Rights to Payment are kept, including all equipment necessary for accessing such Books and the names and addresses of all service bureaus, computer or data processing companies and other Persons keeping any Books or collecting Rights to Payment for the Company, are set forth in Schedule 1.

(c) Jurisdiction of Organization and Names. The Company's jurisdiction of organization is set forth in Schedule 1; and the Company's exact legal name is as set forth in the first paragraph of this Agreement. All trade names and trade styles under which the Company presently conducts its business operations are set forth in Schedule 1, and, except as set forth in Schedule 1, the Company has not, at any time in the past: (i) been known as or used any other corporate, trade or fictitious name; (ii) changed its name; (iii) been the surviving or resulting corporation in a merger or consolidation; or (iv) acquired through asset purchase or otherwise any business of any Person.

(d) Collateral. The Company has rights in or the power to transfer the Collateral, and the Company is the sole and complete owner of the Collateral (or, in the case of after-acquired Collateral, at the time the Company acquires rights in such Collateral, will be the sole and complete owner thereof), free from any Lien other than Permitted Liens.

(e) Enforceability; Priority of Security Interest. (i) This Agreement creates a security interest which is enforceable against the Collateral in which the Company now has rights and will create a security interest which is enforceable against the Collateral in which the Company hereafter acquires rights at the time the Company acquires any such rights; and (ii) Aron has a perfected and first priority security interest in the Collateral, in which the Company now has rights, and will have a perfected and first priority security interest in the Collateral in which the Company hereafter acquires rights at the time the Company acquires any such rights, in each case, subject to Permitted Liens and securing the payment and performance of the Secured Obligations.

(f) Other Financing Statements. Other than (i) financing statements disclosed to Aron and (ii) financing statements in favor of Aron, no effective financing statement naming the Company as debtor, assignor, grantor, mortgagor, pledgor or the like and covering all or any part of the Collateral is on file in any filing or recording office in any jurisdiction.

(g) Rights to Payment.

(i) The Rights to Payment represent valid, binding and enforceable obligations of the account debtors or other Persons obligated thereon, representing, bona fide transactions completed in accordance with the terms and provisions contained in any documents related thereto;

(ii) the Company has not assigned any of its rights under the Rights to Payment except as provided in this Agreement or as set forth in the other Transaction Documents; and

(iii) all Rights to Payment comply in all material respects with Applicable Law concerning form, content and manner of preparation and execution.

(h) Inventory. No Inventory is stored with any bailee, warehouseman or similar Person or on any premises leased to the Company, nor has any Inventory been consigned to the Company or consigned by the Company to any Person or is held by the Company for any Person under any "bill and hold" or other arrangement, except as set forth in Schedule 1.

(i) [Reserved].

(j) [Reserved].

(k) Deposit Accounts. The names and addresses of all financial institutions at which the Company maintains its Deposit Accounts, and the account numbers and account names of such Deposit Accounts, are set forth in Schedule 1.

(l) Instrument Collateral. (i) The Company has not previously assigned any interest in any Instruments (other than such interests as will be released on or before the date hereof), (ii) no Person other than the Company owns an interest in the Instruments (whether as joint holders, participants or otherwise), and (iii) no material default exists under or in respect of the Instruments of the Company.

(m) [Reserved].

(n) Investment Property; Instruments; and Chattel Paper. All securities accounts of the Company and Investment Property of the Company are set forth in Schedule 1, and all Instruments and Chattel Paper held by the Company are also set forth in Schedule 1.

(o) Control Agreements. No Control Agreements exist with respect to any Collateral other than any Control Agreements in favor of Aron.

(p) Letter-of-Credit Rights. The Company does not have any Letter-of-Credit Rights except as set forth in Schedule 1.

(q) Commercial Tort Claims. The Company does not have any Commercial Tort Claims except as set forth in Schedule 1.

(r) Real Property Leases. Except as set forth on Schedule 1, the Company is not and will not become a lessee under any real property lease or other agreement governing the location of Collateral at the premises of another Person pursuant to which the lessor or such other Person may obtain any rights in any of the Collateral, and no such lease or other such agreement now prohibits, restrains, impairs or will prohibit, restrain or impair the Company's right to remove any Collateral from the premises at which such Collateral is situated, except for the usual and customary restrictions contained in such leases of real property.

(s) Insurance. Aron is named as loss payee or additional insured, as appropriate, on each insurance policy identified on Schedule 1.

SECTION 5 Covenants. So long as any of the Secured Obligations (other than contingent indemnification obligations) remain unsatisfied, the Company agrees that:

(a) General Covenants.

(i) Defense of Collateral. The Company will appear in and defend any action, suit or proceeding which may affect to a material extent its title to, or right or interest in, or Aron's right or interest in, the Collateral.

(ii) Preservation of Collateral. The Company will do and perform all reasonable acts that may be necessary and appropriate to maintain, preserve and protect the Collateral.

(iii) Compliance with Laws, Etc. The Company will comply in all material respects with all laws, regulations and ordinances, and all policies of insurance, relating in a material way to the possession, operation, maintenance and control of the Collateral.

(iv) Location of Books and Chief Executive Office. The Company will: (A) keep all Books pertaining to the Rights to Payment at the locations set forth in Schedule 1; and (B) give at least 30 days' prior written notice to Aron of (1) any changes in any such location where Books pertaining to the Rights to Payment are kept, including any change of name or address of any service bureau, computer or data processing company or other Person preparing or maintaining any Books or collecting Rights to Payment for the Company or (2) any changes in the location of the Company's chief executive office or principal place of business.

(v) Location of Collateral. The Company will: (A) keep the Collateral at the locations set forth in Schedule 1, or at such other locations as may be disclosed in writing to Aron pursuant to clause (B) and will not remove any such Collateral from such locations (other than in connection with sales of Inventory in the ordinary course of the Company's business, other dispositions permitted by Section 18.5(c)(iv) of the S&O Agreement, as otherwise permitted under the S&O Agreement and movements of Collateral from one disclosed location to another disclosed location within the United States), except upon at least 30 days' prior written notice of any removal to Aron; and (B) give Aron at least 30 days' prior written notice of any change in the locations set forth in Schedule 1.

(vi) Change in Name, Identity or Structure. The Company will give at least 30 days' prior written notice to Aron of (A) any change in its name, (B) any change in its jurisdiction of organization, (C) any change in its registration as an organization (or any new such registration); and (D) any changes in its identity or structure in any manner which might make any financing statement filed hereunder incorrect or seriously misleading; *provided* that the Company shall not change its jurisdiction of organization to a jurisdiction outside of the United States.

(vii) Maintenance of Records. The Company will keep separate, accurate and complete Books with respect to the Collateral, disclosing Aron's security interest hereunder.

(viii) Leased Premises; Collateral Held by Warehouseman, Bailee, Etc.

(A) The Company will use commercially reasonable efforts to obtain from each Person from whom the Company leases any premises, and from each other Person at whose premises any Collateral is at any time present (including any bailee, warehouseman or similar Person), within 45 days of (1) the Second Restatement Effective Date, or (2) if later, the date the Company enters into a lease of or a contract to hold Collateral at any premises, any such collateral access, subordination, landlord waiver, bailment, consent and estoppel agreements, as Aron may reasonably require, in form and substance satisfactory to Aron; *provided* that, with respect to any such Person that is an Affiliate of the Company, the Company will cause such Person to deliver to Aron a "bailee's letter" in substantially the form attached as Exhibit A hereto no later than 45 days after the Second Restatement Effective Date, or, if later, the date such lease or contract is entered into. In the event that any such Person becomes an Affiliate of the Company after the date hereof, the Company will cause such Person to deliver such bailee's letter no later than 45 days after the date such Person becomes an Affiliate of the Company.

(ix) Rights to Payment. The Company will:

(A) with such frequency as Aron may reasonably require but no more than once per fiscal quarter, or as may be required under the S&O Agreement, furnish to Aron full and complete reports, in form and substance satisfactory to Aron, with respect to the Accounts;

(B) if any Accounts arise from contracts with the United States or any department, agency or instrumentality thereof, promptly notify Aron thereof and execute any

documents and instruments and take any other steps reasonably requested by Aron in order that all monies due and to become due thereunder shall be assigned to Aron and notice thereof be given to the Federal authorities sufficient for such security interest to be recognized under the Federal Assignment of Claims Act;

(C) (1) upon the reasonable request of Aron at any time, notify all or any designated portion of the account debtors and other obligors on the Rights to Payment of the security interest hereunder, and (2) upon the occurrence and during the continuance of an Event of Default and upon the request of Aron, notify the account debtors and other obligors on the Rights to Payment or any designated portion thereof that payment shall be made directly to Aron or to such other Person or location as Aron shall specify;

(D) take any and all actions, including actions requested by Aron, to ensure that all Accounts of the Company will be paid to a bank deposit account at a bank acceptable to Aron and with which Aron has entered into a Control Agreement in favor of Aron (the "Collection Account") and pursuant to which Aron has a perfected security interest therein and, if any Person obligated on an Account constituting Collateral pays directly to the Company, the Company shall promptly remit such sums to the Collection Account. Until deposited in the Collection Account, any such amounts to be remitted shall be held in trust for the benefit of Aron and shall be segregated from other funds of the Company. Upon the occurrence of an Event of Default, Aron shall have the right to notify the customers or obligors under any Accounts of the assignment of such Accounts to Aron and to direct such customers or obligors to make payment of all amounts due or to become due directly to Aron or to such other account designated by Aron; and

(E) without limiting the Company's obligations under clause (D), upon the occurrence and during the continuance of any Event of Default and the exercise of remedies by Aron under any Transaction Document, establish such lockbox or similar arrangements for the payment of the Accounts and other Rights to Payment as Aron shall require.

As used in this Section 5(a)(ix), the term "Accounts" shall exclude any Accounts constituting identifiable proceeds of the Note Collateral.

(x) Instruments, Investment Property, Etc. Upon the request of Aron, the Company will (A) promptly deliver to Aron, or an agent designated by it, appropriately endorsed or accompanied by appropriate instruments of transfer or assignment, all Instruments, Documents, Chattel Paper and certificated securities with respect to any Investment Property, all letters of credit, and all other Rights to Payment, in each case, constituting Collateral and at any time evidenced by promissory notes, trade acceptances or other instruments, (B) cause any securities intermediaries to show on their books that Aron is the entitlement holder with respect to any Investment Property constituting Collateral, and/or obtain Control Agreements in favor of Aron from such securities intermediaries, in form and substance satisfactory to Aron, with respect to any Investment Property constituting Collateral, as reasonably requested by Aron, and (C) provide such notice, obtain such acknowledgments and take all such other action, with respect to any Chattel Paper, Documents and Letter-of-Credit Rights, in each case, constituting Collateral, as Aron shall reasonably specify.

(xi) Deposit Accounts and Securities Accounts. The Company will give Aron prompt notice of the establishment of any new Deposit Account and of any new securities account (other than an Excluded Account) established by the Company with respect to any Investment Property.

(xii) Inventory. The Company will not store any Inventory with a bailee, warehouseman or similar Person or on premises leased to the Company other than in Included

Locations (solely to the extent contemplated and permitted under the S&O Agreement) and those locations identified in Schedule 1, and will not dispose of any Inventory on a bill-and-hold, guaranteed sale, sale and return, sale on approval, consignment or similar basis, and will not acquire any Inventory from any Person on any such basis, without in each case giving Aron prior written notice thereof.

(xiii) Notices, Reports and Information. The Company will (A) notify Aron of any other modifications of or additions to the information contained in Schedule 1 (including any acquisition or holding of an interest in any Chattel Paper, Commercial Tort Claims and Letter-of-Credit Rights constituting Collateral); (B) notify Aron of any material claim made or asserted against the Collateral by any Person and of any change in the composition of the Collateral or other event which could materially adversely affect the value of the Collateral or Aron's Lien thereon; (C) furnish to Aron such listings, descriptions and schedules with respect to Inventory, and such other reports and other information in connection with the Collateral, as Aron may reasonably request, all in reasonable detail; and (D) upon the reasonable request of Aron make such demands and requests for information and reports as the Company is entitled to make in respect of the Collateral.

(xiv) Insurance. (A) The Company shall carry and maintain in full force and effect, at the expense of the Company all insurance coverages with financially sound and reputable insurance companies and comply with all agreements in respect thereof as required by Article 16 of the S&O Agreement.

(B) The Company shall take all actions, including actions requested by Aron, to ensure that all insurance proceeds payable to the Company with respect to the Collateral will be paid to a bank deposit account at a bank acceptable to Aron and with which Aron has entered into a Control Agreement in favor of Aron (the "Insurance Proceeds Account") and pursuant to which Aron has a perfected security interest therein and, if any insurance proceeds with respect to the Collateral are paid directly to the Company, the Company shall promptly remit such sums to the Insurance Proceeds Account. Until deposited in the Insurance Proceeds Account, any such amounts to be remitted shall be held in trust for the benefit of Aron and shall be segregated from other funds of the Company.

SECTION 6 Rights to Payment and Pledged Collateral.

(a) Collection of Rights to Payment. Until Aron exercises its rights hereunder to collect Rights to Payment, the Company shall endeavor in the first instance diligently and in the ordinary course of its business to collect all amounts due or to become due on or with respect to the Rights to Payment. At the request of Aron, upon the occurrence and during the continuance of any Event of Default, all remittances received by the Company with respect to the Collateral shall be held in trust for Aron and, in accordance with Aron's instructions, remitted to Aron or deposited to an account with Aron in the form received (with any necessary endorsements or instruments of assignment or transfer).

(b) Pledged Collateral. Unless and until an Event of Default shall have occurred and be continuing, the Company shall be entitled to receive and retain for its own account any cash dividend on or other cash distribution or payment, if any, in respect of the Pledged Collateral; *provided, however*, that, the Company shall not be entitled to receive (i) cash paid, payable or otherwise distributed in redemption of, or in exchange for or in substitution of, any Pledged Collateral held by the Company, or (ii) dividends and other distributions paid or payable in cash in respect of any such Pledged Collateral in connection with a partial or total liquidation or dissolution of any Person whose ownership interests constitute Pledged Collateral or in connection with a reduction of capital, capital surplus or paid-in-surplus or any other type of recapitalization involving any such Person. At the request

of Aron, upon the occurrence and during the continuance of any Event of Default, Aron shall be entitled to receive all distributions and payments of any nature with respect to any Pledged Collateral, and all such distributions or payments held by the Company shall be held in trust for Aron and, in accordance with Aron's instructions, remitted to Aron or deposited to an account with Aron in the form received (with any necessary endorsements or instruments of assignment or transfer). Following the occurrence and during the continuance of an Event of Default, any such distributions and payments with respect to any Pledged Collateral held in any securities account shall be held and retained in such securities account, in each case as part of the Collateral hereunder. Additionally, Aron shall have the right, upon the occurrence and during the continuance of an Event of Default, following prior written notice to the Company, to exercise voting rights and to exercise rights to give consents, ratifications and waivers with respect to any Pledged Collateral, and to exercise all rights of conversion, exchange, subscription or any other rights, privileges or options pertaining thereto, as if Aron were the absolute owner thereof; *provided* that Aron shall have no duty to exercise any of the foregoing rights afforded to it and shall not be responsible to the Company or any other Person for any failure to do so or delay in doing so.

(c) [Reserved].

(d) Certain Other Administrative Matters. Upon the occurrence and during the continuance of any Event of Default, Aron may cause any of the Pledged Collateral to be transferred into its name or into the name of its nominee or nominees (subject to the rights of the Company specified in this Section 6). If available and if otherwise required by this Agreement, Aron shall have the right to exchange uncertificated Pledged Collateral for certificated Pledged Collateral, and to exchange certificated Pledged Collateral for certificates of larger or smaller denominations, for any purpose consistent with this Agreement.

SECTION 7 Authorization; Aron Appointed Attorney-in-Fact. Aron shall have the right to, in the name of the Company, or in the name of Aron or otherwise, without notice to or assent by the Company, and the Company hereby constitutes and appoints Aron (and any of Aron's officers, employees or agents designated by Aron) as the Company's true and lawful attorney-in-fact, with full power and authority to:

(a) file any of the financing statements which must be filed to perfect or continue perfected, maintain the priority of or provide notice of Aron's security interest in the Collateral;

(b) take possession of and endorse any notes, acceptances, checks, drafts, money orders or other forms of payment or security and collect any Proceeds of any Collateral;

(c) sign and endorse any invoice or bill of lading relating to any of the Collateral, warehouse or storage receipts, drafts against customers or other obligors, assignments, notices of assignment, verifications and notices to customers or other obligors;

(d) notify the U.S. Postal Service or other postal authorities to change the address for delivery of mail addressed to the Company to such address as Aron may designate and, without limiting the generality of the foregoing, establish with any Person lockbox or similar arrangements for the payment of the Rights to Payment;

(e) receive, open and dispose of all mail addressed to the Company;

(f) send requests for verification of Rights to Payment to the customers or other obligors of the Company;

(g) contact, or direct the Company to contact, all account debtors and other obligors on the Rights to Payment and instruct such account debtors and other obligors to make all payments directly to Aron;

(h) assert, adjust, sue for, compromise or release any claims under any policies of insurance;

(i) exercise dominion and control over, and refuse to permit further withdrawals from, Deposit Accounts constituting Collateral and maintained with Aron or any other bank, financial institution or other Person;

(j) notify each Person maintaining lockbox or similar arrangements for the payment of the Rights to Payment to remit all amounts representing collections on the Rights to Payment directly to Aron;

(k) ask, demand, collect, receive and give acquittances and receipts for any and all Rights to Payment, enforce payment or any other rights in respect of the Rights to Payment and other Collateral, grant consents, agree to any amendments, modifications or waivers of the agreements and documents governing the Rights to Payment and other Collateral, and otherwise file any claims, take any action or institute, defend, settle or adjust any actions, suits or proceedings with respect to the Collateral, as Aron may deem necessary or desirable to maintain, preserve and protect the Collateral, to collect the Collateral or to enforce the rights of Aron with respect to the Collateral;

(l) [Reserved].

(m) execute any and all endorsements, assignments or other documents and instruments necessary to sell, lease, assign, convey or otherwise transfer title in or dispose of the Collateral;

(n) execute and deliver to any securities intermediary or other Person any entitlement order or other notice, document or instrument which Aron may deem necessary or advisable to maintain, protect, realize upon and preserve the Deposit Accounts and Investment Property constituting Collateral and Aron's security interest therein; and

(o) execute any and all such other documents and instruments, and do any and all acts and things for and on behalf of the Company, which Aron may deem necessary or advisable to maintain, protect, realize upon and preserve the Collateral and Aron's security interest therein and to accomplish the purposes of this Agreement.

Aron agrees that, except upon the occurrence and during the continuance of an Event of Default, it shall not exercise the power of attorney, or any rights granted to Aron, pursuant to clauses (b) through (n). The foregoing power of attorney is coupled with an interest and irrevocable so long as the Secured Obligations have not been paid and performed in full. The Company hereby ratifies, to the extent permitted by law, all that Aron shall lawfully and in good faith do or cause to be done by virtue of and in compliance with this Section 7.

SECTION 8 Aron Performance of Company Obligations. Aron may perform or pay any obligation which the Company has agreed to perform or pay under or in connection with this Agreement, and the Company shall reimburse Aron on demand for any amounts paid by Aron pursuant to this Section 8.

SECTION 9 Aron's Duties. Notwithstanding any provision contained in this Agreement, Aron shall have no duty to exercise any of the rights, privileges or powers afforded

to it and shall not be responsible to the Company or any other Person for any failure to do so or delay in doing so. Beyond the exercise of reasonable care to assure the safe custody of Collateral in Aron's possession and the accounting for moneys actually received by Aron hereunder, Aron shall have no duty or liability to exercise or preserve any rights, privileges or powers pertaining to the Collateral.

SECTION 10 Remedies.

(a) Remedies. Upon the occurrence and during the continuance of any Event of Default, Aron shall have, in addition to all other rights and remedies granted to it in this Agreement, the S&O Agreement or any other Transaction Document, all rights and remedies of a secured party under the UCC and other Applicable Law. Without limiting the generality of the foregoing, the Company agrees that:

(i) Aron may peaceably and without notice enter any premises of the Company, take possession of any Collateral, remove or dispose of all or part of the Collateral on any premises of the Company or elsewhere, and otherwise collect, receive, appropriate and realize upon all or any part of the Collateral, and demand, give receipt for, settle, renew, extend, exchange, compromise, adjust, or sue for all or any part of the Collateral, as Aron may determine.

(ii) Aron may require the Company to assemble all or any part of the Collateral and make it available to Aron at any place and time designated by Aron.

(iii) [Reserved].

(iv) Aron may secure the appointment of a receiver of the Collateral or any part thereof (to the extent and in the manner provided by Applicable Law).

(v) Aron may withdraw (or cause to be withdrawn) any and all funds from any Deposit Accounts or securities accounts constituting Collateral.

(vi) Aron may sell, resell, lease, use, assign, transfer or otherwise dispose of any or all of the Collateral in its then condition or following any commercially reasonable preparation or processing (utilizing in connection therewith any of the Company's assets, without charge or liability to Aron therefor) at public or private sale, by one or more contracts, in one or more parcels, at the same or different times, for cash or credit or for future delivery without assumption of any credit risk, all as Aron deems advisable; *provided, however*, that the Company shall be credited with the net proceeds of sale only when such proceeds are finally collected by Aron. Aron shall have the right upon any such public sale, and, to the extent permitted by law, upon any such private sale, to purchase the whole or any part of the Collateral so sold, free of any right or equity of redemption, which right or equity of redemption the Company hereby releases, to the extent permitted by law. Aron shall give the Company such notice of any public or private sale as may be required by the UCC or other Applicable Law. The Company recognizes that Aron may be unable to make a public sale of any or all of the Pledged Collateral, by reason of prohibitions contained in applicable securities laws or otherwise, and expressly agrees that a private sale to a restricted group of purchasers for investment and not with a view to any distribution thereof shall be considered a commercially reasonable sale.

(vii) Aron shall not have any obligation to clean-up or otherwise prepare the Collateral for sale. Aron has no obligation to attempt to satisfy the Secured Obligations by collecting them from any other Person liable for them and Aron may release, modify or waive any Collateral provided by any other Person to secure any of the Secured Obligations, all without affecting Aron's rights against the Company. The Company waives any right it may have to

require Aron to pursue any third Person for any of the Secured Obligations. Aron may comply with any applicable state or federal law requirements in connection with a disposition of the Collateral and compliance will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral. Aron may sell the Collateral without giving any warranties as to the Collateral. Aron may specifically disclaim any warranties of title or the like. This procedure will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral. If Aron sells any of the Collateral upon credit, the Company will be credited only with payments actually made by the purchaser, received by Aron and applied to the indebtedness of the purchaser. In the event the purchaser fails to pay for the Collateral, Aron may resell the Collateral and the Company shall be credited with the proceeds of the sale.

(b) [Reserved].

(c) Proceeds Account. To the extent that any of the Secured Obligations may be contingent, unmatured or unliquidated at such time as there may exist an Event of Default, Aron may, at its election, (i) retain the proceeds of any sale, collection, disposition or other realization upon the Collateral (or any portion thereof) in a special purpose non-interest-bearing restricted deposit account (the "Proceeds Account") created and maintained by Aron for such purpose (which shall constitute a Deposit Account included within the Collateral hereunder) until such time as Aron may elect to apply such proceeds to the Secured Obligations, and the Company agrees that such retention of such proceeds by Aron shall not be deemed strict foreclosure with respect thereto; (ii) in any manner elected by Aron, estimate the liquidated amount of any such contingent, unmatured or unliquidated claims and apply the proceeds of the Collateral against such amount; or (iii) otherwise proceed in any manner permitted by Applicable Law. The Company agrees that the Proceeds Account shall be a blocked account and that upon the irrevocable deposit of funds into the Proceeds Account, the Company shall not have any right of withdrawal with respect to such funds. Accordingly, the Company irrevocably waives until the termination of this Agreement in accordance with Section 23 the right to make any withdrawal from the Proceeds Account and the right to instruct Aron to honor drafts against the Proceeds Account.

(d) Application of Proceeds. The cash proceeds actually received from the sale or other disposition or collection of the Collateral, and any other amounts received in respect of the Collateral the application of which is not otherwise provided for herein, shall be applied as provided in Article 19 of the S&O Agreement. Any surplus thereof which exists after payment and performance in full of the Secured Obligations shall be promptly paid over to the Company or otherwise disposed of in accordance with the UCC or other Applicable Law. The Company shall remain liable to Aron for any deficiency which exists after any sale or other disposition or collection of Collateral.

SECTION 11 Certain Waivers. The Company waives, to the fullest extent permitted by law, (a) any right of redemption with respect to the Collateral, whether before or after sale hereunder, and all rights, if any, of marshalling of the Collateral or other collateral or security for the Secured Obligations; (b) any right to require Aron (i) to proceed against any Person, (ii) to exhaust any other collateral or security for any of the Secured Obligations, (iii) to pursue any remedy in Aron's power, or (iv) to make or give any presentments, demands for performance, notices of nonperformance, protests, notices of protests or notices of dishonor in connection with any of the Collateral; and (c) all claims, damages, and demands against Aron arising out of the repossession, retention, sale or application of the proceeds of any sale of the Collateral, unless such damages, and claims and demands in respect thereof, are determined by a court of competent jurisdiction by final and non-appealable judgment to have resulted from Aron's gross negligence or willful misconduct.

SECTION 12 Notices. All notices or other communications hereunder shall be given in the manner and to the addresses specified in the S&O Agreement, subject to the terms set forth in Article 27 of the S&O Agreement. Each of the Company and Aron may change its address, facsimile number or email address for notices and other communications hereunder by notice to the other parties.

SECTION 13 No Waiver; Cumulative Remedies. No failure on the part of Aron to exercise, and no delay in exercising, any right, remedy, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, remedy, power or privilege preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights and remedies under this Agreement are cumulative and not exclusive of any rights, remedies, powers and privileges that may otherwise be available to Aron.

SECTION 14 Costs and Expenses; Indemnification; Other Charges.

(a) Costs and Expenses. The Company agrees to pay:

(i) all reasonable out-of-pocket expenses incurred by Aron and its Affiliates (including the reasonable fees, charges and disbursements of counsel for Aron), and shall pay all reasonable fees and time charges and disbursements for attorneys who may be employees of Aron, in connection with the preparation, negotiation, execution, delivery and administration of this Agreement, or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), including in connection with the preservation or custody of any Collateral;

(ii) all reasonable out-of-pocket expenses incurred by Aron (including the reasonable fees, charges and disbursements of any counsel for Aron), and shall pay all reasonable fees and time charges for attorneys who may be employees of Aron, in connection with the enforcement or protection of its rights (A) in connection with this Agreement, including its rights under this Section, (B) in connection with the Secured Obligations, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of the Secured Obligations, and including in or in connection with any Insolvency Proceeding, and (C) in connection with the protection, sale or collection of, or other realization upon, any of the Collateral, including all expenses of taking, collecting, holding, sorting, handling, preparing for sale, selling, or the like, and other such expenses of sales and collections of Collateral; and

(iii) all title, appraisal (including the allocated cost of internal appraisal services), survey, audit, environmental inspection, consulting, search, recording, filing and similar costs, fees and expenses incurred or sustained by Aron or any of its Affiliates in connection with this Agreement or the Collateral.

(b) Indemnification. The Company hereby agrees to indemnify Aron, any Affiliate thereof (and any agent thereof) and each Related Party of any of the foregoing Persons (each such Person being called an “Indemnitee”) against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and related expenses (including the reasonable fees, charges and disbursements of any counsel for any Indemnitee), and shall indemnify and hold harmless each Indemnitee from all reasonable fees and time charges and disbursements for attorneys who may be employees of any Indemnitee, incurred by any Indemnitee or asserted against any Indemnitee by any Person (including the Company), other than such Indemnitee and its Related Parties, arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement or any agreement or instrument contemplated thereby, the performance by the parties hereto of their respective obligations hereunder or thereunder or the consummation of the transactions contemplated hereby or thereby, (ii) the

Secured Obligations or the use or proposed use of the proceeds therefrom, or (iii) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by the Company, and regardless of whether any Indemnitee is a party thereto; *provided* that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related expenses (x) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence or willful misconduct of such Indemnitee or (y) result from a claim brought by the Company against an Indemnitee for breach in bad faith of such Indemnitee's obligations hereunder or under any other Transaction Document, if the Company has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction. This Section shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(c) Payment. All amounts due under this Section shall be payable not later than 10 days after demand therefor.

(d) Interest. Any amounts payable to Aron under this Section 14 or otherwise under this Agreement if not paid upon demand shall bear interest from the date of such demand until paid in full, at the Default Interest Rate in accordance with the S&O Agreement.

(e) Survival. The agreements in this Section 14 shall survive the termination of the Agreement and the repayment of all Secured Obligations.

SECTION 15 Binding Effect. This Agreement shall be binding upon, inure to the benefit of and be enforceable by the Company, Aron, each indemnified Person referred to in Section 14, and their respective successors and assigns and shall bind any Person who becomes bound as a debtor to this Agreement.

SECTION 16 Governing Law. THIS AGREEMENT SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED UNDER THE LAWS OF THE STATE OF NEW YORK WITHOUT GIVING EFFECT TO ITS CONFLICT OF LAWS PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER STATE.

SECTION 17 Submission to Jurisdiction. EACH OF THE PARTIES HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF ANY FEDERAL OR STATE COURT OF COMPETENT JURISDICTION SITUATED IN THE CITY OF NEW YORK, (WITHOUT RECOURSE TO ARBITRATION UNLESS BOTH PARTIES AGREE IN WRITING), AND TO SERVICE OF PROCESS BY CERTIFIED MAIL, DELIVERED TO THE PARTY AT THE ADDRESS INDICATED IN SCHEDULE M OF THE S&O AGREEMENT. EACH PARTY HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION TO PERSONAL JURISDICTION, WHETHER ON GROUNDS OF VENUE, RESIDENCE OR DOMICILE.

SECTION 18 Waiver of Jury Trial. EACH PARTY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY PROCEEDINGS RELATING TO THIS AGREEMENT.

SECTION 19 Entire Agreement; Amendment. THE TERMS OF THIS AGREEMENT CONSTITUTE THE ENTIRE AGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE MATTERS SET FORTH IN THIS AGREEMENT, AND NO REPRESENTATIONS OR WARRANTIES SHALL BE IMPLIED OR PROVISIONS ADDED IN THE ABSENCE OF A WRITTEN AGREEMENT TO SUCH EFFECT BETWEEN THE

PARTIES. THIS AGREEMENT SHALL NOT BE AMENDED EXCEPT BY THE WRITTEN AGREEMENT OF THE PARTIES HERETO.

SECTION 20 Severability. If any Article, Section or provision of this Agreement shall be determined to be null and void, voidable or invalid by a court of competent jurisdiction, then for such period that the same is void or invalid, it shall be deemed to be deleted from this Agreement and the remaining portions of this Agreement shall remain in full force and effect.

SECTION 21 Counterparts. This Agreement may be executed by the parties in separate counterparts and initially delivered by facsimile transmission or otherwise, with original signature pages to follow, and all such counterparts shall together constitute one and the same instrument.

SECTION 22 No Inconsistent Requirements. The Company acknowledges that this Agreement and the other Transaction Documents may contain covenants and other terms and provisions variously stated regarding the same or similar matters, and agrees that all such covenants, terms and provisions are cumulative and all shall be performed and satisfied in accordance with their respective terms.

SECTION 23 Termination. Upon termination of the S&O Agreement and the other Transaction Documents and the performance of the obligations thereunder, the security interests created by this Agreement shall terminate and Aron shall promptly execute and deliver to the Company such documents and instruments reasonably requested by the Company as shall be necessary to evidence the termination of all security interests given by the Company to Aron hereunder.

[Remainder of page intentionally left blank; signature pages follow]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the date first above written.

COMPANY:

PAR HAWAII REFINING, LLC

By: /s/ William Monteleone

Name: William Monteleone

Title: Chief Financial Officer

Signature Page 1 to Second Amended and Restated Pledge and Security Agreement

ARON:

J. ARON & COMPANY LLC

By: /s/ Simon Collier

Name: Simon Collier

Title: Attorney In Fact

SUBSIDIARIES OF THE REGISTRANT

<u>Name</u>	<u>Jurisdiction</u>
Hermes Consolidated, LLC	Delaware
Par Hawaii, LLC	Delaware
Par Hawaii Refining, LLC	Hawaii
Par Hawaii Shared Services, LLC	Delaware
Par Pacific Hawaii Property Company, LLC	Delaware
Par Petroleum Finance Corp.	Delaware
Par Petroleum, LLC	Delaware
Par Piceance Energy Equity LLC	Delaware
Par Tacoma, LLC	Delaware
U.S. Oil and Refining Co.	Delaware
Wyoming Pipeline Company LLC	Wyoming
Laramie Energy, LLC (46.0% interest)	Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-192519, 333-195662, 333-204597, 333-212107, 333-213471, 333-214593, 333-228933, 333-229278 and 333-262690 on Form S-3 and Registration Statement Nos. 333-185612, 333-208575, 333-216518, 333-225054 and 333-256130 on Form S-8 of our reports dated February 25, 2022, relating to the financial statements of Par Pacific Holdings, Inc. and the effectiveness of Par Pacific Holdings, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2021.

/s/ DELOITTE & TOUCHE LLP

Houston, Texas
February 25, 2022

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)/15d-14(a) PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, William Pate, certify that:

1. I have reviewed this annual report on Form 10-K of Par Pacific Holdings, Inc.;
 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
-

- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2022

/s/ William Pate

William Pate

President and Chief Executive Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)/15d-14(a) PROMULGATED UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, William Monteleone, certify that:

1. I have reviewed this annual report on Form 10-K of Par Pacific Holdings, Inc.;
 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
-

- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2022

/s/ William Monteleone

William Monteleone

Chief Financial Officer

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Par Pacific Holdings, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2021 (the “Report”), as filed with the Securities and Exchange Commission on the date hereof, I, William Pate, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ William Pate

William Pate
President and Chief Executive Officer

February 25, 2022

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Par Pacific Holdings, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2021 (the “Report”), as filed with the Securities and Exchange Commission on the date hereof, I, William Monteleone, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ William Monteleone

William Monteleone
Chief Financial Officer

February 25, 2022