

Dear Fellow Shareholders,

2022 was an extraordinary year as we generated record financial results, bolstered our capital structure with significant debt reduction and returned to a growth posture.

2022 was an extraordinary year as we generated record financial results, bolstered our capital structure with significant debt reduction and returned to a growth posture. Adjusted EBITDA improved from \$126 million in 2021 to \$643 million in 2022. Adjusted Earnings per share improved from \$(0.62) in 2021 to \$7.93 in 2022. 2022 cash from operations was over \$7 per share. Book value improved by 143% from \$266 million at year end 2021 to \$645 million by year end 2022. We reduced net debt by \$443 million during the year from \$468 million at year end 2021 to \$25 million at year end 2022. Our liquidity exceeded \$575 million at year end 2022. And, finally, we announced the acquisition of ExxonMobil's Billings refinery and related logistics and marketing operations in the Rockies, nearly doubling our mainland refining capacity. We expect to close that transaction before mid-year 2023. In summary, we generated significant profits from our existing business and reinvested those profits in a highly accretive growth transaction that further improves our business profile and competitiveness.

2022 market conditions were strong by any measure, driven by: 1) rebounding refined product demand as global activity levels surged back to pre-pandemic levels; 2) reduced refining capacity with over 2.5 million barrels per day (mmbpd) of net closures between 2020 and 2022; and 3) expanding risk premia for waterborne refined products due to European inventory supply chain disruptions created by the Russia – Ukraine conflict. While the macro backdrop was certainly favorable, the foundation for this monumental shift in our financial results was built over the last three years when we not only survived the pandemic but positioned our enterprise for long term success. We made the difficult decision to shut down the smaller of our two Hawaii refineries, invested over \$88 million in plant-wide turnarounds between 2020 and 2022, and restructured many of our customer contracts. Each of these decisions and many more were key to capturing the strong market conditions of the last three quarters.

1

Discussion of Business Units

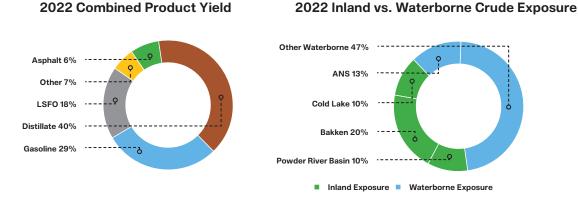
REFINING

Our 2022 refining segment Adjusted EBITDA was \$567 million, compared to \$53 million in 2021. The more than \$500 million profit improvement reflects above mid-cycle market conditions for most of the year, strong reliability and our industry-leading distillate yield.

In Hawaii, we achieved record profitability, more than recovering the losses incurred during the pandemic. Over the last three years, Hawaii market conditions have shifted from record lows to record highs. The Singapore 3-1-2 index from 2020 through 2022 improved from \$3.15 to \$6.22 to \$25.43 per barrel (bbl), annually. The distillate market has been the largest factor pulling the improvement in the index, complementing the distillate orientation of our Hawaii sales mix. The Singapore gasoil crack spread to Brent improved to \$36.41 per bbl in 2022 from \$6.82 per bbl in 2021. Hawaii jet demand returned to near pre-pandemic levels towards the end of 2022. Domestic Hawaii tourist arrivals actually exceeded 2019 levels, while international travelers (particularly Japanese tourists) remain well below 2019 levels.

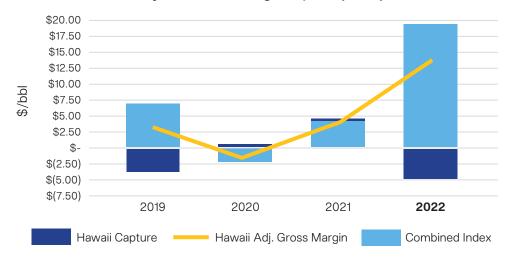
We are pleased with the contributions Hawaii delivered this year as the efforts from the prior three years manifested in our financial results.

The Singapore market continues to evolve with growth in Chinese refining capacity largely offset by closures in other Asia-Pacific regions. Chinese policies continue to signal a long-term focus on serving their domestic market and reducing exports over time. By 2025, the Chinese government plans to cap the country's refining capacity at 20 mmbpd and eliminate refined product exports. Despite China spending the majority of 2022 in some form of COVID lockdowns and 500 mbpd of new Chinese refining capacity coming online in 2022, the country's refined product export volumes averaged 551 mbpd for 2022, 18% below 2021 volumes. Singapore inventory levels for gasoil and kerosene remain well below 5-year lows. Several Asia-Pacific refiners have become the marginal suppliers of diesel to Europe in the face of Russian sanctions on refined products. This trend bears watching over the course of 2023 but most market watchers have been surprised at the Chinese discipline in the export markets in the face of increased capacity and diminished local demand.



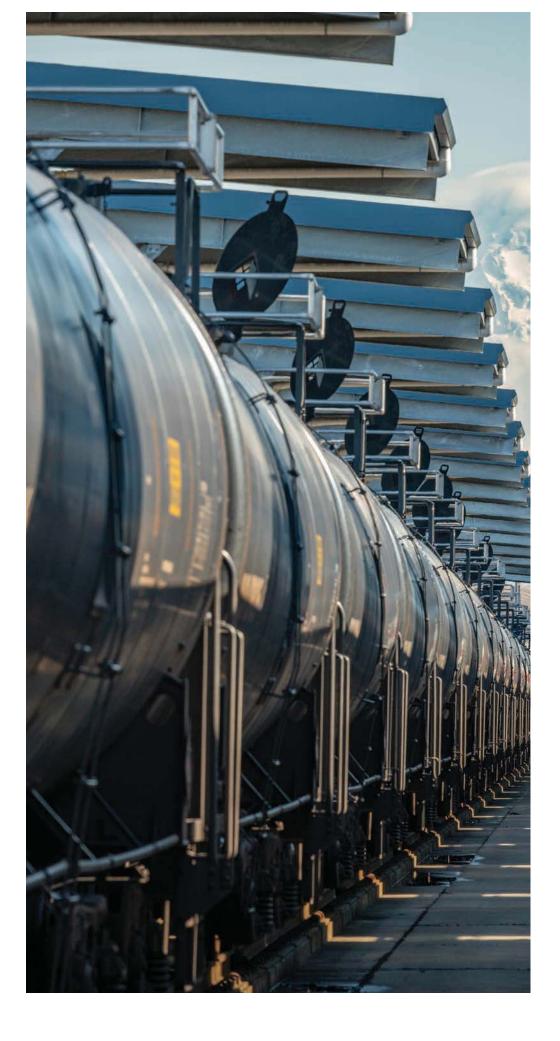
Despite the volatility surrounding the sanctioning of Russian crude oil (Russian crude represented approximately 21% of our 2021 Hawaii crude slate) and the corresponding shifts in global trade flows, we successfully adjusted our Hawaii crude diet and contained total costs. Our landed crude differential versus Brent climbed by approximately \$4.22 per bbl compared to 2021, a modest offset compared to favorable Singapore 3-1-2 product trends. The largest factors driving the increase were the rapid rise in backwardation and freight costs throughout the year.

We are pleased with the contributions Hawaii delivered this year as the efforts from the prior three years manifested in our financial results. The best metric to demonstrate our progress is to evaluate our Adjusted Gross Margin per bbl versus our Hawaii Combined Index (or our capture of this index). We believe this metric best measures the business unit's performance relative to market conditions.



Hawaii Adjusted Gross Margin Capture (\$/bbl)

The largest factors impacting Hawaii capture were related to supply chain and inventory price risk management. Risk management costs were high this year given market volatility; however, these costs ensure we maximize the local market spread between crude oil and refined products, while minimizing exposure to changes in the underlying, absolute price of hydrocarbons. To expand further, the quantity of inventory we hold on-island is significant relative to our monthly sales. Typically, we hold between 130% to 200% of monthly sales as inventory. Simply put, our inventory turns are low compared to a mainland refiner due to the lengthy supply chain required to support a remote market like Hawaii. To manage this risk, we hedge the majority of our inventory to protect against changes in the price of crude oil. The price of this insurance premium is variable and depends upon the shape of the forward commodity curves. As the forward curve becomes more backwardated, the cost of insurance goes up. Insuring our inventory value was expensive this year, yet we believe this risk management strategy is superior to the longer-term returns on capital we could generate by dedicating excess capital to the business unit to effectively absorb the large swings in liquidity. The cost of this balance sheet risk management activity flows through our GAAP income statement as well as Adjusted EBITDA.



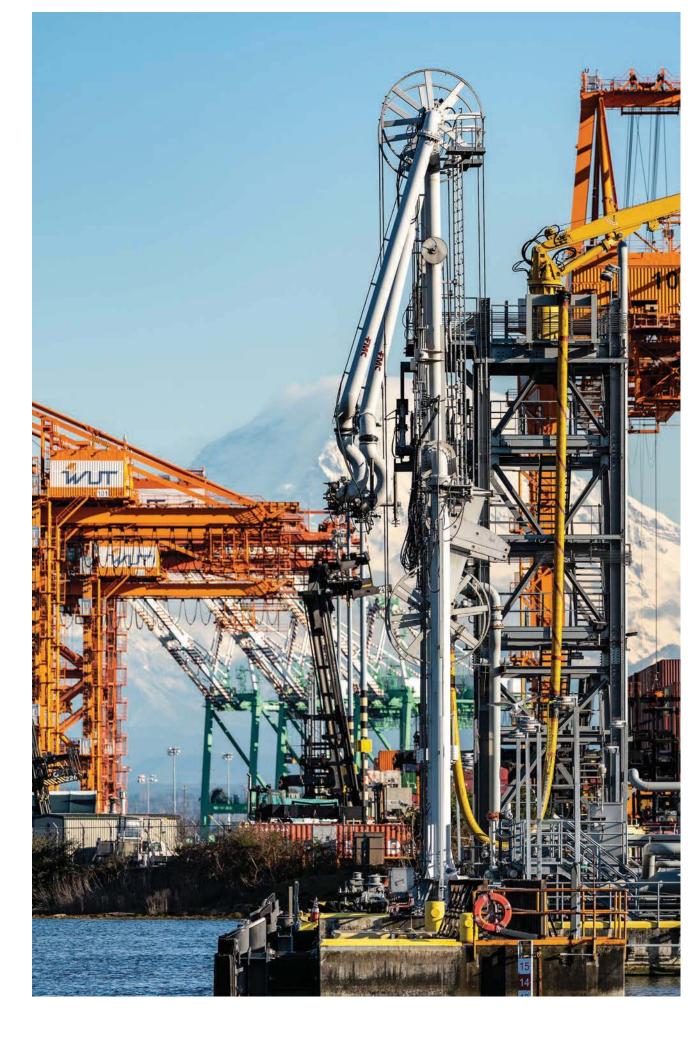
With a well-balanced supply/demand profile in Hawaii, our focus has shifted to enhancing our crude flexibility and maximizing throughput and total distillate production. In 2022 we achieved annual throughput of nearly 82 mbpd. While our core unit reliability was high, we are focused on further debottlenecking the plant to achieve higher levels of throughput.

In Wyoming, we also reported record financial results driven by strong regional market conditions and stable feedstock pricing. PADD IV market dynamics continued to improve with several regional refineries converting all their refining capacity to renewable diesel production, reducing regional supply of other refined products. While the driving season was not as strong as in the prior two years, diesel demand rebounded strongly due to increased industrial activity. We ran our units at record throughput during the third quarter and hit several monthly production records during 2022.

Our Washington refinery generated record financial results after completing a plant-wide turnaround in February 2022. During this turnaround we debottlenecked the facility to increase our maximum rates up to nameplate capacity of 42 mbpd and increased heavy crude processing capabilities. These projects allowed us to capture the rapidly improving market conditions during the last three quarters of the year. Refined product market conditions were strong with the PNW 5-2-2-1 index improving from \$15.95 per bbl in 2021 to \$32.40 per bbl in 2022. Reduced regional supply due to several San Francisco area refiners beginning the conversion to renewable fuel production, elevated refined product waterborne freight costs, and unplanned regional refinery outages were key factors driving robust market conditions. In addition, heavy products performed well with strong vacuum gasoil ("VGO") market conditions in response to reduced Russian supply and attractive asphalt netbacks in the second half of 2022 as crude oil prices stabilized.

Our Washington refinery generated record financial results after completing a plant-wide turnaround in February 2022.

Washington recorded strong post-turnaround reliability, allowing this location to capitalize upon superior access to inland crude compared to our peers who typically source waterborne crudes like Alaskan North Slope ("ANS"). The best demonstration of this feedstock advantage is the spread between WTI and ANS crude. Over the course of 2022 WTI traded at a more than \$8 per bbl discount to ANS compared to a discount of approximately \$3 per bbl during 2021. The largest driver of this widening spread was related to the indirect impact of increasing waterborne freight costs. WTI is priced as a pipeline delivery to Cushing, Oklahoma, yet as U.S. production has grown, approximately 3.3 mmbpd are ultimately exported from the US Gulf coast. In order to compete in the global market, WTI at Houston needed to discount to compensate international crude buyers for rising freight costs. This increase indirectly reduced the price of WTI at Cushing relative to global waterborne crudes like Brent or ANS. On top of the widening WTI to ANS spread, we also experienced expanding discounts for Western Canadian Select ("WCS") versus WTI. In summary, excellent market conditions and operational reliability resulted in record financial performance for our Washington refining operations.





The discussion of our refining business unit would not be complete without reference to the Renewable Fuel Standard ("RFS") and Renewable Identification Numbers ("RINs"). The EPA's inconsistent application of the RFS remains a particular challenge for small refiners. Our balance sheet at year end is in the unusual position of including four years of RFS related liabilities and assets, perhaps the best demonstration of inconsistent EPA application. As of year-end 2022, our total net RIN liability was approximately \$158 million which represents approximately one year of our renewable volume obligation. This liability remains a future cash requirement, but we have several alternatives that allow us to manage our RIN position over the next several years.

As we turn the chapter on 2022's tremendous financial performance, we focus upon the items that are crucial to our long-term success. Strong personal and process safety, environmental stewardship and operational reliability remain critical. We continue to focus upon delivering on our key objective of safely serving our communities. In 2023, we plan to invest in low-capital, high-return debottlenecking projects at each refinery to enable consistent, higher throughputs. Our main focus areas are Hawaii crude flexibility and distillate production, summer peak rates in Wyoming, and Washington renewables co-processing flexibility. We do not have any major planned turnaround outlays over the course of 2023.

LOGISTICS

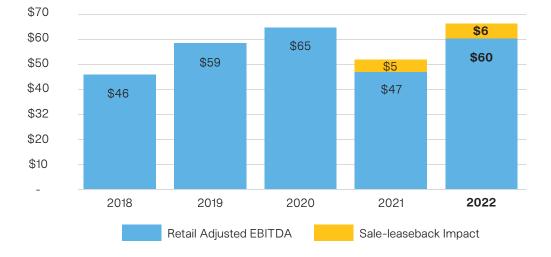
2022 logistics segment Adjusted EBITDA was \$74 million, a modest improvement from \$73 million in 2021. All our logistics assets were highly utilized, and we were able to mitigate increasing costs through improved pricing. Going forward, we expect this segment to perform well and continue to be a stable business unit which offsets volatility inherent in the refining segment. The Washington location presents the most upside for additional third party volumes as we pursue our broader energy transition objectives.

RETAIL

Our retail business continues to generate strong profits. 2022 retail segment Adjusted EBITDA was \$60 million, compared to \$47 million in 2021. Fuel sales volumes have remained relatively flat compared to 2021. Hawaii gasoline volumes have been stickier relative to many mainland markets as international travel grew during the second half of 2022, partially offsetting demand destruction from higher retail pump prices during the first half of the year. With year end retail prices below prior year levels, we are experiencing stable sales and focusing on continued growth in our merchandising efforts.

Our five-year growth profile within the retail segment has been strong yet we believe more opportunity for growth exists.

As we look forward, our growth and new initiatives will leverage significant market positions in Hawaii and the Pacific Northwest. At the end of 2022, we completed a three-store acquisition in the Pacific Northwest that we expect to generate strong returns given the nice fit within our store footprint. We are adding two new to industry sites during 2023, one in Hawaii and another in the Pacific Northwest. In the Idaho/Washington markets, the rollout of our



Retail Adjusted EBITDA (\$mm)

nomnom brand has been well received, and we are investing in our in-store offerings to improve customer experience. Our customer loyalty program was launched in 2022 and is achieving attractive customer growth and enhancing customer retention and cross-over sales from the pump to the store. We are focused on building upon the early success of the nomnom brand, continuing to expand in-store offerings and enhancing our strategic integration with our refining and logistics systems. These objectives should allow us to continue driving strong returns on capital in this more stable business unit.

LARAMIE

We hold a 46% equity investment in Laramie Energy, a natural gas E&P company with operations in western Colorado. Although Laramie is not consolidated into our financial results, we believe the investment has become a more attractive asset in light of natural gas market changes. United States natural gas prices surged in 2022 as global supply and demand balances tightened in the face of Russian trade flow disruptions. The Ukrainian conflict demonstrated the instability of Russian supplies, and European nations have now turned to other sources of natural gas supply. As a result, United States export terminals are loading as much LNG as possible, and this incremental demand resulted in domestic spot natural gas prices rising from a monthly average price of \$3.76 per million British thermal units (mmbtu) in December 2021 to \$5.53 mmbtu in December 2022.

Laramie generated strong financial results in 2022, delivering hedged Adjusted EBITDAX of \$102 million and reducing its net debt (including redeemable preferred stock) to \$114 million at year end 2022 from \$152 million at year end 2021. Laramie also invested approximately \$38 million in drilling and completion activities, reversing recent production declines and resulting in roughly flat production over the course of the year. During the first quarter of 2023 Laramie completed a refinancing of its senior secured credit facilities and redeemed \$74 million of preferred stock. Subject to certain financial covenants and other restrictions, Laramie investors will be permitted to receive distributions under this new credit facility.

We expect to receive a cash distribution of approximately \$10 million during the first quarter of 2023 in conjunction with the refinancing. We remain focused on monetizing our investment in Laramie, likely through a stream of annual distributions. To simplify this investment into a clear financial metric, we own 46% of hedged Adjusted EBITDAX of \$102 million (or \$47 million, net to us) and our proportionate net debt on this asset is 46% of \$114 million (or a net financial liability of \$52 million). Our investors can decide what \$47 million of an upstream business with \$52 million of net debt is worth, but it is certainly greater than our carried cost of \$0.

Capital Allocation

2022 marked a critical inflection point for our balance sheet. Not only were we able to achieve our longer-term debt targets, but we were also able to comfortably pursue the Billings transaction with cash on hand. Cash from operations excluding turnarounds totaled \$482 million compared to a use of \$18 million in 2021. With this cash flow we invested \$83 million into turnarounds and capital projects, deposited \$30 million pursuant to the ExxonMobil Billings Purchase and Sale Agreement, paid down \$64 million in debt and repurchased \$6 million of stock. These activities leave our cash balance at a healthy \$491 million at year end 2022 and well prepared for the Billings acquisition.

We ended 2022 with net debt of \$25 million, compared to year end 2021 and 2020 net debt of \$468 million and \$663 million, respectively. Our stated gross debt objective of \$400 to \$500 million of debt will grow to a target of \$500 to \$600 million pro forma for the Billings acquisition. During the first quarter of 2023, we announced a comprehensive refinancing of our funded debt through a new \$550 million Term Loan B facility. This facility simplifies our capital structure, reduces our cost of debt and positions our company for future growth opportunities.

We grew our book value per share from \$4.56 to \$10.76 over the course of 2022. While this growth is impressive, we would note the book value of our equity remains depressed by the following factors: 1) our Laramie investment is currently carried at \$0 after taking nearly \$128 million in impairments; 2) during the pandemic we impaired our existing operations by approximately \$88 million; 3) our RIN assets are carried at cost, which is approximately \$130 million below the market value; and 4) our Washington inventory is carried at a LIFO value of approximately \$55.24 per bbl which is \$21.10 per bbl below market at year end. In aggregate, these items total to approximately \$6.50 per share in incremental book value. In addition, the balance of our \$1.2 billion net operating loss carryforward (NOL) is not on the balance sheet, given the \$330 million valuation allowance we have in place. The NOL was an extremely valuable asset this year; we consumed approximately 25% of our NOL balance, which enhanced our cash flow by approximately \$100 million.

Given our strong cash flows, we have closely studied capital allocation alternatives and considered opportunities to reduce debt, return capital to shareholders, invest in the business and pursue M&A. We view our capital allocation framework as dynamic based

upon the opportunity set at the time. Over the course of the year our capital allocation decisions shifted from debt reduction and returning capital to shareholders towards reserving capital for future growth as our confidence and interest in the Billings transaction grew.

As we do every year, we reviewed our acquisition history, and we concluded each of our refining & logistics transactions generated strong investment returns, but the cost of acquisition capital was extraordinarily high. Based on this analysis, we concluded that equity capital is precious and no matter how accretive a transaction may be, there is a premium on having excess capital available to capitalize on growth opportunities. We are, after all, first and foremost a growth company with a string of highly successfully acquisitions. Because of these acquisitions, we have grown cash from operations from \$(1.67) per share in 2014 to over \$7.50 per share in 2022. Funding the Billings equity requirements largely off our balance sheet should minimize this drag from high-cost acquisition financing.

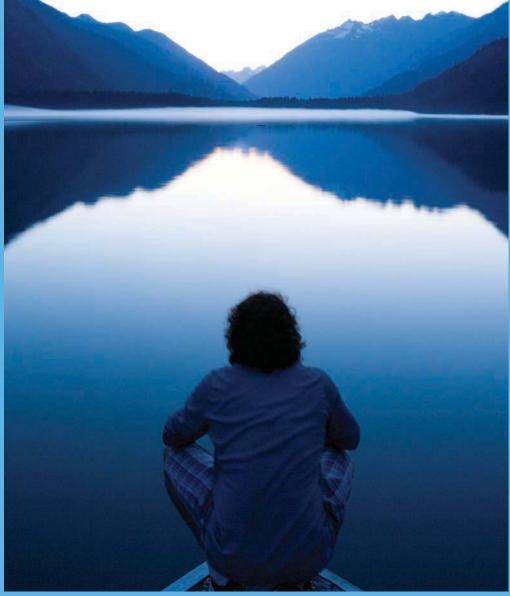
Outside of reserving capital for the Billings transaction, we are also evaluating several energy transition opportunities and reducing the cost of our working capital financing. As a growth-oriented company, we will continue to generate opportunities for excess capital deployment; however, discipline will remain paramount as we measure our growth opportunities against returning capital to shareholders. If we fail to identify accretive transactions that properly reward our investors, we will return the capital to them.

Sustainability and Energy Transition

We were pleased to publish our second annual sustainability report in 2022. We view sustainability as a critical element of our mission to serve our local communities by providing safe and reliable energy to address local demand. We balance this mission with a commitment to reducing our Scope 1 greenhouse gas emissions and lowering our carbon footprint. We made significant progress this year, evaluating initiatives to lower both our Scope 1 and Scope 3 emission profiles. We are exploring several energy transition opportunities to achieve this goal and look forward to engaging with all our stakeholders in creating a sustainable future. The passage of the Inflation Reduction Act and other federal policies provide strong incentives to study energy transition projects as decarbonization remains at the forefront of policymakers' agenda.

In the state of Washington, 2023 marks the first year of the Clean Fuels and Cap & Invest Programs. Over the course of 2022, we began to execute on a co-processing project that will allow us to blend both conventional and plant-based oils into our Tacoma diesel hydrotreater. This project will allow for up to 500 bpd of renewables feedstock processing capacity, driving lower carbon intensity production and credit generation. The project required a small capital outlay and provides us the optionality to blend renewable feedstocks into our operations based on economic signals.

We view sustainability as a critical element of our mission to serve our local communities by providing safe and reliable energy to address local demand.



Over the longer term, we are developing a larger opportunity to manufacture on-site green hydrogen, leveraging our existing infrastructure and proximity to carbon-free, affordable hydropower. We are working closely with stakeholders from all levels to progress this project which will likely include a co-located Sustainable Aviation Fuel ("SAF") facility as the anchor offtaker of the green hydrogen. If we reach a final investment decision on this combined hydrogen electrolyzer and SAF facility, we believe we will have the lowest carbon-intensity jet fuel in the world. In Hawaii, we announced a memorandum of understanding with Hawaiian Airlines to develop SAF via conversion of our underutilized diesel hydrotreater. We expect to make final investment decision on this project in the first half of 2023 as we develop a durable feedstock strategy. Federal incentives stacked with our logistical capabilities along the west coast allow for a competitive project.

Outlook

As we enter 2023, while market volatility persists, we are highly optimistic about the future of our company. The events of the last three years served as extreme shocks to economic supply and demand and society at large. The inflationary result of the strong policy stimulus from governments and central banks is unsurprising but, nonetheless, destabilizing to a world that has lived through more than twenty years of relative stability and growth. Simultaneously, global energy and agricultural trade flows have largely been redrawn in the face of the largest conflict in Europe since World War II. The energy map remains in disarray and how energy trade flows emerge from the past three years' disruption is a key unknown. Organizationally, we are prepared for a wide array of outcomes. Our corporate strategy of owning downstream systems in logistically complex markets is increasingly valuable in a world shifting towards shorter supply chains, decarbonization and geopolitical instability. Each of these factors is inherently intermittent and, in most cases, inflationary. The value of a reliable, local energy supply chain has been critical to underpinning long-term economic growth for centuries. The last 36 months has certainly reminded all nations of the need for domestic energy security and the importance of local supply. We expect our strategy as a community-oriented energy supplier to thrive in this environment.

We are focused on crisp execution of the Billings transaction and building a strong portfolio of energy transition opportunities.

We own a company with a strong balance sheet and, pro forma for the Billings acquisition, a more durable enterprise. Our asset base and capital structure are well-positioned for down markets, yet above average growth rates over the long term. Over the near term, we are focused upon crisp execution of the Billings transaction in the second quarter of 2023. As always, integration of this scale will be challenging but our key objectives of establishing shared values centered upon strong personal and process safety, capturing synergies, and setting a foundation for improved reliability are keys to generating strong returns from the acquisition. As we look further over the horizon, we are building a strong portfolio of energy transition opportunities in Tacoma and Hawaii (and potentially Billings). Our future remains bright.

We thank you for your support of our enterprise.

On behalf of the management and employees of Par Pacific,

William Pate Chief Executive Officer

William Monteleone President

NON-GAAP Performance Measures

Management uses certain financial measures to evaluate our operating performance that are considered non-GAAP financial measures. These measures should not be considered in isolation or as substitutes or alternatives to their most directly comparable GAAP financial measures or any other measure of financial performance or liquidity presented in accordance with GAAP. These non-GAAP measures may not be comparable to similarly titled measures used by other companies since each company may define these terms differently.

We believe Adjusted Gross Margin (as defined below) provides useful information to investors because it eliminates the gross impact of volatile commodity prices and adjusts for certain noncash items and timing differences created by our inventory financing agreements and lower of cost and net realizable value adjustments to demonstrate the earnings potential of the business before other fixed and variable costs, which are reported separately in Operating expense (excluding depreciation) and Depreciation and amortization. Management uses Adjusted Gross Margin per barrel to evaluate operating performance and compare profitability to other companies in the industry and to industry benchmarks. We believe Adjusted Net Income (Loss) and Adjusted EBITDA (as defined below) are useful supplemental financial measures that allow investors to assess the financial performance of our assets without regard to financing methods, capital structure, or historical cost basis, the ability of our assets to generate cash to pay interest on our indebtedness, and our operating performance and return on invested capital as compared to other companies without regard to financing methods and capital structure. We believe Adjusted EBITDA by segment (as defined below) is a useful supplemental financial measure to evaluate the economic performance of our segments without regard to financing methods, capital structure, or historical cost basis.

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

Adjusted Gross Margin

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

- operating expense (excluding depreciation);
- depreciation and amortization ("D&A");
- impairment expense;
- loss (gain) on sale of assets, net;

- inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments);
- LIFO layer liquidation impacts associated with our Washington inventory;
- Renewable Identification Numbers ("RINs") mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability); and
- unrealized loss (gain) on derivatives.

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

	_	Year Ended December 31, 2022								
		Refining	Logistics	Retail						
Operating Income	\$	401,901 \$	54,049 \$	49,238						
Operating expense (excluding depreciation)		245,992	14,988	81,229						
Depreciation and amortization		65,472	20,579	10,971						
Loss (gain) on sale of assets, net		1	(253)	56						
Inventory valuation adjustment		(15,712)	_	_						
RINs mark-to-market adjustments		105,760	_	_						
Unrealized loss on derivatives		9,336	_	_						
Adjusted Gross Margin ¹	\$	812,750 \$	89,363 \$	141,494						

	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 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		31,841	—	—					
RINs mark-to-market adjustments		66,350	—	_					
Unrealized loss on derivatives	_	1,517	_						
Adjusted Gross Margin ¹	\$	264,448 \$	87,906	\$ 118,940					

	 Year Ended December 31, 20						
	Refining	Logistics		Retail			
Operating Income	\$ (331,826) \$	35,044	\$	24,211			
Operating expense (excluding depreciation)	199,738	13,581		64,108			
Depreciation and amortization	53,930	21,899		10,692			
Impairment expense	55,989	_		29,817			
RINs mark-to-market adjustments	81,709	_		_			
Unrealized loss on derivatives	 (4,804)	_		_			
Adjusted Gross Margin ¹	\$ 64,730 \$	70,524	\$	128,828			

	Year Ended December 31, 2019							
		Refining	Logistics		Retail			
Operating Income (Loss)	\$	93,781 \$	59,075	\$	49,245			
Operating expense (excluding depreciation)		234,582	11,010		67,307			
Depreciation and amortization		55,832	17,017		10,035			
Inventory valuation adjustment		19,436	—		—			
RINs mark-to-market adjustments		(4,804)	—		—			
Unrealized loss on derivatives		8,988	_		_			
Adjusted Gross Margin ¹	\$	407,815 \$	87,102	\$	126,587			

¹ For the year ended December 31, 2022 there was no LIFO liquidation adjustment or impairment expense. For the year ended December 31, 2021 there was no LIFO liquidation adjustment. For year ended December 31, 2020 there was no LIFO liquidation adjustment or loss (gain) on sale of assets. For the year ended December 31, 2019 there was no LIFO liquidation adjustment, impairment expense, or loss (gain) on sale of assets.

Adjusted Net Income (Loss) and Adjusted EBITDA

Adjusted Net Income (Loss) is defined as Net Income (Loss) excluding:

- inventory valuation adjustment (which adjusts for timing differences to reflect the economics
 of our inventory financing agreements, including lower of cost or net realizable value
 adjustments, the impact of the embedded derivative repurchase or terminal obligations,
 contango (gains) and backwardation losses associated with our Washington inventory and
 intermediation obligation, and purchase price allocation adjustments);
- the LIFO layer liquidation impacts associated with our Washington inventory;
- RINs mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability);
- unrealized (gain) loss on derivatives;
- acquisition and integration costs;
- debt extinguishment and commitment costs;
- increase in (release of) tax valuation allowance and other deferred tax items;

- changes in the value of contingent consideration and common stock warrants;
- severance costs;
- (gain) loss on sale of assets;
- impairment expense;
- impairment expense associated with our investment in Laramie Energy and our share of Laramie Energy's asset impairment losses in excess of our basis difference; and
- Par's share of Laramie Energy's unrealized loss (gain) on derivatives.

Adjusted EBITDA is defined as Adjusted Net Income (Loss) excluding:

- D&A;
- interest expense and financing costs;
- equity losses (earnings) from Laramie Energy excluding Par's share of unrealized loss (gain) on derivatives, impairment of Par's investment, and our share of Laramie Energy's asset impairment losses in excess of our basis difference; and
- income tax expense (benefit) excluding the increase in (release of) tax valuation allowance.

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

	Year Ended December 31,				
	 2022	2021			
Net Income (Loss)	\$ 364,189 \$	(81,297)			
Inventory valuation adjustment	(15,712)	31,841			
RINs mark-to-market adjustments	105,760	66,350			
Unrealized loss (gain) on derivatives	9,336	1,517			
Acquisition and integration costs	3,663	87			
Debt extinguishment and commitment costs	5,329	8,144			
Severance costs	2,272	84			
Loss (gain) on sale of assets, net	(169)	(64,697)			
Impairment expense	—	1,838			
Adjusted Net Income (Loss)	 474,668	(36,133)			
Depreciation and amortization	99,769	94,241			
Interest expense and financing costs, net	68,288	66,493			
Income tax expense	 710	1,021			
Adjusted EBITDA ¹	\$ 643,435 \$	125,622			

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

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

		Year Dece		
	_	2022		2021
Adjusted Net Income (Loss)	\$	474,668	\$	(36,133)
Undistributed Adjusted Net Income allocated to participating securities		_		
Adjusted Net Income (Loss) attributable to common stockholders		474,668		(36,133)
Plus: effect of convertible securities		—		_
Numerator for diluted income (loss) per common share	\$	474,668	\$	(36,133)
Basic weighted-average common stock shares outstanding		59,544		58,268
Add dilutive effects of common stock equivalents ¹		339		—
Diluted weighted-average common stock shares outstanding		59,883		58,268
Basic Adjusted Net Income (Loss) per common share	\$	7.97	\$	(0.62)
Diluted Adjusted Net Income (Loss) per common share	\$	7.93	\$	(0.62)

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

Adjusted EBITDA by Segment

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

- D&A;
- inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments);
- the LIFO layer liquidation impacts associated with our Washington inventory;
- RINs mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability);
- unrealized (gain) loss on derivatives;
- acquisition and integration costs;
- severance costs;
- (gain) loss on sale of assets; and
- impairment expense.

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

The following table presents a reconciliation of Adjusted EBITDA by segment to the most directly comparable GAAP financial measure, operating income (loss) by segment, on a historical basis, for selected segments, for the periods indicated (in thousands):

	Year Ended December 31, 2022							2
	_	Refining	I	Logistics		Retail		Corporate and Other
Operating income (loss) by segment	\$	401,901	\$	54,049	\$	49,238	\$	(67,285)
Depreciation and amortization		65,472		20,579		10,971		2,747
Inventory valuation adjustment		(15,712)		—		_		—
RINs mark-to-market adjustments		105,760		—		_		—
Unrealized loss (gain) on derivatives		9,336		—		—		—
Acquisition and integration costs		—		—		_		3,663
Severance costs		40		13		22		2,197
Loss on sale of assets, net		1		(253)		56		27
Other income (loss), net		—		—		_		613
Adjusted EBITDA 1	\$	566,798	\$	74,388	\$	60,287	\$	(58,038)

	Year Ended December 31, 2021					
	_	Refining	Logistics		Retail	Corporate and Other
Operating income (loss) by segment	\$	(88,799)	\$ 51,159	\$	81,249 \$	6 (51,228)
Depreciation and amortization		58,258	22,044		10,880	3,059
Inventory valuation adjustment		31,841	—		—	—
RINs mark-to-market adjustments		66,350	—		—	—
Unrealized loss (gain) on derivatives		1,517	—		—	—
Acquisition and integration costs		—	—		—	87
Severance costs		61	23		—	—
Loss on sale of assets, net		(19,659)	(19)		(45,034)	15
Impairment expense		1,838	_		_	_
Gain on curtailment of pension obligation		1,802	228		2	_
Other income (loss), net	_	_	_		_	(52)
Adjusted EBITDA ¹	\$	53,209	\$ 73,435	\$	47,097 \$	6 (48,119)

	Year Ended December 31, 2020					
	Refining	Logistics		Retail		Corporate and Other
Operating income (loss) by segment	\$ (331,826	6) \$ 35,044	\$	24,211	\$	(45,427)
Depreciation and amortization	53,930	21,899		10,692		3,515
Inventory valuation adjustment	9,994	· _		—		_
RINs mark-to-market adjustments	81,709			—		_
Unrealized loss (gain) on derivatives	(4,804	+) —		—		_
Acquisition and integration costs	_	· _		—		614
Severance costs	312	2 8		—		192
Impairment expense	55,989) —		29,817		_
Other income (loss), net				_	_	1,049
Adjusted EBITDA 1	\$ (134,696	6) \$ 56,951	\$	64,720	\$	(40,057)

	Year Ended December 31, 2019							
		Refining		Logistics		Retail		Corporate and Other
Operating income (loss) by segment	\$	93,781	\$	59,075	\$	49,245	\$	(54,121)
Depreciation and amortization		55,832		17,017		10,035		3,237
Inventory valuation adjustment		19,436		_		—		—
RINs mark-to-market adjustments		(4,804)		_		—		—
Unrealized loss (gain) on derivatives		8,988		_		—		—
Acquisition and integration costs		_		_		—		4,704
Other income (loss), net	_	_		_		—		2,516
Adjusted EBITDA 1	\$	173,233	\$	76,092	\$	59,280	\$	(43,664)

	Year Ended December 31, 2018						
	Refining	I	Logistics		Retail		Corporate and Other
Operating income (loss) by segment	\$ 73,269	\$	33,389	\$	37,232	\$	(61,949)
Depreciation and amortization	32,483		6,860		8,962		4,337
Inventory valuation adjustment	(16,875)		—		—		_
RINs mark-to-market adjustments	4,544		—		—		_
Unrealized loss (gain) on derivatives	(1,497)		_		_		_
Acquisition and integration costs	_		_		_		10,319
Other income (loss), net	_		—		—		1,046
Adjusted EBITDA 1	\$ 91,924	\$	40,249	\$	46,194	\$	(46,247)

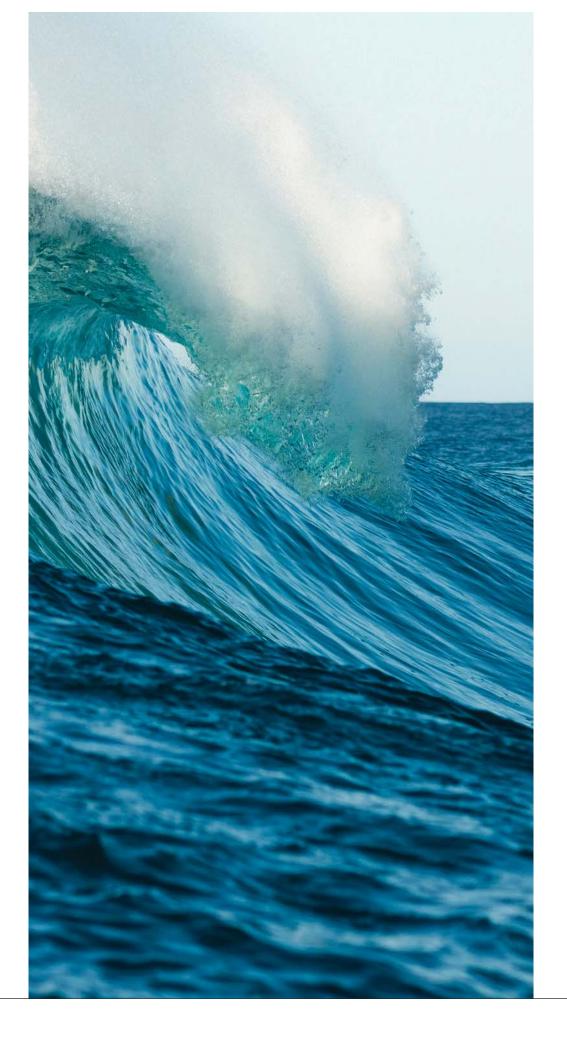
¹ For the year ended December 31, 2022, there was no LIFO liquidation adjustment, impairment expense, or gain on curtailment of pension obligation. For the year ended December 31, 2021 there was no LIFO liquidation adjustment. For the year ended December 31, 2020 there was no LIFO liquidation adjustment, loss on sale of assets, or gain on curtailment of pension obligation. For the years ended December 31, 2019 and 2018 there was no LIFO liquidation adjustment, impairment expense, loss on sale of assets, or gain on curtailment of pension obligation, or severance costs.

Laramie Energy Adjusted EBITDAX

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

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

		Year Ended December 31,			
	_	2022	2021		
Net income (loss)	\$	12,065 \$	32,476		
Commodity derivative loss (gain)		78,532	42,995		
Gain (loss) on settled derivative instruments		(41,034)	(10,578)		
Interest expense and loan fees		14,930	17,155		
Gain on extinguishment of debt		—	(695)		
Non-cash preferred dividend		10,409	7,224		
Depreciation, depletion, amortization, and accretion		25,982	28,860		
Exploration and geological and geographical expense		—	342		
Bonus accrual		—	602		
Loss (gain) on disposal of assets		821	(6)		
Expired acreage (non-cash)		292	2,667		
Total Adjusted EBITDAX	\$	101,997 \$	121,042		



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, 2022

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)

<u>Delaware</u> (State or other jurisdiction of incorporation or organization) <u>84-1060803</u> (I.R.S. Employer Identification No.)

825 Town & Country Lane, Suite 1500	
Houston, <u>Texas</u>	<u>77024</u>
(Address of principal executive offices)	(Zip Code)

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	Name of Exchange on which registered
Common stock, \$0.01 par value	PARR	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 \boxtimes No \square

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 \square No \blacksquare

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 \boxtimes No \square

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 \boxtimes No \square

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	×	Accelerated filer	
Non-accelerated filer		Smaller reporting company	
		Emerging growth company	

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. \Box

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.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. \Box

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to \$240.10D-1(b). \Box

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 \$891,844,502 based on the closing sales price of the common stock on the New York Stock Exchange on June 30, 2022. As of February 21, 2023, 60,668,152 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.

TABLE OF CONTENTS

PAGE

PART I	
Item 1. BUSINESS	<u>1</u>
Item 1A. RISK FACTORS	<u>16</u>
Item 1B. UNRESOLVED STAFF COMMENTS	<u>30</u>
Item 2. PROPERTIES	<u>30</u>
Item 3. LEGAL PROCEEDINGS	<u>31</u>
Item 4. MINE SAFETY DISCLOSURES	<u>31</u>

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES	<u>32</u>
Item 6. [RESERVED]	<u>34</u>
Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	<u>35</u>
Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	<u>63</u>
Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	<u>64</u>
Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	<u>64</u>
Item 9A. CONTROLS AND PROCEDURES	<u>64</u>
Item 9B. OTHER INFORMATION	<u>68</u>
Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTION	<u>68</u>

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE	<u>68</u>
Item 11. EXECUTIVE COMPENSATION	<u>68</u>
Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	<u>68</u>
Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	<u>68</u>
Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES	<u>68</u>

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	<u>69</u>
Item 16. FORM 10-K SUMMARY	<u>F-58</u>

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.
CO ₂	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.
NOx	Nitrogen oxides.
refined products	Petroleum products, such as gasoline, diesel, and jet fuel, that are produced by a refinery.
SO ₂	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.

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 155 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 121 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 in Washington and Idaho sell gasoline, diesel, and retail merchandise.

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"), an entity focused on developing and producing natural gas in Garfield, Mesa, and Rio Blanco counties, Colorado.

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 2022, 2021 and 2020. As of December 2022, the epidemiological conditions in regions in which we operate had improved significantly and most restrictions have been relaxed. This, combined with widespread vaccine availability, has lessened the perceived severity of the pandemic, leading to higher risk tolerance for individuals and increased travel and public contact in the regions in which we operate. However, a resurgence of the virus or another pandemic event could cause a return to severe restrictions, leading to a deterioration of macroeconomic conditions and our industry. 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 Mbpd of Crude unit operating throughput capacity. The Hawaii refinery's major processing units, listed in the table below, produce liquified petroleum gas ("LPG"), naphtha, gasoline, jet fuel, ULSD, 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, 2022:

Hawaii Refining Unit	Capacity (Mbpd)
Crude Oil Distillation Units	94
Vacuum Distillation Units	40
Hydrocracker	19
Catalytic Reformer	13
Visbreaker / Crude Oil Distillation	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. Effective March 3, 2022, we suspended purchases of Russian crude oil as a response to the Russia-Ukraine conflict.

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. For example, in 2022, our Hawaii refinery

leased 0.3-0.4 MMBbls of capacity to the Defense Logistics Agency ("DLA") until April 2024. Revenue from this agreement is reported in our Hawaii Logistics segment.

We finance our Hawaii refinery's hydrocarbon inventories through a supply and offtake agreement (the "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 81.8 Mbpd, or 87% of crude oil utilization, to meet local demand for the year ended December 31, 2022. Our Par West refinery has been shut down and is not expected to restart. 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. We believe the 3-1-2 Singapore Crack Spread is the best market indicator for our Hawaii operations. The 3-1-2 Singapore Crack Spread is computed by taking one barrel of gasoline and two barrels of distillates (diesel and jet fuel) from three barrels of Brent crude oil. The 3-1-2 Singapore Crack Spread averaged \$25.43 per barrel during the year ended December 31, 2022, with a low of \$16.21 per barrel average in the first quarter and a high of \$36.80 per barrel average in the second quarter.

Below is a summary of average crack spreads for the years ended December 31, 2022, 2021, and 2020:

		Year Ended December 31,					
	2022 2021			2021	2020		
3-1-2 Singapore Crack Spread	\$	25.43	\$	6.22	\$	3.15	

Washington Refinery

Our Washington refinery is located in Tacoma, Washington, on approximately 139 fee-owned acres and is rated at 42 Mbpd 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.

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.

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

Set forth below is a summary of the capacity of our Washington refinery as of December 31, 2022:

The Washington refinery operated at an average throughput of 35.5 Mbpd, or 85% utilization, for the year ended December 31, 2022. In 2021 and 2022, we executed turnaround activities in Washington, which resulted in lower throughput and utilization outside of market conditions. 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."

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 \$32.40 per barrel during the year ended December 31, 2022, with a low of \$21.88 per barrel average in the first quarter and a high of \$46.16 per barrel average in the second quarter.

Below is a summary of average crack spreads and crude oil prices per barrel for the years ended December 31, 2022, 2021, and 2020:

	Year Ended December 31,					
		2022		2021	_	2020
Pacific Northwest 5-2-2-1 Index	\$	32.40	\$	15.95	\$	11.44
Bakken Clearbrook		98.09		68.20		37.19
WCS Hardisty		75.43		54.61		27.45
ANS		102.56		71.49		41.77

Wyoming Refinery

Our Wyoming refinery is located in Newcastle, Wyoming, on approximately 121 fee-owned acres and with a capacity of 19 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. In 2022, our Wyoming operations set a new crude production record of processing 19.2 Mbpd.

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 490 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.

Wyoming Refining Unit	Capacity (Mbpd)		
Crude Oil Distillation Unit	19		
Residual Fluid Catalytic Cracker	7		
Catalytic Reformer	4		
Naphtha Hydrotreater	4		
Diesel Hydrotreater	6		
Isomerization	5		

Set forth below is a summary of the capacity of our Wyoming refinery as of December 31, 2022:

The Wyoming refinery operated at an average throughput of 16.5 Mbpd, or 92% utilization, for the year ended December 31, 2022. 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 \$41.32 per barrel during 2022 with a low of \$26.53 per barrel average in the first quarter and a high of \$54.55 per barrel average in the second quarter.

Below is a summary of average crack spreads for the years ended December 31, 2022, 2021, and 2020:

	 Year Ended December 31,					
	2022		2021		2020	
Wyoming 3-2-1 Index	\$ 41.32	\$	29.00	\$	17.80	

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 and sources its crude oil from the Americas, Africa, Asia, and to a lesser extent other sources worldwide throughout 2022. Effective March 3, 2022, we suspended purchases of Russian crude oil as a response to the Russia-Ukraine conflict. 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 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 31 locations in Washington and Idaho where we set the price to the retail consumer. Of these, 34 of the Hawaii locations and all 31 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. In 2023, we plan to convert all of our convenience stores in Hawaii to our Hele brand.

We operate convenience stores at all 31 of our retail fuel outlets in Washington and Idaho. We use our proprietary "nomnom" brand at both the fueling facilities and stores. Our current store count includes the acquisition and rebranding in 2022 of three new convenience store locations in Washington acquired in December 2, 2022. Additionally, we broke ground on a new to industry site in a growth area of Spokane, Washington, which is scheduled to open during the second half of 2023.

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 between the Hawaii refinery and the IES Downstream, LLC ("IES") storage facility located approximately 2 miles away. The manifold also allows for transfer of crude oil between the SPM and the IES facility. 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. A significant portion 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 our customers.

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 ten 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 tourism industry continued to rebound in 2022 with visitor counts at 90% of 2019 levels at the end of the year. Despite having slightly fewer visitors, visitor spend was nearly 14% higher near the end of 2022 compared to the same time period in 2019. Domestic arrivals continue to outpace international visitors with domestic travel higher than pre-pandemic levels as international tourism has yet to fully recover.

According to the State Department of Business, Economic Development and Tourism ("DBEDT"), labor market conditions improved in 2022 with unemployment at 4.0% in 2022. Many workers who left the labor force during the pandemic have returned. The Honolulu consumer inflation rate declined in 2022 from 7.5% in March to 6.6% in September. In an effort to curb inflation, the Federal Reserve Bank implemented a series of interest rate hikes which negatively impacted home sales and construction activity also slowed as a result.

The DBEDT economic growth projection for Hawaii in 2023 is 1.7%.

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 Spokane City Department of Economic Development, the unemployment rate was 4.1% through October 2022, and the average annual wage was \$57 thousand in 2021 in positions covered by unemployment insurance.

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 technology and information industry companies. According to the U.S. Bureau of Economic Analysis (the "BEA"), gross domestic product ("GDP") for the State of Washington grew by 6.7% from 2020 to 2021.

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. 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, visitor spending has increased in 2022, above pre-pandemic levels. South Dakota welcomed 14.4 million visitors for the year, resulting in visitor spending of approximately \$4.7 billion in 2022, an increase of 15% over the pre-pandemic spending heights reached in 2019. Additionally, \$1.0 billion, or 21% of tourism dollars, were spent on transportation services, representing an increase of 10% over pre-pandemic transportation spending.

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 4.2% in 2022 and the U.S. Energy Information Administration forecasts that coal production will decrease in 2023.

OTHER OPERATIONS

Laramie Energy

As of December 31, 2022, we owned a 46.0% equity investment in Laramie Energy, an entity focused on developing and 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, 2022.

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, 2022, 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, 2022.

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 evolving 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 CO_2 , 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 CO_2 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 CO_2 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 2021, after essentially all processing and fuel use at the Par West refinery had been suspended, the combined GHG emissions for both refineries in Hawaii totaled 604,673 metric tons (which is 33% 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.

The State of Washington and its political subdivisions passed several climate-focused laws in 2021 that are relevant to our Tacoma, Washington location. These include a low-carbon fuel standard ("LCFS") 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. The Washington Department of Ecology ("WDOE") has issued final rules implementing the LCFS effective on January 1, 2023, implementing requirements that are now in effect and will gradually reduce the carbon intensity of fuels sold in the state over time by annually lowering that limit. The WDOE has also issued final rules with respect to the "cap and trade"-style program with an effective date of November 1, 2022, with credit allocations and auctions commencing during 2023. While these programs are not expected to result in a material impact to earnings in the immediate term, both programs involve gradual tightening of standards over time and will likely require us to take additional actions or credit purchases, some of which may eventually be material. 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.

Additional regulatory, legislative, and judicial developments are likely to occur in the future. The Administration's return to the Paris Climate Accord, actions voiding the prior Administration's orders on the social cost of carbon, and efforts to develop a "whole of government" strategy to aggressively address climate change issues 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 SO_2 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 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, the EPA announced its intent to revisit the December 2020 decision retaining 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, but no action has been taken in that respect to date. We do not currently anticipate that a more stringent NAAQS will materially impact our Hawaii, Washington, or Wyoming operations, but the risk of impact will increase in Washington if and when 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 March 31, 2022, the EPA and NHTSA published a final rule containing additional fuel efficiency standards for cars and light trucks that include 8-10% 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. 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. As of December 31, 2022, our estimate of the renewable volume obligation ("RVO") liability for the 2021 and 2022 compliance years is based on the RFS volumetric requirements which the EPA finalized on June 3, 2022. Those EPA final rules adopted revised deadlines for compliance with RFS standards for prior compliance years, along with new guidelines for compliance in the future.

Additionally, the RFS enables the EPA to exempt certain small refineries from the renewable fuels blending requirements in the event such requirements would cause disproportionate economic hardship to that refinery. In prior years, we have petitioned the EPA for a small refinery waiver for certain of our refineries. However, in 2022, EPA generally denied all small refinery exemption petitions, including ours. Litigation surrounding the 2022 RFS volumetric requirements and other aspects of those final rules, including the EPA's denial of small refinery relief, is ongoing in *Wynnewood Ref. Co., LLC v EPA*.

The RFS may present production and logistics challenges for both the renewable fuels and the 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. On July 2, 2021, a three-judge panel of the U.S. Court of Appeals for the District of Columbia Circuit vacated the EPA's approval of year-round E15 sales. However, on April 29, 2022, in response to supply challenges caused in part by Russia's invasion of Ukraine, the EPA issued an emergency waiver to permit E15 sales through the summer of 2022. 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 pergallon 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, but not thereafter. All our refineries are Tier 3 compliant.

In addition to federal requirements, several states, including Washington, have proposed or enacted low carbon fuel standards applicable to transportation fuels. The Washington LCFS creates a carbon intensity score for transportation fuels and require fuel producers and importers who fall short of increasingly stringent annual 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. 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. We believe we are in substantial compliance with these requirements and that any noncompliance would not have a material adverse effect on us.

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. However, new operating and other regulatory standards could involve additional costs, and failure to comply with such standards could involve penalties, each of which could be material.

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.

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.

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, 2022, 2021, and 2020, we had one customer in our refining segment that accounted for 17%, 13%, and 13%, respectively, of our consolidated revenue. No other customer accounted for more than 10% of our consolidated revenues during the years ended December 31, 2022, 2021, and 2020, and 2020.

HUMAN CAPITAL

Workforce Composition

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, 2022, our workforce consisted of 1,397 employees, including 226 employees, or 16% of our total workforce, at our Hawaii and Washington refineries represented by the United Steelworkers Union ("USW") with collective bargaining agreements effective through January 31, 2026. We value all our employees, represented and non-represented, and constantly strive to maintain and improve satisfactory relationships with them. Our 1,397 employees work in the following operating segments throughout the United States:

Operating Segment	Number of Employees
Refining and Logistics	668
Retail	607
Corporate	122
Total	1,397

Diversity and Inclusion

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 work to develop relationships with local organizations that provide services to historically underserved populations and make them aware of career opportunities at Par. As of December 31, 2022, our workforce consisted of 48% minorities, 36% women, 6% protected veterans, and 6% employees with disabilities.

Par is committed to maintaining a safe, respectful, and inclusive workplace. A work environment that values all employees and their contributions is critical to our success in that it enables each employee to bring their unique perspectives to work each day. By embracing our differences and viewing diversity and inclusion as assets, we are able to realize our full and creative potential. We actively train our management on why diversity and inclusion are critical in the workplace, enabling them to demonstrate allyship and embrace the differences of others, whether cultural or simply diversity of thought. Par is proud to foster an environment where all employees feel safe, heard, and valued and where there is a commitment to creating a greater representation of opinions, backgrounds, and experiences.

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 right thing with the highest ethical standards enables 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 worklife balance. Our benefits include our retirement savings plan with company match, 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 at Par. 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 continuous safety improvement with a keen eye for evaluating and managing risk. We continually monitor and improve the effectiveness of our health and safety programs, policies, 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 forwardlooking 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 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. Additionally, the Alberta government has 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 ongoing 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 continues to be uncertain and depends on numerous factors that continue to evolve, 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 continue to 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.

Geopolitical conflicts, including the conflict between Russia and Ukraine, could increase the cost of our crude oil feedstocks and affect the demand for our products.

In February 2022, following Russia's invasion of Ukraine, the U.S. and other countries announced sanctions against Russia, including restrictions on the importation of Russian crude oil. On March 3, 2022, we suspended purchases of Russian crude oil for our Hawaii refinery in response to the Russia-Ukraine conflict. The U.S. and other countries may impose wider sanctions and take stronger actions should the conflict further escalate. While it is difficult to predict the impact these sanctions will ultimately have on Par Pacific, any further sanctions imposed or actions taken by the U.S. or other countries, and any retaliatory measures by Russia in response, such as restrictions on energy supplies from Russia, may increase our costs, reduce our sales and earnings, or otherwise have an adverse effect on our operations. Additionally, Russia's invasion of Ukraine and the international response to the conflict may exacerbate inflationary pressures, including with respect to commodity prices and energy costs. Rapid and significant changes in commodity costs may increase the cost of our crude oil feedstocks and affect the demand for our 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 CO_2 , 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 and other 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 2022, we incurred \$169.4 million of RINs expense for our Hawaii, Wyoming, and Washington refineries. 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. 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 various courts, 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. 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. 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. Finally, California and a small number of other states have announced a ban on new internal combustion engine-powered cars by 2035. These state actions could 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 CO_2 , 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, Washington and other states have passed low carbon fuel standard legislation and other initiatives, including a cap and invest program, 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, 2022, we have accrued \$14.8 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. Additionally, we are subject to periodic inspection and audit regarding these requirements.

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, GHG emissions), 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. Our agreement with J. Aron also requires us to pay substantial interest expense associated with the facility. Given recent increases in crude oil prices and interest rates, the cost of this facility has significantly increased. We also have the Washington Refinery Intermediation Agreement with MLC whereby our Washington refinery purchases certain 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, 2022, we had \$505.5 million of indebtedness and Interest expense and financing costs, net for the year ended December 31, 2022 was \$68.3 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 as well as our J. Aron Supply and Offtake Agreement and MLC Washington Refinery Intermediation Agreement, 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, 2022, we estimated that we had approximately \$1.2 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 2029 through 2037. 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, 2022, we employed 1,397 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 effective through January 31, 2026. 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.

Changes in the availability of and the cost of labor could adversely affect our business.

Changes in labor markets due to COVID-19 and other factors, including inflationary pressures, have increased the competition for recruiting and retaining talent. As a result of these factors, our business could be adversely impacted by increases in labor, health care, and benefits costs necessary to attract and retain high quality employees with the right skill sets to meet our needs. In addition, our wages and benefits programs may be insufficient to attract and retain top performing employees, especially in a rising wage market. Any failure by us to attract, develop, retain, motivate, and maintain good relationships with qualified individuals could adversely affect our business and results of operations.

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.

The pending acquisition of the ExxonMobil Billings refinery and associated marketing and logistics assets (the "Billings Acquisition") may not close as anticipated.

The Billings Acquisition is expected to close in the second quarter of 2023, subject to the satisfaction of certain closing conditions. If these conditions are not satisfied or waived, the Billings Acquisition will not be consummated. Certain of the conditions that remain to be satisfied include, but are not limited to:

- the continued accuracy of the representations and warranties contained in the Billings Acquisition purchase agreement;
- the performance by each party of its obligations under the Billings Acquisition purchase agreement;
- the absence of any law or timing agreement that prohibits the Billings Acquisition or makes the Billings Acquisition illegal;
- the absence of any suit, action or other proceeding that seeks to prohibit the Billings Acquisition, seeks to make the Billings Acquisition illegal, or seeks substantial damages in connection with the Billings Acquisition;
- the absence of adverse action under the Hart-Scott-Rodino Antitrust Improvement Act of 1976, as amended;
- the absence of a material adverse effect with respect to the sellers relating to the ownership, operation or maintenance of the assets to be purchased in the Billings Acquisition and the assets, condition or business of Exxon Billings Cogeneration, Inc. and Yellowstone Logistics Holding Company or the ability of the sellers to consummate the Billings Acquisition;

- the operation of the Billings refinery in accordance with certain operating standards for a certain period prior to the closing date of the Billings Acquisition;
- the delivery of certain carve-out financial statements related to the assets and equity interests to be acquired in the Billings Acquisition; and
- the execution of certain agreements related to the consummation of the Billings Acquisition.

In addition, we and the sellers can mutually agree to terminate the Billings Acquisition purchase agreement without completing the Billings Acquisition. Further, we or the sellers can unilaterally terminate the Billings Acquisition purchase agreement without the other party's agreement and without completing the Billings Acquisition upon the occurrence of certain events.

We cannot assure you that the pending Billings Acquisition will close on our expected timeframe, or at all, or close without material adjustment.

We may fail to successfully integrate the assets to be acquired in the Billings Acquisition with our existing business in a timely manner, which could have a material adverse effect on our business, financial condition, results of operations, or cash flows, or we may fail to realize all of the expected benefits of the Billings Acquisition, which could negatively impact our future results of operations.

Integration of the assets to be acquired in the Billings Acquisition with our existing business will be a complex, timeconsuming, and costly process. A failure to successfully integrate the assets with our existing business in a timely manner may have a material adverse effect on our business, financial condition, results of operations, or cash flows. The difficulties of combining the assets with our existing operations include, among other things:

- operating a larger combined organization and adding operations;
- difficulties in the assimilation of the acquired assets and operations;
- the diversion of management's attention from other business concerns;
- integrating personnel from diverse business backgrounds and organizational cultures;
- potential environmental or regulatory compliance matters or liabilities; and
- coordinating and consolidating corporate and administrative functions.

If we consummate the Billings Acquisition and if any of these risks or unanticipated liabilities or costs were to materialize, then any desired benefits of the Billings Acquisition may not be fully realized, if at all, and our future results of operations could be negatively impacted. In addition, the assets to be acquired in the Billings Acquisition may actually perform at levels below the forecasts we used to evaluate the assets, due to factors that are beyond our control. If the assets perform at levels below the forecasts we used to evaluate the assets, then our future results of operations could be negatively impacted.

Flaws in our ongoing due diligence in connection with the assets to be acquired in the Billings Acquisition could have a significant negative effect on our financial condition and results of operations.

We conducted due diligence in connection with the Billings Acquisition prior to signing the purchase agreement with respect thereto and are continuing to conduct due diligence during the period between the signing and closing of the Billings Acquisition. Intensive due diligence is time consuming and expensive due to the operations, accounting, finance, and legal professionals who must be involved in the due diligence process and the fact that such efforts do not always lead to a consummated transaction. Diligence may not reveal all material issues that may affect the assets to be acquired in the Billings Acquisition. In addition, factors outside of our control may later arise. If, during the due diligence process, we fail to identify issues specific to the assets, we may be forced to later write down or write off assets, restructure our operations, or incur impairment or other charges that could result in other reporting losses. We cannot assure you that we will not have to take write-downs or write-offs in connection with the acquisitions of certain of the assets and assumption of certain liabilities of the assets to be acquired in the Billings Acquisition, which could have a negative effect on our financial condition and results of operations following closing.

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 \$24.96 on November 22, 2022, and a low of \$11.82 on March 16, 2022, during the year ended December 31, 2022. 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 evaluation of our investment in Laramie Energy, we recorded an impairment charge of \$45.3 million on our consolidated statement of operations for the year ended December 31, 2020. Any additional impairment charges could have a negative impairment charge 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. 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.

Blackrock, Inc., together with its affiliates, owned or had the right to acquire as of December 31, 2022 approximately 13.4% of our outstanding common stock. This level of 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 GHG emissions 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. 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, 2022, 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 21, 2023, there were 122 common stockholders of record. On February 21, 2023, the closing price of our common stock was \$26.50 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.

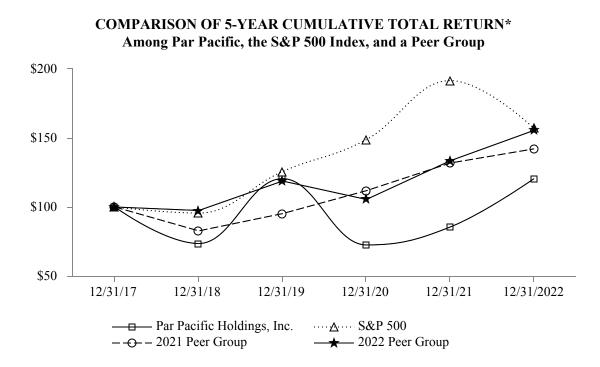
Stock Performance Graph

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, 2022. 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: Calumet Specialty Products Partners, L.P., Casey's General Stores, Inc., Crestwood Equity Partners, L.P., Crossamerica Partners, L.P., CVR Energy, Inc., Darling Ingredients Inc., Delek US Holdings, Inc., Green Plains Inc., HF Sinclair Corp, Nustar Energy, L.P., Parkland Corp, PBF Energy, Inc., Stepan Company, Sunoco, L.P., Tronox Holdings, PLC, and Vertex, Inc.

We changed our industry index comparison to better reflect the our growing refining portfolio and to include companies that better reflect our strategic direction. Our previous industry peer group consisted of: 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.



*\$100 invested on December 31, 2017 in stock or index, including reinvestment of dividends.

Recent Sales of Unregistered Securities

During the year ended December 31, 2022, 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, 2022:

Period	Total number of shares (or units) purchased (1)	paid	rage price per share or unit)	Total number of shares (or units) purchased as part of publicly announced plans or programs (1)	r aj do sha tha un	Maximum number (or pproximate llar value) of res (or units) at may yet be purchased der the plans programs (1)
October 1 - October 31, 2022	35	\$	14.91	—	\$	43,454,006
November 1 - November 30, 2022						43,454,006
December 1 - December 31, 2022	122		22.26			43,454,006
Total	157	\$	20.62		\$	43,454,006

(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 to our consolidated financial statements under Item 8 of this Form 10-K 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

Inflation

In 2022, higher national gasoline prices and U.S. inflation affected most Americans. Following gasoline price highs of approximately \$5 per gallon in summer 2022, prices at the pump fell from June through December, reaching a national average of \$3.11 per gallon. Even with these declines, the overall energy index was up 7.3% year over year as of December 2022. Rising energy prices are, among other factors, indicators of inflation, and the U.S. Federal Reserve (the "Fed") has taken significant steps to curb inflation, increasing its benchmark interest rate six times throughout 2022, from near zero percent at the beginning of 2022 to a range of 4.25% to 4.5% in December 2022. These actions by the Fed are intended to reverse rising U.S. inflation rates, which have increased 6.5% year over year as of the December inflation report released in January 2023, by slowing economic and wage growth. While inflation has increased relative to prior years, we do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases, or price increases could lead to a decline in demand for our products, which could have a material effect on our business, financial condition or results of operations. Please read Item 1A. — Risk Factors for more information on the general macroeconomic environment and its potential impacts on our business.

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, caused severe disruptions in the worldwide economy in 2020 and 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. As of December 2022, the COVID-19 outlook in regions in which we operate has improved significantly and restrictions have been relaxed. This, combined with widespread vaccine availability, has lessened the perceived severity of the pandemic, leading to higher risk tolerance for individuals and increased travel and public contact in the regions in which we operate. However, a resurgence of the virus or another pandemic event could cause a return to severe restrictions, leading to a deterioration of macroeconomic conditions and our industry. For more information, please read "Item 1. — Business — Markets" of this Form 10-K.

The financial results contained in this Annual Report on Form 10-K reflect the rebounding demand driven by decreasing COVID-19 pandemic-related demand suppression experienced in the regions in which we operate. However, even with the eased restrictions and increased risk tolerance of individuals, economic effects of the pandemic are ongoing and the impacts of the virus on people and businesses continue to evolve as of the date of this report. The full magnitude of the impact of these and other events 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. Please read Item 1A. — Risk Factors for more information on the impact of the COVID-19 pandemic and its potential impacts on our business.

Russia-Ukraine conflict

In response to the Russian invasion of Ukraine in February 2022, the international community imposed economic sanctions and other limitations on Russian exports, which further decreased the global supply and drove up the price of crude

oil. On March 3, 2022, we suspended purchases of Russian crude oil for our Hawaii refinery in response to the Russia-Ukraine conflict. We have turned to other grades of crude oil to meet fuel production requirements. In the third quarter, the global market for energy commodities experienced moderately declining prices driven by increased supply expectations after twelve months of rising prices. In response, the Organization of the Petroleum Exporting Companies ("OPEC") announced on October 5, 2022, that it would cut production by two million barrels a day (representing approximately 2% of global oil production) with the intention of raising global oil prices. As of December 2022, OPEC and Russia reaffirmed this production cut, and the European Union has enacted an embargo on Russian oil, further tightening supply. The European Union has also announced that it will implement a limited ban on the purchase of Russian refined and intermediate petroleum products effective February 2023. The overall effect of the conflict and associated actions taken to limit the purchase of Russian petroleum products has been to raise the operating costs of many European and other refineries. As a result, global product cracks have risen to high levels, generally benefiting refineries that are not purchasing Russian feedstocks or using natural gas as a heat source.

As of the date of this Annual Report on Form 10-K, the Russia-Ukraine conflict is ongoing and continues to impact the global economy. We will continue to monitor the effects the conflict has on the global financial markets and our operations. Please read Item 1A. — Risk Factors for more information on the Russia-Ukraine conflict and its potential impacts on our business.

Results of Operations

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Net Income (Loss). Our financial results for the year ended December 31, 2022 improved from a net loss of \$81.3 million for the year ended December 31, 2021 to net income of \$364.2 million for the year ended December 31, 2022. The improvement was primarily driven by widened product crack spreads across all of our refineries and a favorable change in the valuation of the embedded derivatives related to our inventory financing agreements driven by changes in commodity prices. These improvements were partially offset by unfavorable purchased product and crude oil differentials, unfavorable first in, first-out ("FIFO") adjustments, increased intermediation fees of \$79.0 million, and a \$54.7 million increase in RINs expenses. Other factors impacting our results period over period include a 2021 gain on sale of assets of \$63.9 million related to the Hawaii sale-leaseback transactions with no such gain in 2022 and a 14% increase in operating expenses compared to 2021.

Adjusted EBITDA and Adjusted Net Income. For the year ended December 31, 2022, Adjusted EBITDA was \$643.4 million compared to \$125.6 million for the year ended December 31, 2021. The improvement was primarily related to favorable realized refined product crack spreads at all our refineries, partially offset by unfavorable purchased product and crude oil differentials and unfavorable FIFO adjustments, unfavorable inventory financing and environmental compliance costs, and higher operating expenses compared to 2021.

For the year ended December 31, 2022, Adjusted Net Income was \$474.7 million compared to an Adjusted Net Loss of \$36.1 million for the year ended December 31, 2021. The change was primarily related to the same factors described above for the increase in Adjusted EBITDA.

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 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 \$125.6 million compared to a loss of \$53.1 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 \$36.1 million compared to \$216.2 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.

The following table summarizes our consolidated results of operations for the years ended December 31, 2022, 2021, and 2020 (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	En	ded Decemb	er .	31,
	2022		2021		2020
Revenues	\$ 7,321,785	\$	4,710,089	\$	3,124,870
Cost of revenues (excluding depreciation)	6,376,014		4,338,474		2,947,697
Operating expense (excluding depreciation)	342,209		299,669		277,427
Depreciation and amortization	99,769		94,241		90,036
Impairment expense			1,838		85,806
Gain on sale of assets, net	(169)		(64,697)		
General and administrative expense (excluding depreciation)	62,396		48,096		41,288
Acquisition and integration costs	3,663		87		614
Total operating expenses	6,883,882		4,717,708		3,442,868
Operating income (loss)	 437,903		(7,619)		(317,998)
Other income (expense)					
Interest expense and financing costs, net	(68,288)		(66,493)		(70,222)
Debt extinguishment and commitment costs	(5,329)		(8,144)		
Gain on curtailment of pension obligation			2,032		
Other income (expense), net	613		(52)		1,049
Change in value of common stock warrants	_		_		4,270
Equity earnings (losses) from Laramie Energy, LLC	 _				(46,905)
Total other expense, net	(73,004)		(72,657)		(111,808)
Income (loss) before income taxes	364,899		(80,276)		(429,806)
Income tax benefit (expense)	(710)	_	(1,021)	_	20,720
Net income (loss)	\$ 364,189	\$	(81,297)	\$	(409,086)

The following tables summarize our operating income (loss) by segment for the years ended December 31, 2022, 2021, and 2020 (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, 2022		Refining	Lo	gistics (1)	Retail	E	Corporate, liminations d Other (2)	Total
Revenues	\$	7,046,060	\$	198,821	\$ 570,206	\$	(493,302)	\$ 7,321,785
Cost of revenues (excluding depreciation)		6,332,694		109,458	428,712		(494,850)	6,376,014
Operating expense (excluding depreciation)		245,992		14,988	81,229			342,209
Depreciation and amortization		65,472		20,579	10,971		2,747	99,769
Loss (gain) on sale of assets, net		1		(253)	56		27	(169)
General and administrative expense (excluding depreciation)							62,396	62,396
Acquisition and integration costs	_				 		3,663	3,663
Operating income (loss)	\$	401,901	\$	54,049	\$ 49,238	\$	(67,285)	\$ 437,903

Year ended December 31, 2021	Refining	L	ogistics (1)	 Retail	El	Corporate, iminations d 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 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	Lo	ogistics (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 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)

(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 \$493.3 million, \$402.2 million, and \$306.5 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Below is a summary of key operating statistics for the refining segment for the years ended December 31, 2022, 2021, and 2020:

	Year E	Year Ended December				
	2022	2021	2020			
Total Refining Segment						
Feedstocks Throughput (Mbpd)	133.8	135.2	124.1			
Refined product sales volume (Mbpd)	140.3	138.8	136.7			
Hawaii Refinery						
Feedstocks Throughput (Mbpd)	81.8	82.0	72.7			
Yield (% of total throughput)						
Gasoline and gasoline blendstocks	25.6 %	24.8 %	24.6 %			
Distillates	38.8 %	45.0 %	42.2 %			
Fuel oils	31.4 %	26.6 %	29.5 %			
Other products	0.7 %	0.6 %	(0.7)%			
Total yield	96.5 %	97.0 %	95.6 %			
Refined product sales volume (Mbpd)						
On-island sales volume	82.9	82.6	83.5			
Exports sales volume	1.1		0.6			
Total refined product sales volume	84.0	82.6	84.1			
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 13.99	\$ 4.56	\$ (1.31)			
Production costs per bbl (\$/throughput bbl) (2)	4.86	3.98	4.03			
D&A per bbl (\$/throughput bbl)	0.67	0.66	0.55			
Washington Refinery						
Feedstocks Throughput (Mbpd)	35.5	36.3	39.1			
Yield (% of total throughput)						
Gasoline and gasoline blendstocks	24.0 %	23.7 %	23.4 %			
Distillates	34.3 %	34.5 %	35.3 %			
Asphalt	20.3 %	20.7 %	18.8 9			
Other products	18.2 %	18.3 %	19.8 9			
Total yield	96.8 %	97.2 %	97.3 %			
Refined product sales volume (Mbpd)	39.7	39.6	39.6			
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 18.00	\$ 2.98	\$ 4.67			
Production costs per bbl (\$/throughput bbl) (2)	4.01	3.86	3.50			
D&A per bbl (\$/throughput bbl)	2.19	1.57	1.39			

		Year Ended December 31,				
		2022		2021		2020
Wyoming Refinery			_			
Feedstocks Throughput (Mbpd)		16.5		16.9		12.3
Yield (% of total throughput)						
Gasoline and gasoline blendstocks		49.7 %	Ď	47.3 %)	49.2 %
Distillates		43.1 %	Ď	45.7 %)	45.2 %
Fuel oil		2.4 %	Ď	2.2 %)	1.9 %
Other products		2.1 %	Ď	1.7 %)	1.3 %
Total yield		97.3 %	<u></u>	96.9 %		97.6 %
Refined product sales volume (Mbpd)		16.6		16.6		13.0
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$	26.50	\$	14.47	\$	6.97
Production costs per bbl (\$/throughput bbl) (2)		7.32		6.22		8.69
D&A per bbl (\$/throughput bbl)		2.85		2.86		4.34
Market Indices (average \$ per barrel)						
3-1-2 Singapore Crack Spread (3)	\$	25.43	\$	6.22	\$	3.15
Pacific Northwest 5-2-2-1 Index (4)		32.40		15.95		11.44
Wyoming 3-2-1 Index (5)		41.32		29.00		17.80
Crude Oil Prices (average \$ per barrel)						
Brent	\$	99.04	\$	70.95	\$	43.21
WTI		94.33		68.11		39.65
ANS	1	02.56		71.49		41.77
Bakken Clearbrook		98.09		68.20		37.19
WCS Hardisty		75.43		54.61		27.45
Brent M1-M3		3.49		1.12		(0.98)

(1) We calculate Adjusted Gross Margin per barrel by dividing Adjusted Gross Margin by total refining throughput. Adjusted Gross Margin for our Washington refinery is determined under the last-in, first-out ("LIFO") inventory costing method. Adjusted Gross Margin for our other refineries is determined under the first-in, first-out ("FIFO") inventory costing method. The definition of Adjusted Gross Margin was modified beginning with the financial results reported for periods in fiscal year 2022. We have recast Adjusted Gross Margin for prior periods when reported to conform to the modified presentation. Please see discussion of Adjusted Gross Margin below.

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

(5) The profitability of our Wyoming refinery is heavily influenced by crack spreads in nearby markets. We believe the Wyoming 3-2-1 Index is the most representative market indicator for our operations in Wyoming. The Wyoming 3-2-1 Index is computed by taking two parts gasoline and one part distillates (ULSD) as created from three barrels of West Texas Intermediate Crude Oil ("WTI"). Pricing is based 50% on applicable product pricing in Rapid City, South Dakota, and 50% on applicable product pricing in Denver, Colorado.

Below is a summary of key operating statistics for the retail segment for the years ended December 31, 2022, 2021, and 2020:

	Year En	nded Decemb	er 31,
	2022	2021	2020
Retail Segment			
Retail sales volumes (thousands of gallons)	105,456	109,150	102,798

Non-GAAP Performance Measures

Management uses certain financial measures to evaluate our operating performance that are considered non-GAAP financial measures. These measures should not be considered in isolation or as substitutes or alternatives to their most directly comparable GAAP financial measures or any other measure of financial performance or liquidity presented in accordance with GAAP. These non-GAAP measures may not be comparable to similarly titled measures used by other companies since each company may define these terms differently.

We believe Adjusted Gross Margin (as defined below) provides useful information to investors because it eliminates the gross impact of volatile commodity prices and adjusts for certain non-cash items and timing differences created by our inventory financing agreements and lower of cost and net realizable value adjustments to demonstrate the earnings potential of the business before other fixed and variable costs, which are reported separately in Operating expense (excluding depreciation) and Depreciation and amortization. Management uses Adjusted Gross Margin per barrel to evaluate operating performance and compare profitability to other companies in the industry and to industry benchmarks. We believe Adjusted Net Income (Loss) and Adjusted EBITDA (as defined below) are useful supplemental financial measures that allow investors to assess the financial performance of our assets without regard to financing methods, capital structure, or historical cost basis, the ability of our assets to generate cash to pay interest on our indebtedness, and our operating performance and return on invested capital as compared to other companies without regard to financing methods and capital structure.

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

Adjusted Gross Margin.

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

- operating expense (excluding depreciation);
- depreciation and amortization ("D&A");
- impairment expense;
- loss (gain) on sale of assets, net;
- inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments);
- LIFO layer liquidation impacts associated with our Washington inventory;
- Renewable Identification Numbers ("RINs") mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability); and

• unrealized loss (gain) on derivatives.

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

Year ended December 31, 2022	Refining	Logistics	Retail
Operating income	\$ 401,901	\$ 54,049	\$ 49,238
Operating expense (excluding depreciation)	245,992	14,988	81,229
Depreciation and amortization	65,472	20,579	10,971
Loss (gain) on sale of assets, net	1	(253)	56
Inventory valuation adjustment	(15,712)		
RINs mark-to-market adjustments	105,760		
Unrealized loss on derivatives	9,336		_
Adjusted Gross Margin (1)	\$ 812,750	\$ 89,363	\$ 141,494
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 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	31,841		
RINs mark-to-market adjustments	66,350		
Unrealized loss on derivatives	1,517		
Adjusted Gross Margin (1)	\$ 264,448	\$ 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 and amortization	53,930	21,899	10,692
Impairment expense	55,989	_	29,817
Inventory valuation adjustment	9,994	—	—
RINs mark-to-market adjustments	81,709		
Unrealized gain on derivatives	(4,804)		
Adjusted Gross Margin (1)	\$ 64,730	\$ 70,524	\$ 128,828

(1) For the years ended December 31, 2022, 2021 and 2020, there was no LIFO liquidation adjustment. For the year ended December 31, 2022, there was no impairment expense. For the year ended December 31, 2020, there was no loss (gain) on sale of assets.

Adjusted Net Income (Loss) and Adjusted EBITDA.

Adjusted Net Income (Loss) is defined as Net income (loss) excluding:

- inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments);
- the LIFO layer liquidation impacts associated with our Washington inventory;

- RINs mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability);
- unrealized (gain) loss on derivatives;
- acquisition and integration costs;
- debt extinguishment and commitment costs;
- increase in (release of) tax valuation allowance and other deferred tax items;
- changes in the value of contingent consideration and common stock warrants;
- severance costs;
- (gain) loss on sale of assets;
- impairment expense;
- impairment expense associated with our investment in Laramie Energy and our share of Laramie Energy's asset impairment losses in excess of our basis difference; and
- Par's share of Laramie Energy's unrealized loss (gain) on derivatives.

Adjusted EBITDA is defined as Adjusted Net Income (Loss) excluding:

- D&A;
- interest expense and financing costs;
- equity losses (earnings) from Laramie Energy excluding Par's share of unrealized loss (gain) on derivatives, impairment of Par's investment, and our share of Laramie Energy's asset impairment losses in excess of our basis difference; and
- income tax expense (benefit) excluding the increase in (release of) tax valuation allowance.

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

	Year Ended December 31,						
		2022		2021		2020	
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086)	
Inventory valuation adjustment		(15,712)		31,841		9,994	
RINs mark-to-market adjustments		105,760		66,350		81,709	
Unrealized loss (gain) on derivatives		9,336		1,517		(4,804)	
Acquisition and integration costs		3,663		87		614	
Debt extinguishment and commitment costs		5,329		8,144			
Changes in valuation allowance and other deferred tax items (1)		—		_		(20,896)	
Change in value of common stock warrants						(4,270)	
Severance costs		2,272		84		512	
Impairment expense				1,838		85,806	
Impairment of Investment in Laramie Energy, LLC (2)		_		_		45,294	
Par's share of Laramie Energy's unrealized gain on derivatives (2)						(1,110)	
Gain on sale of assets		(169)		(64,697)			
Adjusted Net Income (Loss) (3)		474,668		(36,133)		(216,237)	
Depreciation and amortization		99,769		94,241		90,036	
Interest expense and financing costs, net		68,288		66,493		70,222	
Equity losses from Laramie Energy, LLC, excluding Par's share of unrealized gain on derivatives and impairment losses						2,721	
Income tax expense (benefit)		710		1,021		176	
Adjusted EBITDA	\$	643,435	\$	125,622	\$	(53,082)	

- 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, 2022, 2021, and 2020, there was no LIFO liquidation adjustment or change in value of contingent consideration.

Discussion of Operating Income (Loss) by Segment

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Refining. Operating income for our refining segment was \$401.9 million for the year ended December 31, 2022, an improvement of \$490.7 million compared to an operating loss of \$88.8 million for the year ended December 31, 2021. The increase in profitability was primarily driven by widening product crack spreads across all our refineries, and a favorable change in the valuation of the embedded derivatives related to our intermediation agreements driven by changes in commodity prices, partially offset by unfavorable purchased product and crude differentials, unfavorable FIFO adjustments, higher inventory financing costs of \$79.0 million, increased fuel burn costs related to higher crude oil costs as discussed below, increased RINs costs of \$54.7 million, and unfavorable derivative costs. Other factors impacting our results period over period include 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 and a 15% increase in operating expenses in 2022, primarily driven by increased utilities, maintenance, and employee costs.

Logistics. Operating income for our logistics segment was \$54.0 million for the year ended December 31, 2022, an increase of \$2.8 million compared to operating income of \$51.2 million for the year ended December 31, 2021. The increase is primarily due to higher third party revenues partially offset by net 2% and 4% decreased throughput across our Hawaii and Wyoming logistics assets, respectively.

Retail. Operating income for our retail segment was \$49.2 million for the year ended December 31, 2022, a decrease of \$32.0 million compared to operating income of \$81.2 million for the year ended December 31, 2021. The decrease in profitability was primarily due to a gain on sale of assets of \$45.0 million primarily related to the 2021 Hawaii sale-leaseback transactions we closed in the first quarter of 2021 with no such gain in 2022 and a 13% increase in operating expenses in the year ended December 31, 2022 primarily related to increased employee costs, higher credit card processing fees due to increased gasoline prices, rebranding fees in Hawaii, and higher rent expense related to the additional leases from our 2021 Hawaii sale-leaseback transactions, partially offset by a 31% increase in fuel margin.

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.

Discussion of Adjusted Gross Margin by Segment

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Refining. For the year ended December 31, 2022, our refining Adjusted Gross Margin was approximately \$812.8 million, an increase of \$548.4 million compared to \$264.4 million for the year ended December 31, 2021. The increase in profitability was primarily driven by favorable realized product crack spreads across all our refineries partially offset by unfavorable purchased product costs, unfavorable FIFO adjustments, increased inventory financing costs of \$79.0 million in Hawaii, unfavorable derivative costs, and increased costs related to fuel burn related to higher crude oil costs as discussed below. Adjusted Gross Margin for the Hawaii refinery improved from \$4.56 per barrel in 2021 to \$13.99 per barrel in 2022 primarily due to favorable product crack spreads, and a 1.7% increase in refined product sales volumes, partially offset by unfavorable purchased product and crude oil costs, unfavorable FIFO adjustments, a \$78.8 million increase in intermediation fees driven primarily by \$59.4 million higher market structure fees under the Supply and Offtake Agreement, increased fuel burn costs related to higher crude oil costs as discussed below, and unfavorable derivatives. Adjusted Gross Margin for the Washington refinery increased by \$15.02 per barrel primarily due to favorable product crack spreads below, and unfavorable forduct crack spreads, partially offset by unfavorable feedstock costs and increased costs related to fuel burn. Adjusted Gross Margin for the Washington refinery increased costs related to fuel burn. Adjusted Gross Margin for the Wyoming refinery increased costs and increased costs related to fuel burn. Adjusted Gross Margin for the Wyoming refinery increased costs.

Logistics. For the year ended December 31, 2022, our logistics Adjusted Gross Margin was approximately \$89.4 million, an increase of \$1.5 million compared to \$87.9 million for the year ended December 31, 2021. The increase was primarily driven by higher third party revenues partially offset by net 2% and 4% decreased throughput across our Hawaii and Wyoming logistics assets, respectively.

Retail. For the year ended December 31, 2022, our retail Adjusted Gross Margin was approximately \$141.5 million, an increase of \$22.6 million compared to \$118.9 million for the year ended December 31, 2021. The increase was primarily due to a 31% increase in fuel margins partially offset by a 3% decline in sales volumes.

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 \$264.4 million, an increase of \$199.7 million compared to a loss of \$64.7 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 \$(1.31) per barrel in 2020 to \$4.56 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 \$7.50 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 \$1.69 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 a net 12% and 32% increase in 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.

Discussion of Consolidated Results

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenues. For the year ended December 31, 2022, revenues were \$7.3 billion, a \$2.6 billion increase compared to \$4.7 billion for the year ended December 31, 2021. The increase was primarily the result of an increase of \$2.5 billion in thirdparty revenues at our refining segment primarily as a result of increases in Brent and WTI crude oil prices. Brent crude oil prices rose to \$99.04 per barrel for the year ended December 31, 2022 compared to \$70.95 per barrel for the year ended December 31, 2021, and WTI crude oil prices averaged \$94.33 per barrel during the year ended December 31, 2022 compared to \$68.11 per barrel in the year ended December 31, 2021. Other factors contributing to the increase in revenues at our refining segment include improved realized product crack spreads across all our refineries. Revenues at our retail segment increased \$113.8 million primarily due to a 36% increase in fuel prices slightly offset by a 3% decline in sales volume.

Cost of Revenues (Excluding Depreciation). For the year ended December 31, 2022, cost of revenues (excluding depreciation) was \$6.4 billion, a \$2.1 billion increase compared to \$4.3 billion for the year ended December 31, 2021. The increase was primarily due to increases in Brent and WTI crude oil prices as discussed above, unfavorable purchased products, higher feedstock costs, and higher inventory financing costs. These increases were partially offset by a favorable change in the valuation of the embedded derivatives related to our inventory financing agreements driven by changes in commodity prices.

Operating Expense (Excluding Depreciation). For the year ended December 31, 2022, operating expense (excluding depreciation) was approximately \$342.2 million, an increase of \$42.5 million compared to \$299.7 million for the year ended December 31, 2021. The increase was primarily due to higher utilities expenses, maintenance expenses at our Hawaii refinery and increased employee costs. Other factors contributing to the increase include higher outside services expenses.

Depreciation and Amortization. For the year ended December 31, 2022, D&A expense was approximately \$99.8 million, an increase of \$5.6 million compared to \$94.2 million for the year ended December 31, 2021. The increase was primarily due to amortization of our Washington Refinery turnaround completed in 2022.

Impairment Expense. During the year ended December 31, 2021, we recorded goodwill and asset impairment charges totaling \$1.8 million primarily related to discontinued capital projects. 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 discussion on our 2021 asset impairment charges. There were no impairment charges during the year ended December 31, 2022.

Gain on Sale of Assets, Net. For the year ended December 31, 2022, there was a \$0.2 million gain on sale of assets, net, which resulted primarily from the sale of equipment. 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 in the first quarter of 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.

General and Administrative Expense (Excluding Depreciation). For the year ended December 31, 2022, general and administrative expense (excluding depreciation) was approximately \$62.4 million, an increase of \$14.3 million compared to \$48.1 million for the year ended December 31, 2021. The increase was primarily due to higher employee costs and an increase in the use of outside services.

Acquisition and Integration Costs. For the year ended December 31, 2022, we incurred approximately \$3.7 million of expenses primarily related to costs incurred for the pending Billings Acquisition. For the year ended December 31, 2021, we incurred an immaterial amount of acquisition and integration costs. 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, 2022, our interest expense and financing costs were approximately \$68.3 million, an increase of \$1.8 million compared to \$66.5 million for the year ended December 31, 2021. The increase was primarily due to an increase of \$7.4 million related to increased borrowings under our inventory financing agreements and increased rates on our Term Loan B Facility. These increases were partially offset by 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 reduced interest on our 12.875% Senior Secured Notes driven by early repayment of these notes. 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.

Debt extinguishment and commitment costs. For the year ended December 31, 2022, our debt extinguishment and commitment costs were approximately \$5.3 million and primarily represented extinguishment costs associated with the repurchase and cancellation of an additional \$36.9 million of 12.875% Senior Secured Notes in the second quarter of 2022. For the year ended December 31, 2021, our debt extinguishment and commitment costs were approximately primarily \$8.1 million and primarily represented \$6.6 million in extinguishment costs associated with the redemption of \$36.8 million of 12.875% Senior Secured Notes in June 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.

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, 2022.

Income Taxes. For the year ended December 31, 2022, we recorded an income tax expense of \$0.7 million primarily driven by an increase in state taxable income. For the year ended December 31, 2021, we recorded an income tax expense of \$1.0 million primarily driven by foreign withholding taxes.

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 and Amortization. For the year ended December 31, 2021, D&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.

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, 2022						
		Parent uarantor	Issuer and Subsidiaries	Non- Guarantor Subsidiaries and Eliminations	ł	ar Pacific Holdings, Inc. and Ibsidiaries	
ASSETS							
Current assets							
Cash and cash equivalents	\$	2,547	\$ 488,350	\$ 28	\$	490,925	
Restricted cash		331	3,670	—		4,001	
Trade accounts receivable		—	252,816	69		252,885	
Inventories		—	1,041,983	_		1,041,983	
Prepaid and other current assets		2,229	89,883	(69)		92,043	
Due from related parties		229,431		(229,431)			
Total current assets		234,538	1,876,702	(229,403)		1,881,837	
Property, plant, and equipment							
Property, plant, and equipment		19,865	1,200,747	3,955		1,224,567	
Less accumulated depreciation and amortization		(14,967)	(370,643)	(3,123)		(388,733)	
Property, plant, and equipment, net		4,898	830,104	832		835,834	
Long-term assets							
Operating lease right-of-use ("ROU") assets		2,649	348,112	—		350,761	
Investment in subsidiaries		487,943	—	(487,943)		_	
Intangible assets, net		—	13,577	—		13,577	
Goodwill		_	126,727	2,598		129,325	
Other long-term assets		723	72,721	(4,131)		69,313	
Total assets	\$	730,751	\$ 3,267,943	\$ (718,047)	\$	3,280,647	
LIABILITIES AND STOCKHOLDERS' EQUITY							
Current liabilities							
Current maturities of long-term debt	\$	—	\$ 10,956	\$ —	\$	10,956	
Obligations under inventory financing agreements		_	893,065	_		893,065	
Accounts payable		4,176	147,219	—		151,395	
Accrued taxes		47	32,052	_		32,099	
Operating lease liabilities		787	65,294	—		66,081	
Other accrued liabilities		511	639,396	587		640,494	
Due to related parties		77,420	118,139	(195,559)		_	
Total current liabilities		82,941	1,906,121	(194,972)		1,794,090	
Long-term liabilities							
Long-term debt, net of current maturities		_	494,576	_		494,576	
Finance lease liabilities		_	10,710	(4,399)		6,311	
Operating lease liabilities		3,273	289,428	_		292,701	
Other liabilities		_	46,922	1,510		48,432	
Total liabilities		86,214	2,747,757	(197,861)		2,636,110	
Commitments and contingencies							
Stockholders' equity							
Preferred stock		—	—	—		—	
Common stock		604				604	
Additional paid-in capital		836,491	409,686	(409,686)		836,491	
Accumulated earnings (deficit)		(200,687)	104,479	(104,479)		(200,687)	
Accumulated other comprehensive income (loss)		8,129	6,021	(6,021)		8,129	
Total stockholders' equity		644,537	520,186	(520,186)	_	644,537	
Total liabilities and stockholders' equity	\$	730,751	\$ 3,267,943	\$ (718,047)	\$	3,280,647	

	As of December 31, 2021					
		Parent uarantor	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 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)		(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)	-	

		Year Ended De	cember 31, 2022	
	Parent Guarantor	Issuer and Subsidiaries	Non- Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries
Revenues	\$ —	\$ 7,321,656	\$ 129	\$ 7,321,785
Operating expenses				
Cost of revenues (excluding depreciation)	_	6,377,494	(1,480)	6,376,014
Operating expense (excluding depreciation)	_	342,209		342,209
Depreciation and amortization	2,131	97,448	190	99,769
Loss (gain) on sale of assets, net	27	(196)	_	(169)
General and administrative expense (excluding depreciation)	17,882	44,514	_	62,396
Acquisition and integration costs	3,396	267		3,663
Total operating expenses	23,436	6,861,736	(1,290)	6,883,882
Operating income (loss)	(23,436)	459,920	1,419	437,903
Other income (expense)				
Interest expense and financing costs, net	(1)	(68,655)	368	(68,288)
Debt extinguishment and commitment costs	_	(5,329)	_	(5,329)
Other income (expense), net	(20)	634	(1)	613
Equity earnings (losses) from subsidiaries	388,008		(388,008)	
Total other income (expense), net	387,987	(73,350)	(387,641)	(73,004)
Income (loss) before income taxes	364,551	386,570	(386,222)	364,899
Income tax benefit (expense) (1)	(362)	(96,995)	96,647	(710)
Net income (loss)	\$ 364,189	\$ 289,575	\$ (289,575)	\$ 364,189
Adjusted EBITDA	\$ (17,551)	\$ 659,378	\$ 1,608	\$ 643,435

			Y	Year Ended December 31, 2021					
	Parent Guarantor		Issuer and Subsidiaries		Non- Guarantor Subsidiaries and Eliminations		Н	Par Pacific oldings, Inc. and ubsidiaries	
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 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		14,989		4,756,960		(54,241)		4,717,708	
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		(66,282)	_	(68,924)		62,549		(72,657)	
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)	\$	(81,297)	\$	(91,010)	\$	91,010	\$	(81,297)	
Adjusted EBITDA	\$	(12,468)	\$	137,323	\$	767	\$	125,622	

	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 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)	\$ (46,871)	\$ 4,732	\$ (53,082)			

(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, 2022								
	Parent Guarantor	Issuer and Subsidiaries	Non- Guarantor Subsidiaries and Eliminations	Par Pacific Holdings, Inc. and Subsidiaries					
Net income (loss)	\$ 364,189	\$ 289,575	\$ (289,575)	\$ 364,189					
Inventory valuation adjustment		(15,712)	_	(15,712)					
RINs mark-to-market adjustments	—	105,760	—	105,760					
Unrealized loss on derivatives	—	9,336	—	9,336					
Acquisition and integration costs	3,396	267		3,663					
Debt extinguishment and commitment costs	—	5,329	—	5,329					
Changes in valuation allowance and other deferred tax items (1)	—	—		—					
Change in value of common stock warrants	—	—	—	—					
Severance costs	351	1,921	_	2,272					
Impairment expense	_	_	_	_					
Impairments of Investments in Laramie Energy, LLC (2)	_	_	_						
Par's share of Laramie Energy's unrealized loss (gain) on derivatives (2)	_	_	_	_					
Loss (gain) on sale of assets, net	27	(196)		(169)					
Depreciation and amortization	2,131	97,448	190	99,769					
Interest expense and financing costs, net	1	68,655	(368)	68,288					
Equity losses (earnings) from Laramie Energy, LLC, excluding Par's share of unrealized loss (gain) on derivatives		_	_	_					
Equity losses (income) from subsidiaries	(388,008)		388,008						
Income tax expense (benefit)	362	96,995	(96,647)	710					
Adjusted EBITDA (3)	\$ (17,551)	\$ 659,378	\$ 1,608	\$ 643,435					

		Year Ended De	cember 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		31,841	—	31,841
RINs mark-to-market adjustments	—	66,350	_	66,350
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
Changes in valuation allowance and other deferred tax items (1)	—	_	_	_
Change in value of common stock warrants	_	_	_	
Severance costs	_	84	_	84
Impairment expense	_	1,838		1,838
Impairments of Investment in Laramie Energy, LLC (2)	_	_	_	_
Par's share of Laramie Energy's unrealized loss (gain) on derivatives (2)	_	_	_	_
Loss (gain) on sale of assets, net	15	(10,949)	(53,763)	(64,697)
Depreciation and amortization	2,452	91,550	239	94,241
Interest expense and financing costs, net	2,600	64,209	(316)	66,493
Equity losses (earnings) from Laramie Energy, LLC, excluding Par's share of unrealized loss (gain) on derivatives	_	_	_	_
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)	\$ 137,323	\$ 767	\$ 125,622

	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	_	9,994	—	9,994			
RINs mark-to-market adjustments	—	81,709	—	81,709			
Unrealized gain on derivatives	—	(4,804)	—	(4,804)			
Acquisition and integration costs	—	614	—	614			
Debt extinguishment and commitment costs	—	—	—	—			
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			
Impairment of Investment in Laramie Energy, LLC (2)	—		45,294	45,294			
Par's share of Laramie Energy's unrealized gain on derivatives (2)	_	_	(1,110)	(1,110)			
Loss (gain) on sale of assets, net	—	—	—	—			
Depreciation 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)	\$ (46,871)	\$ 4,732	\$ (53,082)			

(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) There was no LIFO liquidation adjustment or change in value of contingent consideration for the years ended December 31, 2022, 2021, and 2020.

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, 2022 was \$577.2 million and consisted of \$574.6 million at Par Petroleum, LLC and subsidiaries, \$2.5 million at Par Pacific Holdings, and \$0.1 million at all our other subsidiaries.

As of December 31, 2022, we had access to the J. Aron Discretionary Draw Facility, the ABL Credit Facility, the MLC receivable advances, and cash on hand of \$490.9 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 acquisitions and 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, 2022, 2021, and 2020, 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 to our consolidated financial statements under Item 8 of this Form 10-K for additional discussion on the share repurchase program. 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, 2022, 2021, and 2020 (in thousands):

	Years Ended December 31,						
		2022		2021		2020	
Net cash provided by (used in) operating activities	\$	452,606	\$	(27,622)	\$	(37,214)	
Net cash provided by (used in) investing activities		(87,308)		74,628		(63,464)	
Net cash provided by (used in) financing activities		13,407		(1,094)		42,559	

Cash flows for the year ended December 31, 2022

Net cash provided by operating activities for the year ended December 31, 2022 was driven primarily by net income of \$364.2 million, non-cash charges to operations of approximately \$127.6 million, and net cash used for changes in operating assets and liabilities of approximately \$39.2 million. Non-cash charges to operations consisted primarily of the following adjustments:

- depreciation and amortization expenses of \$99.8 million;
- stock based compensation costs of \$9.4 million;
- unrealized loss on derivatives contracts of \$9.3 million; and
- debt commitment and extinguishment costs of \$5.3 million.

Net cash used for changes in operating assets and liabilities resulted primarily from:

- net increases in our Supply and Offtake Agreement and Washington Refinery Intermediation Agreement obligations and accounts payable; and
- an increase in gross environmental credit obligations primarily related to current period production volumes and increases in RINs prices;

partially offset by

- net increases in our inventories and accounts receivable resulting from higher crude oil and refined product prices and higher inventory volumes at our Hawaii refinery; and
- increase in prepaid and other primarily driven by a \$34.7 million increase in Collateral posted with broker for derivative instruments.

Net cash used in investing activities for the year ended December 31, 2022 consisted primarily of:

- \$53.0 million in additions to property, plant, and equipment driven by profit improvement and turnaround projects including crude recovery and debottlenecking projects at our Tacoma refinery, maintenance and tank replacement projects at our Wyoming refinery, and co-generation engine and tank conversion projects at our Hawaii refinery; and
- \$35.5 million related to acquisitions, primarily comprised of a \$30.0 million deposit on the Billings Acquisition and \$5.5 million for a three-store expansion of our Washington retail footprint.

Net cash provided by financing activities was approximately \$13.4 million for the year ended December 31, 2022 and consisted primarily of the following activities:

 net borrowings under the J. Aron Discretionary Draw Facility and MLC receivable advances of \$80.7 million;

partially offset by

- net repayments of debt of \$62.0 million primarily driven by the partial repurchase and cancellation of our 7.75% Senior Secured Notes and 12.875% Senior Secured Notes; and
- repurchases of common stock of \$7.8 million.

Cash flows for the year ended December 31, 2021

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.

Net cash provided by investing activities was approximately \$74.6 million for the year ended December 31, 2021 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 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 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.

Cash flows for the year ended December 31, 2020

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 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 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.

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, 2022 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 2023 are \$44.3 million and our total estimated undiscounted future interest payments will be \$133.3 million on the debt obligations held as of December 31, 2022 and using interest rates in effect as of December 31, 2022. 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, 2022, totaled approximately \$82.6 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 2023 ranges from \$85 to \$95 million and primarily relates to 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 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, 2022 for the purchase of crude oil for use at our refineries that are scheduled for delivery in 2023. As of December 31, 2022, we have material purchase commitments of \$4.3 billion, with required cash outlays primarily expected in the next twelve months.

Supply and Offtake Agreement. On June 1, 2021, we and J. Aron entered into the second amended and restated supply and offtake agreement which expires on May 31, 2024, with a one-year extension option. We and J. Aron entered into amendments to the Supply and Offtake Agreement on April 25, 2022, and May 17, 2022, which, among other things, increased the capacity under the Discretionary Draw Facility. 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. We and MLC entered into amendments to the Washington Refinery Intermediation Agreement on February 11, 2021, December 17, 2021, March 9, 2022, May 9, 2022, August 11, 2022, and November 2, 2022, which, among other things, increased the maximum borrowing capacity under the MLC receivable advances. Please read Note 11—Inventory Financing Agreements to our consolidated financial statements under Item 8 of this Form 10-K for more information.

Billings Acquisition. On October 20, 2022, we entered into a purchase agreement with Exxon Mobil Corporation, ExxonMobil Oil Corporation and ExxonMobil Pipeline Company LLC (collectively, the "Sellers") to acquire (i) the high-conversion, complex refinery located in Billings, Montana, and certain associated distribution and logistics assets, and (ii) 100% of the issued and outstanding equity interests in Exxon Billings Cogeneration, Inc. and in Yellowstone Logistics Holding Company. Upon a successful closing of the transactions contemplated by the purchase agreement, we would pay a purchase price of \$310 million plus the value of hydrocarbon inventory and adjusted working capital to the Sellers. The purchase price is also subject to other purchase price adjustments. We have not recorded a related contingency during the fiscal year ended December 31, 2022, as this transaction is subject to customary closing conditions and is expected to close in the second quarter

of 2023. Please read Note 4—Acquisitions 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 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.

We are 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, 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.

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 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, 2022 and 2021.

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 134 Mbpd for the full year of 2022, would change annualized operating income by approximately \$48.2 million. This analysis may differ from actual results.

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 2024.

Based on our net open futures positions at December 31, 2022, a \$1 change in the price of crude oil, assuming all other factors remain constant, would result in \$0.2 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, 2022, we consumed approximately 134 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 June 3, 2022, the EPA finalized the 2021 and 2022 RVOs, reduced the existing 2020 RVO, denied 69 small refinery exemption petitions including ours, and proposed that certain small refineries be permitted to use an alternative RIN retirement schedule for their 2019-2020 compliance obligations. 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, 2022, we had \$203.1 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 \$6.4 million and \$3.9 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 may utilize interest rate swaps to manage our interest rate risk. As of December 31, 2022, we did not hold any open interest rate swaps.

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, 2022, 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, 2022.

Changes in Internal Control over Financial Reporting

There were no changes during the quarter ended December 31, 2022, 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, 2022. 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, 2022, 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, 2022, which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors 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, 2022, 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, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Commission (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, 2022, of the Company and our report dated February 27, 2023, 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 27, 2023

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, 2022.

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, 2022.

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, 2022.

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, 2022.

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, 2022.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as part of this report:
 - Consolidated Financial Statements (Included under Item 8). The Index to the Consolidated Financial Statements is included on page <u>F-1</u> 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 <u>Third Amended Joint Chapter 11 Plan of Reorganization of Delta Petroleum Corporation and Its Debtor Affiliates</u> <u>dated August 16, 2012. Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K</u> <u>filed on September 7, 2012.</u>
- 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.
- 2.11 Equity and Asset Purchase Agreement dated as of October 20, 2022, by and among Exxon Mobil Corporation, ExxonMobil Oil Corporation and ExxonMobil Pipeline Company, LLC, as sellers, and Par Montana, LLC and Par Montana Holdings, LLC, as purchaser entities, and solely for the limited purposes set forth therein, Par Pacific Holdings, Inc. Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on October 21, 2022.
- 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 <u>Second Amended and Restated Bylaws of the Company dated October 20, 2015. Incorporated by reference to</u> 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 <u>Stockholders Agreement dated April 10, 2015. Incorporated by reference to Exhibit 4.1 to the Company's Current</u> <u>Report on Form 8-K filed on April 13, 2015.</u>
- 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 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.
- 4.9 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.
- 4.10 Fourth Supplemental Indenture, dated as of November 16, 2022, among Par Montana, LLC, Par Petroleum, LLC, Par Petroleum Finance Corp., Par Pacific Holdings, Inc., the other guarantors party thereto, and Wilmington Trust, National Association.*
- 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 First Supplemental Indenture, dated as of November 16, 2022, among Par Montana, LLC, Par Petroleum, LLC, Par Petroleum Finance Corp., Par Pacific Holdings, Inc., the other guarantors party thereto, and Wilmington Trust, National Association.*
- 4.13 <u>Description of Registrant's Securities.*</u>
- 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 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.****
- 10.11 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.****
- 10.12 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.****
- 10.13 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.****
- 10.14 Form of Nonstatutory Stock Option Agreement (Discretionary Long Term Incentive Plan). *
- 10.15 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.****
- 10.16 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.
- 10.17 <u>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.</u>
- 10.18 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.
- 10.19 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.****
- 10.20 Employment Assignment Letter with Jim Yates dated August 5, 2022. Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on November 3, 2022.
- 10.21 <u>Employment Offer Letter with Richard Creamer dated March 29, 2022. Incorporated by reference to Exhibit 10.8</u> to the Company's Quarterly Report on Form 10-Q filed on August 9, 2022.
- 10.22 Employment Offer Letter with Eric Wright dated January 17, 2017. Incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on May 6, 2022.
- 10.23 Employment Offer Letter with Shawn Flores dated December 13, 2022.*
- 10.24 <u>Par Pacific Holdings, Inc. Non-Qualified Deferred Compensation Plan. Incorporated by reference to Exhibit 10.1</u> to the Company's Current Report on Form 8-K filed on March 6, 2017.****
- 10.25 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. ****
- 10.26 Par Pacific Holdings, Inc. Severance Plan for Senior Officers, dated as of March 7, 2017. ****
- 10.27 <u>Amendment #2 to the Par Pacific Holdings, Inc. Severance Plan for Senior Officers, dated as of May 23, 2022.</u> Incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K filed on May 25, 2022.

- 10.28 <u>Asset Purchase Agreement dated as of January 9, 2018 by and among CHS Inc., Par Hawaii, Inc., and Par Pacific</u> Holdings, Inc. Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 10, 2018. #
- 10.29 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. #
- 10.30 <u>Term Loan and Guaranty Agreement, dated as of January 11, 2019, among Par Petroleum, LLC, Par Petroleum</u> 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.
- 10.31 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.
- 10.32 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.
- 10.33 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.
- 10.34 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
- 10.35 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. Incorporated by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K filed on February 25, 2022.
- 10.36 <u>Topping Unit Purchase Agreement by and among IES Downstream, LLC, Eagle Island, LLC, Par Hawaii</u> <u>Refining, LLC, and Par Pacific Holdings, Inc., dated as of August 29, 2018. Incorporated by reference to Exhibit</u> <u>10.1 to the Company's Quarterly Report on Form 10-Q filed on November 7, 2018. #</u>
- 10.37 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.
- 10.38 Amendment No. 1 and Assumption Agreement to Pledge and Security Agreement dated as of August 15, 2019, among Par Petroleum, LLC, and the other grantors party thereto and Wilmington Trust, National Association, as collateral trustee. Incorporated by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K filed on February 25, 2022.
- 10.39 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. Incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K filed on February 25, 2022.
- 10.40 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. Incorporated by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K filed on February 25, 2022.
- 10.41 <u>Amendment No. 4 and Assumption Agreement to Pledge and Security Agreement dated as of March 23, 2022,</u> <u>among Par Petroleum, LLC, and the other grantors party thereto and Wilmington Trust, National Association, as</u> <u>collateral trustee.*</u>
- 10.42 <u>Assumption Agreement to Pledge and Security Agreement, dated as of November 16, 2022, made by and among</u> <u>Par Petroleum, LLC, Par Petroleum Finance Corp. and Par Montana, LLC, in favor of Wilmington Trust,</u> <u>National Association, as collateral trustee.*</u>
- 10.43 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.

- 10.44 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.
- 10.45 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.
- 10.46 First Amendment to Amended and Restated Loan and Security Agreement dated as of February 14, 2023, 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.*
- 10.47 Increase Agreement and Amendment dated as of March 30, 2022, among Par Petroleum, LLC, Par Hawaii, LLC, Hermes Consolidated, LLC, Wyoming Pipeline Company LLC, Par Pacific Holdings, Inc., the guarantors party thereto, the incremental lender party thereto, the other lenders party thereto, 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 April 1, 2022.
- 10.48 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.
- 10.49 <u>Second Amended and Restated Pledge and Security Agreement dated June 1, 2021 in favor of J. Aron &</u> <u>Company LLC by Par Hawaii Refining, LLC. Incorporated by reference to Exhibit 10.42 to the Company's</u> <u>Annual Report on Form 10-K filed on February 25, 2022.</u>
- 10.50 Amendment to Second Amended and Restated Supply and Offtake Agreement dated as of March 24, 2022, 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 May 6, 2022.
- 10.51 <u>Amendment to Second Amended and Restated Supply and Offtake Agreement, dated as of April 25, 2022, by and among Par Hawaii Refining LLC, Par Petroleum, LLC, as guarantor, and J. Aron & Company LLC. Incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K filed on April 28, 2022</u>
- 10.52 Amendment to Second Amended and Restated Supply and Offtake Agreement, dated as of May 17, 2022, by and among Par Hawaii Refining LLC, Par Petroleum, LLC, as guarantor, and J. Aron & Company LLC. Incorporated by reference to Exhibit 10.1 to the Company's current report on Form 8-K filed on May 19, 2022.
- 10.53 Amendment to Second Amended and Restated Supply and Offtake Agreement, dated as of September 13, 2022, by and among Par Hawaii Refining LLC, Par Petroleum, LLC, as guarantor, and J. Aron & Company LLC. Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 3, 2022.
- 10.54 <u>Amendment to Second Amended and Restated Supply and Offtake Agreement, dated as of February 13, 2023, by</u> and among Par Hawaii Refining LLC, Par Petroleum, LLC, as guarantor, and J. Aron & Company LLC.*
- 10.55 <u>Twentieth Amendment to First Lien ISDA 2002 Master Agreement entered into as of March 9, 2022 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 March 11, 2022.</u>
- 10.56 <u>Twenty first Amendment to First Lien ISDA 2002 Master Agreement entered into as of March 25, 2022 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 May 6, 2022.</u>
- 10.57 Twenty second Amendment to First Lien ISDA 2002 Master Agreement entered into as of April 21, 2022 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2022.
- 10.58 <u>Twenty third Amendment to First Lien ISDA 2002 Master Agreement entered into as of May 9, 2022 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2022.</u>
- 10.59 <u>Twenty fourth Amendment to First Lien ISDA 2002 Master Agreement entered into as of May 17, 2022 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2022.</u>
- 10.60 Twenty fifth Amendment to First Lien ISDA 2002 Master Agreement entered into as of June 28, 2022 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc. Incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2022.

- 10.61 Twenty sixth Amendment to First Lien ISDA 2002 Master Agreement entered into as of August 11, 2022 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 August 16, 2022.
- 10.62 Twenty seventh Amendment to First Lien ISDA 2002 Master Agreement entered into as of November 2, 2022 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 7, 2022.
- 10.63 Twenty eighth Amendment to First Lien ISDA 2002 Master Agreement entered into as of January 3, 2023 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc.*
- 10.64 Twenty ninth Amendment to First Lien ISDA 2002 Master Agreement entered into as of January 25, 2023 by and between U.S. Oil & Refining Co. and Merrill Lynch Commodities, Inc.*
- 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 <u>Subsidiaries of the Registrant.*</u>
- 23.1 <u>Consent of Deloitte & Touche LLP*</u>
- 31.1 Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
- 31.2 <u>Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*</u>
- 32.1 Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350.***
- 32.2 <u>Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.***</u>
- 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, 2022, 2021, and 2020

	Page No.
Report of Independent Registered Public Accounting Firm Auditor Name: Deloitte & Touch LLP; Auditor Firm ID: 34; Auditor Location: Houston, Texas	<u>F-2</u>
Consolidated Balance Sheets	<u>F-4</u>
Consolidated Statements of Operations	<u>F-5</u>
Consolidated Statements of Comprehensive Income (Loss)	<u>F-6</u>
Consolidated Statements of Cash Flows	<u>F-7</u>
Consolidated Statements of Changes in Stockholders' Equity	<u>F-8</u>
Notes to Consolidated Financial Statements	<u>F-9</u>

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors 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, 2022 and 2021, the related consolidated statements of operations, comprehensive income, cash flows and changes in stakeholder's equity for each of the three years in the period ended December 31, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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, 2022, 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 27, 2023 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 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 forecasts of future gross margin 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 \$129.3 million as of December 31, 2022. No impairment loss was recorded during the year ended December 31, 2022.

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 rate, valuation multiples, and forecasts of future gross margin 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 rate, valuation multiples, and forecasts of future gross margin 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 rate, selection of valuation multiples, and forecasts of future gross margin and operating expenses.
- We evaluated management's ability to accurately forecast 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, 2022.
- 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 rate, 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 27, 2023

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

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

(in thousands, except share data)		ecember 31, 2022	December 3 2021	
ASSETS				
Current assets				
Cash and cash equivalents	\$	490,925	\$	112,221
Restricted cash	•	4,001	•	4,000
Total cash, cash equivalents, and restricted cash		494,926		116,221
Trade accounts receivable, net of allowances of \$0.3 million and \$0.4 million at December 31, 2022 and December 31, 2021, respectively		252,885		195,108
Inventories		1,041,983		790,317
Prepaid and other current assets		92,043		28,525
Total current assets		1,881,837		1,130,171
Property, plant, and equipment				
Property, plant, and equipment		1,224,567		1,180,397
Less accumulated depreciation and amortization		(388,733)		(323,892)
Property, plant, and equipment, net		835,834		856,505
Long-term assets				
Operating lease right-of-use ("ROU") assets		350,761		383,824
Intangible assets, net		13,577		16,234
Goodwill		129,325		127,262
Other long-term assets		69,313		56,255
Total assets	\$	3,280,647	\$	2,570,251
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Current maturities of long-term debt	\$	10,956	\$	10,841
Obligations under inventory financing agreements		893,065		737,704
Accounts payable		151,395		154,543
Accrued taxes		32,099		28,641
Operating lease liabilities		66,081		53,640
Other accrued liabilities		640,494		370,424
Total current liabilities		1,794,090		1,355,793
Long-term liabilities		1,774,070		1,555,775
Long-term habilities		494,576		552 717
Finance lease liabilities				553,717 7,691
		6,311		
Operating lease liabilities Other liabilities		292,701		335,094
Total liabilities		48,432 2,636,110		52,256 2,304,551
Commitments and Contingencies (Note 17)		2,030,110		2,304,331
Stockholders' equity				
Preferred stock, \$0.01 par value: 3,000,000 shares authorized, none issued				
Common stock, \$0.01 par value; 500,000 shares authorized, note issued December 31, 2021, 60,470,837 shares and 60,161,955 shares issued at December 31, 2022 and December 31, 2021, respectively		604		602
Additional paid-in capital		836,491		821,713
Accumulated deficit		(200,687)		(559,117
Accumulated denet		8,129		2,502
Total stockholders' equity		644,537		2,502
Total liabilities and stockholders' equity	\$	3,280,647		2,570,251

See accompanying notes to consolidated financial statements.

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

Operating expenses Cost of revenues (excluding depreciation) 6,376,014 4,338,474 2,947,697 Operating expense (excluding depreciation) 342,209 299,669 277,427 Depreciation and amortization 99,769 94,241 90,036 Impairment expense — 1,838 88,506 Gain on sale of assets, net (169) (64,697) — General and administrative expense (excluding depreciation) 62,396 48,096 41,288 Acquisition and integration costs 3,663 87 614 Total operating expenses — 1,838 3,442,868 Operating income (loss) 437,903 (7,619) (317,998 Other income (coss) — 2,032 — — Interest expense and financing costs, net (68,288) (66,493) (70,222 Debt extinguishment and commitment costs (5,329) (8,144) — Gain on curtailment of pension obligation — 2,022 — Other income (expense), net (73,004) (722,657) (111,808		Year Ended December 31,							
Operating expenses Cost of revenues (excluding depreciation) $6,376,014$ $4,338,474$ $2,947,697$ Operating expense (excluding depreciation) $342,209$ $299,669$ $277,427$ Depreciation and amortization $99,769$ $94,241$ $90,036$ Impairment expense $1,838$ $88,506$ Gain on sale of assets, net (169) $(64,697)$ General and administrative expense (excluding depreciation) $62,396$ $48,096$ $41,286$ Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $(76,19)$ $(317,998)$ $(76,129)$ $(76,129)$ $(76,129)$ $(76,129)$ $(76,129)$ $(76,129)$ $(76,122)$ -0 -0 $29,709$ $(76,129)$ $(76,122)$ -0 -0 $29,709$ $(76,129)$ $(76,122)$ -0 -0 $29,700$ $(76,129)$ $(76,122)$ -0 -0 $29,700$ $(76,129)$ $(76,129)$ $(76,122)$ -0 -0 -0 $20,720$ -0			2022	202	21		2020		
Cost of revenues (excluding depreciation) $6,376,014$ $4,338,474$ $2,947,697$ Operating expense (excluding depreciation) $342,209$ $299,669$ $277,427$ Depreciation and amortization $99,769$ $94,241$ $90,036$ Impairment expense - 1.838 $85,806$ Gain on sale of assets, net (169) (64,697) - General and administrative expense (excluding depreciation) $62,396$ $48,096$ $41,288$ Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $437,903$ $(7,619)$ $(317,998)$ Other income (expense) (68,288) $(66,493)$ $(70,222)$ Dether stinguishment and commitment costs $(5,329)$ $(8,144)$ - Gain on curtailment of pension obligation - $2,032$ - Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants - - $4,276$ Equity losses from Laramie Energy, LLC - -	Revenues	\$	7,321,785	\$ 4,7	/10,089	\$	3,124,870		
Operating expense (excluding depreciation) $342,209$ $299,669$ $277,427$ Depreciation and amortization $99,769$ $94,241$ $90,036$ Impairment expense - $1,838$ $85,806$ Gain on sale of assets, net (169) (64,697) - General and administrative expense (excluding depreciation) $62,396$ $48,096$ $41,288$ Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $437,903$ (76,19) (317,998) Other income (expense) $66,8288$ (66,493) (70,222) Debt extinguishment and commitment costs $(5,329)$ $(8,144)$ - Gain on curtailment of pension obligation - $2,032$ - Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants - - $42,900$ Income (loss) before income taxes $364,899$ $(80,276)$ $(111,808)$	Operating expenses								
Depreciation and amortization 99,769 94,241 90,036 Impairment expense — 1,838 85,800 Gain on sale of assets, net (169) (64,697) — General and administrative expense (excluding depreciation) 62,396 48,096 41,288 Acquisition and integration costs 3,663 87 614 Total operating expenses 6,883,882 4,717,708 3,442,868 Operating income (loss) (68,288) (66,493) (70,222 Other income (expense) (5,329) (8,144) — Gain on curtailment of pension obligation — 2,032 — Other income (expense), net 613 (52) 1,049 Change in value of common stock warrants — — 4,270 Equity losses from Laramic Energy, LLC — — — 442,980 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) before income taxes 364,899	Cost of revenues (excluding depreciation)		6,376,014	4,3	338,474		2,947,697		
Impairment expense - 1,838 85,806 Gain on sale of assets, net (169) (64,697) - General and administrative expense (excluding depreciation) 62,396 48,096 41,288 Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) 437,903 (7,619) (317,998 Other income (expense) - 2,032 - Interest expense and financing costs, net (68,288) (66,493) (70,222 Other income (expense) - 2,032 - Other income (expense), net 613 (52) 1,049 Change in value of common stock warrants - - 42,700 Equity losses from Laramie Energy, LLC - - (46,905) Income (loss) before income taxes 364,899 (80,276) (411,808 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) before income taxes 364,189 \$ (81,297) \$ (409,086 Income (loss) per share -	Operating expense (excluding depreciation)		342,209	-	299,669		277,427		
Gain on sale of assets, net (169) (64,697) General and administrative expense (excluding depreciation) $62,396$ $48,096$ $41,288$ Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $437,903$ (7,619) (317,998) Other income (expense) (68,288) (66,493) (70,222) Debt extinguishment and commitment costs $(5,329)$ $(8,144)$ Gain on curtailment of pension obligation - $2,032$ Other income (expense), net 613 (52) 1.049 Change in value of common stock warrants - - $42,700$ Equity losses from Laramie Energy, LLC - - $(46,905)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) before income taxes $364,899$ $(81,297)$ $$(409,086)$ Income (loss) per share - - $$(409,086)$ Income (loss) per share - - $$(409,086)$ <t< td=""><td>Depreciation and amortization</td><td></td><td>99,769</td><td></td><td>94,241</td><td></td><td>90,036</td></t<>	Depreciation and amortization		99,769		94,241		90,036		
General and administrative expense (excluding depreciation) $62,396$ $48,096$ $41,288$ Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6.883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $437,903$ $(7,619)$ $(317,998)$ Other income (expense) $437,903$ $(7,619)$ $(317,998)$ Interest expense and financing costs, net $(68,288)$ $(66,493)$ $(70,222)$ Debt extinguishment and commitment costs $(5,329)$ $(8,144)$ $$ Gain on curtailment of pension obligation $$ $2,032$ $$ Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants $$ $$ $-4,270$ Equity losses from Laramie Energy, LLC $$ $$ $(46,905)$ Total other expense, net (710) $(1,021)$ $20,720$ Net income (loss)before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) before income taxes $364,189$ $$ (81,297)$ $$ (409,086)$ Income (loss)ber share $$ 364,189$ $$ (81,297)$ $$ (409,086)$ Income (loss)gais $$ 6.12$ $$ (1.40)$ $$ (7.68)$ Diluted $$ 6.08$ $$ (1.40)$ $$ (7.68)$ Diluted $$ 6.08$ $$ (1.40)$ $$ (7.68)$ Diluted $$ 5.08$ $$ (1.40)$ $$ (7.68)$ Diluted $$ 5.9,544$ $$ 58,268$ $$ 53,295$	Impairment expense		_		1,838		85,806		
Acquisition and integration costs $3,663$ 87 614 Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $437,903$ $(7,619)$ $(317,998)$ Other income (expense) $437,903$ $(7,619)$ $(317,998)$ Other income (expense) $(68,288)$ $(66,493)$ $(70,222)$ Debt extinguishment and commitment costs $(5,329)$ $(8,144)$ $$ Gain on curtailment of pension obligation $$ $2,032$ $$ Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants $$ $$ $42,700$ Equity losses from Laramie Energy, LLC $$ $$ $(46,905)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) before income taxes $364,189$ $$ (81,297)$ $$ (409,086)$ Income (loss) per share $ -$ Basic $$ 6.08$ $$ (140)$ $$ (7.68)$ $$ (140)$ $$ (7.68)$ Diluted $$ 8.6.08$ $$ $	Gain on sale of assets, net		(169)		(64,697)		_		
Total operating expenses $6,883,882$ $4,717,708$ $3,442,868$ Operating income (loss) $437,903$ $(7,619)$ $(317,998)$ Other income (expense) $(68,288)$ $(66,493)$ $(70,222)$ Debt extinguishment and commitment costs $(5,329)$ $(8,144)$ $-$ Gain on curtailment of pension obligation $ 2,032$ $-$ Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants $ 4,270$ Equity losses from Laramic Energy, LLC $ (46,905)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) S $364,189$ S $(81,297)$ S $(409,086)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ (7100) $(1,021)$ $20,720$ Income (loss) S $364,189$ S $(81,297)$ S	General and administrative expense (excluding depreciation)		62,396		48,096		41,288		
Operating income (loss) 437,903 (7,619) (317,998) Other income (expense) Interest expense and financing costs, net (68,288) (66,493) (70,222) Debt extinguishment and commitment costs (5,329) (8,144) Gain on curtailment of pension obligation 2,032 Other income (expense), net 613 (52) 1,049 Change in value of common stock warrants 4,270 Equity losses from Laramie Energy, LLC (46,905) Total other expense, net (73,004) (72,657) (111,808) Income (loss) before income taxes 364,899 (80,276) (429,806) Income (loss) before income taxes 364,899 (80,276) (429,806) Income (loss) per share - - (409,086) Integet (less) per share -	Acquisition and integration costs		3,663		87		614		
Other income (expense) Interest expense and financing costs, net (68,288) (66,493) (70,222 Debt extinguishment and commitment costs (5,329) (8,144) Gain on curtailment of pension obligation 2,032 Other income (expense), net 613 (52) 1,049 Change in value of common stock warrants 4,270 Equity losses from Laramie Energy, LLC 46,905 Total other expense, net (73,004) (72,657) (111,808 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) per share - 4,6905 Income (loss) per share - - 4,6905 Basic \$ 6.12 \$ (140) \$ (7.68 Diluted \$ 6.08 \$ (1.40) \$ (7.68 Diluted \$ 6.08 \$ (1.40) \$ (7.68 Diluted \$ 59,544 58,268 53,295 53,295 53,295	Total operating expenses		6,883,882	4,7	717,708		3,442,868		
Interest expense and financing costs, net (68,288) (66,493) (70,222 Debt extinguishment and commitment costs (5,329) (8,144) Gain on curtailment of pension obligation 2,032 Other income (expense), net 613 (52) 1,049 Change in value of common stock warrants 4,270 Equity losses from Laramie Energy, LLC (46,905 Total other expense, net (73,004) (72,657) (111,808 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) per share	Operating income (loss)		437,903		(7,619)		(317,998		
Debt extinguishment and commitment costs (5,329) (8,144) Gain on curtailment of pension obligation 2,032 Other income (expense), net 613 (52) 1,049 Change in value of common stock warrants 4,270 Equity losses from Laramie Energy, LLC (46,905) Total other expense, net (73,004) (72,657) (111,808) Income (loss) before income taxes 364,899 (80,276) (429,806) Income (loss) before income taxes 364,899 (80,276) (429,806) Income (loss) per share Basic \$ 6,12 \$ (1.40) \$ (7.68) Diluted \$ 6,08 (1.40) \$ (7.68) Weighted-average number of shares outstanding Basic 59,544 58,268 53,295	Other income (expense)								
Gain on curtailment of pension obligation - $2,032$ - Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants - - $4,270$ Equity losses from Laramie Energy, LLC - - $(46,905)$ Total other expense, net $(73,004)$ $(72,657)$ $(111,808)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) $$364,189$ $$(81,297)$ $$$(409,086)$ Income (loss) per share $$$(710)$ $(1,021)$ $$$(7.68)$ Diluted $$$6.12$ $$(1.40)$ $$$(7.68)$ Weighted-average number of shares outstanding $$$(7.68)$ $$$(1.40)$ $$$(7.68)$	Interest expense and financing costs, net		(68,288)		(66,493)		(70,222)		
Other income (expense), net 613 (52) $1,049$ Change in value of common stock warrants $ 4,270$ Equity losses from Laramie Energy, LLC $ (46,905)$ Total other expense, net $(73,004)$ $(72,657)$ $(1111,808)$ Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income (loss) before income taxes $364,189$ $(80,276)$ $(429,806)$ Income (loss) (710) $(1,021)$ $20,720$ Net income (loss) $\frac{5}{3}$ $364,189$ $\frac{5}{8}$ $(81,297)$ $\frac{5}{8}$ Income (loss) per share $\frac{5}{8}$ 6.12 $\frac{5}{1,400}$ $\frac{5}{7,688}$ Weighted-average number of shares outstanding $\frac{59,544}{58,268}$ $53,295$	Debt extinguishment and commitment costs		(5,329)		(8,144)				
Change in value of common stock warrants — — — 4,270 Equity losses from Laranie Energy, LLC — — — (46,905 Total other expense, net (73,004) (72,657) (111,808 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) before income taxes 364,189 \$ (81,297) \$ (409,086 Income (loss) per share \$ 364,189 \$ (81,297) \$ (409,086 Income (loss) per share \$ 364,189 \$ (1.40) \$ (7.68 Diluted \$ 6.12 \$ (1.40) \$ (7.68 Weighted-average number of shares outstanding	Gain on curtailment of pension obligation		_		2,032				
Equity losses from Laramie Energy, LLC — — — — (46,905 Total other expense, net (73,004) (72,657) (111,808 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) before income taxes 364,899 (80,276) (429,806 Income (loss) before income taxes 364,189 \$ (81,297) \$ Net income (loss) per share \$ 364,189 \$ (81,297) \$ (409,086 Income (loss) per share \$ \$ 6.12 \$ (1.40) \$ (7.68 Diluted \$ 6.08 \$ (1.40) \$ (7.68 Basic \$ 59,544 58,268 53,295	Other income (expense), net		613		(52)		1,049		
Total other expense, net (73,004) (72,657) (111,808 Income (loss) before income taxes 364,899 (80,276) (429,806 Income tax benefit (expense) (710) (1,021) 20,720 Net income (loss) \$ 364,189 \$ (81,297) \$ (409,086) Income (loss) per share \$ 6.12 \$ (1.40) \$ (7.68) Diluted \$ 6.08 \$ (1.40) \$ (7.68) Weighted-average number of shares outstanding Basic 59,544 58,268 53,295	Change in value of common stock warrants		—		_		4,270		
Income (loss) before income taxes $364,899$ $(80,276)$ $(429,806)$ Income tax benefit (expense) (710) $(1,021)$ $20,720$ Net income (loss)\$ 364,189\$ $(81,297)$ \$ $(409,086)$ Income (loss) per share $364,189$ \$ $(81,297)$ \$ $(409,086)$ Basic\$ 6.12 \$ (1.40) \$ (7.68) Diluted\$ 6.08 \$ (1.40) \$ (7.68) Weighted-average number of shares outstanding $59,544$ $58,268$ $53,295$	Equity losses from Laramie Energy, LLC		_		_		(46,905		
Income tax benefit (expense) (1,021) 20,720 Net income (loss) \$ 364,189 \$ (81,297) \$ (409,086) Income (loss) per share	Total other expense, net		(73,004)		(72,657)		(111,808		
Net income (loss) \$ 364,189 \$ (81,297) \$ (409,086 Income (loss) per share \$ 6.12 \$ (1.40) \$ (7.68 Basic \$ 6.08 \$ (1.40) \$ (7.68 Weighted-average number of shares outstanding \$ 59,544 \$ 58,268 \$ 53,295	Income (loss) before income taxes		364,899		(80,276)		(429,806		
Income (loss) per share Basic \$ 6.12 \$ (1.40) \$ (7.68 Diluted \$ 6.08 \$ (1.40) \$ (7.68 Weighted-average number of shares outstanding Basic 59,544 58,268 53,295	Income tax benefit (expense)		(710)	_	(1,021)		20,720		
Basic \$ 6.12 \$ (1.40) \$ (7.68) Diluted \$ 6.08 \$ (1.40) \$ (7.68) Weighted-average number of shares outstanding Basic 59,544 58,268 53,295	Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086		
Diluted \$ 6.08 \$ (1.40) \$ (7.68 Weighted-average number of shares outstanding Basic 59,544 58,268 53,295	Income (loss) per share								
Weighted-average number of shares outstanding Basic59,54458,26853,295		\$	6.12	\$	(1.40)	\$	(7.68		
Basic 59,544 58,268 53,295	Diluted	\$	6.08	\$	(1.40)	\$	(7.68		
Basic 59,544 58,268 53,295	Weighted-average number of shares outstanding								
Diluted 59,883 58,268 53,295			59,544		58,268		53,295		
	Diluted		59,883		58,268		53,295		

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,					
	2022		2021		2020	
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086)
Other comprehensive income (loss):						
Other post-retirement benefits income (loss), net of tax		5,627		6,244		(4,324)
Total other comprehensive income (loss), net of tax		5,627		6,244		(4,324)
Comprehensive income (loss)	\$	369,816	\$	(75,053)	\$	(413,410)

See accompanying notes to consolidated financial statements.

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

		Yea	r En	ded Decembe	r 31 ,		
		2022		2021		2020	
Cash flows from operating activities:							
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086	
Adjustments to reconcile net income (loss) to cash provided by (used in) operating activities:							
Depreciation and amortization		99,769		94,241		90,036	
Impairment expense		—		1,838		85,806	
Debt extinguishment and commitment costs		5,329		8,144			
Non-cash interest expense		4,218		5,663		6,902	
Non-cash lower of cost and net realizable value adjustment		(463)		(10,132)		10,595	
Change in value of common stock warrants		_				(4,270	
Deferred taxes		274		(260)		(20,895	
Gain on sale of assets, net		(169)		(64,697)			
Stock-based compensation		9,353		8,165		7,342	
Unrealized (gain) loss on derivative contracts		9,336		(1,393)		(3,322	
Equity losses from Laramie Energy, LLC				_		46,905	
Net changes in operating assets and liabilities:						,	
Trade accounts receivable		(57,391)		(83,955)		117,801	
Prepaid and other assets		(35,356)		(6,321)		36,500	
Inventories		(254,437)		(350,652)		171,880	
Deferred turnaround expenditures		(29,608)		(9,451)		(49,770	
Obligations under inventory financing agreements		74,680		252,920		(190,831	
Accounts payable, other accrued liabilities, and operating lease ROU assets and liabilities		262,882		209,565		67,193	
		452,606		(27,622)			
Net cash provided by (used in) operating activities		432,000		(27,022)		(37,214	
Cash flows from investing activities:		(25.54())					
Acquisitions of businesses, net of cash acquired		(35,546)		(20, 522)		((2,522	
Capital expenditures		(53,025)		(29,533)		(63,522	
Proceeds from sale of assets		1,263		104,161		58	
Net cash provided by (used in) investing activities		(87,308)		74,628		(63,464	
Cash flows from financing activities:							
Proceeds from sale of common stock, net of offering costs				87,193			
Proceeds from borrowings		384,874		186,773		250,387	
Repayments of borrowings		(446,863)		(329,315)		(159,489	
Net borrowings (repayments) on deferred payment arrangements and receivable advances		80,681		61,098		(41,645	
Purchase of common stock for retirement		(7,834)		(2,145)		(1,156	
Payments for debt extinguishment and commitment costs		(3,483)		(5,618)		_	
Other financing activities, net		6,032		920		(5,538	
Net cash provided by (used in) financing activities		13,407		(1,094)		42,559	
Net increase (decrease) in cash, cash equivalents, and restricted cash		378,705		45,912		(58,119	
Cash, cash equivalents, and restricted cash at beginning of period		116,221		70,309		128,428	
Cash, cash equivalents, and restricted cash at end of period	\$	494,926	\$	116,221	\$	70,309	
Supplemental cash flow information:							
Net cash received (paid) for:							
Interest	\$	(63,323)	\$	(65,221)	\$	(54,256	
Taxes		(51)		(795)		190	
Non-cash investing and financing activities:		()		~ /			
Accrued capital expenditures	\$	5,418	\$	8,177	\$	4,686	
Value of warrants reclassified to equity	~		*		~	3,936	
ROU assets obtained in exchange for new finance lease liabilities		594		1,936		3,476	
ROU assets obtained in exchange for new operating lease liabilities		64,567		97,011		22,529	
		04,307		97,011		22,329	
ROU assets terminated in exchange for release from finance lease liabilities		_		_			
ROU assets terminated in exchange for release from operating lease liabilities		32,902		6,847		7,738	
nuonnaos		52,702		0,077		1,150	

See accompanying notes to consolidated financial statements.

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

			Additional		Accumulated Other	
	Commo	n Stock	Paid-In	Accumulated	Comprehensive	Total
	Shares	Amount	Capital Deficit		Income	Equity
Balance, January 1, 2020	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
Issuance of common stock for employee stock purchase plan	67		1,244		_	1,244
Stock-based compensation	417	3	9,163	_	_	9,166
Purchase of common stock for retirement	(524)	(5)	(2,069)	(5,759)	_	(7,833)
Exercise of stock options	349	4	6,440			6,444
Other comprehensive income		—	_	_	5,627	5,627
Net income				364,189		364,189
Balance, December 31, 2022	60,471	\$ 604	\$ 836,491	\$ (200,687)	\$ 8,129	\$ 644,537

See accompanying notes to consolidated financial statements.

Note 1—Overview

Par Pacific Holdings, Inc. and its wholly owned subsidiaries ("Par" or the "Company") own and operate marketleading 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. Our refinery in Kapolei, Hawaii, produces gasoline, jet fuel, ultralow 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 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 under our proprietary "nomnom" brand that sell merchandise such as soft drinks, prepared foods, and other sundries. Our Hawaii retail network includes our proprietary Hele (the Hawaiian word for movement or "let's go") fuel brand 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. In 2023, we plan to unite all our company operated convenience stores under our Hele brand. Our cardlock locations on Kauai are branded Kauai Automated Fuels ("KAF").

We operate convenience stores at 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, 2022, 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, 2022, we owned a 46.0% equity investment in Laramie Energy, LLC ("Laramie Energy"). Laramie Energy is focused on developing and 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.

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.

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, 2022, 2021, or 2020.

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.

We are 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 & Refining Co. and certain affiliated entities (collectively, "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.

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.

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 year ended December 31, 2020, we recorded an impairment charge of \$45.3 million in our consolidated statement of operations due to the significant decline in natural gas prices during the first quarter of 2020. 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

From time to time, we enter into lease arrangements where we are the lessor in order to utilize a portion of our fixed assets not currently used in our primary operations. All of these lessor leases are classified as operating leases, whereby we do not derecognize the underlying asset, and the income from our customers is recognized as revenue on a straight-line basis over the lease term. Please read Note 16—Leases for further disclosures and information on leases.

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.

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 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 and amortization ("D&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 2022, 2021, and 2020, we recognized deferred turnaround costs of approximately \$29.6 million, \$9.5 million, and \$49.8 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 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, 2022 and 2021 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.

As a general rule, our open years for Internal Revenue Service ("IRS") examination purposes are 2019, 2020, and 2021. 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.

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,						
		2022		2021		2020	
Cost of revenues	\$	20,437	\$	21,903	\$	21,755	
Operating expense		51,901		52,338		56,637	
General and administrative expense		2,661		2,972		3,429	

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 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. 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.

On September 30, 2022, the FASB issued ASU 2022-04, *Liabilities—Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations*. This ASU defines supplier finance programs and establishes new disclosure requirements for such programs. For programs meeting that definition, this ASU requires annual disclosures of key

terms, obligations, and certain information related to these programs. Interim disclosure of the amount of outstanding obligations is also required. ASU 2022-04 is effective for fiscal years beginning after December 15, 2022, with early adoption permitted. This ASU will expand our disclosures for qualified supplier finance programs.

Accounting Principles Adopted

On January 1, 2022, we adopted 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 treatment of modifications or exchanges of call options or warrants classified in equity. As we do not have any such items classified in equity as of December 31, 2022, our adoption of ASU 2021-04 did not have a material impact on our financial condition, results of operations, and cash flows.*

On January 1, 2022, we adopted ASU No. 2021-10, *Government Assistance (Topic 832), Disclosures by Business Entities about Government Assistance* ("ASU 2021-10"). This ASU requires certain annual disclosures when receiving government assistance that is accounted for under a grant or contribution model. As of December 31, 2022, we did not receive any government assistance requiring these new disclosures, therefore our adoption of ASU 2021-10 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, 2022, we owned a 46.0% ownership interest in Laramie Energy, an 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.

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 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, 2022 and 2021, the term loan had an outstanding balance of \$77.4 million and \$140.1 million, respectively.

On February 21, 2023, Laramie Energy entered into a term loan agreement which provided a \$205 million first lien term loan facility with \$160.0 million funded at closing and an optional \$45 million delayed draw commitment, subject to certain terms and conditions. Laramie Energy used the proceeds from the term loan to repay the then-outstanding balance of \$76.3 million on its existing term loan, including accrued interest and prepayment penalties, and fully redeem preferred equity of \$73.5 million. After deducting transaction costs, net proceeds were \$4.8 million. Laramie Energy's term loan matures on February 21, 2027. Under the terms of the new term loan, Laramie is permitted to make future cash distributions to its owners, including us, subject to certain restrictions.

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.

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

	Year End	ed December 31,
		2020
Beginning balance	\$	46,905
Equity earnings (losses) from Laramie Energy (1)		(1,611)
Impairment of our investment in Laramie Energy		(45,294)
Ending balance (1)	\$	

(1) 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.

Note 4—Acquisitions

Billings Acquisition

On October 20, 2022, we and our subsidiaries Par Montana, LLC ("Par Montana") and Par Montana Holdings, LLC ("Par Montana Holdings" and, together with Par Montana, the "Purchasers") entered into an Equity and Asset Purchase Agreement (the "Purchase Agreement") with Exxon Mobil Corporation, ExxonMobil Oil Corporation, and ExxonMobil Pipeline Company LLC (collectively, the "Sellers") to purchase (i) the high-conversion, complex refinery located in Billings, Montana and certain associated distribution and logistics assets, and (ii) 100% of the issued and outstanding equity interests in Exxon Billings Cogeneration, Inc. and in Yellowstone Logistics Holding Company for a base purchase price of \$310.0 million plus the value of hydrocarbon inventory and adjusted working capital at closing (collectively, the "Billings Acquisition"). The closing of the Billings Acquisition is subject to certain customary closing conditions and is expected to close in the second quarter of 2023. Upon execution of the Purchase Agreement, we made a cash deposit of \$30.0 million, recorded in Prepaid and other current assets, which will be credited to the sale upon a successful closing. We guaranteed the payment and performance of the Purchasers' obligations under the Purchase Agreement. We incurred \$3.4 million of acquisition costs related to the Billings Acquisition for the year ended December 31, 2022. These costs are included in Acquisition and integration costs on our consolidated statement of operations.

Northwest Retail Expansion

On December 2, 2022, we purchased three retail stores in Washington, for total consideration of \$5.5 million (the "Northwest Retail Expansion"). We accounted for the Northwest Retail Expansion as a business combination whereby the purchase price was allocated to the assets acquired and liabilities assumed based on their estimated fair values on the date of acquisition. Of the total purchase price of \$5.5 million, \$2.0 million was allocated to property, plant, and equipment, \$0.8 million was allocated to lease valuation, and \$0.5 million was allocated to inventory. We recognized \$2.1 million in goodwill attributable to opportunities expected to arise from expanding our operations. We incurred \$0.3 million of acquisition costs related to the Northwest Retail Expansion for the year ended December 31, 2022. These costs are included in Acquisition and integration costs on our consolidated statement of operations.

Note 5—Revenue Recognition

As of December 31, 2022 and 2021, receivables from contracts with customers were \$242.5 million and \$189.9 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 \$11.5 million and \$10.1 million as of December 31, 2022 and 2021, 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, 2022	Refining	Logistics	Retail
Product or service:			
Gasoline	\$ 1,999,065	\$ —	\$ 428,959
Distillates (1)	3,139,807		46,392
Other refined products (2)	1,890,813		
Merchandise			91,289
Transportation and terminalling services		198,821	
Other revenue	16,375		3,566
Total segment revenues (3)	\$ 7,046,060	\$ 198,821	\$ 570,206
Year Ended December 31, 2021	Refining	Logistics	Retail
Product or service:			
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
Product or service:			
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

(1) Distillates primarily include diesel and jet fuel.

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

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

Note 6—Inventories

Inventories at December 31, 2022 and 2021 consisted of the following (in thousands):

Titled Inventory		Supply and Offtake Agreement (1)		Total
\$ 112,082	\$	265,536	\$	377,618
188,040		168,624		356,664
 307,701		—		307,701
\$ 607,823	\$	434,160	\$	1,041,983
\$ 102,085	\$	199,282	\$	301,367
179,737		142,872		322,609
 166,341				166,341
\$ 448,163	\$	342,154	\$	790,317
 \$ \$	Inventory \$ 112,082 188,040 307,701 \$ 607,823 \$ 102,085 179,737 166,341	Titled Inventory Agr \$ 112,082 \$ 188,040 307,701 \$ \$ 607,823 \$ \$ 102,085 \$ 179,737 166,341	Titled Inventory Offfake Agreement (1) \$ 112,082 \$ 265,536 188,040 168,624 307,701 \$ 607,823 \$ 434,160 \$ 102,085 \$ 199,282 179,737 142,872 166,341	Titled Inventory Offfake Agreement (1) \$ 112,082 265,536 188,040 168,624 $307,701$ — \$ 607,823 434,160 \$ 102,085 199,282 179,737 142,872 166,341 —

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

(2) Includes \$258.2 million and \$120.1 million of RINs and environmental credits, reported at the lower of cost or NRV, as of December 31, 2022 and 2021, respectively. Our renewable volume obligation and other gross environmental credit obligations of \$549.8 million and \$311.0 million, reported at market value, are included in Other accrued liabilities on our consolidated balance sheets as of December 31, 2022 and 2021, respectively.

Inventories valued on the LIFO method were approximately 20% of total inventories at both December 31, 2022 and 2021.

As of December 31, 2022, we had no reserve for the lower of cost or net realizable value of inventory. As of December 31, 2021, there was a \$0.5 million reserve for the lower of cost or net realizable value of inventory. As of December 31, 2022 and December 31, 2021, the current replacement cost exceeded the LIFO inventory carrying value by approximately \$46.4 million and \$46.0 million, respectively.

Note 7—Prepaid and Other Current Assets

Prepaid and other current assets at December 31, 2022 and 2021 consisted of the following (in thousands):

	Dece	December 31,			
	2022		2021		
Collateral posted with broker for derivative instruments (1)	\$ 40,788	3 \$	6,053		
Billings acquisition deposit (2)	30,000)	_		
Prepaid insurance	15,639	,	14,110		
Deferred inventory financing charges	_	-	4,073		
Other	5,610	,	4,289		
Total	\$ 92,043	\$	28,525		

(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.

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

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):

	 Decem	ber	er 31,	
	2022		2021	
Land	\$ 153,804	\$	153,254	
Buildings and equipment (1)	1,050,898		1,007,608	
Other (1)	 19,865		19,535	
Total property, plant, and equipment	1,224,567		1,180,397	
Less accumulated depreciation and amortization	(388,733)		(323,892)	
Property, plant, and equipment, net	\$ 835,834	\$	856,505	

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

Depreciation and finance lease amortization expense was approximately \$75.0 million, \$77.2 million, and \$81.8 million for the years ended December 31, 2022, 2021, and 2020, 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 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. For the year ended December 31, 2022, no such impairment was recorded.

Note 9—Asset Retirement Obligations

Our asset retirement obligations ("AROs") are primarily related to the removal of underground storage tanks and the removal of brand signage at owned and leased retail sites which are legally required, whether by government action or contractual arrangement. The table below summarizes the changes in our recorded AROs (in thousands):

	 Year Ended December 31,					
	2022		2021		2020	
Beginning balance	\$ 14,414	\$	10,636	\$	10,180	
Accretion expense	934		873		490	
Revision in estimate	116		3,602			
Liabilities settled during period	 (89)		(697)		(34)	
Ending balance	\$ 15,375	\$	14,414	\$	10,636	

Note 10—Goodwill and Intangible Assets

During the years ended December 31, 2022, 2021, and 2020, the change in the net carrying amount of goodwill was as follows (in thousands):

Balance at January 1, 2020	\$ 195,919
Impairment expense	 (67,922)
Balance at December 31, 2020	127,997
Divestitures	 (735)
Balance at December 31, 2021	127,262
Acquisitions (1)	2,120
Divestitures	 (57)
Balance at December 31, 2022	\$ 129,325

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

The gross carrying value of goodwill was \$202.9 million as of January 1, 2020 and December 31, 2020 and 2021, and \$205.0 million as of December 31, 2022. As of January 1, 2020, we had accumulated impairment charges of \$7.0 million, and as of December 31, 2020, 2021, and 2022, we had accumulated impairment charges, including charges related to divestitures, of \$74.9 million, \$75.6 million, and \$75.7 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,				
	 2022		2021		
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	(5,383)		(5,297)		
Customer relationships	(19,632)		(17,061)		
Other					
Total accumulated amortization	(25,015)		(22,358)		
Net:					
Trade name and trademarks	884		970		
Customer relationships	12,432		15,003		
Other	261		261		
Total intangible assets, net	\$ 13,577	\$	16,234		

Amortization expense was approximately \$2.7 million for each of the years ended December 31, 2022, 2021, and 2020. 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
2023	\$ 2,658
2024	1,400
2025	979
2026	979
2027	979
Thereafter	 6,582
	\$ 13,577

Note 11—Inventory Financing Agreements

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

	 December 31,				
	2022				
Supply and Offtake Agreement	\$ 732,511	\$	569,158		
Washington Refinery Intermediation Agreement	 160,554		168,546		
Obligations under inventory financing agreements	\$ 893,065	\$	737,704		

Supply and Offtake Agreement

We have a supply and offtake agreement with J. Aron to support our Hawaii refining operations (the "Supply and Offtake Agreement"). On June 1, 2021, we entered into the second amended and restated supply and offtake agreement, which amended and restated the first amended and restated supply and offtake agreement in its entirety. 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 will sell, and J. Aron will 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. 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. The agreement also provides for the lease of crude oil and certain refined product storage facilities to J. Aron.

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. 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. 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.

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.

Prior to July 1, 2021, the Supply and Offtake Agreement 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.

Effective July 1, 2021, a discretionary draw facility (the "Discretionary Draw Facility") became available to PHR up to but excluding the Expiration Date. 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. Prior to June 1, 2022, the advances under the Discretionary Draw Facility bore interest at a rate equal to three-month LIBOR plus 4.00% per annum. Beginning on June 1, 2022, the advances 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 pay a discretionary draw availability fee equal to 0.75% of the unused capacity under the Discretionary Draw Facility.

On April 25, 2022, we entered into an amendment to the Supply and Offtake Agreement which, among other things, amended the maximum commitment amount under the Discretionary Draw Facility from \$165 million to \$215 million and increased the limit in the borrowing base for eligible hydrocarbon inventory from \$82.5 million to \$107.5 million. The amendment further requires a \$5.0 million reserve against the borrowing base at any time more than \$165 million is outstanding in discretionary draw advances made to PHR; the reserve may be reduced by the posting of cash collateral by PHR in accordance with the terms of the amendment.

Under the Supply and Offtake Agreement, 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. In 2022, we entered into additional contracts with J. Aron to fix certain fees for the month of March 2022 for \$18.2 million. The amount due to or from J. Aron is recorded as an adjustment to our Obligations under inventory financing agreements as allowed under the Supply and Offtake Agreement. We had no fixed market fees due to or from J. Aron as of December 31, 2022. As of December 31, 2021, we had a payable of \$6.2 million. We recognized fixed market fees of \$8.8 million, \$13.5 million, and \$1.3 million for the years ended December 31, 2022, 2021, and 2020, respectively, which were included in Cost of revenues (excluding depreciation) on our consolidated statements of operations.

Washington Refinery Intermediation Agreement

We are party to the Washington Refinery Intermediation Agreement with MLC, which 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, 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 from June 30, 2021 to 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 and to revise certain other terms and conditions in the Washington Refinery Intermediation Agreement. On March 9, 2022, we and MLC amended the Washington Refinery Intermediation Agreement to advance the term expiry date to March 31, 2023. On November 2, 2022, we and MLC amended the Washington Refinery Intermediation Agreement to further extend the term through March 31, 2024.

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 (the "MLC receivable advances") and additional advances based on crude oil and products inventories. Prior to May 9, 2022, the maximum borrowing capacity under the MLC receivable advances was \$90.0 million. On May 9, 2022, we and MLC amended the Washington Refinery Intermediation Agreement to increase the maximum borrowing capacity under the MLC receivable advances to \$115 million. The maximum borrowing capacity was reduced to \$110 million under the amendment to the Washington Refinery Intermediation Agreement dated November 2, 2022. The MLC receivable advances bore interest at a rate equal to three-month LIBOR plus 3.25% per annum prior to August 11, 2022. On August 11, 2022, we and MLC entered into an amendment to the Washington Refinery Intermediation Refinery Intermediation Agreement to establish adjusted three-month term Secured Overnight Financing Rate ("SOFR") as the benchmark rate in replacement of LIBOR and revise certain other terms and conditions. We also pay an availability fee equal to 0.75% of the unused capacity under the MLC receivable advances.

The following table summarizes our outstanding borrowings, letters of credit, and contractual undertaking obligations under the intermediation agreements (in thousands):

	December 31,				
	2022			2021	
Discretionary Draw Facility					
Outstanding borrowings (1)	\$	204,843	\$	126,225	
Borrowing capacity		204,843		126,225	
MLC receivable advances					
Outstanding borrowings (1)		56,601		54,538	
Borrowing capacity		56,601		54,538	
J. Aron payment undertaking obligations					
MLC issued letters of credit		115,001		166,950	

(1) Amounts outstanding under the Discretionary Draw Facility and MLC receivable advances are included in Obligations under inventory financing agreements on our consolidated balance sheets. Changes in the amount outstanding under these arrangements are included within Cash flows from financing activities on the consolidated statements of cash flows.

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,					51,
	2022		2021			2020
Net fees and expenses:						
Supply and Offtake Agreement						
Inventory intermediation fees (1)	\$	100,610	\$	21,612	\$	12,034
Interest expense and financing costs, net		6,150		3,015		3,044
Washington Refinery Intermediation Agreement						
Inventory intermediation fees	\$	3,000	\$	3,236	\$	4,112
Interest expense and financing costs, net		10,111		4,900		2,791

 Inventory intermediation fees under the Supply and Offtake Agreement include market structure fees of \$63.3 million and \$4.0 million for the years ended December 31, 2022, and 2021, respectively, and a market structure benefit of \$3.0 million for the year ended December 31, 2020.

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, 2022 and 2021 consisted of the following (in thousands):

	December 31,					
	2022			2021		
Accrued payroll and other employee benefits	\$	27,815	\$	19,710		
Gross environmental credit obligations (1)		549,791		311,014		
Other		62,888		39,700		
Total	\$	640,494	\$	370,424		

(1) Gross environmental credit obligations are stated at market as of December 31, 2022 and 2021. 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 or net realizable value. The carrying costs of these assets were \$258.2 million and \$120.1 million as of December 31, 2022 and 2021, respectively.

Note 13—Debt

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

	December 31,			
		2022		2021
ABL Credit Facility due 2025	\$		\$	
7.75% Senior Secured Notes due 2025		281,000		296,000
Term Loan B due 2026		203,125		215,625
12.875% Senior Secured Notes due 2026		31,314		68,250
Principal amount of long-term debt		515,439		579,875
Less: unamortized discount and deferred financing costs		(9,907)		(15,317)
Total debt, net of unamortized discount and deferred financing costs		505,532		564,558
Less: current maturities, net of unamortized discount and deferred financing costs		(10,956)		(10,841)
Long-term debt, net of current maturities	\$	494,576	\$	553,717

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

Year Ended	An	iount Due
2023	\$	12,500
2024		12,500
2025		293,500
2026		196,939
2027		_
Thereafter		_
Total	\$	515,439

Additionally, as of December 31, 2022 and 2021, we had approximately \$19.5 million and \$18.5 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 in cash-collateralized letters of credit and surety bonds outstanding as of both December 31, 2022 and December 31, 2021, 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 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.

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 Bank of Hawaii, which provided a term loan in the principal amount of \$45.0 million. 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%. 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. 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.

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 \$142.5 million subject to a borrowing base. As of December 31, 2022, the ABL Revolver had no outstanding balance and a borrowing base of approximately \$85.1 million. The maturity date of the ABL Revolver is February 2, 2025, on which date all revolving loans will be due and payable in full.

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 increased the maximum principal amount of the ABL Revolver at any time outstanding from \$85 million 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 extended the maturity date of the ABL Revolver from December 21, 2022 to February 2, 2025.

The ABL Loan Agreement also included 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. On March 30, 2022, the parties to the ABL Loan Agreement and the incremental lender party thereto amended the ABL Loan Agreement to exercise the accordion feature to increase the aggregate revolving commitments under the ABL Loan Agreement from \$105 million to \$142.5 million and decrease the available increase under the accordion feature from \$50 million to \$12.5 million, subject to certain limitations and conditions.

Prior to February 2, 2022, the revolving loans under the ABL Revolver bore interest at a fluctuating rate per annum equal to (i) during the periods such revolving loan was 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 was a LIBOR Loan, at LIBOR for the applicable interest period plus the applicable margin in effect from time to time. The base rate was equal to (i) daily LIBOR ("LIBOR Daily Floating Rate") or (ii) if the LIBOR Daily Floating Rate was unavailable for any reason, a rate as calculated per the agreement for such day.

Under the ABL Loan Agreement entered into on February 2, 2022, 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. The average effective interest rate for 2022 and 2021 on the ABL Revolver loan was 2.7% and 2.6%, respectively.

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, other than PHR, U.S. Oil, and any other Future Intermediation Subsidiary (as defined in the ABL Loan Agreement).

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.

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. On May 24, 2022, and July 14, 2022, we repurchased and cancelled \$5.0 million and \$10.0 million in aggregate principal amounts of the 7.75% Senior Secured Notes at repurchase prices of 97.500% and 95.000%, respectively, of the aggregate principal amount of notes repurchased. We recognized aggregate discounts of \$0.6 million and incurred aggregate debt extinguishment costs of \$0.2 million for these repurchases, which were recorded in Debt extinguishment and commitment costs on our consolidated statement of operations for the year ended December 31, 2022. As of December 31, 2022, the 7.75% Senior Secured Notes had an outstanding principal balance of \$281.0 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 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 2022 on the Term Loan B was 8.6%.

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.

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. We repurchased and cancelled \$13.9 million and \$21.7 million in aggregate principal amount of 12.875% Senior Secured Notes on May 16, 2022 and May 27, 2022, respectively, at a repurchase price of 111.125% of the aggregate principal amount of the notes repurchased, plus accrued and unpaid interest as of the repurchase date. On June 13, 2022, we repurchased an additional \$1.3 million in aggregate principal amount of the notes at a repurchase date. We paid premiums of approximately \$4.1 million upon repurchases of the 12.875% Senior Secured Notes during the year ended December 31, 2022 and incurred aggregate debt extinguishment costs of \$1.6 million for these repurchases, which were recorded in Debt extinguishment and commitment costs of \$1.6 million for these repurchases, which were recorded in Debt extinguishment and commitment costs of \$1.6 million for these repurchases, which were recorded in Debt extinguishment and commitment costs on our consolidated statement of operations for the year ended December 31, 2022 and incurred aggregate debt extinguishment costs of \$1.6 million for these repurchases, which were recorded in Debt extinguishment and commitment costs on our consolidated statement of operations for the year ended December 31, 2022. As of December 31, 2022, \$31.3 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, 2022, 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 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 2024. At December 31, 2022, our open commodity derivative contracts represented (in thousands of barrels):

Contract type	Purchases	Sales	Net
Futures	50,892	(51,147)	(255)
Swaps	1,524	(2,014)	(490)
Total	52,416	(53,161)	(745)

At December 31, 2022, 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 our refineries as of December 31, 2022:

	 2022
Average barrels per month	 67,500
Weighted-average strike price - floor (in dollars)	\$ 69.01
Weighted-average strike price - ceiling (in dollars)	\$ 92.36
Commencement date	January 2023
Expiry date	December 2023

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.

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, 2022 and 2021 and their placement within our consolidated balance sheets.

			Decem	ber 31	,
	Balance Sheet Location		2022		2021
		Asset (Liability)			
Commodity derivatives (1)	Prepaid and other current assets	\$	495	\$	1,260
Commodity derivatives	Other accrued liabilities		(10,989)		(1,431)
J. Aron repurchase obligation derivative	Obligations under inventory financing agreements		(12,156)		(15,151)
MLC terminal obligation derivative	Obligations under inventory financing agreements		14,435		(22,170)

(1) Does not include cash collateral of \$40.8 million and \$6.1 million recorded in Prepaid and other current assets as of December 31, 2022, and December 31, 2021, respectively, and \$9.5 million in Other long-term assets as of both December 31, 2022 and December 31, 2021.

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):

					led Decembe	r 31,	,
	Statement of Operations Classification		2022		2021		2020
Commodity derivatives	Cost of revenues (excluding depreciation)	\$	(65,814)	\$	(22,417)	\$	(51,902)
J. Aron repurchase obligation derivative	Cost of revenues (excluding depreciation)		2,995		5,646		(20,970)
MLC terminal obligation derivative	Cost of revenues (excluding depreciation)		(49,636)		(73,256)		39,820
Interest rate derivatives	Interest expense and financing costs, net				104		(2,265)

Note 15—Fair Value Measurements

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

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 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 New York Mercantile Exchange ("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.

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

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 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 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, have a weighted average of \$14.07 per barrel, and range from a discount of \$17.90 per barrel to a premium of \$85.04 per barrel as of December 31, 2022. 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, 2022 or 2021. 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, 2022 and 2021 are presented gross in the tables below (in thousands):

	December 31, 2022										
	Level 1		Level 2		Level 3	0	Gross Fair Value		Effect of Counter- arty Netting		Net Carrying Value on Balance Sheet (1)
Assets											
Commodity derivatives	\$ 161,541	\$	8,369	\$	_	\$	169,910	\$	(169,415)	\$	495
Liabilities											
Commodity derivatives	\$ (172,529)	\$	(7,875)	\$	—	\$	(180,404)	\$	169,415	\$	(10,989)
J. Aron repurchase obligation derivative					(12,156)		(12,156)		_		(12,156)
MLC terminal obligation derivative	_		_		14,435		14,435		_		14,435
Gross environmental credit obligations (2)			(549,791)				(549,791)				(549,791)
Total (3)	\$ (172,529)	\$	(557,666)	\$	2,279	\$	(727,916)	\$	169,415	\$	(558,501)

	December 31, 2021									
	Level 1		Level 2		Level 3	0	Gross Fair Value		Effect of Counter- arty 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)

(1) Does not include cash collateral of \$50.3 million and \$15.6 million as of December 31, 2022 and 2021, 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 \$258.2 million and \$120.1 million presented as Inventories on our consolidated balance sheet and stated at the lower of cost and net realizable value as of December 31, 2022 and 2021, respectively.

(3) The interest rate derivative was settled in February 2021, therefore, there is no asset or liability related to the interest rate derivative on December 31, 2022 or 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,						
	2022	2021		2020			
Balance, beginning of period	\$ (37,321)	\$ (30,9	958) \$	(22,750)			
Settlements	86,242	61,2	247	(31,328)			
Total gains (losses) included in earnings	 (46,642)	(67,6	510)	23,120			
Balance, end of period	\$ 2,279	\$ (37,3	\$21)	(30,958)			

The carrying value and fair value of long-term debt and other financial instruments as of December 31, 2022 and 2021 are as follows (in thousands):

		December 31, 2022		
	Carry	ing Value	Fair Value	
ABL Credit Facility due 2025 (2)	\$	_ :	\$	
7.75% Senior Secured Notes due 2025 (1)		277,137	276,785	
Term Loan B Facility due 2026 (1)		198,268	201,094	
12.875% Senior Secured Notes due 2026 (1)		30,127	34,029	

	Decemb	er 31, 2021
	Carrying Value	Fair Value
ABL Credit Facility due 2025 (2)	\$ —	\$ —
7.75% Senior Secured Notes due 2025 (1)	290,621	299,700
Term Loan B Facility due 2026 (1)	208,903	214,827
Senior Secured Notes due 2026 (1)	65,034	75,758

(1) The fair value measurements of the 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 is considered Level 3 measurements in the fair value hierarchy.

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, approximated 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 residual value guarantees associated with any of our leases.

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, 2022 and 2021 and their placement within our consolidated balance sheets:

Lease type	Balance Sheet Location	Dece	mber 31, 2022	December 31, 2021		
Assets						
Finance	Property, plant, and equipment	\$	21,150	\$	20,556	
Finance	Accumulated amortization		(10,308)		(8,397)	
Finance	Property, plant, and equipment, net	\$	10,842	\$	12,159	
Operating	Operating lease right-of-use assets		350,761		383,824	
Total right-of-use asset	ts	\$	361,603	\$	395,983	
Liabilities						
Current						
Finance	Other accrued liabilities	\$	1,782	\$	1,540	
Operating	Operating lease liabilities		66,081		53,640	
Long-term						
Finance	Finance lease liabilities		6,311		7,691	
Operating	Operating lease liabilities		292,701		335,094	
Total lease liabilities		\$	366,875	\$	397,965	
Weighted-average remainin	ng lease term (in years)					
Finance			5.60		6.29	
Operating			9.00		11.28	
Weighted-average discount	rate					
Finance			7.38 %	1	7.46 %	
Operating			7.10 %	1	6.70 %	

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

	Year Ended December 31,									
Lease cost type		2022		2021	2020					
Finance lease cost										
Amortization of finance lease ROU assets	\$	1,917	\$	1,913	\$	2,007				
Interest on lease liabilities		619		655		654				
Operating lease cost		89,591		91,882		106,256				
Variable lease cost		5,478		6,716		9,802				
Short-term lease cost		8,575		1,013		1,926				
Net lease cost	\$	106,180	\$	102,179	\$	120,645				
Operating lease income (1)	\$	(11,030)	\$	(3,149)	\$	(3,201)				

(1) At December 31, 2022 and 2021, Property, plant, and equipment, net associated with leased assets was approximately \$9.2 million and \$10.8 million, respectively. The majority of our lessor income comes from leases with lease terms of one year or less and the estimated future undiscounted cash flows from lessor income are not expected to be material.

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

	Year Ended December 31,					1,
Lease type		2022		2021		2020
Cash paid for amounts included in the measurement of liabilities						
Financing cash flows from finance leases	\$	1,620	\$	1,914	\$	1,932
Operating cash flows from finance leases		614		658		656
Operating cash flows from operating leases		85,681		89,677		103,270
Non-cash supplemental amounts						
ROU assets obtained in exchange for new finance lease liabilities		594		1,936		3,476
ROU assets obtained in exchange for new operating lease liabilities		64,567		97,011		22,529
ROU assets terminated in exchange for release from finance lease liabilities						
ROU assets terminated in exchange for release from operating lease liabilities		32,902		6,847		7,738

The table below includes the estimated future undiscounted cash flows for finance and operating leases as of December 31, 2022 (in thousands):

For the year ending December 31,	Fi	inance leases	Operating leases			Total
2023	\$	2,286	\$	88,546	\$	90,832
2024		1,955		75,129		77,084
2025		1,794		50,823		52,617
2026		1,327		45,777		47,104
2027		1,098		43,575		44,673
Thereafter		1,582		160,849		162,431
Total lease payments		10,042		464,699		474,741
Less amount representing interest		(1,949)		(105,917)		(107,866)
Present value of lease liabilities	\$	8,093	\$	358,782	\$	366,875

Additionally, we have \$11.6 million and \$3.8 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 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. From time to time, Par Hawaii Refining, LLC has appealed various tax assessments related to its land, buildings, and fuel storage tanks, and is currently appealing the City of Honolulu's property tax assessment for tax year 2023. During the first quarter of 2022, we received a tax assessment in the amount of \$1.4 million from the Washington Department of Revenue related to its audit of certain taxes allegedly payable on certain sales of raw vacuum gas oil between 2014 and 2016. We believe the Department of Revenue's interpretation is in conflict with its prior guidance and we appealed in November 2022. By opinion dated September 22, 2021, the Hawaii Attorney General reversed a prior 1964 opinion exempting various business transactions conducted in Hawaii foreign trade zone from certain state taxes. We and other similarly situated state taxpayers who had previously claimed such exemptions, certain of which we are contractually obligated to indemnify, are currently being audited 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 foreign trade zone, 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. 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 for the well-understood components of these efforts. As of December 31, 2022, we have accrued \$14.8 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 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

Under the Energy Independence and Security Act (the "EISA"), the Renewable Fuel Standard (the "RFS") requires an increasing amount of renewable fuel to be blended into the nation's transportation fuel supply. 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 or by purchasing renewable credits, referred to as RINs, to maintain compliance. For additional information, please read Item 1. — Business — Environmental Regulations. As of December 31, 2022, our estimate of the renewable volume obligation ("RVO") liability for the 2021 and 2022 compliance years is based on the RFS volumetric requirements which the EPA finalized on June 3, 2022.

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.

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.

Environmental Agreement

On September 25, 2013, Par Petroleum, LLC (formerly Hawaii Pacific Energy, a wholly owned subsidiary of Par created for purposes of the acquisition of PHR), Tesoro Corporation ("Tesoro"), 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.

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, 2022, 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, 2022, 2021, and 2020, we had one customer in our refining segment that accounted for 17%, 13%, and, 13%, respectively, of our consolidated revenue. No other customer accounted for more than 10% of our consolidated revenues during the years ended December 31, 2022, 2021, and 2020.

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 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.

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 years ended December 31, 2022 and 2021, 420 thousand and 59 thousand shares were repurchased under this share repurchase program for a total of \$5.8 million and \$0.8 million, respectively.

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, 2022, 3.4 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.

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						
Restricted Stock Awards	\$	5,172	\$	4,657	\$	3,939				
Restricted Stock Units	\$	1,451	\$	1,356	\$	1,510				
Stock Option Awards	\$	2,540	\$	1,939	\$	1,660				

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, 2022, 135 thousand shares remained available under the ESPP.

During each of the years ended December 31, 2022, 2021, and 2020, 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, 2022, 2021, and 2020, employees purchased 67 thousand, 85 thousand, and 145 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, 2022, 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	A Gran	eighted- verage t Date Fair Value
Unvested balance at December 31, 2021	760	\$	17.19
Granted	464		15.27
Vested	(336)		17.01
Forfeited	(94)		16.49
Unvested balance at December 31, 2022	794	\$	16.24

	Years Ended December 31,						
	2022		2021			2020	
Weighted-average grant-date fair value per share of restricted stock awards and restricted stock units granted (in dollars)	\$	15.27	\$	16.38	\$	16.97	
Fair value of restricted stock awards and restricted stock units vested	\$	5,718	\$	4,370	\$	3,787	

As of December 31, 2022 and 2021, there were approximately \$8.8 million and \$9.0 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 1.69 years and 1.74 years, respectively.

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, 2021	158	\$	17.61	
Granted	50		14.91	
Vested	(70)		17.31	
Forfeited	(25)		16.81	
Unvested balance at December 31, 2022	113	\$	16.78	

	Years Ended December 31,					
	2022			2021 2020		2020
Weighted-average grant-date fair value per share of performance restricted stock units granted (in dollars)	\$	14.91	\$	16.52	\$	19.73
Fair value of performance restricted stock units vested	\$	1,343	\$	940	\$	783

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, 2022 and 2021, there were approximately \$0.7 million and \$1.1 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 1.69 years and 1.76 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 2022, 2021, and 2020 are presented below.

	2022	2021	2020
Expected life from date of grant (in years)	5.3	5.3	5.3
Expected volatility	55.4%	53.2%	33.2%
Risk-free interest rate	1.83%	0.64%	1.31%

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, 2021	2,195	\$ 18.50	4.2	\$ 446
Issued	449	14.91		
Exercised	(349)	16.79		
Forfeited / canceled / expired	(275)	19.13		
Outstanding balance at December 31, 2022	2,020	\$ 17.92	4.3	\$ 10,779
Exercisable, end of year	1,300	\$ 18.94	3.2	\$ 5,608

The estimated weighted-average grant-date fair value per share of options granted during the year ended December 31, 2022, 2021, and 2020 was \$7.44, \$7.72, and \$6.30, respectively.

As of December 31, 2022 and 2021, there were approximately \$3.7 million and \$3.8 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 1.79 years and 1.76 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, 2022, 2021, and 2020, we made contributions to the plans totaling approximately \$5.2 million, \$3.1 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.

The changes in the projected benefit obligation and the fair value of plan assets of our Benefit Plans for the years ended December 31, 2022 and 2021 were as follows (in thousands):

	 2022	 2021
Changes in projected benefit obligation:		
Projected benefit obligation as of the beginning of the period	\$ 56,411	\$ 60,479
Service cost	821	1,140
Interest cost	1,538	1,538
Plan amendment		(446)
Actuarial gain (1)	(15,178)	(2,508)
Benefits paid	(2,225)	(1,760)
Curtailment	 —	 (2,032)
Projected benefit obligation as of the end of the period	\$ 41,367	\$ 56,411
Changes in fair value of plan assets:		
Fair value of plan assets as of the beginning of the period	\$ 49,821	\$ 46,161
Actual return (loss) on plan assets	(6,957)	5,420
Employer contributions		—
Benefits paid	 (2,225)	 (1,760)
Fair value of plan assets as of the end of the period	\$ 40,639	\$ 49,821

(1) For the year ended December 31, 2022, the change in the actuarial gain was due to an increase in the discount rate. 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.

The underfunded status of our Benefit Plans is recorded within Other liabilities on our consolidated balance sheets and the funded status of our Benefit Plans is recorded within Other long-term assets on our consolidated balance sheets. The reconciliation of the underfunded status of our Benefit Plans of December 31, 2022 and 2021 was as follows:

	2022				2021	l
	WY	' Refining	U.S. Oil	W	Y Refining	U.S. Oil
Projected benefit obligation		24,730	16,637		34,333	22,078
Fair value of plan assets		21,940	18,699		28,076	21,745
Underfunded/(overfunded) status	\$	2,790 \$	(2,062)	\$	6,257 \$	333
Amounts recognized in consolidated balance sheet:						
Non-current assets		—	2,062		—	—
Non-current liabilities		(2,790)			(6,257)	(333)
Net amount recorded	\$	(2,790) \$	2,062	\$	(6,257) \$	(333)
Gross amounts recognized in accumulated other comprehensive income (loss): (1)						
Net actuarial gain (loss)		5,243	(318)		2,188	(2,892)
Total accumulated other comprehensive income (loss)	\$	5,243 \$	(318)	\$	2,188 \$	(2,892)

(1) For the year ended December 31, 2022, we recognized an immaterial amount of service costs in accumulated other comprehensive income.

Weighted-average assumptions used to measure our projected benefit obligation as of December 31, 2022, 2021, and 2020 and net periodic benefit costs for the years ended December 31, 2022, 2021 and 2020 are as follows:

	2022	2021	2020
Projected benefit obligation:			
Wyoming Refining plan			
Discount rate (1)	5.15 %	2.85 %	2.65 %
Rate of compensation increase	<u> </u>	<u> %</u>	3.00 %
U.S. Oil plan			
Discount rate (1)	5.00 %	2.70 %	2.35 %
Rate of compensation increase	3.00 %	3.00 %	3.00 %
Net periodic benefit costs:			
Wyoming Refining plan			
Discount rate (1)	2.85 %	3.25 %	3.30 %
Expected long-term rate of return (2)	5.75 %	5.75 %	6.25 %
Rate of compensation increase	<u> </u>	3.00 %	3.00 %
U.S. Oil plan			
Discount rate (1)	2.70 %	2.35 %	3.10 %
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 credit for the years ended December 31, 2022, 2021, and 2020 includes the following components:

	2022		2021		 2020
Components of net periodic benefit (credit):					
Service cost	\$	821	\$	1,140	\$ 1,347
Interest cost		1,538		1,538	1,642
Expected return on plan assets		(2,596)		(2,375)	(2,323)
Amortization of net loss		3		245	176
Amortization of prior service cost		_			1
Effect of curtailment				(2,032)	
Net periodic benefit credit	\$	(234)	\$	(1,484)	\$ 843

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, 2022, 2021, and 2020. 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, 2022, 2021, and 2020.

The weighted-average asset allocation for our Wyoming Refining plan at December 31, 2022 is as follows:

	Target	Actual		
Asset category:				
Equity securities	40 %	33 %		
Debt securities	50 %	49 %		
Real estate	10 %	18 %		
Total	100 %	100 %		

The weighted-average asset allocation for our U.S. Oil plan at December 31, 2022 is as follows:

	Target	Actual
Asset category:		
Equity securities	56 %	50 %
Debt securities	43 %	50 %
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 2023. 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	
2023	\$ 2,281
2024	2,322
2025	2,404
2026	2,632
2027	2,628
Thereafter	 13,441
	\$ 25,708

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. The common stock warrants are included in the calculation of basic income (loss) per share for the year ended December 31, 2020, 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.

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,						
		2022		2021	2020		
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086)	
Plus: Net income effect of convertible securities				_			
Numerator for diluted income (loss) per common share	\$	364,189	\$	(81,297)	\$	(409,086)	
Basic weighted-average common stock shares outstanding		59,544		58,268		53,295	
Plus: dilutive effects of common stock equivalents (1)		339		, 		, 	
Diluted weighted-average common stock shares outstanding		59,883		58,268		53,295	
Basic income (loss) per common share	\$	6.12	\$	(1.40)	\$	(7.68)	
Diluted income (loss) per common share	\$	6.08	\$	(1.40)	\$	(7.68)	
Diluted income (loss) per common share excludes the following equity instruments because their effect would be anti-dilutive:							
Shares of unvested restricted stock		234		925		475	
Shares of stock options		1,868		2,386		2,229	
Common stock equivalents using the if-converted method of settling the 5.00% Convertible Senior Notes (2)		_		1,230		2,704	

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

(2) We had no 5.00% Convertible Senior Notes outstanding for the year ended December 31, 2022.

Note 21—Income Taxes

As of December 31, 2022, we had approximately \$1.2 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, 2022, we recorded an income tax expense of \$0.7 million primarily driven by an increase in state taxable income. 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 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. 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, 2022.

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 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, 2022.

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,						
		2022	_	2021		2020		
Current:								
U.S.—Federal	\$		\$		\$	_		
U.S.—State		362		26		51		
Foreign		73		1,255		125		
Deferred:								
U.S.—Federal		236		(223)		(20,509)		
U.S.—State		39		(37)		(387)		
Total	\$	710	\$	1,021	\$	(20,720)		

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 E	Year Ended December 31,						
	2022	2021	2020					
Federal statutory rate	21.0 %	21.0 %	21.0 %					
State income taxes, net of federal benefit	0.1 %	<u> %</u>	0.1 %					
Foreign taxes	<u> %</u>	(1.6)%	<u> </u>					
Change in valuation allowance related to current activity	(21.3)%	(20.1)%	(14.0)%					
Permanent items	0.4 %	(0.6)%	(2.3)%					
Actual income tax rate	0.2 %	(1.3)%	4.8 %					

Deferred tax assets (liabilities) are comprised of the following (in thousands):

	December 31,			
		2022		2021
Deferred tax assets:				
Net operating loss	\$	308,457	\$	424,112
Intangible assets		830		1,912
Environmental credit obligations		71,424		40,097
Other		4,099		16,137
Total deferred tax assets		384,810		482,258
Valuation allowance		(330,456)		(421,387)
Net deferred tax assets		54,354		60,871
Deferred tax liabilities:				
Inventory		5,891		9,820
Property and equipment		54,124		56,436
Total deferred tax liabilities		60,015		66,256
Total deferred tax liability, net	\$	(5,661)	\$	(5,385)

We have NOL carryforwards as of December 31, 2022 of \$1.2 billion for federal income tax purposes. If not utilized, approximately \$1.0 billion of our NOL carryforwards will expire during 2029 through 2037. Approximately \$0.2 billion of our NOL carryforwards do not expire.

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.

Summarized financial information concerning reportable segments consists of the following (in thousands):

For the year ended December 31, 2022	R	efining	L	ogistics	Retail	Eli	orporate, minations, d Other (1)	Total
Revenues	\$ 7	7,046,060	\$	198,821	\$ 570,206	\$	(493,302)	\$ 7,321,785
Cost of revenues (excluding depreciation)	6	5,332,694		109,458	428,712		(494,850)	6,376,014
Operating expense (excluding depreciation)		245,992		14,988	81,229			342,209
Depreciation and amortization		65,472		20,579	10,971		2,747	99,769
Loss (gain) on sale of assets, net		1		(253)	56		27	(169)
General and administrative expense (excluding depreciation)							62,396	62,396
Acquisition and integration costs					 _		3,663	 3,663
Operating income (loss)	\$	401,901	\$	54,049	\$ 49,238	\$	(67,285)	\$ 437,903
Interest expense and financing costs, net								(68,288)
Debt extinguishment and commitment costs								(5,329)
Gain on curtailment of pension obligation								_
Other income, net								613
Income before income taxes								364,899
Income tax expense								(710)
Net income								\$ 364,189
Total assets	\$ 2	2,580,298	\$	412,336	\$ 244,233	\$	43,780	\$ 3,280,647
Goodwill		39,821		55,232	34,272			129,325
Capital expenditures		31,967		12,094	7,652		1,312	53,025

(1) Includes eliminations of intersegment revenues and cost of revenues of \$493.3 million for the year ended December 31, 2022.

For the year ended December 31, 2021	Refining	g Logistics		cs 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 and amortization	58,258		22,044		10,880		3,059		94,241
Impairment expense	1,838				—				1,838
Loss 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)
	¢ 1.000.005	¢	200.102	•	220.245		14025	_	0.550.051
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.

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 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)
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.

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 5% 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 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, 2022, 2021, or 2020.

Note 24—Subsequent Events

Refinancing of Term Loan B

On February 14, 2023, we priced the proposed private \$550 million aggregate principal amount senior secured term loan B due 2030. We intend to use the proceeds from the proposed term loan to refinance the Company's existing Term Loan B Facility and its outstanding Notes (as described below) and for general corporate purposes.

Tender Offers

On February 15, 2023, we announced the commencement of cash tender offers (the "Tender Offers") for the purchase by PPL of any and all of the (i) 7.75% Senior Secured Notes and (ii) 12.875% Senior Secured Notes (together, the "Notes"). The Tender Offers were for cash consideration of \$1,021.20 per \$1,000 principal amount of 7.75% Senior Secured Notes and \$1,090.44 per \$1,000 principal amount of 12.875% Senior Secured Notes, plus an amount equal to any accrued and unpaid interest.

The Tender Offers expired on February 23, 2023, and \$260.6 million, or approximately 92.74%, of the 7.75% Senior Secured Notes and \$29.0 million, or approximately 92.73%, of the 12.875% Senior Secured Notes were validly tendered and not validly withdrawn, In addition, \$270 thousand aggregate principal amount of the 7.75% Senior Secured Notes were tendered subject to guaranteed delivery procedures. Subject to raising at least \$550 million in gross proceeds under the proposed term loan, we expect to accept for payment all notes validly tendered during the offering period and all notes properly delivered under guaranteed delivery procedures and expects to make payment on all such notes on February 28, 2023. As described below, we have exercised optional redemption rights with respect to any outstanding Notes and intend to satisfy and discharge each indenture governing the Notes, as applicable, on the settlement date.

Redemption of Notes

On February 15, 2023, we issued notices of conditional redemption (collectively, the "Redemption") for each series of the Notes pursuant to the applicable agreements, in each case subject to the successful refinancing of Term Loan B.

Amendments

In connection with the above, (i) the ABL Borrowers and the lenders, and Bank of America, N.A., as administrative agent, entered into the First Amendment, dated as of February 14, 2023, to Amended and Restated Loan and Security Agreement, dated as of February 2, 2022, (ii) Par Hawaii Refining, LLC, PPL and J. Aron & Company, LLC entered into the Amendment, dated as of February 13, 2023, to Second Amended and Restated Supply and Offtake Agreement, dated as of June 1, 2021, and (iii) U.S. Oil & Refining Co., PPL and Merrill Lynch Commodities, Inc. entered into a letter agreement dated February 15, 2023, in each case, to facilitate the refinancing and tender offers noted.

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT PAR PACIFIC HOLDINGS, INC. (PARENT ONLY) BALANCE SHEETS (in thousands, except share data)

	Dece	mber 31, 2022	Decembe	er 31, 2021
ASSETS				
Current assets				
Cash and cash equivalents	\$	2,547	\$	4,086
Restricted cash		331		330
Total cash, cash equivalents, and restricted cash		2,878		4,416
Prepaid and other current assets		2,229		15,664
Due from subsidiaries		229,431		94,676
Total current assets		234,538		114,756
Property, plant, and equipment				
Property, plant, and equipment		19,865		19,535
Less accumulated depreciation and amortization		(14,967)		(13,869)
Property, plant, and equipment, net		4,898		5,666
Long-term assets				
Operating lease right-of-use ("ROU") assets		2,649		3,280
Investment in subsidiaries		487,943		207,483
Other long-term assets		723		724
Total assets	\$	730,751	\$	331,909
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable	\$	4,176	\$	1,386
Accrued taxes		47		48
Operating lease liabilities		787		608
Other accrued liabilities		511		9,805
Due to subsidiaries		77,420		50,195
Total current liabilities		82,941		62,042
Long-term liabilities				
Finance lease liabilities		—		17
Operating lease liabilities		3,273		4,150
Total liabilities		86,214		66,209
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, 2022 and December 31, 2021, 60,470,837 shares and 60,161,955 shares issued at December 31, 2022 and December 31, 2021 reconcisional		(04		(02
and December 31, 2021, respectively		604		602
Additional paid-in capital		836,491		821,713
Accumulated deficit		(200,687)		(559,117)
Accumulated other comprehensive income (loss)		8,129		2,502
Total stockholders' equity	¢	644,537	¢	265,700
Total liabilities and stockholders' equity	\$	730,751	\$	331,909

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT PAR PACIFIC HOLDINGS, INC. (PARENT ONLY) STATEMENTS OF OPERATIONS (in thousands)

		Year Ended December 31,				
			2021	2020		
Operating expenses						
Depreciation and amortization	\$	2,131	\$	2,452	\$	2,900
Loss (gain) on sale of assets, net		27		15		—
General and administrative expense (excluding depreciation)		17,882		12,435		11,097
Acquisition and integration costs		3,396		87		_
Total operating expenses		23,436		14,989		13,997
Operating loss		(23,436)		(14,989)		(13,997)
Other income (expense)						
Interest expense and financing costs, net		(1)		(2,600)		(4,982)
Other expense, net		(20)		(33)		(3)
Change in value of common stock warrants		_		_		4,270
Equity in earnings (losses) from subsidiaries		388,008		(63,649)		(394,197)
Total other income (expense), net		387,987		(66,282)		(394,912)
Income (loss) before income taxes		364,551		(81,271)		(408,909)
Income tax expense		(362)		(26)		(177)
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086)

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT PAR PACIFIC HOLDINGS, INC. (PARENT ONLY) STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (in thousands)

	Year Ended December 31,					
		2022		2021		2020
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086)
Other comprehensive income (loss): (1)						
Other post-retirement benefits income (loss), net of tax		5,627		6,244		(4,324)
Total other comprehensive income (loss), net of tax		5,627		6,244		(4,324)
Comprehensive income (loss)	\$	369,816	\$	(75,053)	\$	(413,410)

(1) Other comprehensive income (loss) relates to benefit plans at our subsidiaries.

SCHEDULE I - CONDENSED FINANCIAL INFORMATION OF REGISTRANT PAR PACIFIC HOLDINGS, INC. (PARENT ONLY) STATEMENTS OF CASH FLOWS (in thousands)

	Year Ended December 31,					
		2022		2021		2020
Cash flows from operating activities:						
Net income (loss)	\$	364,189	\$	(81,297)	\$	(409,086)
Adjustments to reconcile net income (loss) to cash used in operating activities:						
Depreciation and amortization		2,131		2,452		2,900
Non-cash interest expense		_		1,364		2,518
Change in value of common stock warrants		_		_		(4,270)
Loss (gain) on sale of assets, net		27		15		_
Stock-based compensation		9,353		8,165		7,342
Equity in losses (income) of subsidiaries		(388,008)		63,649		394,197
Net changes in operating assets and liabilities:						
Prepaid and other assets		13,436		1,318		(4,253)
Accounts payable, other accrued liabilities, and operating lease ROU assets and liabilities	3	2,651		(1,380)		(187)
Net cash provided by (used in) operating activities		3,779		(5,714)		(10,839)
Cash flows from investing activities:						
Investments in subsidiaries		_		(146,056)		_
Distributions from subsidiaries		_		90,183		4,113
Capital expenditures		(1,311)		(1,126)		(1,296)
Due to (from) subsidiaries		5,645		29,752		5,768
Proceeds from sale of assets		_				14
Net cash provided by (used in) investing activities		4,334		(27,247)		8,599
Cash flows from financing activities:						
Proceeds from sale of common stock, net of offering costs		_		87,193		_
Proceeds from borrowings		_		12,364		14,437
Repayments of borrowings		(9,319)		(62,111)		(18,603)
Other financing activities, net		(332)		(879)		164
Net cash provided by (used in) financing activities		(9,651)		36,567		(4,002)
Net increase (decrease) in cash, cash equivalents, and restricted cash		(1,538)		3,606		(6,242)
Cash, cash equivalents, and restricted cash at beginning of period		4,416		810		7,052
Cash, cash equivalents, and restricted cash at end of period	\$	2,878	\$	4,416	\$	810
Supplemental cash flow information:						
Net cash received (paid) for:						
Interest	\$	(3)	\$	(1,230)	\$	(2,475)
Taxes		(15)		27		(28)
Non-cash investing and financing activities:						
Accrued capital expenditures	\$	372	\$	131	\$	233
ROU assets obtained in exchange for new finance lease liabilities		_		_		173
ROU assets obtained in exchange for new operating lease liabilities		_		165		_

Item 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange of Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on February 27, 2023.

PAR PACIFIC HOLDINGS, INC.

By: /s/ William Pate

William Pate

Chief Executive Officer

By: /s/ Shawn Flores

Shawn Flores

Senior Vice President and 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 27, 2023.

Signature

/s/ WILLIAM PATE William Pate

/s/ WILLIAM MONTELEONE William Monteleone

/s/ SHAWN FLORES

Shawn Flores

/s/ IVAN GUERRA Ivan Guerra

/s/ MELVYN N. KLEIN

Melvyn N. Klein

/s/ ROBERT S. SILBERMAN

Robert S. Silberman

/s/ TIMOTHY CLOSSEY

Timothy Clossey

/s/ L. MELVIN COOPER

L. Melvin Cooper

/s/ CURTIS ANASTASIO

Curtis Anastasio

/s/ WALTER A. DODS, JR. Walter A. Dods, Jr.

/s/ KATHERINE HATCHER

Katherine Hatcher

/s/ ANTHONY CHASE

Anthony Chase

/s/ PHILIP DAVIDSON

Philip Davidson

<u>Title</u>

Chief Executive Officer and Director (Principal Executive Officer)

President and Director

Senior Vice President and Chief Financial Officer (Principal Financial Officer)

> Chief Accounting Officer (Principal Accounting Officer)

> > Chairman Emeritus

Chairman of the Board of Directors

Director

Director

Director

Director

Director

Director

Director

Corporate Information

Management

William Pate Chief Executive Officer

Will Monteleone President

Richard Creamer Executive Vice President, Refining and Logistics

Shawn Flores Senior Vice President, Chief Financial Officer

Jeff Hollis Senior Vice President, General Counsel and Secretary

Ryan Kelley Senior Vice President, Chief Information Officer

Matthew Legg Senior Vice President, Chief Human Resources Officer

Danielle Mattiussi Senior Vice President, Chief Retail Officer

Eric Wright President, Par Hawaii

Ivan Guerra Vice President, Chief Accounting Officer

Corporate Office

Par Pacific Holdings, Inc. 825 Town & Country Lane, Suite 1500 Houston, TX 77024 (281) 899-4800 www.parpacific.com

Investor Relations

Ashimi Patel

(832) 916-3355 apatel@parpacific.com www.parpacific.com/investors

Director, Investor Relations

Additional copies of the Form 10-K are available without charge. Shareholders, securities analysts, portfolio managers and others who have questions or need additional information concerning the Company may contact:

CROXSON Design croxsondesign.com

Independent Registered Public Accounting Firm

Deloitte & Touche LLP 1111 Bagby Street, Suite 4500 Houston, TX 77002

Directors

Robert S. Silberman Chairman of the Board Executive Committee Chairman

Melvyn N. Klein Chairman Emeritus Nominating and Corporate Governance Committee Chairman

Curt V. Anastasio Director Audit Committee Chairman

Timothy Clossey Director Operations and Technology Committee Chairman

Walter A. Dods, Jr. Director Compensation Committee Chairman

Anthony Chase Director

L. Melvin Cooper Director

Philip Davidson Director

Katherine Hatcher Director

William Pate Director Chief Executive Officer

Will Monteleone Director President





Par Pacific Holdings, Inc.

www.parpacific.com