2024

Annual Report

NRP

Natural Resource Partners L.P.

To the Unitholders of Natural Resource Partners L.P. (“NRP”):

NRP generated $251 million of Free Cash Flow in 2024, redeemed the remainder of our preferred units, retired all remaining warrants, paid out $72 million of distributions and finished the year with only $142 million of debt and no other financial obligations outstanding.

We remain focused on our strategy to pay off financial obligations in order to de-risk common equity and free up cash flow for distribution to unitholders. Since we embarked on this strategy a decade ago, we have cut costs, eliminated capital expenditures, sold off underperforming assets, and permanently retired over $1.3 billion of financial obligations, consisting of debt, preferred equity and warrants. The results of these efforts have profoundly improved the Partnership’s free cash flow generation, risk profile and outlook.

Our Assets

NRP owns approximately 13 million acres of mineral interests and other property rights across the United States, roughly 20,000 square miles, including 3.5 million acres of underground pore space for the sequestration of carbon dioxide. Our assets provide critical inputs for the manufacturing of steel, electricity, building materials, and components used in the generation of renewable energy.

We lease our mineral and other rights to companies that conduct operations on our properties in exchange for paying royalties, bonuses, and other fees to us. We do not conduct “operations” on any of our assets or directly engage in any type of industrial activity. Operating expenses, capital costs, and other liabilities arising out of production activities are borne entirely by our lessees.

We also own a 49% interest in Sisecam Wyoming, LLC, one of the world’s lowest-cost producers of soda ash, an essential ingredient for the manufacturing of glass, detergents, solar panels, and batteries for electric vehicles. Operations are managed by our partner, Sisecam Chemicals Wyoming LLC, and we realize cash flow when distributions are paid to us.

Maximizing Value

We think long-term. We do not provide quarterly guidance or concern ourselves with meeting short-term earnings expectations. Our focus is on maximizing the Partnership’s earning power over five, ten, fifteen years and beyond. We believe this is the best approach to maximize the intrinsic value of our business, which should in turn maximize the intrinsic value of your investment.

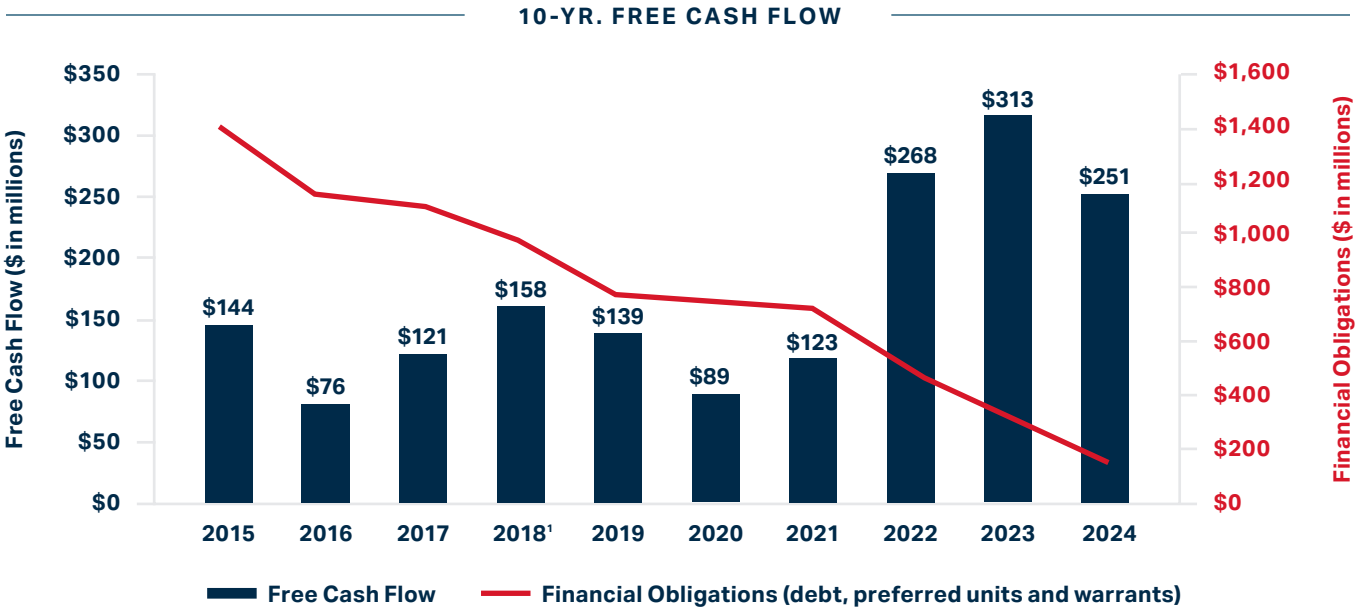
We define intrinsic value as the present value of future cash flows per common unit, calculated using a range of discount rates. Whether it is to retire debt, pay distributions, streamline costs or make investments, we evaluate the impact on intrinsic value of every capital allocation decision we make. This approach has allowed us to successfully navigate the challenges of the past decade and has become a key foundation of our mission to maximize value for our unitholders.

We consider the protection of Partnership assets from market downturns and more significant black swan events just as important as capital allocation. We approach this responsibility with a glass half empty mindset, brainstorming things that could go wrong in the world, and contemplating the impact on NRP if they occur. Running these “what-ifs” through our financial forecast produces stress tests that allow us to better understand the potential consequences of an adverse event, or combination of events. Every decision we make, especially when it comes to capital allocation, is influenced by the results of this stress testing.

Performance

The primary metric we use to measure our results is Free Cash Flow, which we define as cash from operations minus capital expenditures. We use this metric because it reflects the cash generated after all deductions and expenditures, including interest expense. As such, Free Cash Flow represents cash generated that is available to retire debt, pay distributions to unitholders or make investments. For this reason, we find it more useful than other commonly used metrics such as net income, EBITDA or distributable cash flow.

The following graph illustrates the Free Cash Flow generated by NRP over the last ten years ended December 31, 2024, the period in which we have implemented our current strategy.



As you can see, NRP has generated significantly more Free Cash Flow in recent years than earlier in the period. There are two key drivers for this improvement.

First, inflation in the post-COVID world has raised the marginal cost of production for metallurgical and thermal coal. As production costs have increased, market prices have been forced to adjust upward to incentivize operators to continue producing. As a royalty owner, we benefit from higher sales prices without having to bear the burden of our operators' higher costs of production.

The second main driver for improvement in Free Cash Flow results from the execution of our strategy to pay off our financial obligations. As debt is retired, interest expense falls, freeing up more cash. Our 2024 interest expense was almost $80 million less than ten years earlier, and this amount will continue to increase as debt balances decline further.

We expect these factors to continue to provide support for our business in the future, but not at the record-setting levels experienced in recent years. Commodity price cycles will continue to impact our Free Cash Flow as they have in the past. Recent weakness in prices for metallurgical coal, thermal coal and soda ash have exerted downward pressure on revenue over the past year and we expect this trend to continue in the near and intermediate term. However, despite these headwinds, the outlook for common unitholders is quite positive. Our capital structure is solid, we continue to generate robust levels of Free Cash Flow, and the end of our journey to deleverage the Partnership is in sight.

Outlook

Prices for metallurgical and thermal coal are down roughly 50% from the highs of 2023 and we do not expect a near term recovery in prices due to soft steel demand and low priced North American natural gas. Longer term, we believe limited investment in new metallurgical coal supply, increased production costs, labor shortages and secular demand trends for steel will provide support for metallurgical coal prices at higher levels when compared to historical norms.

Thermal coal prices should also benefit from limited new investment, increased production costs and labor shortages, but we expect the impact of those factors to be more than offset by the continued long-term secular decline in North American thermal demand.

Global soda ash prices have fallen roughly 60% from the highs of 2023 as the market has been flooded with new production capacity and soda ash demand has softened due to declining construction activity in China and lower demand for flat glass. These factors have created the most difficult market for soda ash producers in a generation, with prices currently below production costs for many producers. We believe it will take several years for the market to absorb this excess capacity and drive prices materially higher.

While lower prices for metallurgical coal, thermal coal and soda ash will result in lower Free Cash Flow generation for NRP, the Partnership is in a more attractive financial position today than at any time in over a decade. We are conservatively financed and generating robust cash flow, with the prospect of significant increases in unitholder distributions as debt is paid off next year.

Alignment

We believe shared values make for good partnerships. We want partners who invest in us because they share our business philosophy and focus on long-term value creation and returns.

Collectively, your executives and Board of Directors own approximately 25% of our outstanding common units. Every member of your executive team has a meaningful portion of their net worth invested in NRP. Our interests are closely aligned with yours.

Conclusion

We are honored to have you as our investors. While the near-term collective outlook for our three key commodities is as negative as it has been since the COVID pandemic, this is the best outlook from the standpoint of an equity holder in more than a decade.

NRP is preparing to transition from a capital-appreciation story to a distribution-oriented one. While our investment proposition is evolving, our primary objective of maximizing long-term intrinsic value per unit will continue. This strategy is the foundation of our philosophy that has served us well in the past and will guide our success in the future.

Thank you to our stakeholders for the trust you have placed in us and to our Board of Directors for its guidance and unwavering support.

Corbin J. Robertson, Jr.
Chairman and Chief Executive Officer

Craig Nunez
President and Chief Operating Officer

[1] Excludes one-time benefit from legal settlement

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2024 or

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

For the transition period from to
Commission file number: 001-31465

NATURAL RESOURCE PARTNERS LP

(Exact name of registrant as specified in its charter)

Delaware	**35-2164875**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1415 Louisiana Street, Suite 3325
Houston, Texas 77002
(Address of principal executive offices)
(Zip Code)
(713) 751-7507
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Units representing limited partner interests	NRP	New York Stock Exchange

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See definition of "accelerated filer", "large 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. ☐

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. ☐

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). ☐

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 the common units held by non-affiliates of the registrant on June 30, 2024, was $889 million based on a closing price on June 28, 2024 of $89.64 per unit as reported on the New York Stock Exchange.

Documents incorporated by reference: None.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Statements included in this Annual Report on Form 10-K may constitute forward-looking statements. In addition, we and our representatives may from time to time make other oral or written statements which are also forward-looking statements. Such forward-looking statements include, among other things, statements regarding: future distributions on our common units; our business strategy; our liquidity and access to capital and financing sources; our financial strategy; prices of and demand for coal, trona and soda ash, and other natural resources; estimated revenues, expenses and results of operations; projected production levels by our lessees; Sisecam Wyoming LLC's ("Sisecam Wyoming's") trona mining and soda ash refinery operations; distributions from our soda ash joint venture; the impact of governmental policies, laws and regulations, as well as regulatory and legal proceedings involving us, and of scheduled or potential regulatory or legal changes; and global and U.S. economic conditions.

These forward-looking statements speak only as of the date hereof and are made based upon our current plans, expectations, estimates, assumptions and beliefs concerning future events impacting us and involve a number of risks and uncertainties. We caution that forward-looking statements are not guarantees and that actual results could differ materially from those expressed or implied in the forward-looking statements. You should not put undue reliance on any forward-looking statements. See "Item 1A. Risk Factors" in this Annual Report on Form 10-K for important factors that could cause our actual results of operations or our actual financial condition to differ.

RISK FACTORS SUMMARY

We are subject to a variety of risks and uncertainties, including risks related to our business, risks related to our indebtedness, risks related to our common units and certain general risks, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. Risks that we deem material are described under "Risk Factors" in Item 1A of this report. These risks include, but are not limited to, the following:

Risks Related to Our Business

- Cash distributions are not guaranteed and may fluctuate with our performance and the establishment of financial reserves. In addition, our debt agreements and our partnership agreement place restrictions on our ability to pay, and in some cases raise, the quarterly distribution under certain circumstances.
- Our leverage and debt service obligations may adversely affect our financial condition, results of operations and business prospects.
- Global pandemics have in the past and may continue to adversely affect our business.
- Prices for both metallurgical and thermal coal are volatile and depend on a number of factors beyond our control. Declines in prices could have a material adverse effect on our business and results of operations.
- Changes to trade regulations, including trade restrictions, sanctions, tariffs, or duties, could significantly harm our results of operations.
- Prices for soda ash are volatile. Any substantial or extended decline in soda ash prices could have an adverse effect on Sisecam Wyoming's ability to continue to make distributions to us.
- We derive a large percentage of our revenues and other income from a small number of coal lessees.
- Bankruptcies in the coal industry, and/or the idling or closure of mines on our properties could have a material adverse effect on our business and results of operations.
- Mining operations are subject to operating risks that could result in lower revenues to us.
- The adoption of climate change legislation and regulations restricting emissions of greenhouse gases and other hazardous air pollutants have resulted in changes in fuel consumption patterns by electric power generators and a corresponding decrease in coal production by our lessees and reduced coal-related revenues.
- Concerns about the environmental impacts of coal combustion, including perceived impacts on global climate issues, are also resulting in unfavorable lending and investment policies by institutions and insurance companies which could significantly affect our ability to raise capital or maintain current insurance levels.
- Increased attention to climate change, environmental, social and governance ("ESG") matters and conservation measures may adversely impact our business.
- In addition to climate change and other Clean Air Act legislation, our businesses are subject to numerous other federal, state and local laws and regulations that may limit production from our properties and our profitability. Thus, any changes in environmental laws and regulations or reinterpretations of enforcement policies, or in presidential administrations, that result in more stringent or costly obligations could adversely affect our performance.
- If our lessees do not manage their operations well, their production volumes and our royalty revenues could decrease.
- We have limited approval rights with respect to the management of our Sisecam Wyoming soda ash joint venture, including with respect to cash distributions and capital expenditures. In addition, we are exposed to operating risks that we do not experience in the royalty business through our soda ash joint venture and through our ownership of certain coal transportation assets.
- Sisecam Wyoming's reserve and resource data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of Sisecam Wyoming's reserves and resources.
- Fluctuations in transportation costs and the availability or reliability of transportation could reduce the production of coal, soda ash and other minerals from our properties.
- Our lessees could satisfy obligations to their customers with minerals from properties other than ours, depriving us of the ability to receive amounts in excess of minimum royalty payments.
- A lessee may incorrectly report royalty revenues, which might not be identified by our lessee audit process or our mine inspection process or, if identified, might be identified in a subsequent period.

Risks Related to Our Structure

- Unitholders may not be able to remove our general partner even if they wish to do so.
- We may issue additional common units or other equity securities without common unitholder approval, which could dilute a unitholder's existing ownership interests.
- Our general partner has a limited call right that may require unitholders to sell their units at an undesirable time or price.
- Cost reimbursements due to our general partner may be substantial and will reduce our cash available for distribution to unitholders.
- Conflicts of interest could arise among our general partner and us or the unitholders.
- The control of our general partner may be transferred to a third party without unitholder consent. A change of control may result in defaults under certain of our debt instruments and the triggering of payment obligations under compensation arrangements.
- Unitholders may not have limited liability if a court finds that unitholder actions constitute control of our business.

Tax Risks to Common Unitholders

- Our tax treatment depends on our status as a partnership for U.S. federal income tax purposes as well as our not being subject to a material amount of entity-level taxation by individual states. If the Internal Revenue Service ("IRS") were to treat us as a corporation for U.S. federal income tax purposes or we were to become subject to material additional amounts of entity-level taxation for state tax purposes, then our cash available for distribution to unitholders would be substantially reduced.
- The tax treatment of publicly traded partnerships or an investment in our units could be subject to potential legislative, judicial or administrative changes or differing interpretations, possibly applied on a retroactive basis.
- Certain U.S. federal income tax preferences currently available with respect to coal exploration and development may be eliminated as a result of future legislation.
- Our unitholders are required to pay taxes on their share of our taxable income even if they do not receive any cash distributions from us. Our unitholders' share of our portfolio income may be taxable to them even though they receive other losses from our activities.
- We may engage in transactions to reduce our indebtedness and manage our liquidity that generate taxable income (including income and gain from the sale of properties and cancellation of indebtedness income) allocable to our unitholders, and income tax liabilities arising therefrom may exceed any distributions made with respect to their units.
- If the IRS contests the U.S. federal income tax positions we take, the market for our units may be adversely impacted and the cost of any IRS contest will reduce our cash available for distribution to our unitholders.
- If the IRS makes audit adjustments to our income tax returns, it (and some states) may assess and collect any taxes (including any applicable penalties and interest) resulting from such audit adjustments directly from us, in which case our cash available for distribution to our unitholders might be substantially reduced.
- Tax gain or loss on the disposition of our common units could be more or less than expected.
- Our unitholders may be subject to limitation on their ability to deduct interest expense incurred by us.
- Tax-exempt entities face unique tax issues from owning our units that may result in adverse tax consequences to them.
- Non-U.S. unitholders will be subject to U.S. federal income taxes and withholding from their distributions and sale proceeds with respect to their income and gain from owning our units.
- We will treat each purchaser of our common units as having the same tax benefits without regard to the actual common units purchased. The IRS may challenge this treatment, which could adversely affect the value of the common units.
- We have adopted certain valuation methodologies in determining a unitholder's allocations of income, gain, loss and deduction. The IRS may challenge these methodologies or the resulting allocations, and such a challenge could adversely affect the value of our common units.
- We generally prorate our items of income, gain, loss and deduction between transferors and transferees of our common units each month based upon the ownership of our common units on the first day of each month, instead of on the basis of the date a particular unit is transferred. The IRS may challenge this treatment, which could change the allocation of items of income, gain, loss and deduction among our unitholders.
- A unitholder whose units are the subject of a securities loan (e.g., a loan to a "short seller" to cover a short sale of units) may be considered as having disposed of those units. If so, such unitholder would no longer be treated for tax purposes as a partner with respect to those units during the period of the loan and may recognize gain or loss from the disposition.
- As a result of investing in our units, our unitholders are likely subject to state and local taxes and return filing requirements in jurisdictions where we operate or own or acquire property.

General Risk Factors

- Our business is subject to cybersecurity risks.

Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may have an adverse effect on our business, financial condition, results of operations and cash flows.

PART I

As used in this Annual Report on Form 10-K, unless the context otherwise requires: "we," "our," "us" and the "Partnership" refer to Natural Resource Partners L.P. and, where the context requires, our subsidiaries. References to "NRP" and "Natural Resource Partners" refer to Natural Resource Partners L.P. only, and not to NRP (Operating) LLC or any of Natural Resource Partners L.P.'s subsidiaries. References to "Opco" refer to NRP (Operating) LLC, a wholly owned subsidiary of NRP, and its subsidiaries.

ITEMS 1. AND 2. BUSINESS AND PROPERTIES

Partnership Structure and Management

We are a publicly traded Delaware limited partnership formed in 2002. We own, manage and lease a diversified portfolio of mineral properties in the United States, including interests in coal and other natural resources and own a non-controlling 49% interest in Sisecam Wyoming LLC ("Sisecam Wyoming"), a trona ore mining and soda ash production business.

Our business is organized into two operating segments:

Mineral Rights—consists of approximately 13 million acres of mineral interests and other subsurface rights across the United States. If combined in a single tract, our ownership would cover roughly 20,000 square miles. Our ownership provides critical inputs for the manufacturing of steel, electricity and basic building materials, as well as opportunities for carbon sequestration and renewable energy. We are working to strategically redefine our business as a key player in the transitional energy economy in the years to come.

Soda Ash—consists of our 49% non-controlling equity interest in Sisecam Wyoming, a trona ore mining and soda ash production business located in the Green River Basin of Wyoming. Sisecam Wyoming mines trona and processes it into soda ash that is sold both domestically and internationally into the glass and chemicals industries.

Our operations are conducted through Opco and our operating assets are owned by our subsidiaries. NRP (GP) LP, our general partner (the "general partner" or "NRP GP"), has sole responsibility for conducting our business and for managing our operations. Because our general partner is a limited partnership, its general partner, GP Natural Resource Partners LLC (the "managing general partner"), conducts its business and operations and the board of directors and officers of GP Natural Resource Partners LLC make decisions on our behalf. Robertson Coal Management LLC ("RCM"), a limited liability company indirectly owned by Corbin J. Robertson, Jr., owns all of the membership interest in GP Natural Resource Partners LLC. All members of the board of directors of the managing general partner (the "Board of Directors") are appointed by RCM.

The senior executives and other officers who manage NRP are employees of Western Pocahontas Properties Limited Partnership or Quintana Minerals Corporation, which are companies controlled by Mr. Robertson, Jr. These officers allocate varying percentages of their time to managing our operations. Neither our general partner, GP Natural Resource Partners LLC, nor any of their affiliates receive any management fee or other compensation in connection with the management of our business, but they are entitled to be reimbursed for all direct and indirect expenses incurred on our behalf.

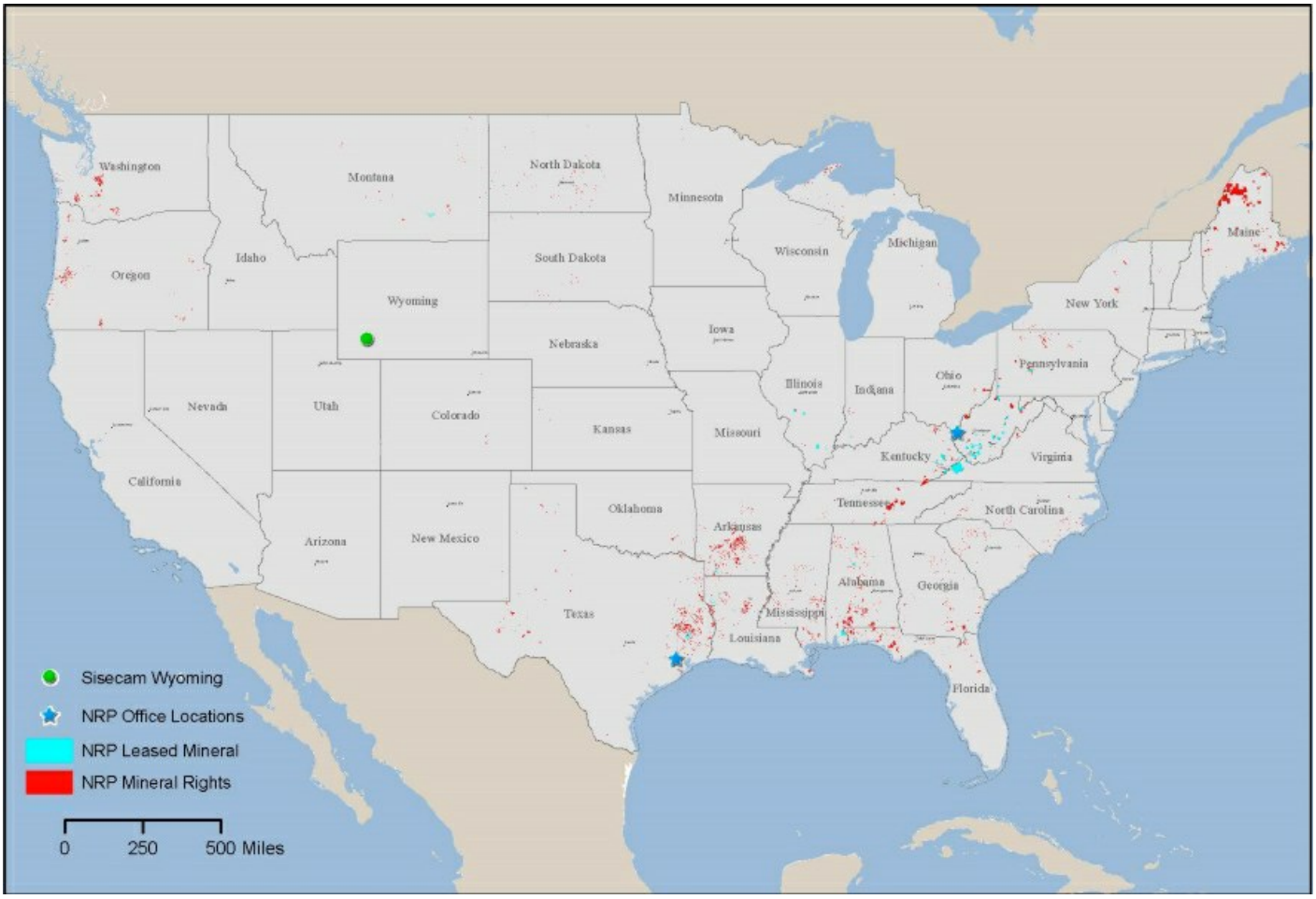
We have regional offices through which we conduct our operations, the largest of which is located at 175 Irwin Road, Huntington, West Virginia 25705 and the telephone number is (304) 522-5757. Our principal executive office is located at 1415 Louisiana Street, Suite 3325, Houston, Texas 77002 and our telephone number is (713) 751-7507.

Segment and Geographic Information

The amount of 2024 revenues and other income from our two operating segments is shown below. For additional business segment information, please see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations" and "Item 8. Financial Statements and Supplementary Data—Note 7. Segment Information" in this Annual Report on Form 10-K, which are both incorporated herein by reference.

(In thousands)	Amount	% of Total
Mineral Rights	$ 249,872	93%
Soda Ash	18,135	7%
Total	$ 268,007	100%

The following map shows the approximate geographic distribution of our ownership footprint:



Mineral Rights Segment

Mineral Rights

We do not mine, drill or produce minerals. Instead, we lease our acreage to companies engaged in the extraction of minerals in exchange for the payment of royalties and various other fees. The royalties we receive are generally a percentage of the gross revenue received by our lessees. The royalties we receive are typically supported by a floor price and minimum payment obligation that protect us during significant price or demand declines.

The majority of our Mineral Rights segment revenues come from royalties related to the sale of coal from our properties. Our coal is primarily located in the Appalachia Basin, the Illinois Basin and the Northern Powder River Basin in the United States. We lease our coal to experienced mine operators under long-term leases. Approximately two-thirds of our royalty-based leases have initial terms of five to 40 years, with substantially all lessees having the option to extend the lease for additional terms. Leases include the right to renegotiate royalties and minimum payments for the additional terms. We also own and manage coal-related transportation and processing assets in the Illinois Basin that generate additional revenues generally based on throughput or rents. We also own oil and gas, industrial minerals and aggregates that generate a portion of the Mineral Rights segment revenues. Additional Mineral Rights segment revenues come from carbon neutral initiatives such the sale of carbon offset credits from forestlands, potential sub-surface carbon dioxide sequestration in our pore space and opportunities to generate geothermal energy from our ownership.

Under our standard royalty lease, we grant the operators the right to mine and sell our minerals in exchange for royalty payments based on the greater of a percentage of the sales price or fixed royalty per ton of minerals mined and sold. Lessees calculate royalty payments due to us and are required to report tons of minerals mined and sold as well as the sales prices of the extracted minerals. Therefore, to a great extent, amounts reported as royalty revenues are based upon the reports of our lessees. We periodically audit this information by examining certain records and internal reports of our lessees and we perform periodic mine inspections to verify that the information that our lessees have submitted to us is accurate. Our audit and inspection processes are designed to identify material variances from lease terms as well as differences between the information reported to us and the actual results from each property.

In addition to their royalty obligations, our lessees are often subject to minimum payments, which reflect amounts we are entitled to receive even if no mining activity occurs during the period. Minimum payments are usually credited against future royalties that are earned as minerals are produced. In certain leases, the lessee is time limited on the period available for recouping minimum payments and such time is unlimited on other leases.

Because we do not operate, our royalty business does not bear ordinary operating costs and has limited direct exposure to environmental, permitting and labor risks. Our lessees, as operators, are subject to environmental laws, permitting requirements and other regulations adopted by various governmental authorities. In addition, the lessees generally bear all labor-related risks, including retiree health care costs, black lung benefits and workers' compensation costs associated with operating the mines on our coal and aggregates properties. We pay property taxes on our properties, which are largely reimbursed by our lessees pursuant to the terms of the various lease agreements.

The SEC amended the property disclosure requirements for registrants with significant mining activities, effective for the fiscal year 2021, with new rules which we comply with in this Annual Report on Form 10-K. The rules contain exceptions that allow royalty companies, such as NRP, to omit information that they lack access to and cannot obtain without incurring an unreasonable burden or expense. As a royalty company, we do not have access to the information required to prepare the technical reports used to determine reserves under the rules, and we are not able to obtain such information without unreasonable burden or expense. The rules require that reserve estimates be based on and that disclosures include technical reports prepared using extensive mine-specific geological and engineering data, as well as market and cost assumptions that we as a mineral owner do not have, including, but not limited to a) site infrastructure costs; b) processing plant costs; c) detailed analysis of environmental compliance and permitting requirements; d) detailed baseline studies with impact assessment; and e) detailed tailings disposal, reclamation and mitigation plans. Our leases do not require the operators of our material properties to prepare technical report summaries or permit us the access and information sufficient to prepare our own technical report summaries under the rules. As a result, we are relying on the royalty company exceptions and have ceased to report coal and other hard mineral reserves.

In addition to summary information about our overall portfolio of mineral rights, this section provides detailed information about four properties in our Mineral Rights segment. These properties were determined to be material to our business based on historical revenue compared to our Mineral Rights segment considered as a whole. These four properties are: 1) Alpha-CAPP (VA), 2) Oak Grove, 3) Williamson and 4) Hillsboro. We have also included a description of other significant properties, which have had lower revenues historically than our material properties but are important to our business.

Coal

Metallurgical Coal

Metallurgical ("Met") coal is used to fuel blast furnaces that forge steel and is the primary driver of our long-term cash flows. Met coal is a high-quality, cleaner coal that generates exceptionally high temperatures when burned and is an essential element in the steel manufacturing process. Metallurgical coal is a finite and declining resource, particularly in industrialized nations. We believe the indispensable role met coal plays in manufacturing steel combined with the increasing scarcity of the resource will provide support for this portion of our business for decades to come. Our metallurgical coal is located in the Northern, Central and Southern Appalachian regions of the United States.

Thermal Coal

Thermal coal, sometimes referred to as steam coal, is used in the production of electricity. The amount of thermal coal produced in the United States has been steadily falling over the last decade as energy providers shift from coal-fired plants to natural gas-fired facilities, and to a lesser extent, alternative energy sources such as geothermal, wind and solar. We believe the long-term secular decline experienced by thermal coal in the United States over the last decade will continue. That fact, combined with the long-term strength of our metallurgical business and the carbon neutral initiatives we discuss below, will result in thermal coal becoming a diminishing contributor to NRP in years to come. The vast majority of our thermal coal sales are located in Illinois and its operations are some of the most cost-efficient mines east of the Mississippi River. The remainder of our thermal coal is located in Montana, the Gulf Coast and Appalachia.

Coal Production Information

The following tables present the type of coal sales volumes by major coal region for the years ended December 31, 2024, 2023 and 2022:

For the Year Ended December 31, 2024

	Type of Coal		
(Tons in thousands)	**Thermal**	**Metallurgical**	**Total**
Appalachia Basin			
Northern	560	471	1,031
Central	1,782	12,355	14,137
Southern	—	2,661	2,661
Total Appalachia Basin	2,342	15,487	17,829
Illinois Basin	5,723	—	5,723
Northern Powder River Basin	2,826	—	2,826
Gulf Coast	1,342	—	1,342
Total	12,233	15,487	27,720

For the Year Ended December 31, 2023

	Type of Coal		
(Tons in thousands)	**Thermal**	**Metallurgical**	**Total**
Appalachia Basin			
Northern	794	351	1,145
Central	1,418	12,509	13,927
Southern	—	2,670	2,670
Total Appalachia Basin	2,212	15,530	17,742
Illinois Basin	8,119	—	8,119
Northern Powder River Basin	4,589	—	4,589
Gulf Coast	1,477	—	1,477
Total	16,397	15,530	31,927

For the Year Ended December 31, 2022

	Type of Coal		
(Tons in thousands)	**Thermal**	**Metallurgical**	**Total**
Appalachia Basin			
Northern	1,166	530	1,696
Central	1,186	12,460	13,646
Southern	93	1,691	1,784
Total Appalachia Basin	2,445	14,681	17,126
Illinois Basin	11,135	—	11,135
Northern Powder River Basin	4,288	—	4,288
Gulf Coast	385	—	385
Total	18,253	14,681	32,934

Major Coal Producing Properties

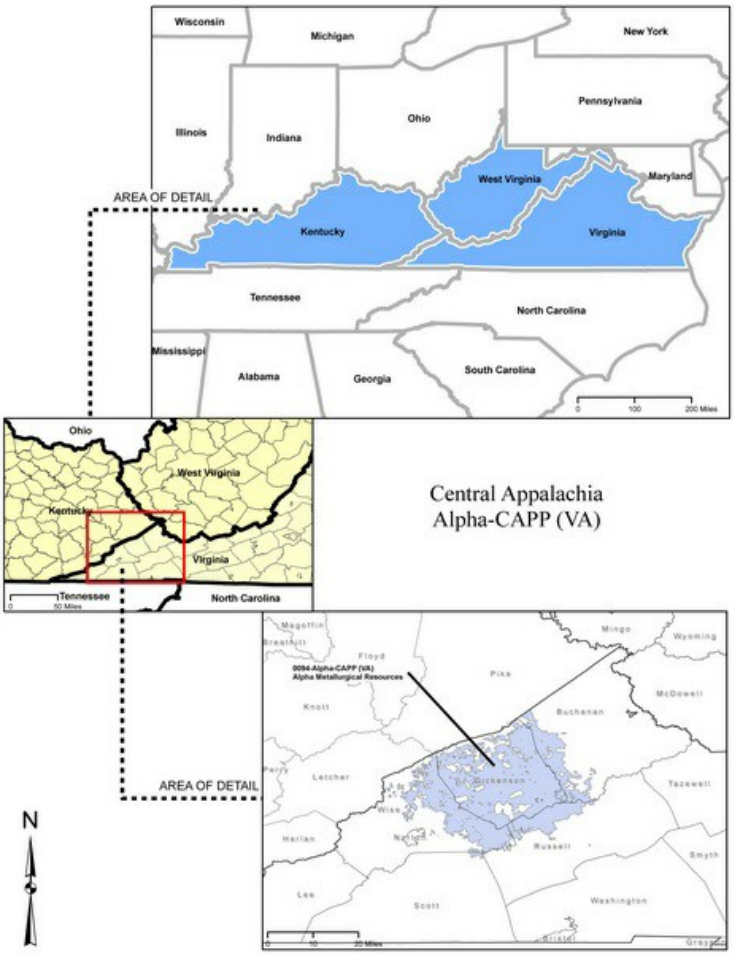
The following table provides a summary of our significant coal royalty properties for 2024 and is followed by additional information for each property:

Region	Property/Lease Name	Operator	Coal Type
Appalachia Basin			
Central	Alpha-CAPP (VA)	Alpha Metallurgical Resources Inc.	Met
Central	Kepler	Alpha Metallurgical Resources Inc.	Met
Central	Marfork	Alpha Metallurgical Resources Inc.	Met
Central	Kingston	Alpha Metallurgical Resources Inc.	Met
Central	Elk Creek	Ramaco Royalty Company, LLC	Met
Southern	Oak Grove	Alabama Kanu Holdings, LLC	Met
Illinois Basin	Williamson	Foresight Energy Resources LLC	Thermal
Illinois Basin	Hillsboro	Foresight Energy Resources LLC	Thermal
Northern Powder River Basin	Western Energy	Westmoreland Mining LLC	Thermal

Appalachia Basin—Central Appalachia

Alpha-CAPP (VA). The Alpha-CAPP (VA) property is located in Wise, Dickenson, Russell and Buchanan Counties, Virginia. Substantially all of the tons sold from this property in 2024 were metallurgical coal. We lease this property to subsidiaries of Alpha Metallurgical Resources Inc. ("Alpha") and previously leased it to subsidiaries of Contura Energy, Inc. The current lease with Alpha expires at the end of 2028 and will automatically renew unless otherwise notified. We receive payments based on the greater of a percentage of the sale price or fixed royalty per ton of coal mined and sold. In addition to the royalty obligations, this lease is subject to minimum payments, which reflect amounts we are entitled to receive even if no mining activity occurs during the period. Minimum payments are credited against future royalties that are earned as minerals are produced and the lessee is time limited on the period available for recouping minimum payments. Production comes from underground room and pillar and surface mines and is trucked to one of two preparation plants. Coal is shipped via the CSX and Norfolk Southern railroads to domestic and export metallurgical customers. The book value of this property was $44.0 million at December 31, 2024.

Below is a map of our Alpha-CAPP (VA) property:



Kepler. The Kepler property is located in Wyoming County, West Virginia. Substantially all of the coal sold from this property in 2024 was metallurgical coal. We lease this property to a subsidiary of Alpha. Metallurgical coal is produced from underground mines and transported by belt or truck to the preparation plant on the property. Coal is shipped via the Norfolk Southern railroad to export metallurgical customers.

Marfork. The Marfork property is located in Boone and Raleigh Counties, West Virginia. Substantially all of the coal sold from this property in 2024 was metallurgical coal. We lease this property to a subsidiary of Alpha. Metallurgical coal is produced from underground mines and transported by belt or truck to the preparation plant on the property. Coal is shipped via the CSX railroad to both domestic and export metallurgical customers.

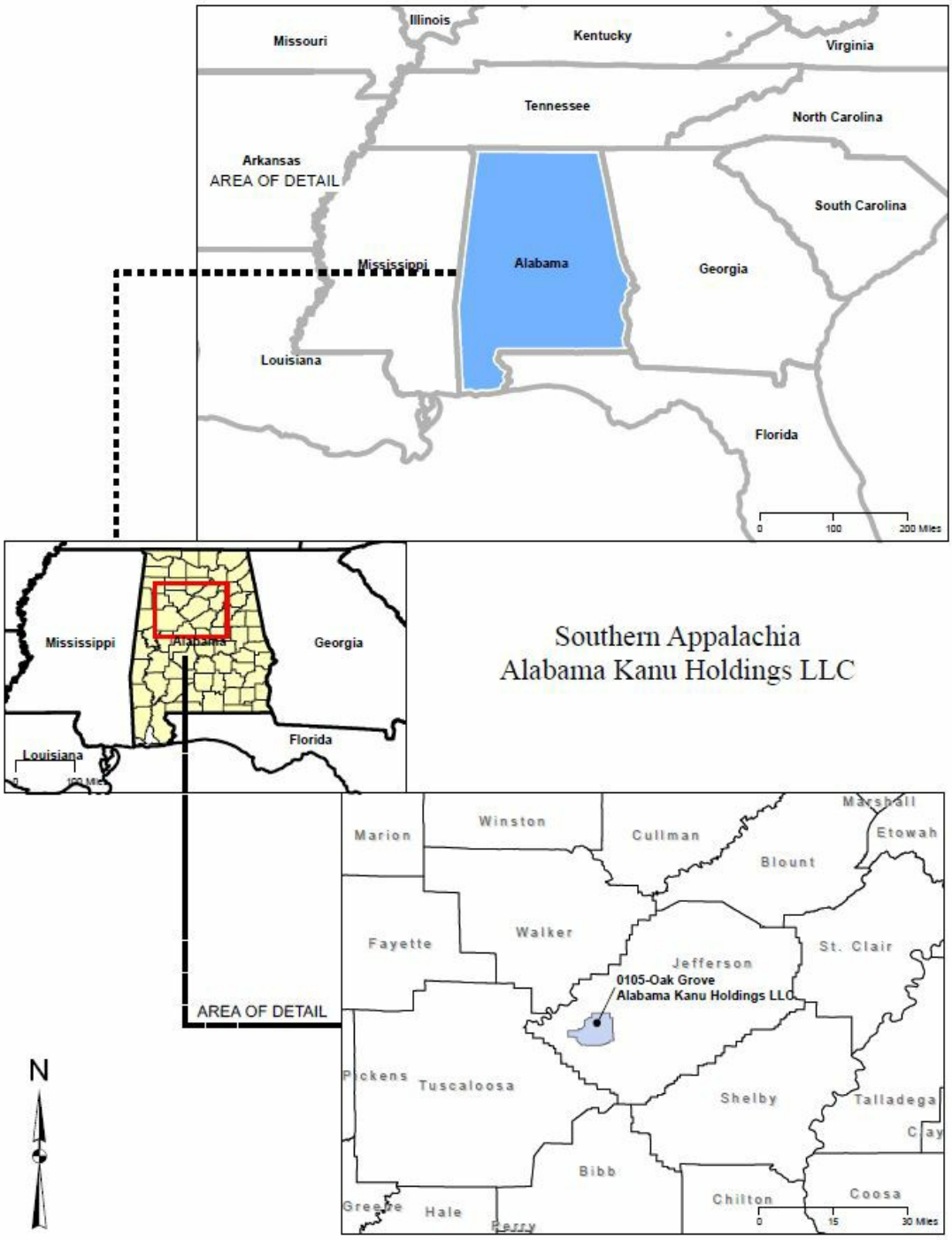
Kingston. The Kingston property is located in Fayette and Raleigh Counties, West Virginia. Substantially all of the coal sold from this property in 2024 was metallurgical coal. We lease this property to a subsidiary of Alpha. Metallurgical coal is produced from surface and underground mines and transported by belt or truck to nearby preparation plants, including the Marfork complex. Coal is shipped via the CSX and Norfolk Southern railroads to both domestic and export metallurgical customers.

Elk Creek. The Elk Creek property is located in Logan and Wyoming Counties, West Virginia. Substantially all of the coal sold from this property in 2024 was metallurgical coal. We lease this property to Ramaco Resources, Inc. Metallurgical coal is produced from surface and underground mines and is transported by belt and truck to a preparation plant on the property. Coal is shipped via the CSX railroad to both domestic and export metallurgical customers.

Appalachia Basin—Southern Appalachia

Oak Grove. The Oak Grove property is located in Jefferson County, Alabama. We currently lease this property to a subsidiary of Alabama Kanu Holdings, LLC ("Alabama Kanu"). Previous operators of this property were Hatfield Metallurgical Coal Holdings, LLC, Murray Metallurgical Coal Holdings LLC, Mission Coal, LLC, and Seneca Resources, LLC. The current lease with Alabama Kanu expires in 2029 and will automatically renew unless otherwise notified. We receive payments based on the greater of a percentage of the sale price or fixed royalty per ton of coal mined and sold. In addition to the royalty obligations, this lease is subject to minimum payments, which reflect amounts we are entitled to receive even if no mining activity occurs during the period. Minimum payments are credited against future royalties that are earned as minerals are produced and the lessee is time limited on the period available for recouping minimum payments. Metallurgical coal production comes from a longwall mine and is transported by beltline to a preparation plant. Metallurgical products are then shipped via railroad and barge to primarily export customers but can be shipped to domestic customers as well. The book value of this property was $3.0 million at December 31, 2024.

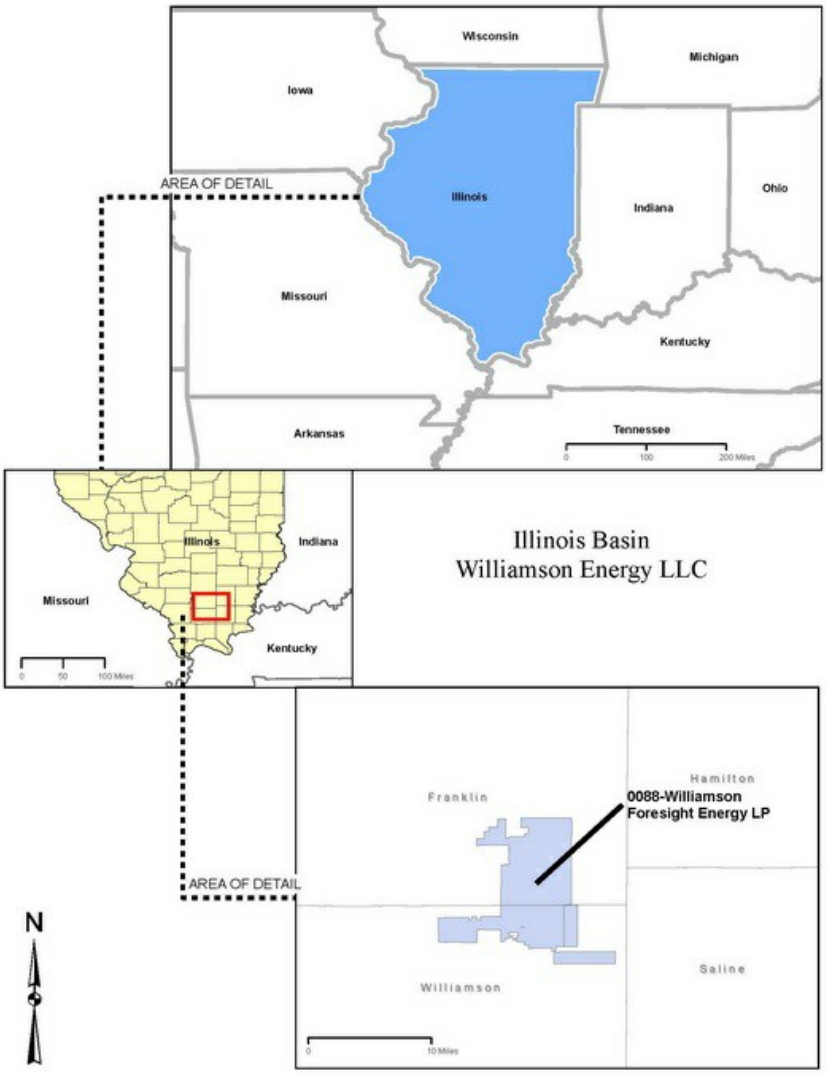
Below is a map of our Oak Grove property:



Illinois Basin

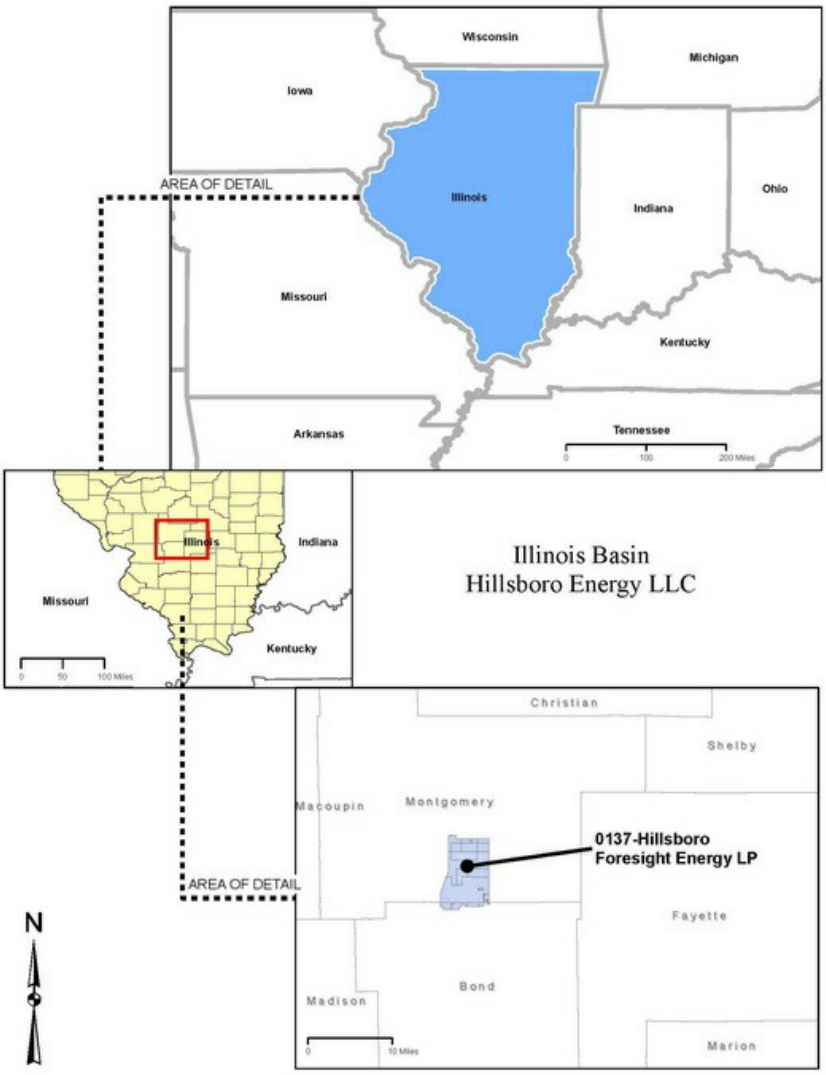
Williamson. The Williamson property is located in Franklin and Williamson Counties, Illinois. This property is under leases to Williamson Energy, a subsidiary of Foresight Energy Resources LLC ("Foresight"). The current leases expire in 2026 and 2033 and will automatically renew unless otherwise notified. We receive payments based on the greater of a percentage of the sale price or fixed royalty per ton of coal mined and sold. In addition to the royalty obligations, these leases are subject to minimum payments, which reflect amounts we are entitled to receive even if no mining activity occurs during the period. Minimum payments are credited against future royalties that are earned as minerals are produced and the lessee is time limited on the period available for recouping minimum payments. Thermal coal production comes from a longwall mine. Coal is shipped primarily via the Canadian National railroad to export customers. The book value of this property was $34.4 million at December 31, 2024.

Below is a map of our Williamson property:



Hillsboro. The Hillsboro property is located in Montgomery and Bond Counties, Illinois. This property is under lease to Hillsboro Energy, a subsidiary of Foresight. The current lease expires in 2033 and will automatically renew unless otherwise notified. We receive payments based on the greater of a percentage of the sale price or fixed royalty per ton of coal mined and sold. In addition to the royalty obligations, this lease is subject to non-recoupable minimum payments, which reflect amounts we are entitled to receive even if no mining activity occurs during the period. Thermal coal production comes from a longwall mine. Coal is shipped by rail via either the Union Pacific, Norfolk Southern or Canadian National railroads, or by barges to domestic utility customers. The book value of this property was $203.9 million at December 31, 2024.

Below is a map of our Hillsboro property:



In addition to these properties, we own loadout and other transportation assets at the Williamson mine and at the Macoupin and Sugar Camp mines, which are also operated by Foresight. See "—Coal Transportation and Processing Assets" below for additional information on these assets.

Production at the Foresight Macoupin mine was temporarily ceased in March 2020 and remains in temporary cessation of production. Foresight is no longer obligated to make royalty, transportation fee, or quarterly minimum payments to us under the Macoupin coal mining lease and transportation agreements. Foresight will instead pay an annual Macoupin fee of $2.0 million to NRP each year through 2026. Foresight also forfeited its right to recoup all previously paid but unrecouped minimum payments with respect to the Macoupin mine. At all times that the Macoupin mine remains in temporary cessation of production, Foresight will take reasonable actions to preserve, protect, and store the equipment, infrastructure, and property located at the mine.

Beginning January 1, 2027, we may at any time elect to cause Foresight to transfer the Macoupin mine and all associated equipment and permits to us for no consideration. If we make this election, we will assume all liabilities associated with the Macoupin mine. Also beginning January 1, 2027, Foresight may at any time elect to offer to sell the Macoupin assets to us for $1.00. If we accept Foresight's offer, we will assume all liabilities associated with the Macoupin mine. If we do not accept Foresight's offer, Foresight may proceed to permanently seal the Macoupin mine and conduct all reclamation activities. To the extent the elections described above are not made, Foresight will continue to pay the annual $2.0 million fee to NRP each year that the mine remains in temporary cessation of production. In addition, Foresight may determine at any time to recommence operations at the Macoupin mine, at which time we and Foresight will negotiate in good faith to enter into new coal mining lease and transportation agreements applicable to the Macoupin mine.

Northern Powder River Basin

Western Energy. The Western Energy property is located in Rosebud and Treasure Counties, Montana. We lease this property to a subsidiary of Rosebud Mining, LLC. Thermal coal is produced by surface dragline mining methods. Coal is transported by either truck or beltline to the Colstrip generation station located at the mine mouth.

Coal Transportation and Processing Assets

We own transportation and processing infrastructure related to certain of our coal properties, including loadout and other transportation assets at Foresight's Williamson mine in the Illinois Basin, for which we collect throughput fees or rents. We lease our Williamson transportation and processing infrastructure to a subsidiary of Foresight and are responsible for operating and maintaining the transportation and processing assets at the Williamson mine that we subcontract to a subsidiary of Foresight. In addition, we own rail loadout and associated infrastructure at the Sugar Camp mine, an Illinois Basin mine also operated by a subsidiary of Foresight. While we own coal at the Williamson mine, we do not own coal at the Sugar Camp mine. The infrastructure at the Sugar Camp mine is leased to a subsidiary of Foresight and we collect minimums and throughput fees. We recorded $10.9 million in revenue related to our coal transportation and processing assets during the year ended December 31, 2024.

We also own transportation and processing infrastructure, including loadout and other transportation assets at Foresight's Macoupin mine. As previously mentioned, the Macoupin mine was temporarily ceased in March 2020 and Foresight is no longer obligated to make transportation fee payments to us under the transportation agreements.

Oil and Gas / Industrial Minerals / Construction Aggregates

Our oil and gas properties are predominately located in Louisiana and during 2024, we received $8.6 million in oil and gas royalty revenues. Our various industrial mineral and construction aggregates properties are located across the United States and include minerals such as limestone, frac sand, copper, lead and zinc. We lease a portion of these minerals to third parties in exchange for royalty payments. The structure of these leases is similar to our coal leases, and these leases typically require minimum rental payments in addition to royalties. During 2024, we received $2.9 million in aggregates royalty revenues, including overriding royalty revenues.

Carbon Neutral Initiatives

We continue to explore and identify carbon neutral revenue sources across our large portfolio of surface, mineral, and timber assets, including the sequestration of carbon dioxide ("CO_2") in our underground pore space and standing forests, lithium production, and the generation of electricity using geothermal, solar and wind energy. As with our existing mineral activities, we do not plan to develop or operate carbon sequestration or carbon neutral energy projects ourselves but we plan to lease our acreage to companies that will conduct those operations in exchange for payment of royalties and other fees to us. While the timing and likelihood of additional cash flows being realized from these activities is uncertain, we believe our large ownership footprint throughout the United States provides additional opportunities to create value in this regard and position us as a key beneficiary of the transitional energy economy with minimal capital investment.

We executed our first carbon neutral project in 2021 through the sale of 1.1 million carbon offset credits for $13.8 million. The offset credits were issued to us by the California Air Resources Board under its cap-and-trade program and represent 1.1 million metric tons of carbon sequestered in approximately 39,000 acres of our forestland in West Virginia. We have the ability to harvest and sell future timber growth and in 2023, we sold carbon offset credits related to 2022 growth for $0.6 million.

Additionally, during 2024 we received approximately $13.4 million from a third party related to its creation of California Air Resources Board carbon offset credits from our properties.

Carbon Sequestration. We own approximately 3.5 million acres of specifically reserved subsurface rights in the southern United States with the potential for permanent sequestration of greenhouse gases. The carbon capture utilization and storage industry ("CCUS") is in its infancy and the future is highly uncertain, but a few facts are clear. A sequestration project requires acreage possessing unique geologic characteristics, close proximity to sources of industrial-scale greenhouse gas emissions or direct air capture capability, and the appropriate form of legal title that grants the acreage owner the right to sequester emissions in the subsurface. The demand for CCUS may be impacted by changes in the regulatory climate, including changes in environmental regulations. Changes in presidential administrations, or at a congressional level may result in periodic increases or decreases in CCUS projects. While carbon sequestration rights and ownership continue to evolve, we believe we own one of the largest inventory of acreage with potential for carbon sequestration activities in the United States.

In the first quarter of 2022 we executed our first subsurface CO_2 sequestration lease on 75,000 acres of underground pore space we own in southwest Alabama with the potential to store over 300 million metric tons of CO_2; however, we were notified that this agreement would not be renewed for another lease term and has been terminated as per the lessee's rights in the agreement. In October of 2022, we announced our second subsurface CO_2 transaction with the execution of a lease for approximately 65,000 acres of pore space we control near southeast Texas with estimated storage capacity of at least 500 million metric tons of CO_2.

Renewable Energy. In addition, we believe portions of our asset base across the United States possess the geologic characteristics and geographical locations necessary for geothermal, solar and wind energy development. With regards to geothermal, the technology to generate safe and reliable "green" electricity using heat found deep underground is advancing rapidly. Once limited to the geologic "hot spots," new technology has made geothermal energy projects feasible in many places previously thought impossible. Our geothermal opportunities are predominately located in the South, Midwest and Northwest parts of the United States. In the third quarter of 2022 we executed our first geothermal lease with the potential to generate up to 15 megawatts of electricity. With regards to wind and solar energy opportunities, we are actively engaged in discussions for potential use of our acreage for these types of renewable energy developments predominantly in Kentucky and West Virginia.

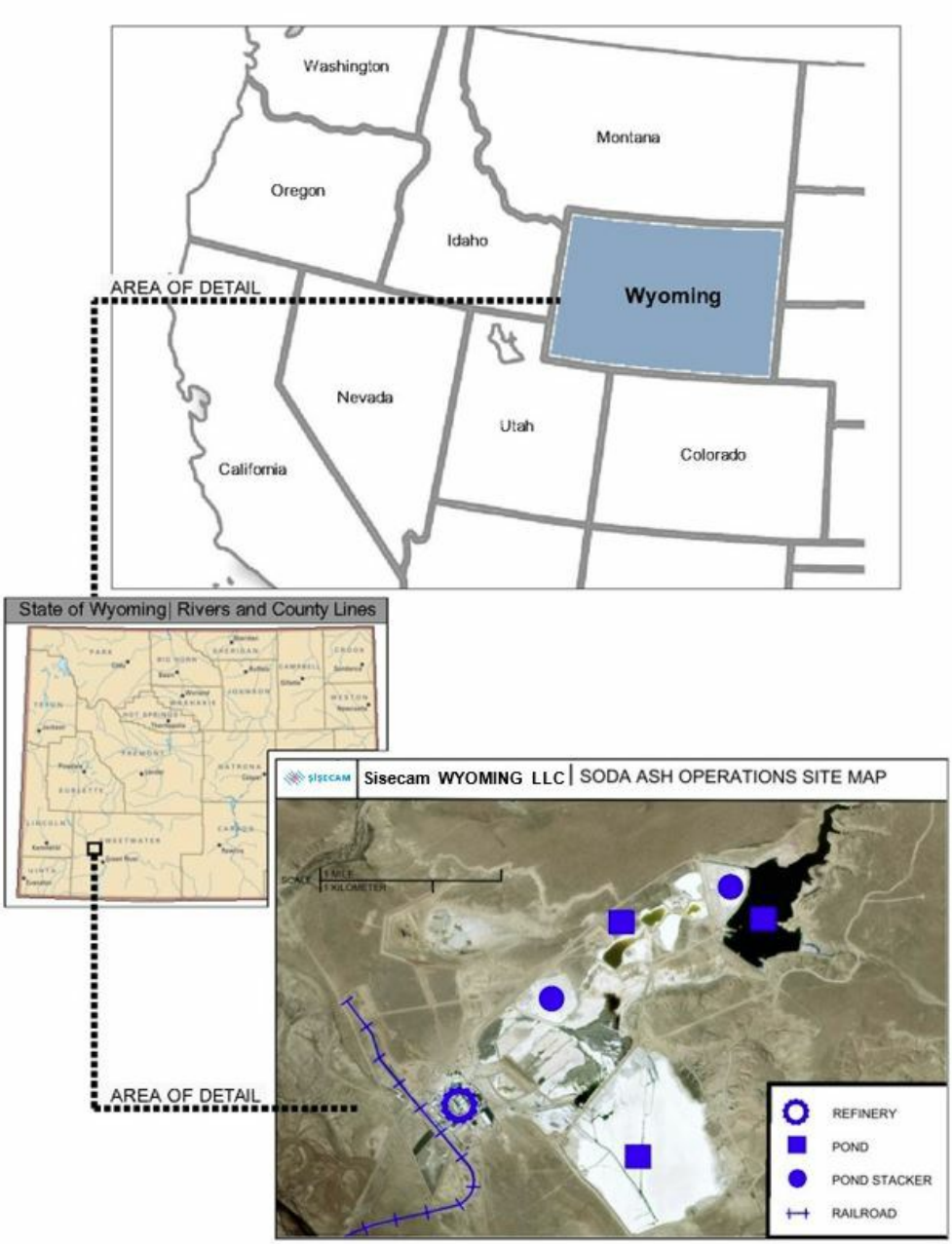
Soda Ash Segment

We own a 49% non-controlling equity interest in Sisecam Wyoming. Sisecam Chemicals Wyoming LLC ("SCW LLC") is the direct owner of 51% of Sisecam Wyoming. SCW LLC, our operating partner, controls and operates Sisecam Wyoming. SCW LLC is 100% owned by Sisecam Chemicals Resources LLC ("Sisecam Chemicals,") which is 100% owned by Sisecam USA Inc. ("Sisecam USA"). Sisecam USA is a direct wholly-owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish Corporation ("Şişecam Parent"), which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi Turkiye Is Bankasi ("Isbank"). Şişecam Parent is a global company operating in soda ash, chromium chemicals, flat glass, auto glass, glassware glass packaging and glass fiber sectors. Şişecam Parent was founded over 88 years ago, is based in Turkey and is one of the largest industrial publicly-listed companies on the Istanbul exchange. With production facilities in several continents and in several countries, Sisecam is one of the largest glass and chemicals producers in the world. Sisecam Wyoming mines trona and processes it into soda ash that is sold both domestically and internationally into the glass and chemicals industries. As a minority interest owner in Sisecam Wyoming, we do not operate and are not involved in the day-to-day operation of the trona ore mine or soda ash production plant. We appoint three of the seven members of the Board of Managers of Sisecam Wyoming and have certain limited negative controls relating to the company. We have limited approval rights with respect to Sisecam Wyoming, and our partner controls most business decisions, including decisions with respect to distributions and capital expenditures.

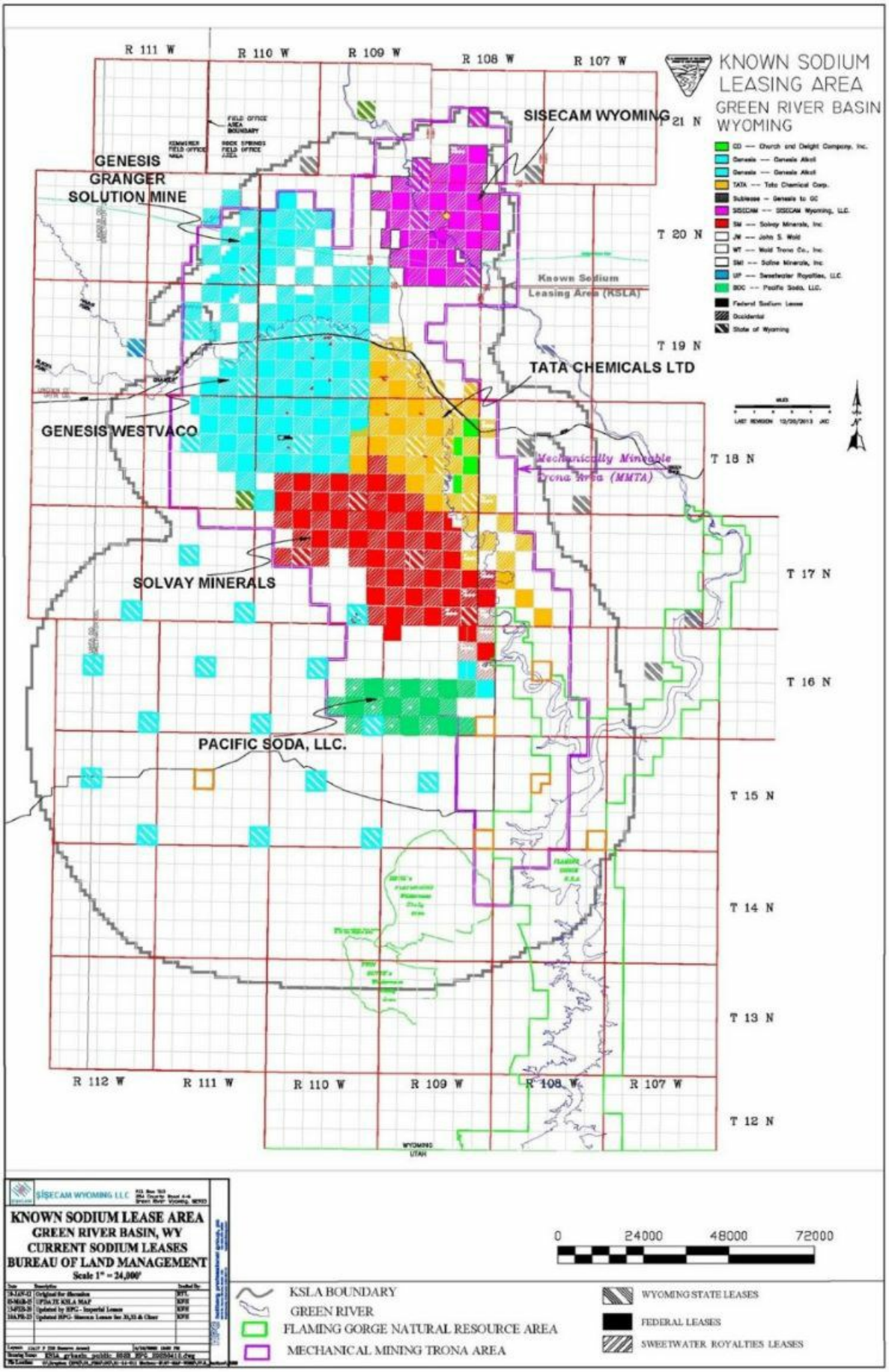
Sisecam Wyoming is one of the largest and lowest cost producers of soda ash in the world, serving a global market from its facility located in the Green River Basin of Wyoming. The Green River Basin geological formation holds the largest, and one of the highest purity, known deposits of trona ore in the world. Trona, a naturally occurring soft mineral, is also known as sodium sesquicarbonate and consists primarily of sodium carbonate, or soda ash, sodium bicarbonate and water. Sisecam Wyoming processes trona ore into soda ash, which is an essential raw material in flat glass, container glass, detergents, chemicals, paper and other consumer and industrial products. The vast majority of the world’s accessible trona is located in the Green River Basin. According to historical production statistics, approximately 30% of global soda ash is produced by processing trona, with the remainder being produced synthetically through chemical processes. The costs associated with procuring the materials needed for synthetic production are greater than the costs associated with mining trona for trona-based production. In addition, trona-based production consumes less energy and produces fewer undesirable by-products than synthetic production.

Sisecam Wyoming’s Green River Basin surface operations consist of leased and licensed subsurface mining areas in Wyoming. The facility is accessible by both road and rail. Sisecam Wyoming uses large continuous mining machines and underground shuttle cars in its mining operations. Its processing assets consist primarily of material sizing units, conveyors, calciners, dissolver circuits, thickener tanks, drum filters, evaporators and rotary dryers.

The following map provides an aerial overview of the Green River Basin surface operations:



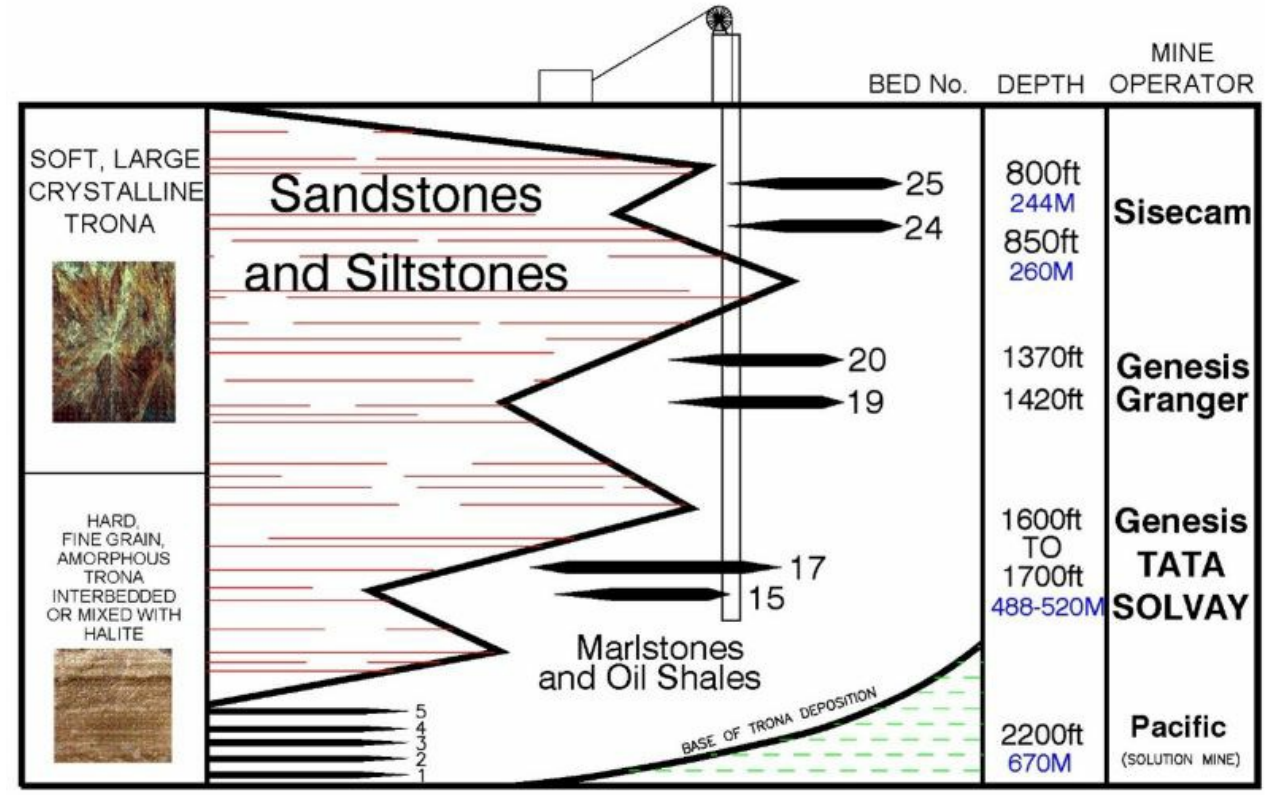
The following map shows the known sodium leasing area within the Green River Basin, including the boundaries of Sisecam Wyoming's leased and licensed subsurface mining:



The Green River Basin geological formation holds one of the largest and purest known deposits of trona ore in the world. Sisecam Wyoming's reserves contain trona deposits having a purity between 80% and 89% by weight, which means that insoluble impurities and water make up approximately 11% to 20% of Sisecam Wyoming's trona.

Sisecam Wyoming's mining leases and license are located in two mining beds, designated by the U.S. Geological Survey as beds 24 and 25, at depths of 850 to 800 feet near their shaft locations, respectively, below the surface. Mining these beds affords Sisecam Wyoming several competitive advantages. First, the depth of Sisecam Wyoming's beds is shallower than other actively mined beds in the Green River Basin, which allows them to use a continuous mining technique to mine trona and roof bolt the ceiling simultaneously. In addition, mining two beds that are on top of one another allows for production efficiencies because Sisecam Wyoming is able to use a single hoisting shaft to service both beds.

The following graphic shows a cross-section of the strategic areas of the Green River Basin where Sisecam Wyoming mines trona:



In trona ore processing, insoluble materials and other impurities are removed by thickening and filtering liquor, a solution consisting of sodium carbonate dissolved in water. Sisecam Wyoming then adds activated carbon to filters to remove organic impurities, which can cause color contamination in the final product. The resulting clear liquid is then crystallized in evaporators, producing sodium carbonate monohydrate. The crystals are then drawn off and passed through a centrifuge to remove excess water. The resulting material is dried in a product dryer to form anhydrous sodium carbonate, or soda ash. The resulting processed soda ash is then stored in on-site storage silos to await shipment by bulk rail or truck to distributors and end customers. The facility is in good working condition and has been in service for more than 60 years.

Shipping and Logistics. For the year ended December 31, 2024, Sisecam Wyoming assisted the majority of its domestic customers in arranging their freight services. All of the soda ash produced is shipped by rail or truck from the Green River Basin facility. For the year ended December 31, 2024, Sisecam Wyoming shipped over 90% of its soda ash to its customers initially via a single rail line owned and controlled by Union Pacific Railroad Company ("Union Pacific"). The Sisecam Wyoming plant receives rail service exclusively from Union Pacific. The agreement with Union Pacific expires on December 31, 2025 and there can be no assurance that it will be renewed on terms favorable to Sisecam Wyoming or at all. If Sisecam Wyoming does not ship at least a significant portion of its soda ash production on the Union Pacific rail line during a twelve-month period, they must pay Union Pacific a shortfall payment under the terms of its transportation agreement. During 2024, Sisecam Wyoming had no shortfall payments and does not expect to make any such payments in the future. A leased fleet of hopper cars serve as dedicated modes of shipment to Sisecam Wyoming's domestic and international customers. For exports, soda ash is shipped on unit trains primarily out of Longview, Washington for bulk shipments. Sisecam Wyoming has contracts securing its export capacity in bulk vessels and containers vessels. From these ports, soda ash is loaded onto ships for delivery to ports all over the world. Sisecam Wyoming ships to customers on Cost and Freight ("CFR") and Cost, Insurance, and Freight ("CIF") basis where they pay for ocean freight and charge the customer directly for these freight costs. Sisecam Wyoming has yearly and multiyear contracts for a portion of its ocean freight with vessel owners and carriers securing capacity and reducing market risk fluctuation.

Customers. Sisecam Wyoming generated approximately half of its gross revenue from export sales, which consist of both customers as well as distributors who serve as its channel partners in certain markets. For customers in North America, Sisecam Chemicals typically enters into contracts on Sisecam Wyoming's behalf with terms ranging from one to three years. Under these contracts, customers generally agree to purchase either minimum estimated volumes of soda ash or a certain percentage of their soda ash requirements at a fixed price for a given calendar year. Although Sisecam Wyoming does not have "take or pay" arrangements with its customers, substantially all sales are made pursuant to written agreements and not through spot sales

Sisecam Wyoming's customers consist primarily of glass manufacturing companies, which account for 50% or more of the consumption of soda ash around the world, and chemical and detergent manufacturing companies.

Sisecam Chemicals has now completed four full years directly managing its international sales, marketing and logistics activities since exiting American Natural Soda Ash Corporation ("ANSAC") at the end of 2020. Sisecam Chemicals took direct control of these activities to improve access to customers and gain control over placement of its sales in the international marketplace. This enhanced view of the global market allows Sisecam Chemicals to better understand supply/demand fundamentals thus allowing better decision making for its business. Sisecam Chemicals continues to optimize its distribution network leveraging strengths of existing distribution partners while expanding as its business requires in certain target areas.

Leases and License. Sisecam Wyoming is party to several mining leases and one license for its subsurface mining rights. Some of the leases are renewable at Sisecam Wyoming's option upon expiration. Sisecam Wyoming pays royalties to the state of Wyoming, the U.S. Bureau of Land Management, Sweetwater Royalties LLC, a subsidiary of Sweetwater Trona OpCo LLC and the successor in interest to the license with the Rock Springs Royalty Company LLC, an affiliate of Occidental Petroleum Corporation (formerly an affiliate of Anadarko Petroleum Corporation), and other private paarties which provide for royalties based upon production volume. The royalties are calculated based upon a percentage of the value of soda ash and related products sold at a certain stage in the mining process. These royalty payments may be subject to a minimum domestic production volume from the Green River Basin facility. Sisecam Wyoming is also obligated to pay annual rentals to its lessors and licensor regardless of actual sales. In addition, Sisecam Wyoming pays a production tax to Sweetwater County, and trona severance tax to the State of Wyoming that is calculated based on a formula that utilizes the volume of trona ore mined and the value of the soda ash produced. Sisecam Wyoming has a perpetual right to continue operating under these leases and license as long as it maintains continuous mining operations and intends to continue renewing the leases and license as has been historical practice.

As a minority interest owner in Sisecam Wyoming, we do not operate and are not involved in the day-to-day operation of the trona ore mine or soda ash production plant. Our partner, SCW LLC, manages the mining and plant operations. We appoint three of the seven members of the Board of Managers of Sisecam Wyoming and have certain limited negative controls relating to the company.

Sisecam Wyoming produced 2.5 million, 2.6 million and 2.8 million short tons of soda ash (of which the Partnership's interest is 1.2 million, 1.3 million and 1.4 million short tons of soda ash) during the year ended December 31, 2024, 2023 and 2022, respectively. Sisecam Wyoming sold 2.5 million, 2.7 million and 2.7 million short tons of soda ash (of which the Partnership's interest is 1.2 million, 1.3 million and 1.3 million short tons of soda ash) during the year ended December 31, 2024, 2023 and 2022, respectively. Sisecam Wyoming had net sales of $578.1 million, $773.6 million and $720.1 million (of which the Partnership's interest is $283.3 million, $379.1 million and $352.8 million) during the year ended December 31, 2024, 2023 and 2022, respectively.

Cautionary Note to Investors Regarding Estimates Of Measured, Indicated And Inferred Resources And Proven And Probable Mineral Reserves

We are subject to the reporting requirements of the Exchange Act governed by S-K 1300 that aim to convey an appropriate level of confidence in the disclosures being reported. In our public filings we disclose proven and probable reserves and measured, indicated and inferred resources, each as defined in S-K 1300. The estimation of measured resources and indicated resources involve greater uncertainty as to their existence and economic feasibility than the estimation of proven and probable reserves, and therefore investors are cautioned not to assume that all or any part of measured or indicated resources will ever be converted into S-K 1300-compliant reserves. The estimation of inferred resources involves far greater uncertainty as to their existence and economic viability than the estimation of other categories of resources, and therefore it cannot be assumed that all or any part of inferred resources will ever be upgraded to a higher category. Therefore, investors are cautioned not to assume that all or any part of inferred resources exist, or that they can be mined legally or economically.

Trona Resources and Trona Reserves

Information concerning Sisecam Wyoming's mining property and estimated mineral resources and mineral reserves in this Form 10-K has been prepared in accordance with the requirements of S-K 1300 which requires us to disclose Sisecam Wyoming's mineral resources, in addition to Sisecam Wyoming's mineral reserves, at Sisecam Wyoming's mining property as of the end of our most recently completed fiscal year. The information that follows is derived, for the most part, from, and in some instances is an extract from the technical report summary prepared by Hollberg Professional Group ("HPG") in compliance with Item 601(b)(96) and S-K 1300 completed on February 27, 2025 (the "2024 TRS"). Portions of the following information are based on assumptions, qualifications and procedures, that are not fully described herein. Reference should be made to the full text of the technical report summary prepared by HPG attached as Exhibit 96.1 and incorporated herein by reference and made a part of this Form 10-K. We have used the term "trona" as in "trona resources" and "trona reserves" interchangeably with "mineral."

HPG has conducted an independent technical review of the lands held by Sisecam Chemicals referred to as the "Big Island Mine," which is located in the area commonly referred to as the Known Sodium Lease Area (the "KSLA") near the town of Green River, Sweetwater County. The KSLA is where trona thickness exceeds 1-meter, extends for over 300 km2, and is greater than 80% grade. The U.S. Geological Survey recognizes 25 trona beds of economic importance (at least 1 meter in thickness and 300 km2 in areal extent) within the Green River Basin. Identified in ascending order, the trona beds are numbered 1 through 25 from the oldest (stratigraphically lowest) to the youngest (stratigraphically highest). Sisecam Wyoming has approximately 23,999 acres of trona under lease made up of approximately 8,094 Federal acres, 2,986 State acres, and 12,919 private acres. Sisecam Chemicals has mineral resources and mineable reserves in the shallowest mechanically mineable Trona beds 24 and 25, at depths of 850 and 800 feet below the surface, respectively, at our mine shaft locations. See also certain maps and graphics of Sisecam Wyoming's property above.

HPG estimated the total of the Big Island Mine's remaining leased and licensed proven and probable trona reserves as 217.7 million short tons (of which the Partnership's interest is 106.7 million short tons) as of December 31, 2024, compared to 211.3 million short tons (of which the Partnership's interest was 103.5 million short tons) as of December 31, 2023 and the total of the measured and indicated in-place trona resources exclusive of reserves as 153.3 million short tons (of which the Partnership's interest is 75.1 million short tons) as of December 31, 2024, compared to 162.3 million short tons (of which the Partnership's interest was 79.5 million short tons) as of December 31, 2023. As of December 31, 2024, the increase of 6.4 million short tons of the Big Island Mine's proven and probable trona reserves, or 3.0%, as compared to December 31, 2023 is due to to the net result of reductions from mining activities, additions due to lease acquisition and additions due to geologic model modifications. The cutoff grade of greater than 75% trona and thickness greater than 6 feet is applied to estimate the trona resources based upon successful mining and processing of the lower grade trona beds 19, 20 and 21 which were considered viable mining prospects by Texas Gulf Soda Ash ("TGSA"). The mineral resource inclusive of the mineral reserves is that portion of the ore body that is considered either economically viable for mining and can be converted to reserves or of economic interest but considered outside the current economic limits. This is the material considered of economic interest that has the potential to be converted to reserves. Sisecam Wyoming's trona resources are categorized as "Measured mineral resources," "Indicated mineral resources," and "Inferred mineral resources," which are defined as follows:

- *Measured mineral resources* - Mineral resources for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.
- *Indicated mineral resources* - Mineral resources for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply the modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve. (The modifying factors are the factors that a qualified person must apply to indicated and measured mineral resources and then evaluate in order to establish the economic viability of mineral reserves. A qualified person must apply and evaluate modifying factors to convert measured and indicated mineral resources to proven and probable mineral reserves. These factors include but are not restricted to mining; processing; metallurgical; infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. The number, type and specific characteristics of the modifying factors applied will necessarily be a function of and depend upon the mineral, mine, property, or project.)
- *Inferred mineral resources* - Mineral resources for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project and may not be converted to a mineral reserve.

The following is a summary of the recoverable trona reserves for beds 24 and 25 as of December 31, 2024:

(in millions of short tons except percentage) (1) (2)

Reserve Category	Proven mineral reserves		Probable mineral reserves		Total mineral reserves	
	Amount	Grade (1)	Amount	Grade (1)	Amount	Grade (1)
Lower Bed 24	69.7	85.9%	75.2	85.6%	145.0	85.8%
Upper Bed 25	39.5	85.6%	33.3	84.8%	72.8	85.3%
Total (3) (4) (5)	109.2	85.8%	108.5	85.3%	217.7	85.6%

(1) Numbers have been rounded; totals may not sum due to rounding.

(2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.

(3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.

(4) Mineral reserves are current as of December 31, 2024, using the definitions in S-K 1300.

(5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned 51% by SCW LLC and 49% by NRP.

Sisecam Wyoming's reserves are subject to leases with the State of Wyoming and the U.S. Bureau of Land Management and a license with Sweetwater Royalties LLC.

The following table presents Sisecam Wyoming's estimated proven and probable trona reserves by license and leases as of December 31, 2024:

(in millions of short tons except percentage) (1) (2)

Reserve Category	Proven mineral reserves		Probable mineral reserves		Total mineral reserves	
	Amount	Grade (1)	Amount	Grade (1)	Amount	Grade (1)
License with Sweetwater Royalties LLC	55.7	85.9%	55.1	85.3%	110.8	85.6%
Leases with the U.S. Government	45.6	85.6%	34.6	85.3%	80.2	85.4%
Leases with the State of Wyoming	8.0	86.7%	18.8	85.9%	26.8	86.1%
Total (3) (4) (5)	109.2	85.8%	108.5	85.3%	217.7	85.6%

(1) Numbers have been rounded; totals may not sum due to rounding.

(2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.

(3) The point of reference is ROM ore delivered to the processing facilities including mining losses and dilution.

(4) Mineral reserves are current as of December 31, 2024, using the definitions in S-K 1300.

(5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned 51% by SCW LLC and 49% by NRP.

The following is a summary of the measured, indicated, and inferred mineral resources exclusive of reserves for trona beds 24 and 25 as of December 31, 2024:

(in millions of short tons except percentage and thickness) (1) (2)

Reserve Category	Measured mineral resources		Indicated mineral resources		Measured + Indicated mineral resources			Inferred mineral resources	
	Amount	Grade (1)	Amount	Grade (1)	Amount	Grade (1)	Thickness (ft)	Amount	Grade (1)
Lower Bed 24	45.4	88.5%	53.6	86.6%	99.1	87.5%	8.6	—	—%
Upper Bed 25	29.3	84.9%	25.0	86.2%	54.3	85.5%	7.9	—	—%
Total (3) (4) (5)	74.7	87.1%	78.7	86.5%	153.3	86.8%	8.3	—	—%

(1) Numbers have been rounded; totals may not sum due to rounding.

(2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.

(3) The point of reference is in-place inclusive of impurities and insoluble content.

(4) Mineral reserves are current as of December 31, 2024, using the definitions in S-K 1300.

(5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned 51% by SCW LLC and 49% by NRP.

HPG estimated proven and probable reserves of approximately 217.7 million short tons of trona (of which the Partnership's interest is 106.7 million short tons), which is equivalent to 118.0 million short tons of soda ash as of December 31, 2024 (of which the Partnership's interest is 57.8 million short tons of soda ash). Based on Sisecam Wyoming's current mining rate of approximately 4.3 million short tons of trona per year, Sisecam Wyoming has enough proven and probable trona reserves to continue mining trona using current methods for approximately 50 years.

The mineral reserve is the economically mineable part of a measured or indicated mineral resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted. Sisecam Wyoming's trona reserves are categorized as "Proven mineral reserves" and "Probable mineral reserves," which are defined as follows:

- *Proven mineral reserves* - The economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.
- *Probable mineral reserves* - The economically mineable part of an indicated and, in some cases, a measured mineral resource.

In determining the reserve parameters and assumptions HPG considered the following circumstances:

- Sisecam Wyoming's 60-year long history and economics of mining the deposit and producing soda ash;
  - The 183.3 million short tons ("Mst") of trona ore produced from these two beds;
- The projected long life of the mine and resulting likely change in economics, mining, and processing methods over its projected 40 plus-year mine life (considering increased production over the current production rates) used in this technical summary. This 40 plus-year mine life consideration is based on the specific assumptions in this technical summary, including assumptions related to projected timing and estimated cost of two-seam mining, timing of related capital expenditures and sales price projections;
- Sisecam Wyoming's current processing facilities' capabilities and projected future changes to these facilities;
- The economics associated with Sisecam Wyoming's current mining equipment and history of "high grading" the thickest portions of the deposit;
- Sisecam Wyoming's current mining equipment limitations and required future changes to these systems; and
- HPG's knowledge of operating and managing other trona and potash mines.

In determining whether the reserves meet these economic standards, HPG made certain assumptions regarding the remaining life of the Big Island Mine, including, among other things, that:

- the cost of products sold per short ton will remain consistent with Sisecam Wyoming's cost of products sold for the five years ended December 31, 2024;
- the weighted average net sales per short ton FOB plant, $165/ton, based on USGS pricing and historical pricing provided by Sisecam Wyoming;
- Sisecam Wyoming's mining costs will remain consistent with the five years ended December 31, 2024, until they begin two-seam mining, at which time mining costs for the two-seam mining tonnage could increase by as much as 30%;
- Sisecam Wyoming's processing costs will remain consistent with the five years ended December 31, 2024, and rise in 10-years to account for lower grade material;
- Sisecam Wyoming will achieve an annual mining rate of approximately 4.3 million short tons of trona in 2025 and beyond;
- Sisecam Wyoming will process soda ash with a 90% rate of recovery, without accounting for the deca rehydration process;
- the ore to ash ratio for the stated trona reserves is 1.835:1.0 (short tons of trona run-of-mine to short tons of soda ash);
- The run-of-mine ore estimate contains dilution from the mining process;
- Sisecam Wyoming will continue to conduct only conventional mining using the room and pillar method and a non-subsidence mine design;
- Sisecam Wyoming will, in approximately 10 years, make necessary modifications to the processing facilities to allow localized mining of 75% ore grade in areas where the floor seam or insoluble disruptions have moved up into the mining horizon causing mining to be halted early due to processing facility limitations;
- Sisecam Wyoming will, in approximately 20 years, make necessary equipment modifications to operate at a seam height of 7-feet, the current mining limit is 9-feet;
- Sisecam Wyoming has and will continue to have valid leases and license in place with respect to the reserves, and that these leases and license can be renewed for the life of the mine based on their extensive history of renewing leases and license;
- Sisecam Wyoming has and will continue to have the necessary permits to conduct mining operations with respect to the reserves; and
- Sisecam Wyoming will maintain the necessary tailings storage capacity to maintain tailings disposal between the mine and surface placement for the life-of-mine.

Sisecam Wyoming's estimates of mineral resources and mineral reserves will change from time to time as a result of mining activities, analysis of new engineering and geologic data, modification of mining plans or mining methods and other factors. For additional information, see "Item 1A. Risk Factors, Risks Related to Our Business" for more information regarding risks surrounding Sisecam Wyoming's reserves.

Internal Controls Disclosure over Trona Resources and Trona Reserves

Sisecam Wyoming has internal controls over the trona resources and trona reserves estimation processes that result in reasonable and reliable estimates aligned with industry practice and reporting regulations. Annually, qualified persons and other Sisecam Wyoming employees review the estimates of trona resources and trona reserves and the supporting documentation, and based on their review of such information recommend approval to use the trona resources and trona reserves estimates to Sisecam Wyoming senior management. Sisecam Wyoming's controls utilize management systems, including, but not limited to, standardized procedures, workflow processes, supervision and management approval, internal and external reviews and audits, reconciliations, and data security covering record keeping, chain of custody and data storage. Sisecam Wyoming's systems also cover sample preparation and analysis, data verification, trona processing, metallurgical testing, recovery estimation, mine design and sequencing, and trona resource and reserve evaluations, with environmental, social and regulatory considerations.

These controls and other methods help to validate the reasonableness of the estimates. The effectiveness of the controls is reviewed periodically to address changes in conditions and the degree of compliance with policies and procedures. For additional information regarding the risks associated with Sisecam Wyoming's estimates of trona resources and reserves, see "Item 1A. Risk Factors, Risks Related to Our Business—Sisecam Wyoming's reserve and resource data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of Sisecam Wyoming's reserves and resources."

The technical data underlying the mineral resources and reserves estimates included in this Annual Report on Form 10-K, including the internal controls for determining and reporting such mineral resources and reserves estimates, are maintained by Sisecam Wyoming, and our agreements with Sisecam Wyoming do not give us (i) access to such underlying technical data sufficient to specifically confirm the opinion of the qualified person with respect to such resources and reserves or (ii) the ability to monitor or enforce Sisecam Wyoming's internal controls for determining and reporting such resources and reserves. Sisecam Wyoming has, however, made representations to us and the qualified person that it does not have reason to believe that the underlying technical data is materially misleading, and that Sisecam Wyoming's internal controls were applied to the mineral resource and reserve information contained in the report. We are providing this information because it represents the information that we have in our possession and we do not have a reasonable ground to believe that it is inaccurate, but we caution investors that we have relied on the qualified person and Sisecam Wyoming with respect to the preparation of the mineral resources and reserves estimates included in this report and are not able to independently verify its accuracy. Investors are cautioned to consider such risks when reviewing the mineral resources and reserves estimates included in this report.

Significant Customers

We have a significant concentration of revenues from Alpha, with total revenues of $67.7 million in 2024 from several different mining operations, including wheelage revenues and coal overriding royalty revenues. We also have a significant concentration of revenues with Foresight and its subsidiaries, with total revenues of $39.2 million in 2024 from all of their mining operations, including transportation and processing services revenues, coal overriding royalty revenues and wheelage revenues. We also have a significant concentration of revenues with Alabama Kanu with total revenues of $29.5 million in 2024 from one mining operation, including overriding royalty revenues. For additional information on significant customers, refer to "Item 8. Financial Statements and Supplementary Data—Note 14. Major Customers."

Competition

We face competition from land companies, coal producers, international steel companies and private equity firms in purchasing coal and royalty producing properties. Numerous producers in the coal industry make coal marketing intensely competitive. Our lessees compete among themselves and with coal producers in various regions of the United States for domestic sales. Lessees compete with both large and small producers nationwide on the basis of coal price at the mine, coal quality, transportation cost from the mine to the customer and the reliability of supply. Continued demand for our coal and the prices that our lessees obtain are also affected by demand for electricity and steel, as well as government regulations, technological developments and the availability and the cost of generating power from alternative fuel sources, including nuclear, natural gas, wind, solar and hydroelectric power.

Sisecam Wyoming's trona mining and soda ash refinery business faces competition from a number of soda ash producers in the United States, Europe and Asia, some of which have greater market share and greater financial, production and other resources than Sisecam Wyoming does. Some of Sisecam Wyoming’s competitors are diversified global corporations that have many lines of business and some have greater capital resources and may be in a better position to withstand a long-term deterioration in the soda ash market. Other competitors, even if smaller in size, may have greater experience and stronger relationships in their local markets. Competitive pressures could make it more difficult for Sisecam Wyoming to retain its existing customers and attract new customers, and could also intensify the negative impact of factors that decrease demand for soda ash in the markets it serves, such as adverse economic conditions, weather, higher fuel costs and taxes or other governmental or regulatory actions that directly or indirectly increase the cost or limit the use of soda ash.

Title to Property

We owned substantially all of our coal and aggregates mineral rights in fee as of December 31, 2024. We lease the remainder from unaffiliated third parties. Sisecam Wyoming leases or licenses its trona. We believe that we have satisfactory title to all of our mineral properties, but we have not had a qualified title company confirm this belief. Although title to these properties is subject to encumbrances in certain cases, such as customary easements, rights-of-way, interests generally retained in connection with the acquisition of real property, licenses, prior reservations, leases, liens, restrictions and other encumbrances, we believe that none of these burdens will materially detract from the value of our properties or from our interest in them or will materially interfere with their use in the operation of our business.

For most of our properties, the surface, oil and gas and mineral or coal estates are not owned by the same entities. Some of those entities are our affiliates. State law and regulations in most of the states where we do business require the oil and gas owner to coordinate the location of wells so as to minimize the impact on the intervening coal seams. We do not anticipate that the existence of the severed estates will materially impede development of the minerals on our properties.

Regulation and Environmental Matters

General

Operations on our properties must be conducted in compliance with all applicable federal, state and local laws and regulations. These laws and regulations include matters involving the discharge of materials into the environment, employee health and safety, mine permits and other licensing requirements, reclamation and restoration of mining properties after mining is completed, management of materials generated by mining operations, surface subsidence from underground mining, water pollution, legislatively mandated benefits for current and retired coal miners, air quality standards, protection of wetlands, plant and wildlife protection, limitations on land use, storage of petroleum products and substances which are regarded as hazardous under applicable laws and management of electrical equipment containing polychlorinated biphenyls ("PCBs"). Because of extensive, comprehensive and often ambiguous regulatory requirements, violations during natural resource extraction operations are not unusual and, notwithstanding compliance efforts, we do not believe violations can be eliminated entirely.

While it is not possible to quantify the costs of compliance with all applicable federal, state and local laws and regulations, those costs have been and are expected to continue to be significant. Our lessees in our coal and aggregates royalty businesses are required to post performance bonds pursuant to federal and state mining laws and regulations for the estimated costs of reclamation and mine closures, including the cost of treating mine water discharge when necessary. In many states our lessees also pay taxes into reclamation funds that states use to achieve reclamation where site specific performance bonds are inadequate to do so. Determinations by federal or state agencies that site specific bonds or state reclamation funds are inadequate could result in increased bonding costs for our lessees or even a cessation of operations if adequate levels of bonding cannot be maintained. We do not accrue for reclamation costs because our lessees are both contractually liable and liable under the permits they hold for all costs relating to their mining operations, including the costs of reclamation and mine closures. Although the lessees typically accrue adequate amounts for these costs, their future operating results would be adversely affected if they later determined these accruals to be insufficient. In recent years, compliance with these laws and regulations has substantially increased the cost of coal mining for all domestic coal producers.

In addition, the electric utility industry, which is the most significant end-user of thermal coal, is subject to extensive regulation regarding the environmental impact of its power generation activities, which has affected and is expected to continue to affect demand for coal mined from our properties. Current and future proposed legislation and regulations could be adopted that will have a significant additional impact on the mining operations of our lessees or their customers' ability to use coal and may require our lessees or their customers to change operations significantly or incur additional substantial costs that would negatively impact the coal industry.

Many of the statutes discussed below also apply to Sisecam Wyoming's trona mining and soda ash production operations, and therefore we do not present a separate discussion of statutes related to those activities, except where appropriate.

Air Emissions

The Clean Air Act and corresponding state and local laws and regulations affect all aspects of our business. The Clean Air Act directly impacts our lessees' coal mining and processing operations by imposing permitting requirements and, in some cases, requirements to install certain emissions control equipment, on sources that emit various hazardous and non-hazardous air pollutants. The Clean Air Act also indirectly affects coal mining operations by extensively regulating the air emissions of coal-fired electric power generating plants. There have been a series of federal rulemakings that are focused on emissions from coal-fired electric generating facilities, including the Cross-State Air Pollution Rule ("CSAPR"), regulating emissions of nitrogen oxide ("NOx") and sulfur dioxide, and the Mercury and Air Toxics Rule ("MATS"), regulating emissions of hazardous air pollutants. In March 2021, the U.S. Environmental Protection Agency ("EPA") revised the CSAPR to require additional emissions reductions of NOx from power plants in twelve states. Further, in April 2022, EPA published a proposed rule to build on the CSAPR by imposing Federal Implementation Plans on over 20 states to implement the National Ambient Air Quality Standards ("NAAQS") for ozone. However, on August 21, 2023, the EPA announced a new review of the ozone NAAQS in combination with its reconsideration of EPA's December 2020 decision to retain the 2015 NAAQS. The EPA's review remains ongoing and it is uncertain when the EPA will complete its review. More recently, in December 2024, the EPA issued a rule to revise the secondary NAAQS for sulfur oxides, but retained without revision the secondary standards for oxides of nitrogen and particulate matter. In May 2024, the EPA published a final rule to amend the MATS rule, which further limits the emission of non-mercury hazardous air pollutant metals from existing coal-fired power plants, tightens the emission standard for mercury for existing lignite-fired power plants, and strengthens emissions monitoring and compliance requirements. This final rule was challenged by various states and industry groups in the U.S. Court of Appeals for the D.C. Circuit. Although the lawsuit remains ongoing, the Supreme Court denied the challengers' request for a stay, so the implementation of the rule will continue as promulgated. Although the impacts of the May 2024 final rule are unknown, the MATS rule program has already forced electric power generators to make capital investments to retrofit power plants and could lead to additional premature retirements of older coal-fired generating units and many electric power generators have already announced retirements due to the uncertainty surrounding the MATS rule. Installation of additional emissions control technologies and other measures required under EPA regulations make it more costly to operate coal-fired power plants and could make coal a less attractive or even effectively prohibited fuel source in the planning, building and operation of power plants in the future. These rules and regulations have resulted in a reduction in coal's share of power generating capacity, which has negatively impacted our lessees' ability to sell coal and our coal-related revenues. Further reductions in coal's share of power generating capacity as a result of compliance with existing or proposed rules and regulations would have a material adverse effect on our coal-related revenues.

The EPA's regulation of methane under the Clean Air Act may also affect oil and gas production on properties in which we hold oil and gas interests. In December 2023, the EPA issued its methane rules, known as OOOOb and OOOOc, that establish new source and first-time existing source standards of performance for GHG and VOC emissions for crude oil and natural gas well sites, natural gas gathering and boosting compressor stations, natural gas processing plants, and transmission and storage facilities. The final rules are currently being challenged by 23 states and a coalition of industry groups in the U.S. Circuit Court of Appeals for the D.C. Circuit, although OOOOb is already in effect. However, the new administration might take action to repeal or modify the methane rules though we cannot predict whether such action will occur or its timing. To the extent the methane rules are implemented as originally promulgated, compliance with the new rules may affect the amount oil & gas companies owe under the Inflation Reduction Act, which amended the CAA to impose a first-time fee on the emission of methane from sources required to report their GHG emissions to the EPA. The methane emissions fee applies to excess methane emissions from certain facilities and starts at $900 per metric ton of leaked methane in 2024 and increases to $1,200 in 2025 and $1,500 in 2026 and thereafter. In November 2024, the EPA finalized a rule, applicable to oil and gas facilities that emit more than 25,000 metric tons of CO_2 per year, to implement the methane emissions fee provisions of the Inflation Reduction Act. We cannot predict whether, how, or when the new administration might take action to revise or repeal the methane fee rule. Additionally, Congress may take actions to repeal or revise the Inflation Reduction Act, including with respect to the methane emissions fee, which timing or outcome similarly cannot be predicted. To the extent that the methane emissions fee rule is implemented as originally promulgated, oil and gas production on the properties in which we hold oil and gas interests could be adversely affected to the extent the rules and any of their requirements impose increased operating costs on the oil and gas industry.

Carbon Dioxide and Greenhouse Gas ("GHG") Emissions

In December 2009, EPA determined that emissions of carbon dioxide, methane, and other GHGs present an endangerment to public health and welfare because emissions of such gases are, according to EPA, contributing to warming of the Earth's atmosphere and other climatic changes. Based on its findings, EPA began adopting and implementing regulations to restrict emissions of GHGs under various provisions of the Clean Air Act.

In August 2015, EPA published its final Clean Power Plan ("CPP") Rule, a multi-factor plan designed to cut carbon pollution from existing power plants, including coal-fired power plants. The rule required improving the heat rate of existing coal-fired power plants and substituting lower carbon-emission sources like natural gas and renewables in place of coal. As promulgated, the rule would have forced many existing coal-fired power plants to incur substantial costs in order to comply or alternatively result in the closure of some of these plants, likely resulting in a material adverse effect on the demand for coal by electric power generators. Following a legal challenge, the EPA formally proposed the Affordable Clean Energy ("ACE") Rule, which replaced the CPP Rule. The ACE Rule went into effect on September 6, 2019 and was also subject to a legal challenge. In January 2021, the D.C. Circuit issued a written opinion holding that the ACE Rule was based on EPA's "erroneous legal premise" that when it determines the "best system of emission reduction" for existing sources, the Clean Air Act mandates that EPA may only consider emission reduction measures that can be applied at and/or to a stationary source (often referred to as "inside-the-fence" measures). The Court vacated the rule, essentially reimplementing the CPP and leaving EPA to decide whether to stick with the CPP or to pursue a new rulemaking. In June 2022, the Supreme Court issued a written opinion, West Virginia v. EPA, in which the Court invalidated the CPP because EPA lacked the authority to promulgate such an expansive rule under the "Major Questions Doctrine." Most recently, in May 2024, the EPA finalized a rule that repeals the ACE rule and establishes GHG standards and guidelines that require coal fired power plants to (1) convert to natural gas co-firing by January 1, 2030 and then retire by 2039, (2) install by 2032 carbon capture and sequestration technology capable of capturing 90% of all CO2 emissions, or (3) cease operations by 2032. The May 2024 rule has been challenged in the U.S. Circuit Court of Appeals, but the U.S. Supreme Court denied the challengers' request to stay implementation of the rule pending the outcome of the litigation. The EPA recently filed a motion to hold the case in abeyance while the EPA reviews the May 2024 rule. However, we cannot predict what action the new administration may take with respect to the May 2024 rule. Notwithstanding the previous litigation, the CPP and the ACE led to premature retirements, and the new rule could lead to additional premature retirements of coal-fired generating units and reduce the demand for coal. Congress has not yet adopted legislation to restrict carbon dioxide emissions from existing power plants and has not otherwise expanded the legal authority of the EPA following *West Virginia v. EPA*, but we cannot predict whether such legislation will be passed in the future or what the potential impacts of such legislation would be.

In October 2015, EPA published its final rule on performance standards for greenhouse gas emissions from new, modified, and reconstructed electric generating units. The final rule requires new steam generating units to use highly efficient supercritical pulverized coal boilers that use partial post-combustion carbon capture and storage technology. Following a legal challenge, the EPA undertook a review of the October 2015 rule, and, in December 2018, EPA issued a proposed rule revising the best system of emission reduction ("BSER") for newly constructed coal-fired electric generating units, among other changes, to replace the 2015 rule. In a status report filed with the Court on January 15, 2021, EPA requested that the case remain in abeyance until after the transition to the Biden administration. On March 17, 2021, in line with President Biden's Executive Order 13990, EPA asked the D.C. Circuit to vacate and remand the "significant contribution" final rule. On April 5, 2021, the D.C. Circuit vacated and remanded the January 2021 final rule. In May 2024, the EPA issued a final NSPS rule for GHG emissions from new and reconstructed fossil fuel-fired combustion turbines, which notably, formally withdrew the December 2018 proposed amendments to the NSPS for GHG emissions from coal-fired EGUs, However, the EPA noted it was still continuing to review the October 2015 rule.

Certain authorizations required for certain mining and oil and gas operations may be difficult to obtain or use due to challenges from environmental advocacy groups to the environmental analyses conducted by federal agencies before granting permits. In particular, those approvals necessary for certain coal activities that are subject to the requirements of the National Environmental Policy Act ("NEPA") are subject to real uncertainty. In April 2022, the Council on Environmental Quality ("CEQ") issued a final rule, which is considered "Phase I" of the Biden Administration's two-phased approach to modifying the NEPA, revoking some of the modifications made to the NEPA regulations under the previous administration and reincorporating the consideration of direct, indirect, and cumulative effects of major federal actions, including GHG emissions. In May 2024, the CEQ finalized the "Phase 2" updates, the "Bipartisan Permitting Reform Implementation Rule," which revised the implementing regulations of the procedural provisions of NEPA and implemented the amendments to NEPA included in the June 3, 2023, Fiscal Responsibility Act of 2023. The final rule was challenged by various states and the litigation remains ongoing. More recently, in November 2024, the U.S. Court of Appeals for the D.C. Circuit held that the CEQ lacks authority to issue NEPA regulations. As a result of this ruling and the recent change in the U.S. presidential administration and the following executive orders, there is significant uncertainty with respect to current and future requirements for these analyses.

In November 2014, President Obama also announced an emission reduction agreement with China's President Xi Jinping. The United States pledged that by 2025 it would cut climate pollution by 26% to 28% from 2005 levels. China pledged it would reach its peak carbon dioxide emissions around 2030 or earlier, and increase its non-fossil fuel share of energy to around 20% by 2030. In December 2015, the United States was one of 196 countries that participated in the Paris Climate Conference, at which the participants agreed to limit their emissions in order to limit global warming to 2°C above pre-industrial levels, with an aspirational goal of 1.5°C. In December 2023, the United Arab Emirates hosted the 28th session of the Conference of the Parties ("COP28") where parties signed onto an agreement to transition "away from fossil fuels in energy systems in a just, orderly and equitable manner" and increase renewable energy capacity so as to achieve net zero by 2050, although no timeline for doing so was set. Subsequent Conferences have sought to build on the Paris Agreement by calling for various to phase out fossil fuels and subsidies related to the same, though none have been legally binding. The full impact of these actions is uncertain at this time, though these international agreements have the potential to result in increased pressure from financial institutions and other stakeholders to eliminate or reduce fossil fuel use and GHG emissions related to the same. Additionally, the new administration has re-withdrawn the United States from the Paris Agreement, and may make changes to the United States' participation in any of these programs, though the nature and timing of such changes are uncertain.

Moreover, many states, regions, and governmental bodies have adopted GHG initiatives and have or are considering the imposition of fees or taxes based on the emission of GHGs by certain facilities, including coal-fired electric generating facilities, either as part of cap and trade, carbon tax, or climate "superfund" laws. For example, in December 2024, New York adopted a law requiring companies that emitted over 1 billion tons of GHG emissions into the atmosphere between 2000 and 2018, with sufficient connections to the state, to pay into a "climate superfund" to support climate-related adaptation and mitigation projects. Other states have announced their intent to increase the use of renewable energy sources, displacing coal and other fossil fuels. Depending on the particular regulatory program that may be enacted, at either the federal or state level, and the outcome of any legal challenges, the demand for coal and oil and gas could be negatively impacted, which would have an adverse effect on our operations. Many states and regions have adopted GHG initiatives and certain governmental bodies have or are considering the imposition of fees or taxes based on the emission of GHG by certain facilities, including coal-fired electric generating facilities. For example, the RGGI calls for the implementation of a cap-and-trade program aimed at reducing carbon dioxide emissions from power plants in participating states. The members of RGGI have established in statutes and/or regulations a carbon dioxide trading program. Similar to RGGI, five western states launched the Western Regional Climate Initiative, although only California, Washington and Quebec are currently active participants. We cannot predict what other regional greenhouse gas reduction initiatives may arise in the future.

Hazardous Materials and Waste

The Federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA" or the Superfund law) and analogous state laws impose liability, without regard to fault or the legality of the original conduct, on certain classes of persons that are considered responsible for having contributed to the release of a “hazardous substance” into the environment. We could become liable under federal and state Superfund and waste management statutes if our lessees are unable to pay environmental cleanup costs relating to hazardous substances. In addition, we may have liability for environmental clean-up costs in connection with Sisecam Wyoming's soda ash businesses.

The Resource Conservation and Recovery Act (“RCRA”) and analogous state laws impose requirements for the generation, transportation, treatment, storage, disposal, and cleanup of hazardous and non-hazardous wastes. Many mining wastes are excluded from the regulatory definition of hazardous wastes, and coal mining operations covered by Surface Mining Control and Reclamation Act (“SMCRA”) permits are by statute exempted from RCRA permitting. Similarly, most wastes associated with the exploration, development, and production of oil & gas are exempt from regulation as hazardous wastes under RCRA, though these wastes typically constitute “solid wastes” that are subject to less stringent non-hazardous waste requirements. However, it is possible that RCRA could be amended or the EPA or state environmental agencies could adopt policies to require such wastes to become subject to more stringent storage, handling, treatment, or disposal requirements, which could impose significant additional costs on the operators of the properties in which we own coal or oil and gas interests. RCRA also allows the EPA to require corrective action at sites where there is a release of hazardous substances. In addition, each state has its own laws regarding the proper management and disposal of waste material. While these laws impose ongoing compliance obligations, such costs are not believed to have a material impact on our operations.

RCRA impacts the coal industry in particular because it regulates the disposal of certain CCB. On April 17, 2015, the EPA finalized regulations under RCRA for the disposal of CCB. Under the finalized regulations, CCB is regulated as “non-hazardous” waste and avoids the stricter, more costly, regulations under RCRA’s “hazardous” waste rules. While the classification of CCB as a hazardous waste would have led to more stringent restrictions and higher costs, this regulation may still increase our lessees’ operating costs and potentially reduce their ability to sell coal. The CCB rule was subject to legal challenge and ultimately remanded to the EPA. On August 28, 2020, the EPA published a final revised rule mandating the closure of unlined impoundments, with deadlines to initiate closure between 2021 and 2028, depending on site-specific circumstances. Certain provisions of the revised CCB rule were vacated by the D.C. Circuit in 2018. Meanwhile, on January 25, 2022, the EPA published determinations for 9 of 57 CCB facilities that sought approval to continue disposal of CCB and non-CCB waste streams until 2023, as opposed to the initial 2021 deadline for unlined impoundments prescribed by the current rule. While the EPA issued one conditional approval, the EPA required the remaining facilities to cease receipt of waste within 135 days of completion of public comment, or around July 2022. And, in January 2023, the EPA issued six proposed determinations to deny facilities’ requests to continue disposal into unlined surface impoundments. The current determinations, future determinations of the same nature, or similar actions in expected future rulemakings could lead to accelerated, abrupt, or unplanned suspension of coal-fired boilers. Most recently, in May 2024, the EPA finalized changes to the CCB regulations for inactive surface impoundments at inactive electric utilities in response to the D.C. Circuit’s 2018 decision. The final rule expands the scope of impoundments subject to regulation and established groundwater monitoring, corrective action, closure, and post closure care requirements for all CCB management units. Although the rule has been challenged by industry groups, the U.S. Supreme Court rejected the challengers’ request to stay the rule so the rule remains effective as promulgated. The combined effect of the CCB rules and the ELG regulations (discussed below) has compelled power generating companies to close existing ash ponds and may force the closure of certain existing coal burning power plants that cannot comply with the new standards. Such retirements may adversely affect the demand for coal.

On November 3, 2015, the EPA published the final rule ELG, revising the regulations for the Steam Electric Power Generating category which became effective on January 4, 2016. The rule sets the first federal limits on the levels of toxic metals in wastewater that can be discharged from power plants, based on technological improvements in the steam electric power industry over the last three decades. The EPA has from time to time updated the applicable ELG regulations and most recently, in May 2024, finalized a new ELG rule applicable to steam electric power generating facilities that sets new discharge limits for flue gas desulfurization wastewater, bottom ash transport water, combustion residual leachate, and legacy wastewaters. Although it is uncertain what actions the new administration may take regarding the 2024 ELG rule, to the extent the 2024 rule, which applies to a major portion of the electric power industry, remains in effect, it may impact the market for products in which we own a mineral interest.

Water Discharges

Operations conducted on our properties can result in discharges of pollutants into waters. The Clean Water Act and analogous state laws and regulations create two permitting programs for mining operations. The National Pollutant Discharge Elimination System ("NPDES") program under Section 402 of the statute is administered by the states or EPA and regulates the concentrations of pollutants in discharges of waste and storm water from a mine site. The Section 404 program is administered by the Army Corps of Engineers and regulates the placement of overburden and fill material into channels, streams and wetlands that comprise “waters of the United States.” The scope of waters that may fall within the jurisdictional reach of the Clean Water Act is expansive and may include land features not commonly understood to be a stream or wetlands. The Clean Water Act and its regulations prohibit the unpermitted discharge of pollutants into such waters, including those from a spill or leak. Similarly, Section 404 also prohibits discharges of fill material and certain other activities in waters unless authorized by the issued permit. Considerable legal uncertainty exists surrounding the standard for what constitutes jurisdictional waters and wetlands subject to the protections and requirements of the CWA. Rulemakings to establish the extent of such jurisdiction were finalized in 2015 and 2020, respectively, and both rulemakings were subject to substantial litigation. Although the EPA and Corps of Engineers did not seek to vacate the 2020 rule on an interim basis, two federal district courts in Arizona and New Mexico vacated the 2020 rule in decisions announced during the third quarter of 2021. In January 2023, the EPA and Corps of Engineers published a final revised definition of WOTUS founded upon a pre-2015 definition, including updates to incorporate existing Supreme Court decisions. Following legal challenge to the January 2023 rule and the Supreme Court’s decision in *Sackett v. EPA*, the EPA issued a revised WOTUS rule in September 2023. Due to the injunction in certain states, however, the implementation of the September 2023 rule currently varies by state. The new Administration may seek to take additional action with respect to these regulations, although the substance and timing of such action cannot be predicted.

States issue a certificate pursuant to Clean Water Act Section 401 that is required for the Corps of Engineers to issue a Section 404 permit. In October 2021, the U.S. District Court for the Northern District of California vacated a 2020 rule revising the Section 401 certification process. The Supreme Court stayed this vacatur and, in September 2023, the EPA finalized its Clean Water Act Section 401 Water Quality Certification Improvement Rule, effective as of November 27, 2023. The Water Quality Certification Improvement Rule was challenged by various states and a coalition of industry groups and the challenge remains ongoing. While the full extent and impact of these actions is unclear at this time due to the litigation and the new U.S. presidential administration, any disruption in the ability to obtain required permits may result in increased costs and project delays. In connection with its review of permits, EPA has at times sought to reduce the size of fills and to impose limits on specific conductance (conductivity) and sulfate at levels that can be unachievable absent treatment at many mines. Such actions by EPA could make it more difficult or expensive to obtain or comply with such permits, which could, in turn, have an adverse effect on our coal-related revenues.

In addition to government action, private citizens’ groups have continued to be active in bringing lawsuits against operators and landowners. Since 2012, several citizen group lawsuits have been filed against mine operators for allegedly violating conditions in their National Pollutant Discharge Elimination System (“NPDES”) permits requiring compliance with West Virginia’s water quality standards. Some of the lawsuits alleged violations of water quality standards for selenium, whereas others alleged that discharges of conductivity and sulfate were causing violations of West Virginia’s narrative water quality standards, which generally prohibit adverse effects to aquatic life. The citizen suit groups have sought penalties as well as injunctive relief that would limit future discharges of selenium, conductivity or sulfate. The federal district court for the Southern District of West Virginia has ruled in favor of the citizen suit groups in multiple suits alleging violations of the water quality standard for selenium and in two suits alleging violations of water quality standards due to discharges of conductivity (one of which was upheld on appeal by the United States Court of Appeals for the Fourth Circuit in January 2017). Additional rulings requiring operators to reduce their discharges of selenium, conductivity or sulfate could result in large treatment expenses for our lessees. In 2015, the West Virginia Legislature enacted certain changes to West Virginia’s NPDES program to expressly prohibit the direct enforcement of water quality standards against permit holders. EPA approved those changes as a program revision effective in March 2019. This approval may prevent future citizen suits alleging violations of water quality standards.

Since 2013, several citizen group lawsuits have been filed against landowners alleging ongoing discharges of pollutants, including selenium and conductivity, from valley fills located at reclaimed mountaintop removal mining sites in West Virginia. In each case, the mine on the subject property has been closed, the property has been reclaimed, and the state reclamation bond has been released. Any determination that a landowner or lessee has liability for discharges from a previously reclaimed mine site could result in substantial compliance costs or fines and would result in uncertainty as to continuing liability for completed and reclaimed coal mine operations.

Endangered Species Act

The federal Endangered Species Act (“ESA”) and counterpart state legislation protect species threatened with possible extinction. The U.S. Fish and Wildlife Service (“USFWS”) works closely with state regulatory agencies to ensure that species subject to the ESA are protected from potential impacts from mining-related and oil and gas exploration and production activities. In recent years, there has been uncertainty with respect to ESA regulation. For example, in October 2021, the Biden Administration proposed the rollback of new rules promulgated under the first Trump Administration and published an advanced notice of proposed rulemaking to codify a general prohibition on incidental take while establishing a process to regulate or permit exceptions to such a prohibition. Additionally, in June 2022, the USFWS and the National Marine Fisheries Service (“NMFS”) published a final rule rescinding the 2020 regulatory definition of “habitat.” Most recently, in April 2024, the USFWS and NMFS finalized three rules that revise regulations for classifying species and designating critical habitat, interagency cooperation, and protecting endangered and threatened species. Among other things, these rules reinstate prior language affirming that listing determinations are made “without reference to possible economic or other impacts of such determination,” clarify the standards for delisting species, revise the set of circumstances for when critical habitat may be not prudent, revise the criteria for identifying unoccupied critical habitat, and reinstate the general application of the “blanket rule” option for protecting newly listed threatened species. We cannot predict what actions the new administration may take with respect to these regulations and the timing with respect to the same. As a result, there is significant uncertainty with respect to ESA regulation at this time. If the USFWS were to designate species indigenous to the areas in which we operate as threatened or endangered or to redesignate a species from threatened to endangered, we or the operators of the properties in which we hold oil and gas or mineral interests could be subject to additional regulatory and permitting requirements, which in turn could increase operating costs or adversely affect our revenues.

Other Regulations Affecting the Mining Industry

Mine Health and Safety Laws

The operations of our coal lessees and Sisecam Wyoming are subject to stringent health and safety standards that have been imposed by federal legislation since the adoption of the Mine Health and Safety Act of 1969. The Mine Health and Safety Act of 1969 resulted in increased operating costs and reduced productivity. The Mine Safety and Health Act of 1977, which significantly expanded the enforcement of health and safety standards of the Mine Health and Safety Act of 1969, imposes comprehensive health and safety standards on all mining operations. In addition, the Black Lung Acts require payments of benefits by all businesses conducting current mining operations to coal miners with black lung or pneumoconiosis and to some beneficiaries of miners who have died from this disease.

Mining accidents in recent years have received national attention and instigated responses at the state and national level that have resulted in increased scrutiny of current safety practices and procedures at all mining operations, particularly underground mining operations. Since 2006, heightened scrutiny has been applied to the safe operations of both underground and surface mines. This increased level of review has resulted in an increase in the civil penalties that mine operators have been assessed for non-compliance. Operating companies and their supervisory employees have also been subject to criminal convictions. The Mine Safety and Health Administration ("MSHA") has also advised mine operators that it will be more aggressive in placing mines in the Pattern of Violations program, if a mine's rate of injuries or significant and substantial citations exceed a certain threshold. A mine that is placed in a Pattern of Violations program will receive additional scrutiny from MSHA.

MSHA has also published, and may continue to publish, requests for information on various mining topics that may result in additional rules applicable to our operations and the operations of our lessees. Recent requests include topics such as engineering controls and best practices to lower miners' exposure to respirable coal mine dust and exposure of underground miners to diesel exhaust. Recent MSHA rulemaking actions include, for example:

- In April 2024, MSHA adopted a rule on respirable crystalline silica, most commonly found in the mining environment through quartz. The final rule, which took effect on June 17, 2024, amends the existing MSHA standards to lower the permissible exposure limit of respirable crystalline silica, as well as set forth new or revised standards for exposure sampling, corrective actions, medical surveillance for metal and non-metal miners, and respiratory protection requirements.

- In December 2024, MSHA adopted a rule to revise Testing, Evaluation, and Approval of Electric Motor-Driven Mine Equipment and Accessories within underground mining environments. The final rule, effective January 9, 2025, adopts various voluntary consensus standards to promote innovation in mine safety and health technologies.

- In December 2023, MSHA published a final rule, which took effect on January 19, 2024, requiring that mine operators and independent contractors operating mobile equipment develop, implement, and periodically update a written safety program for surface mobile equipment (excluding belt conveyors) at surface mines and surface areas of underground mines. The deadline for compliance with the rule was July 17, 2024.

MSHA has also finalized a number of rules related to controlling exposure to coal mine dust, which has resulted in progressively stricter exposure limits imposed by MHSA regulations. These requirements impose a number of dust monitoring obligation and mine ventilation requirements on our coal lessees' operations. Compliance with these rules can result in increased costs on our lessees' operations, including, but not limited to, the purchasing of new equipment and the hiring of additional personnel to assist with monitoring, reporting, and recordkeeping obligations. It is uncertain whether any of the above or other various proposed rules or requests for information would have material impacts on our operations, our costs of operation, or the operations of our lessees.

Surface Mining Control and Reclamation Act of 1977

The Surface Mining Control and Reclamation Act of 1977 ("SMCRA") and similar statutes enacted and enforced by the states impose on mine operators the responsibility of reclaiming the land and compensating the landowner for types of damages occurring as a result of mining operations. To ensure compliance with any reclamation obligations, mine operators are required to post performance bonds. Our coal lessees are contractually obligated under the terms of our leases to comply with all federal, state and local laws, including SMCRA. Upon completion of the mining, reclamation generally is completed by seeding with grasses or planting trees for use as pasture or timberland, as specified in the reclamation plan approved by the state regulatory authority. In addition, higher and better uses of the reclaimed property are encouraged.

Mining Permits and Approvals

Numerous governmental permits or approvals such as those required by SMCRA and the Clean Water Act are required for mining operations. In connection with obtaining these permits and approvals, our lessees may be required to prepare and present to federal, state or local authorities data pertaining to the effect or impact that any proposed production of coal may have upon the environment. The requirements imposed by any of these authorities may be costly and time consuming and may delay commencement or continuation of mining operations.

In order to obtain mining permits and approvals from state regulatory authorities, mine operators, including our lessees, must submit a reclamation plan for reclaiming the mined property upon the completion of mining operations. The majority of our lessees have obtained or applied for permits to mine a significant portion of its coal that is currently planned to be mined over the next five years, and continue to be in the planning phase for obtaining permits for the additional coal planned to be mined over the following five years. However, given the imposition of new requirements in the permits in the form of policies and the increased oversight review that has been exercised by EPA, there are no assurances that they will not experience difficulty and delays in obtaining mining permits in the future. In addition, EPA has used its authority to create significant delays in the issuance of new permits and the modification of existing permits, which has led to substantial delays and increased costs for coal operators.

Employees and Labor Relations

As of December 31, 2024, affiliates of our general partner employed 54 people who directly supported our operations. None of these employees were subject to a collective bargaining agreement.

Human Capital

We believe all individuals are entitled to courtesy, dignity, and respect, and we support a culture of integrity and personal and professional growth. We are strong leaders within our community, and we seek to uphold a positive presence in all areas where we live and work.

Website Access to Partnership Reports

Our internet address is www.nrplp.com. We make available free of charge on or through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. Information on our website is not a part of this report. In addition, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information filed by us.

Corporate Governance Matters

Our Code of Business Conduct and Ethics, our Disclosure Controls and Procedures Policy and our Corporate Governance Guidelines adopted by the Board of Directors, as well as the charter for our Audit Committee and Compensation, Nominating and Governance Committee are available on our website at www.nrplp.com. Copies of our annual report, our Code of Business Conduct and Ethics, our Disclosure Controls and Procedures Policy, our Corporate Governance Guidelines and our committee charters will be made available upon written request to our principal executive office at 1415 Louisiana St., Suite 3325, Houston, Texas 77002.

ITEM 1A. RISK FACTORS

Risks Related to Our Business

Cash distributions are not guaranteed and may fluctuate with our performance and the establishment of financial reserves. In addition, our debt agreements and our partnership agreement place restrictions on our ability to pay, and in some cases raise, the quarterly distribution under certain circumstances.

Because distributions on the common units are dependent on the amount of cash we generate, distributions fluctuate based on our performance. The actual amount of cash that is available to be distributed each quarter depends on numerous factors, some of which are beyond our control and the control of the general partner. Cash distributions are dependent primarily on cash flow, and not solely on profitability, which is affected by non-cash items. Therefore, cash distributions might be made during periods when we record losses and might not be made during periods when we record profits. The actual amount of cash we have to distribute each quarter is reduced by payments in respect of debt service and other contractual obligations, fixed charges, maintenance capital expenditures, and reserves for future operating or capital needs that the Board of Directors may determine are appropriate. We have significant debt service obligations. To the extent our Board of Directors deems appropriate, it may determine to decrease the amount of the quarterly distribution on our common units or suspend or eliminate the distribution on our common units altogether. In addition, because our unitholders are required to pay income taxes on their respective shares of our taxable income, our unitholders may be required to pay taxes in excess of any future distributions we make. Our unitholders' share of our portfolio income may be taxable to them even though they receive other losses from our activities. See "—Tax Risks to Our Unitholders—Our unitholders are required to pay taxes on their share of our income even if they do not receive any cash distributions from us. Our unitholders' share of our portfolio income may be taxable to them even though they receive other losses from our activities."

Our partnership agreement requires our consolidated leverage ratio to be less than 3.25x in order to make quarterly distributions on the common units in an amount in excess of $0.45 per unit.

For more information on restrictions on our ability to make distributions on our common units, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources" and "Item 8. Financial Statements and Supplementary Data—Note 11. Debt, Net."

Our leverage and debt service obligations may adversely affect our financial condition, results of operations and business prospects.

As of December 31, 2024, we and our subsidiaries had approximately $142.3 million of total indebtedness. The terms and conditions governing the indenture for Opco's revolving credit facility and senior notes:

- require us to meet certain leverage and interest coverage ratios;
- require us to dedicate a substantial portion of our cash flow from operations to service our existing debt, thereby reducing the cash available to finance our operations and other business activities and could limit our flexibility in planning for or reacting to changes in our business and the industries in which we operate;
- increase our vulnerability to economic downturns and adverse developments in our business;
- limit our ability to access the bank and capital markets to raise capital on favorable terms or to obtain additional financing for working capital, capital expenditures or acquisitions or to refinance existing indebtedness;
- place restrictions on our ability to obtain additional financing, make investments, lease equipment, sell assets and engage in business combinations;
- place us at a competitive disadvantage relative to competitors with lower levels of indebtedness in relation to their overall size or less restrictive terms governing their indebtedness;
- make it more difficult for us to satisfy our obligations under our debt agreements and increase the risk that we may default on our debt obligations; and
- limit management's discretion in operating our business.

Our ability to meet our expenses and debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory and other factors. We will not be able to control many of these factors, such as economic conditions and governmental regulation. We cannot be certain that our cash flow will be sufficient to allow us to pay the principal and interest on our debt and meet our other obligations. If we do not have sufficient funds, we may be required to refinance all or part of our existing debt, borrow more money, or sell assets or raise equity at unattractive prices, including higher interest rates. We are required to make substantial principal repayments each year in connection with Opco's senior notes, with approximately $14 million due thereunder during 2025. To the extent we borrow to make some of these payments, we may not be able to refinance these amounts on terms acceptable to us, if at all. We may not be able to refinance our debt, sell assets, borrow more money or access the bank and capital markets on terms acceptable to us, if at all. Our ability to comply with the financial and other restrictive covenants in our debt agreements will be affected by the levels of cash flow from our operations and future events and circumstances beyond our control. Failure to comply with these covenants would result in an event of default under our indebtedness, and such an event of default could adversely affect our business, financial condition and results of operations.

Global pandemics have in the past and may continue to adversely affect our business.

The COVID-19 pandemic adversely affected the global economy, disrupted global supply chains and created significant volatility in the financial markets. In addition, the pandemic resulted in travel restrictions, business closures and the institution of quarantining and other restrictions on movement in many communities and global trading markets. Coal markets faced substantial challenges prior to the pandemic, and widespread increases in unemployment and decreases in electricity and steel demand further reduced demand and prices for coal in 2020. In addition, demand for and prices of soda ash decreased in 2020, as global manufacturing slowed. Our Board of Directors determined to suspend cash distributions to our common unitholders with respect to the first quarter of 2020 in order to preserve liquidity due to uncertainties created by the pandemic. In addition, Sisecam Wyoming suspended cash distributions to its members in 2020 due to adverse effects of the pandemic on the global and domestic soda ash markets. Both companies have resumed distributions, however there remains a risk that distributions could be suspended in the future due to another global pandemic.

Prices for both metallurgical and thermal coal are volatile and depend on a number of factors beyond our control. Declines in prices could have a material adverse effect on our business and results of operations.

Coal prices continue to be volatile and prices could decline substantially from current levels. Production by some of our lessees may not be economic if prices decline further or remain at current levels. The prices our lessees receive for their coal depend upon factors beyond their or our control, including:

- the supply of and demand for domestic and foreign coal;
- domestic and foreign governmental regulations and taxes;
- changes in fuel consumption patterns of electric power generators;
- the price and availability of alternative fuels, especially natural gas;
- global economic conditions, including the strength of the U.S. dollar relative to other currencies;
- global and domestic demand for steel;
- tariff rates on imports and trade disputes, particularly involving the United States and China;
- the availability of, proximity to and capacity of transportation networks and facilities;
- global or national health concerns, including the outbreak of pandemic or contagious disease;
- weather conditions; and
- the effect of worldwide energy conservation measures.

Natural gas is the primary fuel that competes with thermal coal for power generation, and renewable energy sources continue to gain market share in power generation. The abundance and ready availability of cheap natural gas, together with increased governmental regulations on the power generation industry has caused a number of utilities to switch from thermal coal to natural gas and/or close coal-powered generation plants. This switching has resulted in a decline in thermal coal prices, and to the extent that natural gas prices remain low, thermal coal prices will also remain low. Reduced international demand for export thermal coal and increased competition from global producers has also put downward pressure on thermal coal prices.

Our lessees produce a significant amount of metallurgical coal that is used for steel production domestically and internationally. Since the amount of steel that is produced is tied to global economic conditions, declines in those conditions could result in the decline of steel, coke and metallurgical coal production. Since metallurgical coal is priced higher than thermal coal, some mines on our properties may only operate profitably if all or a portion of their production is sold as metallurgical coal. If these mines are unable to sell metallurgical coal, they may not be economically viable and may be temporarily idled or closed. Any potential future lessee bankruptcy filings could create additional uncertainty as to the future of operations on our properties and could have a material adverse effect on our business and results of operations.

To the extent our lessees are unable to economically produce coal over the long term, the carrying value of our coal mineral rights could be adversely affected. A long-term asset generally is deemed impaired when the future expected cash flow from its use and disposition is less than its book value. For the year ended December 31, 2024, we recorded impairment charges of approximately $0.1 million related to properties that we believe our current or future lessees are unable to operate profitably. Future impairment analyses could result in additional downward adjustments to the carrying value of our assets.

Changes to trade regulations, including trade restrictions, sanctions, tariffs, or duties, could significantly harm our results of operations.

Restrictions on international trade, such as sanctions, tariffs, duties and other governmental controls on imports or exports of goods, could adversely affect our business. In February 2025, the U.S. presidential administration imposed new tariffs on China and China responded with tariffs on select U.S. goods, including coal, which could negatively affect the price of coal. If new legislation or additional trade restrictions are adopted or geopolitical tensions were to increase and reduce the price received by our lessees for coal sales, the amount of royalties that we receive from our lessees would also be reduced which could adversely affect our free cash flow.

Prices for soda ash are volatile. Any substantial or extended decline in soda ash prices could have an adverse effect on Sisecam Wyoming's ability to continue to make distributions to its members and on our results of operations.

The market price of soda ash directly affects the profitability of Sisecam Wyoming's soda ash production operations. If the market price for soda ash declines, Sisecam Wyoming's sales will decrease. Historically, the global market and, to a lesser extent, the domestic market for soda ash has been volatile, and those markets are likely to remain volatile in the future. The prices Sisecam Wyoming receives for its soda ash depend on numerous factors beyond Sisecam Wyoming's control, including worldwide and regional economic and political conditions impacting supply and demand. In addition, the impact of the Sisecam Chemicals Resources' exit from ANSAC and Sisecam Wyoming's transition to the utilization of Sisecam Group's global distribution network for some of its export operations beginning 2021 could affect prices received for export sales. Glass manufacturers and other industrial customers drive most of the demand for soda ash, and these customers experience significant fluctuations in demand and production costs. Competition from increased use of glass substitutes, such as plastic and recycled glass, has had a negative effect on demand for soda ash. Substantial or extended declines in prices for soda ash could have a material adverse effect on Sisecam Wyoming's ability to continue to make distributions to its members and on our results of operations.

We derive a large percentage of our revenues and other income from a small number of coal lessees.

Challenges in the coal mining industry have led to significant consolidation activity. We own significant interests in several of Alpha's mining operations, which accounted for approximately 28% of our total revenues in 2024. We also own significant interests in all of Foresight's mining operations, which accounted for approximately 16% of our total revenues in 2024. We also own a significant interest in Alabama Kanu's Oak Grove operation, which accounted for approximately 12% of our total revenues in 2024. Certain other lessees have made acquisitions over the past few years resulting in their having an increased interest in our coal. Any interruption in these lessees' ability to make royalty payments to us could have a disproportionate material adverse effect on our business and results of operations.

Bankruptcies in the coal industry, and/or the idling or closure of mines on our properties could have a material adverse effect on our business and results of operations.

While current coal prices have recovered substantially, the recent coal price environment, together with high operating costs and limited access to capital, has caused a number of coal producers to file for protection under The U.S. Bankruptcy Code and/or idle or close mines that they cannot operate profitably. To the extent our leases are accepted or assigned in a bankruptcy process, pre-petition amounts are required to be cured in full, but we may ultimately make concessions in the financial terms of those leases in order for the reorganized company or new lessor to operate profitably going forward. To the extent our leases are rejected, operations on those leases will cease, and we will be unlikely to recover the full amount of our rejection damages claims. More of our lessees may file for bankruptcy in the future, which will create additional uncertainty as to the future of operations on our properties and could have a material adverse effect on our business and results of operations.

Mining operations are subject to operating risks that could result in lower revenues to us.

Our revenues are largely dependent on the level of production of minerals from our properties, and any interruptions to or increases in costs of the production from our properties may reduce our revenues. The level of production and costs thereof are subject to operating conditions or events beyond our or our lessees' control including:

- difficulties or delays in acquiring necessary permits or mining or surface rights;
- reclamation costs and bonding costs;
- changes or variations in geologic conditions, such as the thickness of the mineral deposits and the amount of rock embedded in or overlying the mineral deposit;
- mining and processing equipment failures and unexpected maintenance problems;
- the availability of equipment or parts and increased costs related thereto;
- the availability of transportation networks and facilities and interruptions due to transportation delays;
- adverse weather and natural disasters, such as heavy rains and flooding;
- labor-related interruptions and trained personnel shortages; and
- mine safety incidents or accidents, including hazardous conditions, roof falls, fires and explosions.

While our lessees maintain insurance coverage, there is no assurance that insurance will be available or cover the costs of these risks. Many of our lessees are experiencing rising costs related to regulatory compliance, insurance coverage, permitting and reclamation bonding, transportation, and labor. Increased costs result in decreased profitability for our lessees and reduce the competitiveness of coal as a fuel source. In addition, we and our lessees may also incur costs and liabilities resulting from third-party claims for damages to property or injury to persons arising from their operations. The occurrence of any of these events or conditions could have a material adverse effect on our business and results of operations.

The adoption of climate change legislation and regulations restricting emissions of greenhouse gases and other hazardous air pollutants have resulted in changes in fuel consumption patterns by electric power generators and a corresponding decrease in coal production by our lessees and reduced coal-related revenues.

Enactment of laws and passage of regulations regarding emissions from the combustion of coal by the U.S., some of its states or other countries, or other actions to limit such emissions, have resulted in and could continue to result in electricity generators switching from coal to other fuel sources and in coal-fueled power plant closures. Further, regulations regarding new coal-fueled power plants could adversely impact the global demand for coal. The potential financial impact on us of existing and future laws, regulations or other policies will depend upon the degree to which any such laws or regulations force electricity generators to diminish their reliance on coal as a fuel source. The amount of coal consumed for domestic electric power generation is affected primarily by the overall demand for electricity, the price and availability of competing fuels for power plants and environmental and other governmental regulations. We expect that substantially all newly constructed power plants in the United States will be fired by natural gas because of lower construction and compliance costs compared to coal-fired plants and because natural gas is a cleaner burning fuel. The increasingly stringent requirements of rules and regulations promulgated under the federal Clean Air Act have resulted in more electric power generators shifting from coal to natural-gas-fired power plants, or to other alternative energy sources such as solar and wind. These changes have resulted in reduced coal consumption and the production of coal from our properties and are expected to continue to have an adverse effect on our coal-related revenues.

In addition to EPA's greenhouse gas initiatives, there are several other federal rulemakings that are focused on emissions from coal-fired electric generating facilities, including the Cross-State Air Pollution Rule ("CSAPR") as revised in 2021, regulating emissions of nitrogen oxide and sulfur dioxide, and the Mercury and Air Toxics Rule ("MATS"), regulating emissions of hazardous air pollutants. Installation of additional emissions control technologies and other measures required under these and other EPA regulations have made it more costly to operate many coal-fired power plants and have resulted in and are expected to continue to result in plant closures. Further reductions in coal's share of power generating capacity as a result of compliance with existing or proposed rules and regulations would have a material adverse effect on our coal-related revenues. For more information on regulation of greenhouse gas and other air pollutant emissions, see "Items 1. and 2. Business and Properties—Regulation and Environmental Matters."

Concerns about the environmental impacts of coal combustion, including perceived impacts on global climate issues, are also resulting in unfavorable lending and investment policies by institutions and insurance companies which could significantly affect our ability to raise capital or maintain current insurance levels.

Global climate issues continue to attract public and scientific attention. Numerous reports have engendered concern about the impacts of human activity, especially fossil fuel combustion, on global climate issues. In addition to government regulation of greenhouse gas and other air pollutant emissions, there have also been efforts in recent years affecting the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities and other groups, promoting the divestment of fossil fuel equities and also pressuring lenders to limit funding to companies engaged in the extraction of fossil fuels, such as coal. One example is the Net Zero Banking Alliance, a group of over 100 banks worldwide representing over 40% of global banking assets who are committed to aligning their investment portfolios with net zero emissions by 2050. Further, in October 2023, the Federal Reserve, Office of the Comptroller of the Currency and the Federal Deposit Insurance Corp. released a finalized set of principles guiding financial institutions with $100 billion or more in assets on the management of physical and transition risks associated with climate change. Although, the future of these principles is uncertain in the new U.S. presidential administration. The impact of such efforts may adversely affect our ability to raise capital. In addition, a number of insurance companies have taken action to limit coverage for companies in the coal industry, which could result in significant increases in our costs of insurance or in our inability to maintain insurance coverage at current levels.

Increased attention to climate change, environmental, social and governance ("ESG") matters and conservation measures may adversely impact our business.

Increasing attention to climate change, societal expectations on companies to address climate change, and investor and societal expectations regarding ESG matters and disclosures, may result in increased costs, reduced profits, increased investigations and litigation, and negative impacts on our access to capital. Any laws or regulations imposing more stringent requirements on our business related to the disclosure of climate related risks may increase compliance costs, and result in potential restrictions on access to capital to the extent we do not meet any climate-related expectations or requirements of financial institutions. Additionally, the SEC released its final rule on climate-related disclosures on March 6, 2024, requiring the disclosure of certain climate-related risks and financial impacts, as well as greenhouse gas emissions. Under the rule, large accelerated filers would be required to incorporate the applicable climate-related disclosures into their filings beginning in fiscal year 2025, with additional requirements relating to the disclosure of Scope 1 and 2 greenhouse gas emissions, if material, and attestation reports for certain large accelerated filers subsequently phasing in. However, the future of the SEC climate rule is uncertain at this time given that its implementation has been stayed pending the outcome of legal challenges; moreover, it is uncertain whether the Commission may seek to change or revoke the rule though we cannot predict whether such action will occur or its timing. As a result, the ultimate impact of the SEC rule, or any similar climate-related disclosure requirements imposed in the future, on our business is uncertain and may result in increased compliance costs and increased costs of and restrictions on access to capital.

Organizations that provide information to investors on corporate governance and related matters have developed ratings processes for evaluating companies on their approach to ESG matters, and many of these ratings processes are inconsistent with each other. Such ratings are used by some investors to inform their investment and voting decisions. Unfavorable ESG ratings and recent activism directed at shifting funding away from companies with energy-related assets could lead to increased negative investor sentiment toward us and our industry and to the diversion of investment to other industries, which could have a negative impact on our stock price and our access to and costs of capital. Furthermore, if our competitors' ESG performance is perceived to be greater than ours, potential or current investors may elect to invest in our competitors instead.

In addition to climate change and other Clean Air Act legislation, our businesses are subject to numerous other federal, state and local laws and regulations that may limit production from our properties and our profitability. Thus, any changes in environmental laws and regulations or reinterpretations of enforcement policies, or in presidential administrations, that result in more stringent or costly obligations could adversely affect our performance.

The operations of our lessees and Sisecam Wyoming are subject to stringent health and safety standards under increasingly strict federal, state and local environmental, health and safety laws, including mine safety regulations and governmental enforcement policies. Failure to comply with these laws and regulations may result in the assessment of administrative, civil and criminal penalties, the imposition of cleanup and site restoration costs and liens, the issuance of injunctions to limit or cease operations, the suspension or revocation of permits and other enforcement measures that could have the effect of limiting production from our properties.

New environmental legislation, new regulations and new interpretations of existing environmental laws, including regulations governing permitting requirements, or changes in presidential administrations, could further regulate or tax mining industries and may also require significant changes to operations, the incurrence of increased costs or the requirement to obtain new or different permits, any of which could decrease our revenues and have a material adverse effect on our financial condition or results of operations. Under SMCRA, our coal lessees have substantial reclamation obligations on properties where mining operations have been completed and are required to post performance bonds for their reclamation obligations. To the extent an operator is unable to satisfy its reclamation obligations or the performance bonds posted are not sufficient to cover those obligations, regulatory authorities or citizens groups could attempt to shift reclamation liability onto the ultimate landowner, which if successful, could have a material adverse effect on our financial condition.

In addition to governmental regulation, private citizens' groups have continued to be active in bringing lawsuits against coal mine operators and land owners that allege violations of water quality standards resulting from ongoing discharges of pollutants from reclaimed mining operations, including selenium and conductivity. Any determination that a landowner or lessee has liability for discharges from a previously reclaimed mine site would result in uncertainty as to continuing liability for completed and reclaimed coal mine operations and could result in substantial compliance costs or fines. For more information on regulation of greenhouse gas and other air pollutant emissions, see "Items 1. and 2. Business and Properties—Regulation and Environmental Matters."

If our lessees do not manage their operations well, their production volumes and our royalty revenues could decrease.

We depend on our lessees to effectively manage their operations on our properties. Our lessees make their own business decisions with respect to their operations within the constraints of their leases, including decisions relating to:

- the payment of minimum royalties;
- marketing of the minerals mined;
- mine plans, including the amount to be mined and the method and timing of mining activities;
- processing and blending minerals;
- expansion plans and capital expenditures;
- credit risk of their customers;
- permitting;
- insurance and surety bonding;
- acquisition of surface rights and other mineral estates;
- employee wages;
- transportation arrangements;
- compliance with applicable laws, including environmental laws; and
- mine closure and reclamation.

A failure on the part of one of our lessees to make royalty payments, including minimum royalty payments, could give us the right to terminate the lease, repossess the property and enforce payment obligations under the lease. If we repossessed any of our properties, we would seek a replacement lessee. We might not be able to find a replacement lessee and, if we did, we might not be able to enter into a new lease on favorable terms within a reasonable period of time. In addition, the existing lessee could be subject to bankruptcy proceedings that could further delay the execution of a new lease or the assignment of the existing lease to another operator. If we enter into a new lease, the replacement operator might not achieve the same levels of production or sell minerals at the same price as the lessee it replaced. In addition, it may be difficult for us to secure new or replacement lessees.

We have limited approval rights with respect to the management of our Sisecam Wyoming soda ash joint venture, including with respect to cash distributions and capital expenditures. In addition, we are exposed to operating risks that we do not experience in the royalty business through our soda ash joint venture and through our ownership of certain coal transportation assets.

We do not have control over the operations of Sisecam Wyoming. We have limited approval rights with respect to Sisecam Wyoming, and our partner controls most business decisions, including decisions with respect to distributions and capital expenditures. During 2020, Sisecam Wyoming suspended cash distributions to its members due to adverse developments in the soda ash market resulting from the COVID-19 pandemic. Distributions resumed in 2021 but no assurance can be made that additional suspensions will not occur in the future. Sisecam Chemicals USA Inc., a wholly owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, appoints four of the seven Board of Managers of Sisecam Wyoming and we appoint three. Any changes to the distribution policy or the capital expenditure plans approved by the Board of Managers could adversely affect the future cash flows to NRP and the financial condition and results of operations of Sisecam Wyoming.

In addition, we are ultimately responsible for operating the transportation infrastructure at Foresight's Williamson mine, and have assumed the capital and operating risks associated with that business. As a result of these investments, we could experience increased costs as well as increased liability exposure associated with operating these facilities.

Sisecam Wyoming's reserve and resource data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of Sisecam Wyoming's reserves and resources.

Sisecam Wyoming's reserve and resource estimates may vary substantially from the actual amounts of minerals Sisecam Wyoming is able to recover economically from their reserves. There are numerous uncertainties inherent in estimating quantities of reserves and resources, including many factors beyond Sisecam Wyoming's control. Estimates of reserves and resources necessarily depend upon a number of variables and assumptions, any one of which may, if incorrect, result in an estimate that varies considerably from actual results. These factors and assumptions relate to, among other aspects:

- future prices of soda ash, mining and production costs, capital expenditures and transportation costs;
- future mining technology and processes;
- the effects of regulation by governmental agencies; and
- geologic and mining conditions, which may not be identified by available exploration data and may differ from Sisecam Wyoming's experiences in areas where it currently mines.

Please read Items 1 and 2. “Business and Properties—Trona Resources and Trona Reserves” for more information including pertinent additional assumptions regarding Sisecam Wyoming's reserve estimates in this Report. Actual production, revenue and expenditures with respect to Sisecam Wyoming's reserves will likely vary from their estimates, and these variations may be material.

Fluctuations in transportation costs and the availability or reliability of transportation could reduce the production of coal, soda ash and other minerals from our properties.

Transportation costs represent a significant portion of the total delivered cost for the customers of our lessees. Increases in transportation costs could make coal a less competitive source of energy or could make minerals produced by some or all of our lessees less competitive than coal produced from other sources. On the other hand, significant decreases in transportation costs could result in increased competition for our lessees from producers in other parts of the country.

Our lessees depend upon railroads, barges, trucks and beltlines to deliver minerals to their customers. Disruption of those transportation services due to weather-related problems, mechanical difficulties, strikes, lockouts, bottlenecks and/or other events could temporarily impair the ability of our lessees to supply coal to their customers and/or increase their costs. Many of our lessees are currently experiencing transportation-related issues due in particular to decreased availability and reliability of rail services and port congestion. Our lessees’ transportation providers may face difficulties in the future that would impair the ability of our lessees to supply minerals to their customers, resulting in decreased royalty revenues to us.

In addition, Sisecam Wyoming transports its soda ash by rail or truck and ocean vessel. As a result, its business and financial results are sensitive to increases in rail freight, trucking and ocean vessel rates. Increases in transportation costs, including increases resulting from emission control requirements, port taxes and fluctuations in the price of fuel, could make soda ash a less competitive product for glass manufacturers when compared to glass substitutes or recycled glass, or could make Sisecam Wyoming’s soda ash less competitive than soda ash produced by competitors that have other means of transportation or are located closer to their customers. Sisecam Wyoming may be unable to pass on its freight and other transportation costs in full because market prices for soda ash are generally determined by supply and demand forces. In addition, rail operations are subject to various risks that may result in a delay or lack of service at Sisecam Wyoming’s facility, and alternative methods of transportation are impracticable or cost prohibitive. For the year ended December 31, 2024, Sisecam Wyoming shipped over 90% of its soda ash from the Green River facility on a single rail line owned and controlled by Union Pacific. Any substantial interruption in or increased costs related to the transportation of Sisecam Wyoming’s soda ash or the failure to renew the rail contract on favorable terms could have a material adverse effect on our financial condition and results of operations.

Our lessees could satisfy obligations to their customers with minerals from properties other than ours, depriving us of the ability to receive amounts in excess of minimum royalty payments.

Mineral supply contracts generally do not require operators to satisfy their obligations to their customers with resources mined from specific locations. Several factors may influence a lessee’s decision to supply its customers with minerals mined from properties we do not own or lease, including the royalty rates under the lessee’s lease with us, mining conditions, mine operating costs, cost and availability of transportation, and customer specifications. In addition, lessees move on and off of our properties over the course of any given year in accordance with their mine plans. If a lessee satisfies its obligations to its customers with minerals from properties we do not own or lease, production on our properties will decrease, and we will receive lower royalty revenues.

A lessee may incorrectly report royalty revenues, which might not be identified by our lessee audit process or our mine inspection process or, if identified, might be identified in a subsequent period.

We depend on our lessees to correctly report production and royalty revenues on a monthly basis. Our regular lessee audits and mine inspections may not discover any irregularities in these reports or, if we do discover errors, we might not identify them in the reporting period in which they occurred. Any undiscovered reporting errors could result in a loss of royalty revenues and errors identified in subsequent periods could lead to accounting disputes as well as disputes with our lessees.

Risks Related to Our Structure

Unitholders may not be able to remove our general partner even if they wish to do so.

Our managing general partner manages and operates NRP. Unlike the holders of common stock in a corporation, unitholders have only limited voting rights on matters affecting our business. Unitholders have no right to elect the general partner or the Board of Directors on an annual or any other basis.

Furthermore, if unitholders are dissatisfied with the performance of our general partner, they currently have little practical ability to remove our general partner or otherwise change its management. Our general partner may not be removed except upon the vote of the holders of at least 66 2/3% of our outstanding common units (including common units held by our general partner and its affiliates). Because of their substantial ownership in us, the removal of our general partner would be difficult without the consent of our general partner and its affiliates.

In addition, the following provisions of our partnership agreement may discourage a person or group from attempting to remove our general partner or otherwise change our management:

- generally, if a person acquires 20% or more of any class of units then outstanding other than from our general partner or its affiliates, the units owned by such person cannot be voted on any matter; and
- our partnership agreement contains limitations upon the ability of unitholders to call meetings or to acquire information about our operations, as well as other limitations upon the unitholders' ability to influence the manner or direction of management.

As a result of these provisions, the price at which the common units will trade may be lower because of the absence or reduction of a takeover premium in the trading price.

We may issue additional common units or other equity securities without common unitholder approval, which could dilute a unitholder's existing ownership interests.

Our general partner may cause us to issue an unlimited number of common units, without common unitholder approval (subject to applicable New York Stock Exchange ("NYSE") rules). We may also issue at any time an unlimited number of equity securities ranking junior or senior to the common units without common unitholder approval (subject to applicable NYSE rules). The issuance of additional common units or other equity securities of equal or senior rank will have the following effects:

- an existing unitholder's proportionate ownership interest in NRP will decrease;
- the amount of cash available for distribution on each unit may decrease;
- the relative voting strength of each previously outstanding unit may be diminished; and
- the market price of the common units may decline.

Our general partner has a limited call right that may require unitholders to sell their units at an undesirable time or price.

If at any time our general partner and its affiliates own 80% or more of the common units, the general partner will have the right, but not the obligation, which it may assign to any of its affiliates, to acquire all, but not less than all, of the remaining common units held by unaffiliated persons at a price generally equal to the then current market price of the common units. As a result, unitholders may be required to sell their common units at a time when they may not desire to sell them or at a price that is less than the price they would like to receive. They may also incur a tax liability upon a sale of their common units.

Cost reimbursements due to our general partner may be substantial and will reduce our cash available for distribution to unitholders.

Prior to making any distribution on the common units, we reimburse our general partner and its affiliates, including officers and directors of the general partner, for all expenses incurred on our behalf. The reimbursement of expenses and the payment of fees could adversely affect our ability to make distributions. The general partner has sole discretion to determine the amount of these expenses. In addition, our general partner and its affiliates may provide us services for which we will be charged reasonable fees as determined by the general partner.

Conflicts of interest could arise among our general partner and us or the unitholders.

These conflicts may include the following:

- we do not have any employees and we rely solely on employees of affiliates of the general partner;
- under our partnership agreement, we reimburse the general partner for the costs of managing and for operating the partnership;
- the amount of cash expenditures, borrowings and reserves in any quarter may affect cash available to pay quarterly distributions to unitholders;
- the general partner tries to avoid being liable for partnership obligations. The general partner is permitted to protect its assets in this manner by our partnership agreement. Under our partnership agreement the general partner would not breach its fiduciary duty by avoiding liability for partnership obligations even if we can obtain more favorable terms without limiting the general partner's liability;
- under our partnership agreement, the general partner may pay its affiliates for any services rendered on terms fair and reasonable to us. The general partner may also enter into additional contracts with any of its affiliates on behalf of us. Agreements or contracts between us and our general partner (and its affiliates) are not necessarily the result of arm's-length negotiations; and
- the general partner would not breach our partnership agreement by exercising its call rights to purchase limited partnership interests or by assigning its call rights to one of its affiliates or to us.

The control of our general partner may be transferred to a third party without unitholder consent. A change of control may result in defaults under certain of our debt instruments and the triggering of payment obligations under compensation arrangements.

Our general partner may transfer its general partner interest to a third party in a merger or in a sale of all or substantially all of its assets without the consent of our unitholders. Furthermore, there is no restriction in our partnership agreement on the ability of the managing general partner from transferring its general partnership interest in our general partner to a third party. The new owner of our general partner would then be in a position to replace the Board of Directors and officers with its own choices and to control their decisions and actions.

In addition, a change of control would constitute an event of default under our debt agreements. During the continuance of an event of default under our debt agreements, the administrative agent may terminate any outstanding commitments of the lenders to extend credit to us and/or declare all amounts payable by us immediately due and payable. A change of control also may trigger payment obligations under various compensation arrangements with our officers.

Unitholders may not have limited liability if a court finds that unitholder actions constitute control of our business.

Our general partner generally has unlimited liability for our obligations, such as our debts and environmental liabilities, except for those contractual obligations that are expressly made without recourse to our general partner. Under Delaware law, however, a unitholder could be held liable for our obligations to the same extent as a general partner if a court determined that the right of unitholders to remove our general partner or to take other action under our partnership agreement constituted participation in the "control" of our business. In addition, Section 17-607 of the Delaware Revised Uniform Limited Partnership Act provides that under some circumstances, a unitholder may be liable to us for the amount of a distribution for a period of three years from the date of the distribution.

Tax Risks to Our Unitholders

Our tax treatment depends on our status as a partnership for U.S. federal income tax purposes as well as our not being subject to a material amount of entity-level taxation by individual states. If the Internal Revenue Service ("IRS") were to treat us as a corporation for U.S. federal income tax purposes or we were to become subject to material additional amounts of entity-level taxation for state tax purposes, then our cash available for distribution to unitholders would be substantially reduced.

The anticipated after-tax economic benefit of an investment in our units depends largely on our being treated as a partnership for U.S. federal income tax purposes. Despite the fact that we are organized as a limited partnership under Delaware law, we would be treated as a corporation for U.S. federal income tax purposes unless we satisfy a "qualifying income" requirement. Based on our current operations and current Treasury Regulations, we believe we satisfy the qualifying income requirement. However, we have not requested, and do not plan to request, a ruling from the IRS on this or any other matter affecting us. Failing to meet the qualifying income requirement or a change in current law could cause us to be treated as a corporation for U.S. federal income tax purposes or otherwise subject us to taxation as an entity.

If we were treated as a corporation for U.S. federal income tax purposes, we would pay U.S. federal income tax on our taxable income at the corporate tax rate and would likely be liable for state income tax at varying rates. Distributions to our unitholders would generally be taxed again as corporate distributions, and no income, gains, losses, deductions or credits would flow through to our unitholders. Because tax would be imposed upon us as a corporation, our cash available for distribution to our unitholders would be substantially reduced. Therefore, treatment of us as a corporation would result in a material reduction in the anticipated cash flow and after-tax return to our unitholders, likely causing a substantial reduction in the value of our units.

At the state level, several states have been evaluating ways to subject partnerships to entity-level taxation through the imposition of state income, franchise and other forms of taxation. We currently own assets and conduct business in several states, many of which impose a margin or franchise tax. In the future, we may expand our operations. Imposition of a similar tax on us in a jurisdiction in which we operate or in other jurisdictions to which we may expand could substantially reduce the cash available for distribution to our unitholders.

The tax treatment of publicly traded partnerships or an investment in our units could be subject to potential legislative, judicial or administrative changes or differing interpretations, possibly applied on a retroactive basis.

The present U.S. federal income tax treatment of publicly traded partnerships, including us, or an investment in our units, may be modified by administrative, legislative or judicial changes or differing interpretations at any time. Members of Congress have frequently proposed and considered substantive changes to the existing U.S. federal income tax laws that would affect publicly traded partnerships, including proposals that would eliminate our ability to qualify for partnership tax treatment. Recent proposals have provided for the expansion of the qualifying income exception for publicly traded partnerships in certain circumstances and other proposals have provided for the total elimination of the qualifying income exception upon which we rely for our partnership tax treatment. Further, while unitholders of publicly traded partnerships are, subject to certain limitations, entitled to a deduction equal to 20% of their allocable share of a publicly traded partnership's "qualified business income," this deduction is scheduled to expire with respect to taxable years beginning after December 31, 2025.

In addition, the Treasury Department has issued, and in the future may issue, regulations interpreting those laws that affect publicly traded partnerships. There can be no assurance that there will not be further changes to U.S. federal income tax laws or the Treasury Department's interpretation of the qualifying income rules in a manner that could impact our ability to qualify as a partnership in the future.

Any modification to the U.S. federal income tax laws and interpretations thereof may or may not be retroactively applied and could make it more difficult or impossible for us to meet the exception for certain publicly traded partnerships to be treated as partnerships for U.S. federal income tax purposes. We are unable to predict whether any changes or other proposals will ultimately be enacted. Any future legislative changes could negatively impact the value of an investment in our units. You are urged to consult with your own tax advisor with respect to the status of regulatory or administrative developments and proposals and their potential effect on your investment in our units.

Certain U.S. federal income tax preferences currently available with respect to coal exploration and development may be eliminated as a result of future legislation.

Changes to U.S. federal income tax laws have been proposed in a prior session of Congress that would eliminate certain key U.S. federal income tax preferences relating to coal exploration and development. These changes include, but are not limited to (i) repealing capital gains treatment of coal and lignite royalties, (ii) eliminating current deductions and 60-month amortization for exploration and development costs relating to coal and other hard mineral fossil fuels, and (iii) repealing the percentage depletion allowance with respect to coal properties. If enacted, these changes would limit or eliminate certain tax deductions that are currently available with respect to coal exploration and development, and any such change could increase the taxable income allocable to our unitholders and negatively impact the value of an investment in our units.

Our unitholders are required to pay taxes on their share of our taxable income even if they do not receive any cash distributions from us. Our unitholders' share of our portfolio income may be taxable to them even though they receive other losses from our activities.

Because our unitholders are treated as partners to whom we allocate taxable income that could be different in amount than the cash we distribute, our unitholders are required to pay any U.S. federal income taxes and, in some cases, state and local income taxes on their share of our taxable income even if they receive no cash distributions from us. Our unitholders may not receive cash distributions from us equal to their share of our taxable income or even equal to the actual tax due from them with respect to that income.

For our unitholders subject to the passive loss rules, our current operations include portfolio activities (such as our coal and mineral royalty businesses) and passive activities (such as our soda ash business). Any passive losses we generate will only be available to offset our passive income generated in the future and will not be available to offset (i) our portfolio income, including income related to our coal and mineral royalty businesses, (ii) a unitholder's income from other passive activities or investments, including investments in other publicly traded partnerships, or (iii) a unitholder's salary or active business income. Thus, our unitholders' share of our portfolio income may be subject to U.S. federal income tax, regardless of other losses they may receive from us.

We may engage in transactions to reduce our indebtedness and manage our liquidity that generate taxable income (including income and gain from the sale of properties and cancellation of indebtedness income) allocable to our unitholders, and income tax liabilities arising therefrom may exceed any distributions made with respect to their units.

We may engage in transactions to reduce our leverage and manage our liquidity that would result in income and gain to our unitholders without a corresponding cash distribution. For example, we may sell assets and use the proceeds to repay existing debt, in which case, our unitholders could be allocated taxable income and gain resulting from the sale without receiving a cash distribution. Further, we may pursue opportunities to reduce our existing debt, such as debt exchanges, debt repurchases, or modifications of our existing debt that would result in "cancellation of indebtedness income" (also referred to as "COD income") being allocated to our unitholders as ordinary taxable income. Our unitholders may be allocated income and gain from these transactions, and income tax liabilities arising therefrom may exceed any distributions we make to our unitholders. The ultimate tax effect of any such income allocations will depend on the unitholder's individual tax position, including, for example, the availability of any suspended passive losses that may offset some portion of the allocable income. Our unitholders may, however, be allocated substantial amounts of ordinary income subject to taxation, without any ability to offset such allocated income against any capital losses attributable to the unitholder's ultimate disposition of its units. Our unitholders are encouraged to consult their tax advisors with respect to the consequences to them.

If the IRS contests the U.S. federal income tax positions we take, the market for our units may be adversely impacted and the cost of any IRS contest will reduce our cash available for distribution to our unitholders.

We have not requested a ruling from the IRS with respect to our treatment as a partnership for U.S. federal income tax purposes or any other matter affecting us. The IRS may adopt positions that differ from the positions we take. It may be necessary to resort to administrative or court proceedings to sustain some or all of the positions we take. A court may not agree with some or all of the positions we take. Any contest by the IRS may materially and adversely impact the market for our units and the price at which they trade. In addition, our costs of any contest by the IRS will be borne indirectly by our unitholders and our general partner because the costs will reduce our cash available for distribution.

If the IRS makes audit adjustments to our income tax returns, it (and some states) may assess and collect any taxes (including any applicable penalties and interest) resulting from such audit adjustments directly from us, in which case our cash available for distribution to our unitholders might be substantially reduced.

If the IRS makes audit adjustments to our income tax returns, it (and some states) may assess and collect any taxes (including any applicable penalties and interest) resulting from such audit adjustments directly from us. To the extent possible, our general partner may elect to either pay the taxes (including any applicable penalties and interest) directly to the IRS or, if we are eligible, issue a revised information statement to each unitholder and former unitholder with respect to an audited and adjusted return. Although our general partner may elect to have our unitholders and former unitholders take such audit adjustments into account and pay any resulting taxes (including applicable penalties or interest) in accordance with their interests in us during the tax year under audit, there can be no assurance that such election will be practical, permissible or effective in all circumstances. As a result, our current unitholders may bear some or all of the tax liability resulting from such audit adjustment, even if such unitholders did not own units in us during the tax year under audit. If, as a result of any such audit adjustment, we are required to make payments of taxes, penalties and interest, our cash available for distribution to our unitholders might be substantially reduced.

Tax gain or loss on the disposition of our common units could be more or less than expected.

If our unitholders sell their common units, they will recognize a gain or loss equal to the difference between the amount realized and their tax basis in those common units. Distributions in excess of a common unitholder's allocable share of our net taxable income result in a decrease in the tax basis in such unitholder's common units. Accordingly, the amount, if any, of such prior excess distributions with respect to the common units sold will, in effect, become taxable income to our common unitholders if they sell such common units at a price greater than their tax basis in those common units, even if the price they receive is less than their original cost. In addition, because the amount realized includes a unitholder's share of our nonrecourse liabilities, if our unitholders sell their common units, they may incur a tax liability in excess of the amount of cash they receive from the sale.

A substantial portion of the amount realized from a unitholder's sale of our units, whether or not representing gain, may be taxed as ordinary income due to potential recapture items, including depletion and depreciation recapture. Thus, a unitholder may recognize both ordinary income and capital loss from the sale of units if the amount realized on a sale of such units is less than such unitholder's adjusted basis in the units. Net capital loss may only offset capital gains and, in the case of individuals, up to $3,000 of ordinary income per year. In the taxable period in which a unitholder sells its units, such unitholder may recognize ordinary income from our allocations of income and gain to such unitholder prior to the sale and from recapture items that generally cannot be offset by any capital loss recognized upon the sale of units.

Our unitholders may be subject to limitation on their ability to deduct interest expense incurred by us.

In general, we are entitled to a deduction for interest paid or accrued on indebtedness properly allocable to our trade or business during our taxable year. However, our deduction for "business interest" is limited to the sum of our business interest income and 30% of our "adjusted taxable income." For the purposes of this limitation, our adjusted taxable income is computed without regard to any business interest expense or business interest income. If our "business interest" is subject to limitation under these rules, our unitholders will be limited in their ability to deduct their share of any interest expense that has been allocated to them. As a result, unitholders may be subject to limitation on their ability to deduct interest expense incurred by us.

Tax-exempt entities face unique tax issues from owning our units that may result in adverse tax consequences to them.

Investment in our units by tax-exempt entities, such as employee benefit plans and individual retirement accounts (known as IRAs) raises issues unique to them. For example, virtually all of our income allocated to organizations that are exempt from U.S. federal income tax, including IRAs and other retirement plans, will be unrelated business taxable income and will be taxable to them. Additionally, all or part of any gain recognized by such tax-exempt organization upon a sale or other disposition of our units may be unrelated business taxable income and may be taxable to them. Tax-exempt entities should consult a tax advisor before investing in our units.

Non-U.S. unitholders will be subject to U.S. federal income taxes and withholding from their distributions and sale proceeds with respect to their income and gain from owning our units.

Non-U.S. unitholders are generally taxed and subject to income tax filing requirements by the United States on income effectively connected with a U.S. trade or business. Income allocated to our unitholders and any gain from the sale of our units will generally be considered to be “effectively connected” with a U.S. trade or business. As a result, distributions to a non-U.S. unitholder will be subject to withholding at the highest applicable effective tax rate and a non-U.S. unitholder who sells or otherwise disposes of a unit will also be subject to U.S. federal income tax on the gain realized from the sale or disposition of that unit. In addition to the withholding tax imposed on distributions of effectively connected income, distributions to a non-U.S. unitholder will also be subject to a 10% withholding tax on the amount of any distribution in excess of our cumulative net income. As we do not compute our cumulative net income for such purposes due to the complexity of the calculation and lack of clarity in how it would apply to us, we intend to treat all of our distributions as being in excess of our cumulative net income for such purposes and subject to such 10% withholding tax. Accordingly, distributions to a non-U.S. unitholder will be subject to a combined withholding tax rate equal to the sum of the highest applicable effective tax rate and 10%.

Moreover, the transferee of an interest in a partnership that is engaged in a U.S. trade or business is generally required to withhold 10% of the “amount realized” by the transferor unless the transferor certifies that it is not a foreign person. While the determination of a partner’s “amount realized” generally includes any decrease of a partner’s share of the partnership’s liabilities, the Treasury regulations provide that the “amount realized” on a transfer of an interest in a publicly traded partnership, such as our common units, will generally be the amount of gross proceeds paid to the broker effecting the applicable transfer on behalf of the transferor, and thus will be determined without regard to any decrease in that partner’s share of a publicly traded partnership’s liabilities. For a transfer of interests in a publicly traded partnership that is effected through a broker, the obligation to withhold is imposed on the transferor’s broker. Current and prospective non-U.S. unitholders should consult their tax advisors regarding the impact of these rules on an investment in our common units.

We will treat each purchaser of our common units as having the same tax benefits without regard to the actual common units purchased. The IRS may challenge this treatment, which could adversely affect the value of the common units.

Because we cannot match transferors and transferees of our common units and for other reasons, we have adopted depreciation and amortization positions that may not conform to all aspects of existing Treasury Regulations. A successful IRS challenge to those positions could adversely affect the amount of tax benefits available to our unitholders. It also could affect the timing of these tax benefits or the amount of gain from the sale of common units and could have a negative impact on the value of our common units or result in audit adjustments to our unitholders' tax returns.

We have adopted certain valuation methodologies in determining a unitholder's allocations of income, gain, loss and deduction. The IRS may challenge these methodologies or the resulting allocations, and such a challenge could adversely affect the value of our common units.

In determining the items of income, gain, loss and deduction allocable to our unitholders, including when we issue additional units, we must determine the fair market value of our assets. Although we may from time to time consult with professional appraisers regarding valuation matters, we make many fair market value estimates using a methodology based on the market value of our common units as a means to measure the fair market value of our assets. The IRS may challenge these valuation methods and the resulting allocations of income, gain, loss and deduction.

A successful IRS challenge to these methods or allocations could adversely affect the timing or amount of taxable income or loss being allocated to our unitholders. It also could affect the amount of gain recognized from the sale of our common units, have a negative impact on the value of our common units or result in audit adjustments to our unitholders’ tax returns without the benefit of additional deductions.

We generally prorate our items of income, gain, loss and deduction between transferors and transferees of our common units each month based upon the ownership of our common units on the first day of each month, instead of on the basis of the date a particular unit is transferred. The IRS may challenge this treatment, which could change the allocation of items of income, gain, loss and deduction among our unitholders.

We generally prorate our items of income, gain, loss and deduction between transferors and transferees of our common units each month based upon the ownership of our common units on the first day of each month (the "Allocation Date"), instead of on the basis of the date a particular unit is transferred. Similarly, we generally allocate (i) certain deductions for depreciation of capital additions, (ii) gain or loss realized on a sale or other disposition of our assets, and (iii) in the discretion of the general partner, any other extraordinary item of income, gain, loss or deduction based upon ownership on the Allocation Date. Treasury Regulations allow a similar monthly simplifying convention, but such regulations do not specifically authorize all aspects of the proration method we have adopted. If the IRS were to challenge our proration method, we may be required to change the allocation of items of income, gain, loss and deduction among our unitholders.

A unitholder whose units are the subject of a securities loan (e.g., a loan to a "short seller" to cover a short sale of units) may be considered as having disposed of those units. If so, such unitholder would no longer be treated for tax purposes as a partner with respect to those units during the period of the loan and may recognize gain or loss from the disposition.

Because there are no specific rules governing the U.S. federal income tax consequence of loaning a partnership interest, a unitholder whose units are the subject of a securities loan may be considered as having disposed of the loaned units. In that case, the unitholder may no longer be treated for tax purposes as a partner with respect to those units during the period of the loan to the short seller and the unitholder may recognize gain or loss from such disposition. Moreover, during the period of the loan, any of our income, gain, loss or deduction with respect to those units may not be reportable by the unitholder and any cash distributions received by the unitholder as to those units could be fully taxable as ordinary income. Our unitholders desiring to assure their status as partners and avoid the risk of gain recognition from a loan of their units are urged to consult a tax advisor to determine whether it is advisable to modify any applicable brokerage account agreements to prohibit their brokers from borrowing their units.

As a result of investing in our units, our unitholders are likely subject to state and local taxes and return filing requirements in jurisdictions where we operate or own or acquire property.

In addition to U.S. federal income taxes, our unitholders are likely subject to other taxes, including state and local taxes, unincorporated business taxes and estate, inheritance or intangible taxes that are imposed by the various jurisdictions in which we conduct business or own property now or in the future, even if our unitholders do not live in any of those jurisdictions. Our unitholders are likely required to file state and local income tax returns and pay state and local income taxes in some or all of these various jurisdictions. Further, our unitholders may be subject to penalties for failure to comply with those requirements. We own property and conduct business in a number of states in the United States. Most of these states impose an income tax on individuals, corporations and other entities. As we make acquisitions or expand our business, we may own assets or conduct business in additional states that impose a personal income tax. It is the unitholder's responsibility to file all U.S. federal, state and local tax returns and pay any taxes due in these jurisdictions. Unitholders should consult with their own tax advisors regarding the filing of such tax returns, the payment of such taxes, and the deductibility of any taxes paid.

General Risk Factors

Our business is subject to cybersecurity risks.

Our business is increasingly dependent on our information and operational technologies and services, and those of our service providers. Threats to information and operational technology systems associated with cybersecurity risks and cyber incidents or attacks continue to grow. Although we utilize various procedures and controls to mitigate our exposure to such risks, cybersecurity attacks and other cyber events are evolving, unpredictable, and sometimes difficult to detect, and could lead to unauthorized access to sensitive information or render data or systems unusable.

In addition, the frequency and magnitude of cyber-attacks is increasing and attackers have become more sophisticated. Cyber-attacks are similarly evolving and include, without limitation, use of malicious software, surveillance, credential stuffing, spear phishing, social engineering, use of deepfakes (*i.e.*, highly realistic synthetic media generated by artificial intelligence), attempts to gain unauthorized access to data, and other electronic security breaches that could lead to disruptions in critical systems, unauthorized release of confidential or otherwise protected information and loss or corruption of data. We may be unable to anticipate, detect or prevent future attacks, particularly as the methodologies used by attackers change frequently or are not recognized until deployed. We may also be unable to investigate or remediate incidents as attackers are increasingly using techniques and tools designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence.

We cannot ensure that our insurance coverage will be sufficient to cover all the losses or expenses we may experience as a result of such cyber-attacks. Our implementation of various procedures and controls to monitor and mitigate security threats and to increase security for our information, facilities and infrastructure may result in increased capital and operating costs. Moreover, there can be no assurance that such procedures and controls will be sufficient to prevent cyber-attacks or other incidents from occurring. If a cyber-attack was to occur, it could lead to losses of sensitive information, critical infrastructure or capabilities essential to our operations, misdirected wire transfers, an inability to settle transactions or maintain operations, disruptions in operations, or other adverse events. If we were to experience an attack and our security measures failed, the potential consequences to our business and the communities in which we operate could be significant and could harm our reputation and lead to financial losses, loss of business or potential liability, including regulatory enforcement, violation of privacy or securities laws and regulations, and individual or class action claims. Any cyber incident could have a material adverse effect on our business, financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Cybersecurity Risk Management and Strategy

We have developed and implemented a cybersecurity risk management program intended to protect the confidentiality, integrity, and availability of our critical systems and information.

Our cyber risk management program is integrated into our overall risk management system, which includes a cybersecurity risk assessment process, that routinely evaluates potential impacts of cybersecurity risks on our business, including our operations, financial stability, and reputation. These assessments inform our cybersecurity risk mitigation strategies. The results are regularly shared with management and the Audit Committee as part of their involvement in managing and overseeing cybersecurity risks.

Key aspects of our cybersecurity risk management program include:

- risk assessments designed to help identify material cybersecurity risks to our critical systems and information;
- a security team principally responsible for managing (1) our cybersecurity risk assessment processes, (2) our security controls, and (3) our response to cybersecurity incidents;
- the use of external service providers, where appropriate, to assess, test or otherwise assist with aspects of our security controls;
- cybersecurity awareness training for our employees, incident response personnel, and management; and
- a cybersecurity incident response plan that includes procedures for responding to cybersecurity incidents.

We have established separate processes and procedures to oversee and identify cybersecurity risks associated with our use of third-party service providers. All third parties involved in our cybersecurity risk assessments and risk management are required to provide reports designed to allow us to monitor and assess such third parties' security controls.

As of the date of this report, though the Partnership and our service providers have experienced certain cybersecurity incidents, we have not identified any risks from known cybersecurity threats, including as a result of any prior cybersecurity incidents, that have materially affected or are reasonably likely to materially affect us, including our operations, business strategy, results of operations, or financial condition. Despite implementation of our cybersecurity process, we face ongoing risks from certain cybersecurity threats that, if realized, are reasonably likely to materially affect us, including our operations, business strategy, results of operations, or financial condition. See "Item 1A. Risk Factors – Our business is subject to cybersecurity risks" included elsewhere in this Annual Report on Form 10-K.

Cybersecurity Governance

Our Board of Directors considers cybersecurity risk as part of its risk oversight function and has delegated to its Audit Committee oversight of cybersecurity and other information technology risks. Our Audit Committee oversees management's implementation of our cybersecurity risk management program.

Our Audit Committee receives periodic reports from management on our cybersecurity risks. In addition, management updates our Audit Committee, as necessary, regarding significant cybersecurity incidents. Our Audit Committee reports to the full Board of Directors regarding its activities, including those related to cybersecurity. Our Board of Directors also receives, as necessary, briefings from management on our cybersecurity risk management program and receive presentations on cybersecurity topics from IT leadership, which includes our Chief Sustainability and Administrative Officer ("CSAO"), or external experts as part of the Board's continuing education on topics that impact public companies.

Our cybersecurity team, led by the CSAO, is responsible for coordinating and executing on the cybersecurity response procedures and for seeking assistance from other Partnership stakeholders and external advisors. Our cybersecurity team includes the CSAO and IT leadership. The team has primary responsibility for our overall cybersecurity risk management program and supervises both our internal cybersecurity personnel and our retained external cybersecurity consultants. Our cybersecurity team includes professionals with deep cybersecurity expertise across multiple industries. The CSAO has over 20 years of audit, risk management and cybersecurity experience covering the energy, pipeline, utilities, manufacturing, and financial services industries.

Our management team stays informed about and monitors efforts to prevent, detect, mitigate, and remediate cybersecurity risks and incidents through various means, which may include briefings from internal information technology personnel, threat intelligence and other information obtained from public or private sources, including external consultants engaged by us, and alerts and reports produced by security tools deployed in the IT environment.

ITEM 3. LEGAL PROCEEDINGS

We are involved, from time to time, in various legal proceedings arising in the ordinary course of business. While the ultimate results of these proceedings cannot be predicted with certainty, management believes these ordinary course matters will not have a material effect on our financial position, liquidity or operations.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

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

NRP Common Units

Our common units are listed and traded on the NYSE under the symbol "NRP." As of February 14, 2025, there were approximately 10,935 beneficial and registered holders of our common units. The computation of the approximate number of unitholders is based upon a broker survey.

ITEM 6. [RESERVED]

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

Introduction

The following discussion and analysis present management's view of our business, financial condition and overall performance and should be read in conjunction with our consolidated financial statements and footnotes included elsewhere in this filing. Our discussion and analysis consist of the following subjects:

- Executive Overview
- Results of Operations
- Liquidity and Capital Resources
- Inflation
- Environmental Regulation
- Related Party Transactions
- Summary of Critical Accounting Estimates
- Recent Accounting Standards

As used in this Item 7, unless the context otherwise requires: "we," "our," "us" and the "Partnership" refer to Natural Resource Partners L.P. and, where the context requires, our subsidiaries. References to "NRP" and "Natural Resource Partners" refer to Natural Resource Partners L.P. only, and not to NRP (Operating) LLC or any of Natural Resource Partners L.P.'s subsidiaries. References to "Opco" refer to NRP (Operating) LLC, a wholly owned subsidiary of NRP, and its subsidiaries.

Non-GAAP Financial Measures

Adjusted EBITDA

Adjusted EBITDA is a non-GAAP financial measure that we define as net income (loss) less equity earnings from unconsolidated investment, net income attributable to non-controlling interest and gain on reserve swap; plus total distributions from unconsolidated investment, interest expense, net, debt modification expense, loss on extinguishment of debt, depreciation, depletion and amortization and asset impairments. Adjusted EBITDA should not be considered an alternative to, or more meaningful than, net income or loss, net income or loss attributable to partners, operating income, cash flows from operating activities or any other measure of financial performance presented in accordance with GAAP as measures of operating performance, liquidity or ability to service debt obligations. There are significant limitations to using Adjusted EBITDA as a measure of performance, including the inability to analyze the effect of certain recurring items that materially affect our net income (loss), the lack of comparability of results of operations of different companies and the different methods of calculating Adjusted EBITDA reported by different companies. In addition, Adjusted EBITDA presented below is not calculated or presented on the same basis as Consolidated EBITDA as defined in our partnership agreement or Consolidated EBITDDA as defined in Opco's debt agreements. See "Item 8. Financial Statements and Supplementary Data—Note 11. Debt, Net" included elsewhere in this Annual Report on Form 10-K for a description of Opco's debt agreements. Adjusted EBITDA is a supplemental performance measure used by our management and by external users of our financial statements, such as investors, commercial banks, research analysts and others to assess the financial performance of our assets without regard to financing methods, capital structure or historical cost basis.

Distributable Cash Flow

Distributable cash flow ("DCF") represents net cash provided by (used in) operating activities of continuing operations plus distributions from unconsolidated investment in excess of cumulative earnings, proceeds from asset sales and disposals, including sales of discontinued operations, and return of long-term contract receivables, less maintenance capital expenditures. DCF is not a measure of financial performance under GAAP and should not be considered as an alternative to cash flows from operating, investing or financing activities. DCF may not be calculated the same for us as for other companies. In addition, DCF presented below is not calculated or presented on the same basis as distributable cash flow as defined in our partnership agreement, which is used as a metric to determine whether we are able to increase quarterly distributions to our common unitholders. DCF is a supplemental liquidity measure used by our management and by external users of our financial statements, such as investors, commercial banks, research analysts and others to assess our ability to make cash distributions and repay debt.

Free Cash Flow

Free cash flow ("FCF") represents net cash provided by (used in) operating activities of continuing operations plus distributions from unconsolidated investment in excess of cumulative earnings and return of long-term contract receivables, less maintenance and expansion capital expenditures and cash flow used in acquisition costs classified as investing or financing activities. FCF is calculated before mandatory debt repayments. FCF is not a measure of financial performance under GAAP and should not be considered as an alternative to cash flows from operating, investing or financing activities. FCF may not be calculated the same for us as for other companies. FCF is a supplemental liquidity measure used by our management and by external users of our financial statements, such as investors, commercial banks, research analysts and others to assess our ability to make cash distributions and repay debt.

Leverage Ratio

Leverage ratio represents the outstanding principal of NRP's debt at the end of the period divided by the last twelve months' Adjusted EBITDA as defined above. NRP believes that leverage ratio is a useful measure to management and investors to evaluate and monitor the indebtedness of NRP relative to its ability to generate income to service such debt and in understanding trends in NRP's overall financial condition. Leverage ratio may not be calculated the same for us as for other companies and is not a substitute for, and should not be used in conjunction with, GAAP financial ratios.

Executive Overview

We are a diversified natural resource company engaged principally in the business of owning, managing and leasing a diversified portfolio of mineral properties in the United States, including interests in coal and other natural resources and own a non-controlling 49% interest in Sisecam Wyoming LLC ("Sisecam Wyoming"), a trona ore mining and soda ash production business. Our common units trade on the New York Stock Exchange under the symbol "NRP." Our business is organized into two operating segments:

Mineral Rights—consists of approximately 13 million acres of mineral interests and other subsurface rights across the United States. If combined in a single tract, our ownership would cover roughly 20,000 square miles. Our ownership provides critical inputs for the manufacturing of steel, electricity and basic building materials, as well as opportunities for carbon sequestration and renewable energy. We are working to strategically redefine our business as a key player in the transitional energy economy in the years to come.

Soda Ash—consists of our 49% non-controlling equity interest in Sisecam Wyoming, a trona ore mining and soda ash production business located in the Green River Basin of Wyoming. Sisecam Wyoming mines trona and processes it into soda ash that is sold both domestically and internationally into the glass and chemicals industries.

Corporate and Financing includes functional corporate departments that do not earn revenues. Costs incurred by these departments include interest and financing, corporate headquarters and overhead, centralized treasury, legal and accounting and other corporate-level activity not specifically allocated to a segment.

Our financial results by segment for the year ended December 31, 2024 are as follows:

	Operating Segments		Corporate and	
(In thousands)	**Mineral Rights**	**Soda Ash**	**Financing**	**Total**
Revenues and other income	$ 249,872	$ 18,135	$ —	$ 268,007
Net income (loss)	$ 206,403	$ 17,964	$ (40,723)	$ 183,644
Adjusted EBITDA (1)	$ 222,007	$ 38,610	$ (25,151)	$ 235,466
Cash flow provided by (used in)				
Operating activities	$ 242,168	$ 38,610	$ (32,285)	$ 248,493
Investing activities	$ 7,511	$ —	$ —	$ 7,511
Financing activities	$ (1,086)	$ —	$ (236,463)	$ (237,549)
Distributable cash flow (1)	$ 249,679	$ 38,610	$ (32,285)	$ 256,004
Free cash flow (1)	$ 244,833	$ 38,610	$ (32,285)	$ 251,158

(1) See"—Results of Operations" below for reconciliations to the most comparable GAAP financial measures.

Current Results/Market Commentary

Business Outlook and Quarterly Distributions

We generated $248.5 million of operating cash flow and $251.2 million of free cash flow during the year ended December 31, 2024, and ended the year with $116.7 million of liquidity consisting of $30.4 million of cash and cash equivalents and $86.3 million of borrowing capacity under our Opco Credit Facility. As of December 31, 2024 our leverage ratio was 0.6x.

In the first quarter of 2024, holders of our warrants to purchase common units (the "warrants") exercised a total of 1,219,665 warrants with a strike price of $34.00. We settled these warrants on a net basis with a total of $55.7 million in cash and 198,767 common units. In the second quarter of 2024, holders of our warrants exercised the remaining 320,335 warrants with a strike price of $34.00. We settled these warrants on a net basis with $10.0 million in cash and 89,059 common units. Following these transactions, of the originally issued 4.0 million warrants, after giving effect to these settlements and all prior settlements, no warrants remain outstanding.

In May 2024, we executed a negotiated transaction with holders of our Class A Preferred Units ("preferred units") pursuant to which we repurchased an aggregate of 40,000 preferred units for $40.0 million in cash. In September 2024, we redeemed the remaining 31,666 preferred units for $31.7 million in cash. Of the originally issued 250,000 preferred units, after giving effect to these redemptions and all prior redemptions, no preferred units remain outstanding.

In 2024, we exercised our option under the Opco Credit Facility to increase the total aggregate commitment under the Opco Credit Facility twice, initially by $30.0 million from $155.0 million to $185.0 million and subsequently by $15.0 million from $185.0 million to $200.0 million. These increases in the total aggregate commitment were made pursuant to an accordion feature of the Opco Credit Facility. In October 2024, we entered into the Seventh Amendment to the Opco Credit Facility which extended the maturity from August 2027 to October 2029. The Seventh Amendment also removed reference to the preferred units and warrants, which are no longer outstanding, and includes modifications to Opco's ability to declare and make certain restricted payments.

In February 2024, we paid a cash distribution of $0.75 per common unit of NRP with respect to the fourth quarter of 2023 as well as a $2.15 million cash distribution on the preferred units with respect to the fourth quarter of 2023. We paid a special cash distribution of $2.44 per common unit of NRP in March 2024 to help cover unitholder tax liabilities associated with owning NRP's common units in 2023. In May 2024, we paid a cash distribution of $0.75 per common unit of NRP with respect to the first quarter of 2024 as well as a $2.15 million cash distribution on the preferred units with respect to the first quarter of 2024. In August 2024, we paid a cash distribution of $0.75 per common unit of NRP with respect to the second quarter of 2024 as well as a $0.95 million cash distribution on the preferred units with respect to the second quarter of 2024. In November 2024, we paid a cash distribution of $0.75 per common unit of NRP with respect to the third quarter of 2024.

In February 2025, the Board of Directors declared a cash distribution of $0.75 per common unit of NRP with respect to the fourth quarter of 2024. Additionally, NRP has announced it will pay special cash distribution of $1.21 in March 2025 to help cover unitholder tax liabilities associated with owning NRP's common units in 2024. Future distributions on our common units will be determined on a quarterly basis by the Board of Directors. The Board of Directors considers numerous factors each quarter in determining cash distributions, including profitability, cash flow, debt service obligations, market conditions and outlook, estimated unitholder income tax liability and the level of cash reserves that the Board of Directors determines is necessary for future operating and capital needs.

Mineral Rights Business Segment

Revenues and other income during the year ended December 31, 2024 decreased $46.7 million, or 16%, as compared to the prior year. Cash provided by operating activities and free cash flow during the year ended December 31, 2024 decreased $17.8 million and $17.6 million, respectively, compared to the prior year. These decreases were primarily due to lower metallurgical coal sales prices and lower thermal coal sales prices and volumes as compared to the prior year, partially offset by one-time carbon neutral revenues and cash flow in 2024.

Metallurgical and thermal coal prices remained weak throughout 2024, primarily due to muted steel demand impacting metallurgical coal and mild weather, high inventory levels, and low natural gas prices impacting thermal coal. While we do not expect significant changes in these factors or to pricing in 2025, metallurgical and thermal coal pricing is still higher compared to long-term historical norms. It appears a new price floor has resulted from input cost inflation as well as ongoing labor shortages and operators' limited access to capital.

We continue to explore and identify carbon neutral revenue sources across our large portfolio of surface, mineral, and timber assets, including the sequestration of carbon dioxide in our underground pore space and standing forests, lithium production, and the generation of electricity using geothermal, solar, and wind energy. We were notified that the previously announced underground carbon sequestration lease agreement executed in 2022 would not be renewed for another lease term and has been terminated as per the lessee's rights in the agreement.

Soda Ash Business Segment

Revenues and other income during the year ended December 31, 2024 decreased $55.3 million, or 75%, as compared to the prior year primarily due to lower international soda ash sales prices due to increased global soda ash capacity and weaker global demand for new construction and automobiles.

Cash provided by operating activities and free cash flow during the year ended December 31, 2024 decreased $42.6 million as compared to the prior year as the decline in revenues and other income resulted in lower cash distributions received from Sisecam Wyoming during the year ended December 31, 2024.

We expect soda ash prices to remain low for the foreseeable future as it will take several years for the market to absorb the influx of new global capacity. However, many producers are currently operating below cost of production as the market is experiencing its lowest sales prices in decades. As this challenging market persists, distributions from Sisecam Wyoming are expected to be below historical levels.

Results of Operations

Year Ended December 31, 2024 and 2023 Compared

Revenues and Other Income

The following table includes our revenues and other income by operating segment:

Operating Segment (In thousands)	For the Year Ended December 31, 2024	2023	Decrease	Percentage Change
Mineral Rights	$ 249,872	$ 296,612	$ (46,740)	(16)%
Soda Ash	18,135	73,397	(55,262)	(75)%
Total	$ 268,007	$ 370,009	$ (102,002)	(28)%

The changes in revenues and other income are discussed for each of the operating segments below:

Mineral Rights

The following table presents coal sales volumes, coal royalty revenue per ton and coal royalty revenues by major coal producing region, the significant categories of other revenues and other income:

(In thousands, except per ton data)	For the Year Ended December 31, 2024	2023	Increase (Decrease)	Percentage Change
Coal sales volumes (tons)				
Appalachia				
Northern	1,031	1,145	(114)	(10)%
Central	14,137	13,927	210	2%
Southern	2,661	2,670	(9)	(0)%
Total Appalachia	17,829	17,742	87	0%
Illinois Basin	5,723	8,119	(2,396)	(30)%
Northern Powder River Basin	2,826	4,589	(1,763)	(38)%
Gulf Coast	1,342	1,477	(135)	(9)%
Total coal sales volumes	27,720	31,927	(4,207)	(13)%
Coal royalty revenue per ton				
Appalachia				
Northern	$ 3.25	$ 7.15	$ (3.90)	(55)%
Central	7.13	8.95	(1.82)	(20)%
Southern	10.22	12.81	(2.59)	(20)%
Illinois Basin	2.26	3.61	(1.35)	(37)%
Northern Powder River Basin	4.87	4.50	0.37	8%
Gulf Coast	0.80	0.66	0.14	21%
Combined average coal royalty revenue per ton	5.74	6.83	(1.09)	(16)%
Coal royalty revenues				
Appalachia				
Northern	$ 3,348	$ 8,192	$ (4,844)	(59)%
Central	100,845	124,631	(23,786)	(19)%
Southern	27,185	34,205	(7,020)	(21)%
Total Appalachia	131,378	167,028	(35,650)	(21)%
Illinois Basin	12,927	29,350	(16,423)	(56)%
Northern Powder River Basin	13,768	20,666	(6,898)	(33)%
Gulf Coast	1,069	969	100	10%
Unadjusted coal royalty revenues	159,142	218,013	(58,871)	(27)%
Coal royalty adjustment for minimum leases	(109)	(2)	(107)	(5,350)%
Total coal royalty revenues	$ 159,033	$ 218,011	$ (58,978)	(27)%
Other revenues				
Production lease minimum revenues	$ 4,365	$ 3,322	$ 1,043	31%
Minimum lease straight-line revenues	16,530	19,389	(2,859)	(15)%
Carbon neutral revenues	15,703	2,969	12,734	429%
Wheelage revenues	9,324	12,191	(2,867)	(24)%
Property tax revenues	7,100	6,219	881	14%
Coal overriding royalty revenues	2,358	2,175	183	8%
Lease amendment revenues	3,724	3,070	654	21%
Aggregates royalty revenues	2,904	2,876	28	1%
Oil and gas royalty revenues	8,566	7,387	1,179	16%
Other revenues	4,542	1,124	3,418	304%
Total other revenues	$ 75,116	$ 60,722	$ 14,394	24%
Royalty and other mineral rights	$ 234,149	$ 278,733	$ (44,584)	(16)%
Transportation and processing services revenues	10,878	14,923	(4,045)	(27)%
Gain on asset sales and disposals	4,845	2,956	1,889	64%
Total Mineral Rights segment revenues and other income	$ 249,872	$ 296,612	$ (46,740)	(16)%

Coal Royalty Revenues

Approximately 75% of coal royalty revenues and approximately 55% of coal royalty sales volumes were derived from metallurgical coal during the year ended December 31, 2024. Total coal royalty revenues decreased $59.0 million from 2023 to 2024. The discussion by region is as follows:

- Appalachia: Coal royalty revenues decreased $35.7 million primarily due to decreased metallurgical coal sales prices during the year ended December 31, 2024, as compared to the prior year.
- Illinois Basin: Coal royalty revenues decreased $16.4 million primarily due to lower thermal coal sales volumes and prices as compared to the prior year.
- Northern Powder River Basin: Coal royalty revenues decreased $6.9 million primarily due to decreased sales volumes during the year ended December 31, 2024, as compared to the prior year. The decrease in sales volumes was due to our lessee mining less on our property during 2024 as compared to 2023 in accordance with its mine plan.

Other Revenues

Other revenues increased $14.4 million during the year ended December 31, 2024 as compared to the prior year primarily driven by carbon neutral revenues received from a third party related to its creation of California Air Resources Board carbon offset credits from our properties.

Transportation and Processing Services Revenues

Transportation and processing services revenues decreased $4.0 million during the year ended December 31, 2024 as compared to the prior year primarily due to a temporary relocation of certain production off of NRP's coal reserves. The fee per ton associated with the transportation and processing of the non-NRP coal is less than the fee per ton associated with the transportation and processing of NRP coal.

Soda Ash

Revenues and other income related to our Soda Ash segment decreased $55.3 million compared to the prior year primarily due to lower international soda ash sales prices due to increased global soda ash capacity and weaker global demand for new construction and automobiles.

Operating Expenses

The following table presents the significant categories of our consolidated operating expenses:

	For the Year Ended December 31,			
(In thousands)	**2024**	**2023**	**Decrease**	**Percentage Change**
Operating expenses				
Operating and maintenance expenses	$ 28,036	$ 32,315	$ (4,279)	(13)%
Depreciation, depletion and amortization	15,535	18,489	(2,954)	(16)%
General and administrative expenses	25,151	26,111	(960)	(4)%
Asset impairments	87	556	(469)	(84)%
Total operating expenses	$ 68,809	$ 77,471	$ (8,662)	(11)%

Total operating expenses decreased $8.7 million primarily due to a $4.3 million decrease in operating and maintenance expenses during the year ended December 31, 2024 and a $3.0 million decrease in depreciation, depletion and amortization compared to the prior year. The decrease in operating and maintenance expenses was primarily due to lower overriding royalty expense from an agreement with WPPLP during the year ended December 31, 2024 as compared to the year ended December 31, 2023. This overriding royalty expense is fully offset by coal royalty revenue we receive from this property. This decrease in operating and maintenance expense was partially offset by higher bad debt expense during the year ended December 31, 2024 as compared to the prior year. The decrease in depreciation, depletion and amortization was primarily due to lower coal production from certain Illinois Basin and Northern Powder River Basin properties during the year ended December 31, 2024 as compared to the prior year.

Interest Expense, Net

Interest expense, net increased $1.5 million primarily due to higher borrowings outstanding on the Opco Credit Facility during the year ended December 31, 2024 as compared to the year ended December 31, 2023.

Adjusted EBITDA (Non-GAAP Financial Measure)

The following table reconciles net income (loss) (the most comparable GAAP financial measure) to Adjusted EBITDA by business segment:

For the Year Ended (In thousands)	Operating Segments		Corporate and Financing	Total
	Mineral Rights	Soda Ash		
December 31, 2024				
Net income (loss)	$ 206,403	$ 17,964	$ (40,723)	$ 183,644
Less: equity earnings from unconsolidated investment	—	(18,135)	—	(18,135)
Add: total distributions from unconsolidated investment	—	38,781	—	38,781
Add: interest expense, net	—	—	15,554	15,554
Add: depreciation, depletion and amortization	15,517	—	18	15,535
Add: asset impairments	87	—	—	87
Adjusted EBITDA	$ 222,007	$ 38,610	$ (25,151)	$ 235,466
December 31, 2023				
Net income (loss)	$ 245,527	$ 73,140	$ (40,232)	$ 278,435
Less: equity earnings from unconsolidated investment	—	(73,397)	—	(73,397)
Add: total distributions from unconsolidated investment	—	81,478	—	81,478
Add: interest expense, net	—	—	14,103	14,103
Add: depreciation, depletion and amortization	18,471	—	18	18,489
Add: asset impairments	556	—	—	556
Adjusted EBITDA	$ 264,554	$ 81,221	$ (26,111)	$ 319,664

Net income decreased $94.8 million as compared to the prior year primarily due to the decrease in revenues and other income as discussed above. Adjusted EBITDA decreased $84.2 million as compared to the prior year primarily due to a $42.5 million decrease in Adjusted EBITDA within our Mineral Rights segment as a result of lower revenues and other income during the year ended December 31, 2024 as discussed above and a $42.6 million decrease in Adjusted EBITDA within our Soda Ash segment primarily due to lower distributions received from Sisecam Wyoming during the year ended December 31, 2024.

Distributable Cash Flow ("DCF") and Free Cash Flow ("FCF") (Non-GAAP Financial Measures)

The following table presents the three major categories of the statement of cash flows by business segment:

For the Year Ended (In thousands)	Operating Segments		Corporate and Financing	Total
	Mineral Rights	Soda Ash		
December 31, 2024				
Cash flow provided by (used in)				
Operating activities	$ 242,168	$ 38,610	$ (32,285)	$ 248,493
Investing activities	7,511	—	—	7,511
Financing activities	(1,086)	—	(236,463)	(237,549)
December 31, 2023				
Cash flow provided by (used in)				
Operating activities	$ 259,983	$ 81,207	$ (30,212)	$ 310,978
Investing activities	5,426	—	(10)	5,416
Financing activities	(583)	—	(342,913)	(343,496)

The following tables reconcile net cash provided by (used in) operating activities (the most comparable GAAP financial measure) by business segment to DCF and FCF:

For the Year Ended (In thousands)	Operating Segments		Corporate and Financing	Total
	Mineral Rights	Soda Ash		
December 31, 2024				
Net cash provided by (used in) operating activities	$ 242,168	$ 38,610	$ (32,285)	$ 248,493
Add: proceeds from asset sales and disposals	4,846	—	—	4,846
Add: return of long-term contract receivable	2,665	—	—	2,665
Distributable cash flow	$ 249,679	$ 38,610	$ (32,285)	$ 256,004
Less: proceeds from asset sales and disposals	(4,846)	—	—	(4,846)
Free cash flow	$ 244,833	$ 38,610	$ (32,285)	$ 251,158
December 31, 2023				
Net cash provided by (used in) operating activities	$ 259,983	$ 81,207	$ (30,212)	$ 310,978
Add: proceeds from asset sales and disposals	2,963	—	—	2,963
Add: return of long-term contract receivable	2,463	—	—	2,463
Less: maintenance capital expenditures	—	—	(10)	(10)
Distributable cash flow	$ 265,409	$ 81,207	$ (30,222)	$ 316,394
Less: proceeds from asset sales and disposals	(2,963)	—	—	(2,963)
Free cash flow	$ 262,446	$ 81,207	$ (30,222)	$ 313,431

Cash provided by operating activities, DCF and FCF decreased $62.5 million, $60.4 million and $62.3 million, respectively from 2023 to 2024. The discussion by segment is as follows:

- Mineral Rights Segment: Cash provided by operating activities, DCF and FCF decreased $17.8 million, $15.7 million and $17.6 million, respectively, primarily due to lower metallurgical coal sales prices and lower thermal coal sales prices and volumes during 2024 as compared to the prior year, partially offset by cash received from one-time carbon neutral revenues in 2024.
- Soda Ash Segment: Cash provided by operating activities, DCF and FCF decreased $42.6 million primarily due to lower distributions received from Sisecam Wyoming in 2024 as compared to 2023.
- Corporate and Financing Segment: Cash used in operating activities increased $2.1 million primarily due to higher cash paid for interest resulting from higher borrowings outstanding on the Opco Credit Facility during the year ended December 31, 2024.

For discussion of our Results of Operations comparing 2023 to 2022, refer to our 2023 Annual Report on Form 10-K filed March 7, 2024 under Part II, "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Liquidity and Capital Resources

Current Liquidity

As of December 31, 2024, we had total liquidity of $116.7 million, consisting of $30.4 million of cash and cash equivalents and $86.3 million in borrowing capacity under our Opco Credit Facility. We have debt service obligations, including approximately $14 million of principal repayments on Opco's senior notes in 2025. As of December 31, 2024 our leverage ratio was 0.6x. The following table calculates our leverage ratio:

(In thousands)	For the Year Ended December 31, 2024
Adjusted EBITDA	$ 235,466
Debt—at December 31, 2024	$ 142,347
Leverage Ratio	0.6x

Cash Flows

Year Ended December 31, 2024 and 2023 Compared

Cash flows provided by operating activities decreased $62.5 million, from $311.0 million during the year ended December 31, 2023 to $248.5 million during the year ended December 31, 2024 primarily due to decreased cash flow within our Mineral Rights and Soda Ash segments, all discussed above.

Cash flows used in financing activities decreased $105.9 million, from $343.5 million used during the year ended December 31, 2023 to $237.5 million used during the year ended December 31, 2024 primarily due to the following:

- $106.7 million of decreased cash used for the redemption of preferred units in 2024 as compared to 2023;
- $81.4 million of decreased debt repayments in 2024 as compared to 2023; and
- $15.7 million decreased distributions to preferred unitholders in 2024 as compared to 2023.

These decreases in cash flow used were partially offset by the following:

- $81.0 million of decreased borrowings on the Opco Credit Facility in 2024 as compared to 2023;
- $9.6 million of increased cash used for the warrant settlements in 2024 as compared to 2023;
- $4.9 million of increased cash used for other items, net in 2024 as compared to 2023; and
- $2.2 million of increased distributions to common unitholders and the general partner in 2024 as compared to 2023.

For discussion of our Cash Flows comparing 2023 to 2022, refer to our 2023 Annual Report on Form 10-K filed March 7, 2024 under Part II, "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Capital Resources and Obligations

Debt, Net

We had the following debt outstanding as of December 31, 2024 and 2023:

	December 31,	
(In thousands)	**2024**	**2023**
Current portion of long-term debt, net	$ 14,192	$ 30,785
Long-term debt, net	127,876	124,273
Total debt, net	$ 142,068	$ 155,058

We have been and continue to be in compliance with the terms of the financial covenants contained in our debt agreements. For additional information regarding our debt and the agreements governing our debt, including the covenants contained therein, see "Item 8. Financial Statements and Supplementary Data—Note 11. Debt, Net" in this Annual Report on Form 10-K.

Debt Obligations

The following table reflects our long-term, non-cancelable debt obligations as of December 31, 2024:

	Payments Due by Period						
Debt Obligations (In thousands)	**Total**	**2025**	**2026**	**2027**	**2028**	**2029**	**Thereafter**
Opco:							
Debt principal payments (including current maturities) (1)	$ 142,347	$ 14,332	$ 14,331	$ —	$ —	$ 113,684	$ —
Debt interest payments (2)	2,175	1,450	725	—	—	—	—
Total	$ 144,522	$ 15,782	$ 15,056	$ —	$ —	$ 113,684	$ —

(1) The amounts indicated in the table include principal due on Opco's senior notes and credit facility.

(2) The amounts indicated in the table include interest due on Opco's senior notes.

Inflation

Despite rising costs beginning in 2021 and continuing into 2024, inflation did not have a material impact on operations for the years ended December 31, 2024, 2023 and 2022.

Environmental Regulation

For additional information on environmental regulation that may have a material impact on our business, see "Items 1. and 2. Business and Properties—Regulation and Environmental Matters."

Related Party Transactions

The information required by this Item is included under "Item 8. Financial Statements and Supplementary Data—Note 13. Related Party Transactions" and "Item 13. Certain Relationships and Related Transactions, and Director Independence" in this Annual Report on Form 10-K and is incorporated by reference herein.

Summary of Critical Accounting Estimates

Preparation of the accompanying financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. See "Item 8. Financial Statements and Supplementary Data—Note 2. Summary of Significant Accounting Policies" in the audited Consolidated Financial Statements of this Form 10-K for discussion of our significant accounting policies. The following critical accounting policies are affected by estimates and assumptions used in the preparation of Consolidated Financial Statements. We evaluate our estimates and assumptions on a regular basis. Actual results could differ from those estimates.

Revenues

Mineral Rights Segment Revenues

Royalty-based leases. Approximately two-thirds of our royalty-based leases have initial terms of five to 40 years, with substantially all lessees having the option to extend the lease for additional terms. For these types of leases, the lessees generally make payments to us based on the greater of a percentage of the gross sales price or a fixed price per ton of mineral mined and sold. Most of our coal and aggregates royalty leases require the lessee to pay quarterly or annual minimum amounts, either made in advance or arrears, which are generally recoupable through actual royalty production over certain time periods that generally range from three to five years.

We have defined our coal and aggregates royalty lease performance obligation as providing the lessee the right to mine and sell our coal or aggregates over the lease term. We then evaluated the likelihood that consideration we expected to receive from our lessees resulting from production would exceed consideration expected to be received from minimum payments over the lease term.

As a result of this evaluation, revenue recognition from our royalty-based leases is based on either production or minimum payments as follows:

- **Production Leases**: Leases for which we expect that consideration from production will be greater than consideration from minimums over the lease term. Revenue for these leases is recognized over time based on production as royalty revenues, as applicable. Deferred revenue from minimums is recognized as royalty revenues when recoupment occurs or as production lease minimum revenues when the recoupment period expires. In addition, we recognize breakage revenue from minimums when we determine that recoupment is remote. This breakage revenue is included in production lease minimum revenues.
- **Minimum Leases**: Leases for which we expect that consideration from minimums will be greater than consideration from production over the lease term. Revenue for these leases is recognized straight-line over the lease term based on the minimum consideration amount as minimum lease straight-line revenues.

This evaluation is performed at the inception of the lease and only reassessed upon modification or renewal of the lease.

Mineral Rights

Mineral rights owned and leased are recorded at its original cost of construction or, upon acquisition, at fair value of the assets acquired. Coal and aggregates mineral rights are depleted on a unit-of-production basis by lease, based upon minerals mined in relation to the net cost of the mineral properties and estimated economic tonnage as estimated by our internal reserve engineers. The technologies and economic data used by our internal reserve engineers in the estimation of our economic tonnage include, but are not limited to, drill logs, geophysical logs, geologic maps including isopach, mine, and coal quality, cross sections, statistical analysis, and available public production data. There are numerous uncertainties inherent in estimating the quantities and qualities of economic tonnage, including many factors beyond our control. Estimates of economically recoverable tonnage depend upon a number of variable factors and assumptions, any one of which may, if incorrect, result in an estimate that varies considerably from actual results.

Asset Impairment

We have developed procedures to evaluate our long-lived assets, including intangible assets, for possible impairment periodically or whenever events or changes in circumstances indicate an asset's net book value may not be recoverable. Potential events or circumstances include, but are not limited to, specific events such as a reduction in economically recoverable tons or production ceasing on a property for an extended period. A long-lived asset is deemed impaired when the future expected undiscounted cash flows from its use and disposition is less than the asset's net book value. Impairment is measured based on the estimated fair value, which is usually determined based upon the present value of the projected future cash flow compared to the asset's net book value. We believe our estimates of cash flows and discount rates are consistent with those of principal market participants.

We evaluate our equity investment for impairment when events or changes in circumstances indicate, in management’s judgment, that the carrying value of such investment may have experienced an other-than-temporary decline in value. When evidence of loss in value has occurred, management compares the estimated fair value of the investment to the carrying value of the investment to determine whether impairment has occurred. If the estimated fair value is less than the carrying value and management considers the decline in value to be other than temporary, the excess of the carrying value over the estimated fair value is recognized in the financial statements as an impairment loss. The fair value of the impaired investment is based on quoted market prices, or upon the present value of expected cash flows using discount rates believed to be consistent with those used by principal market participants, plus market analysis of comparable assets owned by the investee, if appropriate.

Recently Adopted Accounting Standards

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07—Segment Reporting (Topic 280)—Improvements to Reportable Segment Disclosures ("ASU 2023-07"). The amendments in ASU 2023-07 improve reportable segment disclosure requirements, primarily through enhanced disclosures about segment expenses. The adoption of ASU 2023-07 with our 2024 Form 10-K did not have a material impact on our Consolidated Financial Statements. See "Item 8. Financial Statements and Supplementary Data—Note 7. Segment Information" for more information.

Recent Accounting Standards

In November 2024, the FASB issued ASU 2024-03, Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures ("ASU 2024-03"). ASU 2024-03 is intended to improve disclosures about a public business entity's expenses and provide more detailed information to investors about the types of expenses in commonly presented expense captions. The guidance is effective for annual periods beginning after December 15, 2026 and quarterly periods beginning after December 31, 2027 and can be adopted prospectively to financial statements issued for reporting periods after the effective date or retrospectively to all prior periods presented in the financial statements. We are currently evaluating the potential impact of this guidance on our disclosures.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk, which includes adverse changes in commodity prices and interest rates as discussed below:

Commodity Price Risk

Our revenues, operating results, financial condition and ability to borrow funds or obtain additional capital depend substantially on prevailing commodity prices. Historically, coal prices have been volatile, with prices fluctuating widely, and are likely to continue to be volatile. Depressed prices in the future would have a negative impact on our future financial results. In particular, substantially lower prices would significantly reduce revenues and could potentially trigger an impairment of our coal properties or a violation of certain financial debt covenants. Because substantially all our reserves are coal, changes in coal prices have a more significant impact on our financial results.

We are dependent upon the effective marketing of the coal mined by our lessees. Our lessees sell the coal under various long-term and short-term contracts as well as on the spot market. Current conditions in the coal industry may make it difficult for our lessees to extend existing contracts or enter into supply contracts with terms of one year or more. Our lessees' failure to negotiate long-term contracts could adversely affect the stability and profitability of our lessees' operations and adversely affect our future financial results. If more coal is sold on the spot market, coal royalty revenues may become more volatile due to fluctuations in spot coal prices.

The market price of soda ash and energy costs directly affects the profitability of Sisecam Wyoming's operations. If the market price for soda ash declines, Sisecam Wyoming's sales revenues will decrease. Historically, the global market and, to a lesser extent, the domestic market for soda ash have been volatile and are likely to remain volatile in the future.

The following table shows the fluctuations of our commodity prices over the past three years:

	2024	2023	2022
Combined average coal royalty revenue per ton	$ 5.74	$ 6.83	$ 6.90
Soda ash average sales price per short ton	$ 235.60	$ 284.97	$ 270.42

Interest Rate Risk

Our exposure to changes in interest rates results from our borrowings under the Opco Credit Facility, which is subject to variable interest rates based upon SOFR. At December 30, 2024, we had $113.7 million in borrowings outstanding under the Opco Credit Facility. If interest rates were to increase by 1%, annual interest expense would increase approximately $1.1 million, assuming the same principal amount remained outstanding during the year.

Fair Value of Financial Assets and Liabilities

Our financial assets and liabilities consist of cash and cash equivalents, a contract receivable and debt. The carrying amounts reported on the Consolidated Balance Sheets for cash and cash equivalents approximate fair value due to their short-term nature. We use available market data and valuation methodologies to estimate the fair value of our debt and contract receivable.

The following table shows the carrying value and estimated fair value of our debt and contract receivable:

		December 31,			
		2024		2023	
(In thousands)	Fair Value Hierarchy Level	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Debt:					
Opco Senior Notes (1)	3	$ 28,384	$ 27,498	$ 59,224	$ 56,533
Opco Credit Facility (2)	3	113,684	113,684	95,834	95,384
Assets:					
Contract receivable, net (current and long-term) (3)	3	$ 26,321	$ 22,776	$ 28,946	$ 24,492

(1) The fair value of the Opco Senior Notes was estimated by management utilizing the present value replacement method incorporating the interest rate of the Opco Credit Facility.

(2) The fair value of the Opco Credit Facility approximates the outstanding borrowing amount because the interest rates are variable and reflective of market rates and the terms of the credit facility allow the Partnership to repay this debt at any time without penalty.

(3) The fair value of the Partnership's contract receivable was determined based on the present value of future cash flow projections related to the underlying asset at a discount rate of 15% at December 31, 2024 and 2023.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Partners of Natural Resource Partners L.P.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Natural Resource Partners L.P. (the Partnership) as of December 31, 2024 and 2023, the related consolidated statements of comprehensive income, partners' capital, and cash flows for each of the three years in the period ended December 31, 2024, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, based on our audits and the reports of PricewaterhouseCoopers LLP and BDO USA, P.C., the consolidated financial statements present fairly, in all material respects, the financial position of the Partnership at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

We did not audit the financial statements of Sisecam Wyoming LLC (Sisecam Wyoming), a limited liability company in which the Partnership has a 49% interest. In the consolidated financial statements, the Partnership's investment in Sisecam Wyoming is stated at $257 million and $277 million as of December 31, 2024 and 2023, respectively, and the Partnership's equity in earnings of Sisecam Wyoming is stated at $18 million in 2024, $73 million in 2023 and $60 million in 2022. Those statements were audited by PricewaterhouseCoopers LLP for the year ended December 31, 2024 and BDO USA, P.C. for the years ended December 31, 2023 and 2022 whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for Sisecam Wyoming, is based solely on the reports of PricewaterhouseCoopers LLP and BDO USA, P.C.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Partnership's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 28, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership'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 Partnership 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 and the report of PricewaterhouseCoopers LLC and the reports of BDO USA P.C. 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 the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Impairment Assessment of Mineral Rights

Description of the Matter	At December 31, 2024, the Partnership's mineral rights, net totaled $380 million. As described in Note 2 to the consolidated financial statements, the Partnership evaluates its long-lived assets (inclusive of mineral rights) for possible impairment whenever events or changes in circumstances indicate that the asset's net book value may not be recoverable. Management evaluates various qualitative and quantitative factors in determining whether or not events or changes in circumstances indicate that the net book value of an asset may not be recoverable. Potential events or circumstances include, but are not limited to, reduction in economically recoverable tons or production ceasing on a property for an extended period. Auditing the Partnership's impairment indicator assessment involved our subjective judgment because, in determining whether an impairment indicator occurred, significant uncertainty exists with judgments management utilizes regarding the likelihood of future production and the likelihood of potential contract renewals or modifications, which rely on information reported by the Partnership's lessee operators.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Partnership's impairment assessment process. We tested controls over the Partnership's process for identifying and evaluating potential indicators of impairment pertaining to mineral rights and the related subjective judgments. To test the Partnership's mineral rights impairment assessment, our audit procedures included, among others, making inquiries of management (including personnel in operations) to understand changes in business, and evaluating the subjective judgments used in the Partnership's assessment. Specifically, we corroborated reserve information to new reserve studies when available. Additionally, we inspected lease modifications of royalty-based lease contracts. We searched for and evaluated other publicly available information pertaining to certain of their lessees, that corroborates or contradicts management's assessment.

/s/ Ernst & Young LLP

We have served as the Partnership's auditor since 2002.

Houston, Texas
February 28, 2025

Report of Independent Registered Public Accounting Firm

To the Board of Managers and Members of Sisecam Wyoming LLC

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Sisecam Wyoming LLC (the "Company") as of December 31, 2024, and the related statements of operations and comprehensive income, of members' equity and of cash flows for the year then ended, including the related notes (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, 2024, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

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 audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 of these financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit 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 audit 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 audit provides a reasonable basis for our opinion.

Critical Audit Matters

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 (i) relates to accounts or disclosures that are material to the financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition – Sales to Others

As described in Note 2 to the financial statements, the Company's sales to others was $578 million for the year ended December 31, 2024. The Company's revenues are recognized at a point-in-time when control of goods transfers to the customer. The time at which delivery and transfer of title, and therefore control, occurs ranges from the point in time when the product leaves the Company's facilities to agreed upon delivery points. Agreed upon delivery points at which control of the product transfers includes points where product reaches the port of loading, a vessel, or other agreed location, thereby rendering the performance obligation fulfilled. Management recognizes revenue as the amount of consideration expected to be received in exchange for transferring promised goods to customers.

The principal consideration for our determination that performing procedures relating to revenue recognition for sales to others is a critical audit matter is a high degree of auditor effort in performing procedures related to the Company's revenue recognition for sales to others.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the financial statements. These procedures included, among others, (i) testing revenue recognized for a sample of revenue transactions by obtaining and inspecting source documents such as customer contracts, purchase orders, invoices, proof of shipment or delivery, and subsequent cash receipts; and (ii) confirming a sample of outstanding customer invoice balances as of December 31, 2024 and, for confirmations not returned, obtaining and inspecting source documents, such as customer contracts, purchase orders, invoices, proof of shipment or delivery, and subsequent cash receipts.

/s/PricewaterhouseCoopers LLP
Charlotte, North Carolina
February 28, 2025

We have served as the Company's auditor since 2024.

Report of Independent Registered Public Accounting Firm

Board of Managers and Members of
Sisecam Wyoming LLC
Atlanta, Georgia

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Sisecam Wyoming LLC (the "Company") as of December 31, 2023, the related statements of operations and comprehensive income, members' equity, and cash flows for the years ended December 31, 2023 and 2022, and the related notes (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 at December 31, 2023, and the results of its operations and its cash flows for the years ended December 31, 2023 and 2022, in conformity with accounting principles generally accepted in the United States of America.

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 Public Company Accounting Oversight Board (United States) ("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 and in accordance with auditing standards generally accepted in the United States of America. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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.

/s/ BDO USA, P.C.

We served as the Company's auditor from 2022 to 2024.

Charlotte, North Carolina

March 7, 2024

NATURAL RESOURCE PARTNERS L.P.
CONSOLIDATED BALANCE SHEETS

(In thousands, except unit data)	December 31, 2024	December 31, 2023
ASSETS		
Current assets		
Cash and cash equivalents	$ 30,444	$ 11,989
Accounts receivable, net	31,469	41,086
Other current assets, net	1,961	2,218
Total current assets	$ 63,874	$ 55,293
Land	24,008	24,008
Mineral rights, net	379,638	394,483
Intangible assets, net	12,924	13,682
Equity in unconsolidated investment	257,355	276,549
Long-term contract receivable, net	23,480	26,321
Other long-term assets, net	11,628	7,540
Total assets	$ 772,907	$ 797,876
LIABILITIES AND CAPITAL		
Current liabilities		
Accounts payable	$ 909	$ 885
Accrued liabilities	12,121	12,987
Accrued interest	302	584
Current portion of deferred revenue	4,341	4,599
Current portion of long-term debt, net	14,192	30,785
Total current liabilities	$ 31,865	$ 49,840
Deferred revenue	55,814	38,356
Long-term debt, net	127,876	124,273
Other non-current liabilities	6,244	7,172
Total liabilities	$ 221,799	$ 219,641
Commitments and contingencies (see Note 15)		
Class A Convertible Preferred Units (71,666 units issued and outstanding at December 31, 2023 at $1,000 par value per unit) (See Note 4)	$ —	$ 47,181
Partners' capital		
Common unitholders' interest (13,049,123 and 12,634,642 units issued and outstanding at December 31, 2024 and 2023, respectively)	$ 543,231	$ 503,076
General partner's interest	9,547	8,005
Warrant holders' interest	—	23,095
Accumulated other comprehensive loss	(1,670)	(3,122)
Total partners' capital	$ 551,108	$ 531,054
Total liabilities and partners' capital	$ 772,907	$ 797,876

The accompanying notes are an integral part of these consolidated financial statements.

NATURAL RESOURCE PARTNERS L.P.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Year Ended December 31,		
(In thousands, except per unit data)	**2024**	**2023**	**2022**
Revenues and other income			
Royalty and other mineral rights	$ 234,149	$ 278,733	$ 307,013
Transportation and processing services	10,878	14,923	21,072
Equity in earnings of Sisecam Wyoming	18,135	73,397	59,795
Gain on asset sales and disposals	4,845	2,956	1,082
Total revenues and other income	$ 268,007	$ 370,009	$ 388,962
Operating expenses			
Operating and maintenance expenses	$ 28,036	$ 32,315	$ 34,903
Depreciation, depletion and amortization	15,535	18,489	22,519
General and administrative expenses	25,151	26,111	21,852
Asset impairments	87	556	4,457
Total operating expenses	$ 68,809	$ 77,471	$ 83,731
Income from operations	$ 199,198	$ 292,538	$ 305,231
Other expenses, net			
Interest expense, net	$ (15,554)	$ (14,103)	$ (26,274)
Loss on extinguishment of debt	—	—	(10,465)
Total other expenses, net	$ (15,554)	$ (14,103)	$ (36,739)
Net income	$ 183,644	$ 278,435	$ 268,492
Less: income attributable to preferred unitholders	(4,248)	(16,719)	(30,000)
Less: redemption of preferred units	(24,485)	(60,929)	—
Net income attributable to common unitholders and the general partner	$ 154,911	$ 200,787	$ 238,492
Net income attributable to common unitholders	$ 151,813	$ 196,771	$ 233,722
Net income attributable to the general partner	3,098	4,016	4,770
Net income per common unit (see Note 6)			
Basic	$ 11.69	$ 15.59	$ 18.72
Diluted	11.35	13.08	13.39
Net income	$ 183,644	$ 278,435	$ 268,492
Comprehensive income (loss) from unconsolidated investment and other	1,452	(21,839)	15,506
Comprehensive income	$ 185,096	$ 256,596	$ 283,998

The accompanying notes are an integral part of these consolidated financial statements.

NATURAL RESOURCE PARTNERS L.P.
CONSOLIDATED STATEMENTS OF PARTNERS' CAPITAL

(In thousands)	Common Unitholders Units	Common Unitholders Amounts	General Partner	Warrant Holders	Accumulated Other Comprehensive Income (Loss)	Total Partners' Capital
Balance at December 31, 2021	12,351	$ 203,062	$ 1,787	$ 47,964	$ 3,211	$ 256,024
Net income (1)	—	263,122	5,370	—	—	268,492
Distributions to common unitholders and the general partner	—	(33,697)	(687)	—	—	(34,384)
Distributions to preferred unitholders	—	(29,653)	(605)	—	—	(30,258)
Issuance of unit-based awards	155	—	—	—	—	—
Unit-based awards amortization and vesting, net	—	1,965	—	—	—	1,965
Capital contribution	—	—	112	—	—	112
Comprehensive income from unconsolidated investment and other	—	—	—	—	15,506	15,506
Balance at December 31, 2022	12,506	$ 404,799	$ 5,977	$ 47,964	$ 18,717	$ 477,457
Net income (2)	—	272,866	5,569	—	—	278,435
Redemptions of preferred units	—	(59,710)	(1,219)	—	—	(60,929)
Distributions to common unitholders and the general partner	—	(68,510)	(1,398)	—	—	(69,908)
Distributions to preferred unitholders	—	(21,628)	(441)	—	—	(22,069)
Issuance of unit-based awards	129	—	—	—	—	—
Unit-based awards amortization and vesting, net	—	5,854	—	—	—	5,854
Capital contribution	—	—	142	—	—	142
Warrant settlements	—	(30,595)	(625)	(24,869)	—	(56,089)
Comprehensive loss from unconsolidated investment and other	—	—	—	—	(21,839)	(21,839)
Balance at December 31, 2023	12,635	$ 503,076	$ 8,005	$ 23,095	$ (3,122)	$ 531,054
Net income (3)	—	179,971	3,673	—	—	183,644
Redemptions of preferred units	—	(23,995)	(490)	—	—	(24,485)
Distributions to common unitholders and the general partner	—	(70,703)	(1,443)	—	—	(72,146)
Distributions to preferred unitholders	—	(6,270)	(128)	—	—	(6,398)
Issuance of unit-based awards	126	—	—	—	—	—
Unit-based awards amortization and vesting, net	—	2,894	—	—	—	2,894
Capital contribution	—	—	782	—	—	782
Warrant settlements	288	(41,742)	(852)	(23,095)	—	(65,689)
Comprehensive income from unconsolidated investment and other	—	—	—	—	1,452	1,452
Balance at December 31, 2024	13,049	$ 543,231	$ 9,547	$ —	$ (1,670)	$ 551,108

(1) Net income includes $30.0 million of income attributable to preferred unitholders that accumulated during the period, of which $29.4 million is allocated to the common unitholders and $0.6 million is allocated to the general partner.

(2) Net income includes $16.7 million of income attributable to preferred unitholders that accumulated during the period, of which $16.4 million is allocated to the common unitholders and $0.3 million is allocated to the general partner.

(3) Net income includes $4.2 million of income attributable to preferred unitholders that accumulated during the period, of which $4.2 million is allocated to the common unitholders and $0.1 million is allocated to the general partner.

The accompanying notes are an integral part of these consolidated financial statements.

NATURAL RESOURCE PARTNERS L.P.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31,		
(In thousands)	**2024**	**2023**	**2022**
Cash flows from operating activities			
Net income	$ 183,644	$ 278,435	$ 268,492
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization	15,535	18,489	22,519
Distributions from unconsolidated investment	38,781	81,478	44,835
Equity earnings from unconsolidated investment	(18,135)	(73,397)	(59,795)
Gain on asset sales and disposals	(4,845)	(2,956)	(1,082)
Loss on extinguishment of debt	—	—	10,465
Asset impairments	87	556	4,457
Bad debt expense	4,185	2,244	1,062
Unit-based compensation expense	11,309	10,910	5,773
Amortization of debt issuance costs and other	(1,509)	1,303	2,410
Change in operating assets and liabilities:			
Accounts receivable	7,285	(164)	(18,671)
Accounts payable	25	(1,108)	37
Accrued liabilities	(2,088)	(225)	935
Accrued interest	(281)	(406)	(224)
Deferred revenue	17,200	(3,483)	(15,424)
Other items, net	(2,700)	(698)	1,049
Net cash provided by operating activities	$ 248,493	$ 310,978	$ 266,838
Cash flows from investing activities			
Proceeds from asset sales and disposals	$ 4,846	$ 2,963	$ 1,083
Return of long-term contract receivable	2,665	2,463	1,723
Capital expenditures	—	(10)	(118)
Net cash provided by investing activities	$ 7,511	$ 5,416	$ 2,688
Cash flows from financing activities			
Debt borrowings	$ 167,850	$ 248,834	$ 70,000
Debt repayments	(181,028)	(262,396)	(339,396)
Distributions to common unitholders and the general partner	(72,146)	(69,908)	(34,384)
Distributions to preferred unitholders	(6,398)	(22,069)	(30,258)
Redemptions of preferred units	(71,666)	(178,334)	—
Redemption of preferred units paid-in-kind	—	—	(19,321)
Warrant settlements (See Note 4)	(65,689)	(56,089)	—
Other items, net	(8,472)	(3,534)	(12,596)
Net cash used in financing activities	$ (237,549)	$ (343,496)	$ (365,955)
Net increase (decrease) in cash and cash equivalents	$ 18,455	$ (27,102)	$ (96,429)
Cash and cash equivalents at beginning of period	11,989	39,091	135,520
Cash and cash equivalents at end of period	$ 30,444	$ 11,989	$ 39,091
Supplemental cash flow information:			
Cash paid for interest	$ 15,452	$ 13,856	$ 25,265

The accompanying notes are an integral part of these consolidated financial statements.

NATURAL RESOURCE PARTNERS L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Nature of Operations

Natural Resource Partners L.P. (the "Partnership"), a Delaware limited partnership, was formed in April 2002. The general partner of the Partnership is NRP (GP) LP ("NRP GP" or "general partner"), a Delaware limited partnership, whose general partner is GP Natural Resource Partners LLC ("managing general partner"), a Delaware limited liability company. The Partnership engages principally in the business of owning, managing and leasing a diversified portfolio of mineral properties in the United States, including interests in coal and other natural resources and owns a non-controlling 49% interest in Sisecam Wyoming LLC ("Sisecam Wyoming"), a trona ore mining and soda ash production business. The Partnership is organized into two operating segments further described in Note 7. Segment Information. As used in these Notes to Consolidated Financial Statements, the terms "NRP," "we," "us" and "our" refer to Natural Resource Partners L.P. and its subsidiaries, unless otherwise stated or indicated by context.

The Partnership's operations are conducted through, and its operating assets are owned by, its subsidiaries. The Partnership owns its subsidiaries through one wholly owned operating company, NRP (Operating) LLC ("Opco"). NRP GP has sole responsibility for conducting the Partnership's business and for managing its operations. Because NRP GP is a limited partnership, its general partner, GP Natural Resource Partners LLC, conducts its business and operations, and the board of directors and officers of GP Natural Resource Partners LLC makes decisions on its behalf. Robertson Coal Management LLC ("RCM"), a limited liability company indirectly owned by Corbin J. Robertson, Jr., owns all of the membership interest in GP Natural Resource Partners LLC. All members of the Board of Directors are appointed by RCM.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying Consolidated Financial Statements of the Partnership have been prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP"). The Consolidated Financial Statements include the accounts of Natural Resource Partners L.P. and its wholly owned subsidiaries. The Partnership has an equity investment in Sisecam Wyoming through which it is able to exercise significant influence over but does not control the investee and is not the primary beneficiary of the investee's activities and is accounted for using the equity method. Intercompany transactions and balances have been eliminated. Reclassifications have been made to prior year amounts in the Consolidated Financial Statements to conform with current year presentation. These reclassifications had no impact on previously reported total assets, total liabilities, partners' capital, net income, or cash flows from operating, investing or financing activities.

Use of Estimates

Preparation of the accompanying financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities on the accompanying Consolidated Balance Sheets, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses on the accompanying Consolidated Statements of Comprehensive Income during the reporting period. Actual results could differ from those estimates. The most significant estimates pertain to coal and aggregates mineral rights and related cash flow estimates which are used to compute depreciation, depletion and amortization and impairments of coal and aggregates properties and related intangible assets and commitments and contingencies.

Fair Value

The Partnership discloses certain assets and liabilities using fair value as defined by authoritative guidance. 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 at the measurement date. See Note 12. Fair Value Measurements for further details.

There are three levels of inputs that may be used to measure fair value:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial assets and liabilities whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Cash and Cash Equivalents

The Partnership considers all highly liquid short-term investments with an original maturity of three months or less to be cash equivalents.

Allowance for Doubtful Accounts

The Partnership records an allowance for doubtful accounts for its accounts receivable and notes receivable comprised of estimated credit risk and non-credit risk (e.g., legal disputes) losses. Receivables are written off when collection efforts are exhausted and future recovery is doubtful. The Partnership includes an allowance for current expected credit losses ("CECL") on its financial assets based on the loss-rate method. NRP assesses the likelihood of collection of its receivables utilizing historical loss rates, current market conditions, industry and macroeconomic factors, reasonable and supportable forecasts and facts or circumstances of individual customers and properties. See Note 18. Credit Losses for more information. The total allowance related to accounts receivables included in accounts receivables, net on the Partnership's Consolidated Balance Sheets was $4.7 million and $5.4 million at December 31, 2024 and 2023, respectively. The total allowance related to short-term notes receivables included in other current assets, net on the Partnership's Consolidated Balance Sheets was $0.0 million and $0.3 million at December 31, 2024 and 2023, respectively. The total allowance related to the Partnership's long-term financing receivable included in long-term contract receivable, net on the Consolidated Balance Sheets was $0.8 million and $0.9 million at December 31, 2024 and 2023, respectively. The Partnership recorded bad debt expense of $4.2 million, $2.2 million and $1.1 million included in operating and maintenance expenses on its Consolidated Statements of Comprehensive Income for the year ended December 31, 2024, 2023 and 2022, respectively.

Mineral Rights

Mineral rights owned and leased are recorded at its original cost of construction or, upon acquisition, at fair value of the assets acquired. Coal and aggregates mineral rights are depleted on a unit-of-production basis by lease, based upon minerals mined in relation to the net cost of the mineral properties and estimated economic tonnage therein.

Intangible Assets

The Partnership’s intangible assets consist of mineral royalty and transportation contracts that at acquisition were more favorable for the Partnership than prevailing market rates, known as above-market contracts. The estimated fair value of the above-market rate contracts are determined based on the present value of future cash flow projections related to the underlying assets acquired. Intangible assets are amortized on a unit-of-production basis by asset based upon minerals mined or transported in relation to the net book value of the intangible asset and estimated economic tonnage expected to be mined or transported during the above-market contract term.

Asset Impairment

The Partnership has developed procedures to evaluate its long-lived assets, including intangible assets, for possible impairment periodically or whenever events or changes in circumstances indicate an asset's net book value may not be recoverable. Potential events or circumstances include, but are not limited to, specific events such as a reduction in economically recoverable tons or production ceasing on a property for an extended period. This analysis is based on historic, current and future performance and considers both quantitative and qualitative information. A long-lived asset is deemed impaired when the future expected undiscounted cash flows from its use and disposition is less than the asset's net book value. Impairment is measured based on the estimated fair value, which is usually determined based upon the present value of the projected future cash flows compared to the asset's net book value. The Partnership believes its estimates of cash flows and discount rates are consistent with those of principal market participants.

The Partnership evaluates its equity investment for impairment when events or changes in circumstances indicate, in management’s judgment, that the carrying value of such investment may have experienced an other-than-temporary decline in value. When evidence of loss in value has occurred, management compares the estimated fair value of the investment to the carrying value of the investment to determine whether potential impairment has occurred. If the estimated fair value is less than the carrying value and management considers the decline in value to be other than temporary, the excess of the carrying value over the estimated fair value is recognized in the financial statements as an impairment loss. The fair value of the impaired investment is based on quoted market prices (Level 1), or upon the present value of expected cash flows using discount rates believed to be consistent with those used by principal market participants (Level 3), plus market analysis of comparable assets owned by the investee, if appropriate (Level 3).

Accrued Liabilities

Included in accrued liabilities on the Partnership's Consolidated Balance Sheets at December 31, 2024 were $8.9 million of accrued employee costs and $3.2 million of accrued property taxes. These amounts were $10.3 million and $2.7 million of accrued employee costs and accrued property taxes, respectively, at December 31, 2023.

Revenue Recognition

Mineral Rights Segment Revenues

Royalty-based leases. Approximately two-thirds of the Partnership's royalty-based leases have initial terms of five to 40 years, with substantially all lessees having the option to extend the lease for additional terms. For these types of leases, the lessees generally make payments to NRP based on the greater of a percentage of the gross sales price or a fixed price per ton of mineral mined and sold. Most of NRP's coal and aggregates royalty leases require the lessee to pay quarterly or annual minimum amounts, either made in advance or arrears, which are generally recoupable through actual royalty production over certain time periods that generally range from three to five years.

The Partnership has defined its coal and aggregates royalty lease performance obligation as providing the lessee the right to mine and sell its coal or aggregates over the lease term. NRP then evaluated the likelihood that consideration it expected to receive from its lessees resulting from production would exceed consideration expected to be received from minimum payments over the lease term.

As a result of this evaluation, revenue recognition from the Partnership's royalty-based leases is based on either production or minimum payments as follows:

- **Production Leases**: Leases for which the Partnership expects that consideration from production will be greater than consideration from minimums over the lease term. Revenue for these leases is recognized over time based on production as royalty revenues, as applicable. Deferred revenue from minimums is recognized as royalty revenues when recoupment occurs or as production lease minimum revenues when the recoupment period expires. In addition, NRP recognizes breakage revenue from minimums when NRP determines that recoupment is remote. This breakage revenue is included in production lease minimum revenues.
- **Minimum Leases**: Leases for which the Partnership expects that consideration from minimums will be greater than consideration from production over the lease term. Revenue for these leases is recognized straight-line over the lease term based on the minimum consideration amount as minimum lease straight-line revenues.

This evaluation is performed at the inception of the lease and only reassessed upon modification or renewal of the lease.

Oil and gas related revenues consist of revenues from royalties and overriding royalties and are recognized on the basis of volume of hydrocarbons sold by lessees and the corresponding revenues from those sales. Also, included within oil and gas royalty revenues are lease bonus payments, which are generally paid upon the execution of a lease.

The Partnership also has overriding royalty revenue interests in certain coal and aggregates mineral rights. Revenue from these interests is recognized over time based on when the coal is sold.

Carbon neutral revenues. Revenues related to consideration for carbon neutral activities that are recognized at a point in time upon satisfaction of NRP's performance obligation.

Wheelage revenues. Revenues related to fees collected per ton to transport foreign coal across property owned by the Partnership that is recognized over time as transportation across the property occurs.

Other revenues. Other revenues consist primarily of rental payments and surface damage fees related to certain land owned by the Partnership and are recognized straight-line over time as it is earned. Other revenues also include property tax revenues. The majority of property taxes paid on the Partnership's properties are reimbursable by the lessee and are recognized on a gross basis over time which reflects the reimbursement of property taxes by the lessee. Property taxes paid by NRP are included in operating and maintenance expenses on the Partnership's Consolidated Statements of Comprehensive Income.

Transportation and processing services revenues. The Partnership owns transportation and processing infrastructure that is leased to third parties for throughput fees. Revenue is recognized over time based on the coal tons transported over the beltlines or processed through the facilities.

Contract Modifications

Contract modifications that impact goods or services or the transaction price are evaluated in accordance with Accounting Standards Codification 606. A majority of the Partnership's contract modifications pertain to its coal and aggregates royalty contracts and include, but are not limited to, extending the lease term, changes to royalty rates, floor prices or minimum consideration, assignment of the contract or forfeiture of recoupment rights. Consideration received in conjunction with a modification of an ongoing lease will be deferred and recognized straight-line over the remaining term of the contract. Consideration received to assign a lease to another party and related forfeited minimums will be recognized immediately upon the termination of the contract. Fees from contract modifications are recognized in lease amendment revenues within royalty and other mineral rights revenues on the Consolidated Statements of Comprehensive Income while modifications in royalty rates and minimums will be recognized prospectively in accordance with the above lease classification.

Contract Assets and Liabilities from Contracts with Customers

Contract assets include receivables from contracts with customers and are recorded when the right to consideration becomes unconditional. Receivables are recognized when the minimums are contractually owed, production occurs or minimums are accrued for based on the passage of time.

Contract liabilities represent minimum consideration received, contractually owed or earned based on the passage of time. The current portion of deferred revenue relates to deferred revenue on minimum leases and lease amendment fees that are to be recognized as revenue on a straight-line basis over the next twelve months. The long-term portion of deferred revenue relates to deferred revenue on production leases and lease amendment fees that are to be recognized as revenue on a straight-line basis beyond the next twelve months. Due to uncertainty in the amount of deferred revenue that will be recouped and recognized as coal royalty revenues from its production leases over the next twelve months, the Partnership is unable to estimate the current portion of deferred revenue.

Equity in Earnings of Sisecam Wyoming

The Partnership accounts for non-marketable equity investments using the equity method of accounting if the investment gives it the ability to exercise significant influence over, but not control of, an investee. The Partnership's 49% investment in Sisecam Wyoming is accounted for using this method. Under the equity method of accounting, investments are stated at initial cost and are adjusted for subsequent additional investments and the proportionate share of earnings or losses and distributions. The basis difference between the investment and the proportional share of investee's net assets is attributed to net tangible assets and is amortized over its estimated useful life. The carrying value in Sisecam Wyoming is recognized in equity in unconsolidated investment on the Partnership's Consolidated Balance Sheets. The Partnership's adjusted share of the earnings or losses of Sisecam Wyoming and amortization of the basis difference is recognized in equity in earnings of Sisecam Wyoming on the Consolidated Statements of Comprehensive Income. The Partnership decreases its investment for its proportional share of distributions received from Sisecam Wyoming. These cash flows are reported utilizing the cumulative earnings approach. Under this approach, distributions received are considered returns on investment and classified as operating cash inflows unless the cumulative distributions received exceed the Partnership's cumulative equity in earnings. The excess of cumulative distributions received over the Partnership's cumulative equity in earnings are considered returns of investment and classified as investing cash inflows.

Property Taxes

The Partnership is responsible for paying property taxes on the properties it owns. Typically, the lessees are contractually responsible for reimbursing the Partnership for property taxes on the leased properties. The payment of and reimbursement of property taxes is included in operating and maintenance expenses and in royalty and other mineral rights revenues, respectively, on the Consolidated Statements of Comprehensive Income.

Unit-Based Compensation

The Partnership has awarded unit-based compensation in the form of equity-based awards and phantom units. The Partnership's service and performance-based awards are valued using the closing price of NRP's units as of the grant date while the Partnership's market-based awards are valued using a Monte Carlo simulation. Compensation cost is remeasured each reporting period for liability-classified awards based on the fair value of an award and is recognized over the service period, which is generally the vesting period. Forfeitures are recognized as they occur. Unit-based compensation expense for all awards is recognized in general and administrative expenses and operating and maintenance expenses on the Consolidated Statements of Comprehensive Income. See Note 16. Unit-Based Compensation for more information.

Deferred Financing Costs

Deferred financing costs consist of legal and other costs related to the issuance of the Partnership’s debt. These costs are amortized over the term of the respective line-of-credit or debt arrangements. Deferred financing costs related to the Partnership's revolving credit facility are included in other long-term assets, net on the Partnership's Consolidated Balance Sheets. Deferred financing costs related to the Partnership's note agreements are included as a direct deduction from the carrying amount of the debt liability in current portion of long-term debt, net or long-term debt, net on the Partnership's Consolidated Balance Sheets.

Income Taxes

The Partnership is not subject to federal or material state income taxes as the unitholders are taxed individually on their allocable share of taxable income. Net income for financial statement purposes may differ significantly from taxable income reportable to unitholders as a result of differences between the tax basis and financial reporting basis of assets and liabilities. In the event of an examination of the Partnership’s tax return, the tax liability of the unitholders could be changed if an adjustment in the Partnership’s income is ultimately sustained by the taxing authorities.

Recently Adopted Accounting Standard

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07—Segment Reporting (Topic 280)—Improvements to Reportable Segment Disclosures ("ASU 2023-07"). The amendments in ASU 2023-07 improve reportable segment disclosure requirements, primarily through enhanced disclosures about segment expenses. The adoption of ASU 2023-07 with NRP's 2024 Form 10-K did not have a material impact on the Partnership's Consolidated Financial Statements. See Note 7. Segment Information for more information.

Recently Issued Accounting Standard

In November 2024, the FASB issued ASU 2024-03, Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures ("ASU 2024-03"). ASU 2024-03 is intended to improve disclosures about a public business entity's expenses and provide more detailed information to investors about the types of expenses in commonly presented expense captions. The guidance is effective for annual periods beginning after December 15, 2026 and quarterly periods beginning after December 31, 2027 and can be adopted prospectively to financial statements issued for reporting periods after the effective date or retrospectively to all prior periods presented in the financial statements. NRP is currently evaluating the potential impact of this guidance on its Consolidated Financial Statements.

3. Revenues from Contracts with Customers

The following table represents the Partnership's Mineral Rights segment revenues from contracts with customers by major source:

	For the Year Ended December 31,		
(In thousands)	2024	2023	2022
Coal royalty revenues	$ 159,033	$ 218,011	$ 226,956
Production lease minimum revenues	4,365	3,322	5,854
Minimum lease straight-line revenues	16,530	19,389	18,792
Carbon neutral revenues (1)	15,703	2,969	8,600
Property tax revenues	7,100	6,219	5,878
Wheelage revenues	9,324	12,191	13,961
Coal overriding royalty revenues	2,358	2,175	3,434
Lease amendment revenues	3,724	3,070	3,201
Aggregates royalty revenues	2,904	2,876	3,299
Oil and gas royalty revenues	8,566	7,387	16,161
Other revenues	2,744	1,124	877
Royalty and other mineral rights revenues	$ 232,351	$ 278,733	$ 307,013
Transportation and processing services revenues	8,597	12,411	17,876
Total Mineral Rights segment revenues from contracts with customers	$ 240,948	$ 291,144	$ 324,889

(1) During 2024, NRP recorded revenues of approximately $13.4 million from a third party related to its creation of California Air Resources Board carbon offset credits from our properties. $11.3 million of this revenue was recorded in the three months ended December 31, 2024.

The following table details the Partnership's Mineral Rights segment contract assets and liabilities resulting from contracts with customers:

	December 31,	
(In thousands)	2024	2023
Receivables		
Accounts receivable, net	$ 27,358	$ 37,206
Other current assets, net (1)	—	429
Other long-term assets, net (2)	2,352	—
Contract liabilities		
Accounts payable (3)	$ 125	$ —
Current portion of deferred revenue	4,341	4,599
Deferred revenue	55,814	38,356

(1) Other current assets, net includes short-term notes receivables from contracts with customers.

(2) Other long-term assets, net includes amounts prepaid by NRP related to override agreements from contracts with customers as well as other long-term assets due from contracts with customers.

(3) Accounts payable includes override payments owed by NRP from contracts with customers.

The following table shows the activity related to the Partnership's Mineral Rights segment deferred revenue resulting from contracts with customers:

	For the Year Ended December 31,		
(In thousands)	2024	2023	2022
Balance at beginning of period (current and non-current)	$ 42,955	$ 46,437	$ 61,862
Increase due to minimums and lease amendment fees	32,960	17,526	19,073
Recognition of previously deferred revenue	(15,760)	(21,008)	(34,498)
Balance at end of period (current and non-current)	$ 60,155	$ 42,955	$ 46,437

The Partnership's non-cancelable annual minimum payments due under the lease terms of its coal and aggregates royalty contracts with customers are as follows as of December 31, 2024 (in thousands):

Lease Term (1)	Weighted Average Remaining Years	Annual Minimum Payments
0 - 5 years	2.3	$ 13,478
5 - 10 years	5.4	17,477
10+ years	11.2	26,309
Total	7.3	$ 57,264

(1) Lease term does not include renewal periods.

4. Class A Convertible Preferred Units and Warrants

On March 2, 2017, NRP issued $250 million of Class A Convertible Preferred Units representing limited partner interests in NRP (the "preferred units") to certain entities controlled by funds affiliated with The Blackstone Group Inc. (collectively referred to as "Blackstone") and certain affiliates of GoldenTree Asset Management LP (collectively referred to as "GoldenTree") (together the "preferred purchasers") pursuant to a Preferred Unit and Warrant Purchase Agreement. NRP issued 250,000 preferred units to the preferred purchasers at a price of $1,000 per preferred unit (the "per unit purchase price"), less a 2.5% structuring and origination fee. The preferred units entitled the preferred purchasers to receive cumulative distributions at a rate of 12% of the purchase price per year, up to one half of which NRP may have paid in additional preferred units (such additional preferred units, the "PIK units"). The preferred units had a perpetual term, unless converted or redeemed. However, in 2024 all remaining preferred units were redeemed and none of the Partnership's preferred units remain outstanding.

NRP also issued two tranches of warrants (the "warrants") to purchase common units to the preferred purchasers (warrants to purchase 1.75 million common units with a strike price of $22.81 and warrants to purchase 2.25 million common units with a strike price of $34.00). The warrants were exercisable by the holders thereof at any time before the eighth anniversary of the closing date. Upon exercise of the warrants, NRP may have, at its option, elected to settle the warrants in common units or cash, each on a net basis. However, in 2024 all remaining warrants were settled and none of the Partnership's warrants remain outstanding.

Accounting for the Preferred Units and Warrants

Classification

The preferred units were accounted for as temporary equity on NRP's Consolidated Balance Sheets due to certain contingent redemption rights that may have been exercised at the election of preferred purchasers. The warrants were accounted for as equity on NRP's Consolidated Balance Sheets.

Initial Measurement

The net transaction price was allocated to the preferred units and warrants based on their relative fair values at inception date. NRP allocated the transaction issuance costs to the preferred units and warrants primarily on a pro-rata basis based on their relative inception date allocated values.

Subsequent Measurement

Preferred Units

During the year ended December 31, 2024, the Partnership redeemed a total of 71,666 preferred units for $71.7 million in cash. During the year ended December 31, 2023, the Partnership redeemed a total of 178,334 preferred unit for $178.3 million in cash. Of the originally issued 250,000 preferred units, no preferred units remained outstanding as of December 31, 2024. and 71,666 preferred units remained outstanding as of December 31, 2023. The preferred units had a $47.2 million carrying value included in class A convertible preferred units on the Partnership's Consolidated Balance Sheets at December 31, 2023.

Activity related to the preferred units is as follows:

(In thousands, except unit data)	Units Outstanding	Financial Position
Balance at December 31, 2021	269,321	$ 183,908
Redemption of preferred units paid-in-kind	(19,321)	(19,321)
Balance at December 31, 2022	250,000	$ 164,587
Redemption of preferred units	(178,334)	(117,406)
Balance at December 31, 2023	71,666	$ 47,181
Redemption of preferred units	(71,666)	(47,181)
Balance at December 31, 2024	—	$ —

Warrants

During the year ended December 31, 2024, the Partnership settled a total of 1,540,000 warrants to purchase common units with a strike price of $34.00. On January 29, 2024 (the "January 2024 exercise date"), holders of the Partnership's warrants exercised 462,165 warrants at a strike price of $34.00. The Partnership settled the warrants on a net basis with $10.0 million in cash and 198,767 common units. The 15-day VWAP ending on the business day prior to the January 2024 exercise date was $97.62. On February 7, 2024 (the "February 7, 2024 exercise date"), holders of the Partnership's warrants exercised 128,750 warrants at a strike price of $34.00. The Partnership settled the warrants on a net basis with $8.0 million in cash. The 15-day VWAP ending on the business day prior to the February 7, 2024 exercise date was $96.29. On February 8, 2024 (the "February 8, 2024 exercise date"), holders of the Partnership's warrants exercised 128,750 warrants at a strike price of $34.00. The 15-day VWAP ending on the business day prior to the February 8, 2024 exercise date was $95.63. The Partnership settled these warrants on a net basis with $7.9 million in cash. On February 14, 2024 (the "February 14, 2024 exercise date"), holders of the Partnership's warrants exercised 500,000 warrants at a strike price of $34.00. The 15-day VWAP ending on the business day prior to the February 14, 2024 exercise date was $93.47. The Partnership settled these warrants on a net basis with $29.7 million in cash. In April 2024 (the "April 2024 exercise date"), holders of the Partnership's warrants exercised 320,335 warrants at a strike price of $34.00. The Partnership settled the warrants on a net basis with $10.0 million in cash and 89,059 common units. The 15-day VWAP ending on the business day prior to the April 2024 exercise date was $90.33.

In 2023, the Partnership negotiated transactions with holders of the Partnership's warrants pursuant to which the Partnership repurchased and retired an aggregate of 752,500 warrants with a strike price of $22.81 and 710,000 warrants with a strike price of $34.00 for approximately $56.1 million in cash. As of December 31, 2024, zero warrants remained outstanding.

Of the originally issued 4,000,000 warrants, no warrants remain outstanding as of December 31, 2024 and 1,540,000 warrants to purchase common units with a strike price of $34.00 were outstanding as of December 31, 2023. These warrants had a carrying value of $23.1 million included in warrant holders' interest within partners' capital on the Partnership's Consolidated Balance Sheets at December 31, 2023.

Activity related to the warrants is as follows:

(In thousands, except warrant data)	Warrants Outstanding	Financial Position
Balance at December 31, 2021 and 2022	3,002,500	$ 47,964
Warrant settlement	(1,462,500)	(24,869)
Balance at December 31, 2023	1,540,000	$ 23,095
Warrant settlements	(1,540,000)	(23,095)
Balance at December 31, 2024	—	$ —

Embedded Features

Certain embedded features within the preferred unit and warrant purchase agreement were accounted for at fair value and were remeasured each quarter. See Note 12. Fair Value Measurements for further information regarding valuation of these embedded derivatives.

5. Common and Preferred Unit Distributions

The Partnership makes cash distributions to common unitholders and made cash distributions to preferred unitholders on a quarterly basis, subject to approval by the Board of Directors. NRP recognizes both common unit and preferred unit distributions on the date the distribution is declared.

Distributions made on the common units and the general partner's general partner ("GP") interest are made on a pro-rata basis in accordance with their relative percentage interests in the Partnership. The general partner is entitled to receive 2% of such distributions.

Income available to common unitholders and the general partner is reduced by preferred unit distributions that accumulated during the period. NRP reduced net income available to common unitholders and the general partner by $4.2 million, $16.7 million and $30.0 million during the year ended December 31, 2024, 2023 and 2022, respectively, as a result of accumulated preferred unit distributions earned during the period. Income available to common unitholders and the general partner is also reduced by the difference between the fair value of the consideration paid upon redemption and the carrying value of the preferred units. As such, NRP reduced net income available to common unitholders and the general partner by $24.5 million and $60.9 million during the year ended December 31, 2024 and 2023, respectively.

The following table shows the cash distributions declared and paid to common and preferred unitholders during the year ended December 31, 2024, 2023 and 2022, respectively:

		Common Units		Preferred Units	
Month Paid	Period Covered by Distribution	Distribution per Unit	Total Distribution (1) (In thousands)	Distribution per Unit	Total Distribution (In thousands)
2024					
February	October 1 - December 31, 2023	$ 0.75	$ 9,918	$ 30.00	$ 2,150
March (2)	Special Distribution	2.44	32,268	—	—
May	January 1 - March 31, 2024	0.75	9,987	30.00	2,150
May (3)	April 1 - May 8, 2024	—	—	12.33	493
August	April 1 - June 30, 2024	0.75	9,986	30.00	950
September (4)	July 1 - September 3, 2024	—	—	20.68	655
November	July 1 - September 30, 2024	0.75	9,987	—	—
2023					
February	October 1 - December 31, 2022	$ 0.75	$ 9,571	$ 30.00	$ 7,500
February (5)	January 1 - February 8, 2023	—	—	12.33	586
March (6)	Special Distribution	2.43	31,329	—	—
May	January 1 - March 31, 2023	0.75	9,669	30.00	6,075
May (7)	April 1 - May 5, 2023	—	—	11.33	406
June (8)	April 1 - June 2, 2023	—	—	20.33	915
August	April 1 - June 30, 2023	0.75	9,669	30.00	3,650
August (9)	June 30 - August 8, 2023	—	—	12.33	432
September (10)	June 30 - September 12, 2023	—	—	23.67	355
November	July 1 - September 30, 2023	0.75	9,670	30.00	2,150
2022					
February	October 1 - December 31, 2021	$ 0.45	$ 5,672	$ 30.00	$ 7,500
February (11)	January 1 - February 8, 2022	—	—	13.35	258
May	January 1 - March 31, 2022	0.75	9,570	30.00	7,500
August	April 1 - June 30, 2022	0.75	9,571	30.00	7,500
November	July 1 - September 30, 2022	0.75	9,571	30.00	7,500

(1) Totals include the amount paid to NRP's general partner in accordance with the general partner's 2% general partner interest.

(2) Special distribution was made to help cover unitholder tax liabilities associated with owning NRP common units during 2023.

(3) Relates to accrued distribution paid upon the redemption of 40,000 preferred units in May 2024

(4) Relates to accrued distribution paid upon the redemption of 31,666 preferred units in September 2024.

(5) Relates to accrued distribution paid upon the redemption of 47,499 preferred units in February 2023.

(6) Special distribution was made to help cover unitholder tax liabilities associated with owning NRP's common units during 2022.

(7) Relates to accrued distribution paid upon the redemption of 35,834 preferred units in May 2023.

(8) Relates to accrued distribution paid upon the redemption of 45,000 preferred units in June 2023.

(9) Relates to accrued distribution paid upon the redemption of 35,000 preferred units in August 2023.

(10) Relates to accrued distribution paid upon the redemption of 15,001 preferred units in September 2023.

(11) Relates to accrued distribution paid upon the redemption of 19,321 preferred units paid-in-kind in February 2022.

6. Net Income Per Common Unit

Basic net income per common unit is computed by dividing net income, after considering income attributable to preferred unitholders, the difference between the fair value of the consideration paid upon redemption and the carrying value of the preferred units, and the general partner's general partner interest, by the weighted average number of common units outstanding. Diluted net income per common unit includes the effect of NRP's preferred units, warrants, and unvested unit-based awards if the inclusion of these items is dilutive.

The dilutive effect of the preferred units is calculated using the if-converted method. Under the if-converted method, the preferred units are assumed to be converted at the beginning of the period, and the resulting common units are included in the denominator of the diluted net income per unit calculation for the period being presented. Distributions declared in the period and undeclared distributions on the preferred units that accumulated during the period are added back to the numerator for purposes of the if-converted calculation. The calculation of diluted net income per common unit for the year ended December 31, 2024, 2023 and 2022 includes the assumed conversion of the preferred units that remained outstanding during the respective period. The calculation of diluted net income per common unit for the year ended December 31, 2024 and 2023 does not include the assumed conversion of preferred units that were redeemed during the period, as the inclusion of these units would be anti-dilutive.

The dilutive effect of the warrants is calculated using the treasury stock method, which assumes that the proceeds from the exercise of these instruments are used to purchase common units at the average market price for the period. The calculation of diluted net income per common unit for the year ended December 31, 2024, 2023 and 2022 includes the net settlement of the warrants for the period during which they were outstanding.

The following table reconciles the numerators and denominators of the basic and diluted net income per common unit computations and calculates basic and diluted net income per common unit:

	For the Year Ended December 31,		
(In thousands, except per unit data)	**2024**	**2023**	**2022**
Basic net income per common unit			
Net income attributable to common unitholders	$ 151,813	$ 196,771	$ 233,722
Weighted average common units—basic	12,991	12,619	12,484
Basic net income per common unit	$ 11.69	$ 15.59	$ 18.72
Diluted net income per common unit			
Weighted average common units—basic	12,991	12,619	12,484
Plus: dilutive effect of preferred units	281	2,059	6,176
Plus: dilutive effect of warrants	139	1,202	783
Plus: dilutive effect of unvested unit-based awards	236	216	210
Weighted average common units—diluted	13,647	16,096	19,653
Net income	$ 183,644	$ 278,435	$ 268,492
Less: income attributable to preferred unitholders	(1,148)	(2,694)	—
Less: redemption of preferred units	(24,485)	(60,929)	—
Diluted net income attributable to common unitholders and the general partner	$ 158,011	$ 214,812	$ 268,492
Less: diluted net income attributable to the general partner	(3,160)	(4,296)	(5,370)
Diluted net income attributable to common unitholders	$ 154,851	$ 210,516	$ 263,122
Diluted net income per common unit	$ 11.35	$ 13.08	$ 13.39

7. Segment Information

The Partnership's segments are strategic business units that offer distinct products and services to different customers in different geographies within the U.S. and that are managed accordingly. NRP has the following two operating segments:

Mineral Rights—consists of mineral interests and other subsurface rights across the United States. NRP's ownership provides critical inputs for the manufacturing of steel, electricity and basic building materials, as well as opportunities for carbon sequestration and renewable energy. The Partnership is working to strategically redefine its business as a key player in the transitional energy economy in the years to come.

Soda Ash—consists of the Partnership's 49% non-controlling equity interest in Sisecam Wyoming, a trona ore mining operation and soda ash refinery in the Green River Basin of Wyoming. Sisecam Wyoming mines trona and processes it into soda ash that is sold both domestically and internationally into the glass and chemicals industries.

Direct segment costs and certain other costs incurred at the corporate level that are identifiable and that benefit the Partnership's segments are allocated to the operating segments accordingly. These allocated costs generally include salaries and benefits, insurance, property taxes, legal, royalty, information technology and shared facilities services and are included in operating and maintenance expenses on the Partnership's Consolidated Statements of Comprehensive Income.

Corporate and Financing includes functional corporate departments that do not earn revenues. Costs incurred by these departments include interest and financing, corporate headquarters and overhead, centralized treasury, legal and accounting and other corporate-level activity not specifically allocated to a segment and are included in general and administrative expenses on the Partnership's Consolidated Statements of Comprehensive Income.

NRP’s Chief Operating Decision Makers (“CODM”) are its Chief Executive Officer and President and Chief Operating Officer. Together, they evaluate the Partnership’s performance monthly through a review of the segments’ net income and free cash flow as compared to budget and utilize this information to assess the segments’ performance and allocate resources. NRP does not conduct operations on any of its assets or directly engage in any type of industrial activity. Instead, it leases its mineral and other rights to companies that conduct operations on its properties in exchange for paying royalties and other fees to the Partnership. Operating expenses, capital costs and other liabilities arising out of production activities are borne entirely by NRP's lessees. In the case of its soda ash investment, operations are managed by NRP's partner, Sisecam Chemicals Wyoming LLC. As such, none of the Partnership's expenses are considered to affect the trends reflected in the segments or consolidated information nor are they considered important to NRP’s future profitability. Accordingly, NRP has determined its significant segment expenses to be its employee related expenses, including compensation (salaries, benefits and bonus) and long-term incentive compensation as well as interest expense and property tax expense. The Partnership is responsible for paying property taxes on the properties it owns. Typically, NRP's lessees are contractually responsible for reimbursing the Partnership for property taxes on the leased properties and this reimbursement amount is included within the Mineral Rights segment revenues. Reclassifications have been made to prior year amounts to conform with current year presentation.

NATURAL RESOURCE PARTNERS L.P.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—CONTINUED

The following table summarizes certain financial information for each of the Partnership's business segments:

	Operating Segments			
(In thousands)	**Mineral Rights**	**Soda Ash**	**Corporate and Financing**	**Total**
For the Year Ended December 31, 2024				
Revenues	$ 245,027	$ —	$ —	$ 245,027
Equity in earnings of Sisecam Wyoming	—	18,135	—	18,135
Gain on asset sales and disposals	4,845	—	—	4,845
Total revenues and other income	$ 249,872	$ 18,135	$ —	$ 268,007
Less:				—
Compensation (salaries, benefits and bonus)	$ 7,948	$ —	$ 8,570	$ 16,518
Long-term incentive compensation (1)	1,785	—	9,466	11,251
Property taxes	7,704	—	—	7,704
Depreciation, depletion and amortization	15,517	—	18	15,535
Asset impairments	87	—	—	87
Interest expense, net (2)	—	—	15,554	15,554
Other segment items (3)	10,428	171	7,115	17,714
Net income (loss)	$ 206,403	$ 17,964	$ (40,723)	$ 183,644
As of December 31, 2024				
Total assets	$ 509,127	$ 257,355	$ 6,425	$ 772,907
For the Year Ended December 31, 2023				
Revenues	$ 293,656	$ —	$ —	$ 293,656
Equity in earnings of Sisecam Wyoming	—	73,397	—	73,397
Gain on asset sales and disposals	2,956	—	—	2,956
Total revenues and other income	$ 296,612	$ 73,397	$ —	$ 370,009
Less:				
Compensation (salaries, benefits and bonus)	$ 8,382	$ —	$ 10,204	$ 18,586
Long-term incentive compensation (4)	2,022	—	8,711	10,733
Property taxes	6,758	—	—	6,758
Depreciation, depletion and amortization	18,471	—	18	18,489
Asset impairments	556	—	—	556
Interest expense, net (2)	—	—	14,103	14,103
Other segment items (3)	14,896	257	7,196	22,349
Net income (loss)	$ 245,527	$ 73,140	$ (40,232)	$ 278,435
As of December 31, 2023				
Total assets	$ 516,844	$ 276,549	$ 4,483	$ 797,876
For the Year Ended December 31, 2022				
Revenues	$ 328,085	$ —	$ —	$ 328,085
Equity in earnings of Sisecam Wyoming	—	59,795	—	59,795
Gain on asset sales and disposals	1,082	—	—	1,082
Total revenues and other income	$ 329,167	$ 59,795	$ —	$ 388,962
Less:				
Compensation (salaries, benefits and bonus)	$ 8,206	$ —	$ 9,388	$ 17,594
Long-term incentive compensation (5)	1,259	—	4,505	5,764
Property taxes	6,389	—	—	6,389
Depreciation, depletion and amortization	22,519	—	—	22,519
Asset impairments	4,457	—	—	4,457
Interest expense, net (2)	—	—	26,274	26,274
Loss on extinguishment of debt	—	—	10,465	10,465
Other segment items (3)	18,889	160	7,959	27,008
Net income (loss)	$ 267,448	$ 59,635	$ (58,591)	$ 268,492

(1) Long-term incentive compensation for the year ended December 31, 2024 includes (1) Mineral Rights segment: $1.4 million of equity compensation and $0.4 million of cash compensation; (2) Corporate & Financing segment: $9.1 million of equity compensation and $0.4 of cash compensation

(2) Included in interest expense, net was $0.7 million, $0.3 million and $0.3 million of interest income for the years ended December 31, 2024, 2023 and 2022, respectively.

(3) Other segment items in the Mineral Rights segment primarily include: insurance, legal, overriding royalty expense, processing and transportation expense, information technology, shared facility services, rent and professional fees. Other segment items in the Soda Ash segment primarily include professional fees. Other segment items in the Corporate and Financing segment primarily include: insurance, legal, information technology, shared facility services, rent and professional fees.

(4) Long-term incentive compensation for the year ended December 31, 2023 includes (1) Mineral Rights segment: $1.4 million of equity compensation and $0.6 million of cash compensation; (2) Corporate & Financing segment: $8.4 million of equity compensation and $0.3 million of cash compensation

(5) Long-term incentive compensation for the year ended December 31, 2022 includes (1) Mineral Rights segment: $0.8 million of equity compensation and $0.5 million of cash compensation; (2) Corporate & Financing segment: $4.1 million of equity compensation and $0.3 million of cash compensation

8. Equity Investment

The Partnership accounts for its 49% investment in Sisecam Wyoming using the equity method of accounting. Activity related to this investment is as follows:

	For the Year Ended December 31,		
(In thousands)	**2024**	**2023**	**2022**
Balance at beginning of period	$ 276,549	$ 306,470	$ 276,004
Income allocation to NRP's equity interests (1)	22,800	78,179	64,712
Amortization of basis difference	(4,665)	(4,783)	(4,917)
Other comprehensive income (loss)	1,452	(21,839)	15,506
Distributions	(38,781)	(81,478)	(44,835)
Balance at end of period	$ 257,355	$ 276,549	$ 306,470

(1) Amounts reclassified into income out of accumulated other comprehensive loss was $6.0 million, $(17.9) million and $(6.8) million for the year ended December 31, 2024, 2023 and 2022, respectively.

The difference between the amount at which the investment in Sisecam Wyoming is carried and the amount of underlying equity in Sisecam Wyoming's net assets was $111.9 million and $116.6 million as of December 31, 2024 and 2023, respectively. This excess basis relates to property, plant and equipment and right to mine assets. The excess basis difference that relates to property, plant and equipment is being amortized into income using the straight-line method over 27 years. The excess basis difference that relates to right to mine assets is being amortized into income using the units of production method.

The following table represents summarized financial information for Sisecam Wyoming as derived from their respective financial statements for the years ended December 31, 2024, 2023 and 2022:

	For the Year Ended December 31,		
(In thousands)	**2024**	**2023**	**2022**
Net sales	$ 578,106	$ 773,590	$ 720,120
Gross profit	76,820	187,929	162,575
Net income	46,530	159,549	132,065

The financial position of Sisecam Wyoming is summarized as follows:

	December 31,	
(In thousands)	**2024**	**2023**
Current assets	$ 247,937	$ 253,754
Noncurrent assets	277,471	284,131
Current liabilities	78,135	91,853
Noncurrent liabilities	150,428	119,533

9. Mineral Rights, Net

The Partnership's mineral rights consist of the following:

	December 31,					
	2024			2023		
(In thousands)	Carrying Value	Accumulated Depletion	Net Book Value	Carrying Value	Accumulated Depletion	Net Book Value
Coal properties	$ 660,961	$ (299,404)	$ 361,557	$ 661,256	$ (285,470)	$ 375,786
Aggregates properties	8,655	(4,065)	4,590	8,655	(3,761)	4,894
Oil and gas royalty properties	12,354	(10,394)	1,960	12,354	(10,082)	2,272
Other	13,143	(1,612)	11,531	13,143	(1,612)	11,531
Total mineral rights, net	$ 695,113	$ (315,475)	$ 379,638	$ 695,408	$ (300,925)	$ 394,483

Depletion expense related to the Partnership's mineral rights is included in depreciation, depletion and amortization on its Consolidated Statements of Comprehensive Income and totaled $14.8 million, $17.3 million and $20.9 million for the year ended December 31, 2024, 2023 and 2022, respectively.

During the year ended December 31, 2024, the Partnership recorded a gain $4.8 million, included in gain on asset sales and disposals on the Consolidated Statements of Comprehensive Income primarily related to a coal property condemnation in the second quarter of 2024. During the years ended December 31, 2023 and 2022, the Partnership had $3.0 million and $1.1 million, respectively, included in gains on asset sales and disposals on the Consolidated Statements of Comprehensive Income.

Impairment of Mineral Rights

During the years ended December 31, 2024, 2023 and 2022, the Partnership identified facts and circumstances that indicated that the carrying value of certain of its mineral rights exceed future cash flows from those assets and recorded non-cash impairment expense included in asset impairments on the Consolidated Statements of Comprehensive Income as follows:

	For the Year Ended December 31,		
(In thousands)	2024	2023	2022
Coal properties [1]	$ 87	$ 556	$ 4,365
Aggregates properties	—	—	92
Total	$ 87	$ 556	$ 4,457

[1] The Partnership recorded $0.1 million and $0.6 million of impairment expense during the year ended December 31, 2024 and 2023, respectively. The Partnership recorded $4.4 million of impairment expense during the year ended December 31, 2022 primarily related to assets whose undiscounted future net cash flows were less than their net book values. Of this amount, $2.6 million of impairment expense related to an asset with $4.3 million of net book value, resulting in a fair value of $1.7 million at December 31, 2022. The fair value of the impaired asset at December 31, 2022 was calculated using a discount rate of 15%.

NRP compared the net book value of its mineral rights to estimated undiscounted future net cash flows. If the net book value exceeded the undiscounted future cash flows, the Partnership recorded an impairment for the excess of the net book value over fair value. A discounted cash flow model was used to estimate the level 3 fair value. Significant inputs used to determine fair value include estimates of future cash flows from coal sales and minimum payments, discount rate and useful economic life. Estimated cash flows are the product of a process that began with current realized pricing as of the measurement date and included an adjustment for risk related to the future realization of cash flows. The impairment recorded during the year ended December 31, 2022 was based on the estimated fair value of the assets versus its net book value and is a level 3 non-recurring fair value estimate.

10. Intangible Assets, Net

The Partnership's intangible assets consist of above-market coal royalty and related transportation contracts with subsidiaries of Foresight Energy Resources LLC ("Foresight") pursuant to which the Partnership receives royalty payments for coal sales and throughput fees for the transportation and processing of coal. The Partnership's intangible assets included on its Consolidated Balance Sheets are as follows:

	December 31,	
(In thousands)	2024	2023
Intangible assets at cost	$ 51,353	$ 51,353
Less: accumulated amortization	(38,429)	(37,671)
Total intangible assets, net	$ 12,924	$ 13,682

Amortization expense included in depreciation, depletion and amortization on the Partnership's Consolidated Statements of Comprehensive Income was $0.8 million, $1.0 million and $1.4 million for the year ended December 31, 2024, 2023 and 2022, respectively.

The estimates of amortization expense for the years ended December 31, as indicated below, are based on current lessee mining plans and are subject to revision as those plans change in future periods.

(In thousands)	Estimated Amortization Expense
2025	$ 792
2026	691
2027	1,008
2028	720
2029	480

11. Debt, Net

The Partnership's debt consists of the following:

	December 31,	
(In thousands)	2024	2023
Opco Credit Facility	$ 113,684	$ 95,834
Opco Senior Notes		
5.82% with semi-annual interest payments in March and September, with annual principal payments in March, due March 2024	$ —	$ 12,685
8.92% with semi-annual interest payments in March and September, with annual principal payments in March, due March 2024	—	4,012
5.03% with semi-annual interest payments in June and December, with annual principal payments in December, due December 2026	22,841	34,262
5.18% with semi-annual interest payments in June and December, with annual principal payments in December, due December 2026	5,822	8,732
Total Opco Senior Notes	$ 28,663	$ 59,691
Total debt at face value	$ 142,347	$ 155,525
Net unamortized debt issuance costs	(279)	(467)
Total debt, net	$ 142,068	$ 155,058
Less: current portion of long-term debt	(14,192)	(30,785)
Total long-term debt, net	$ 127,876	$ 124,273

NRP LP Debt

2025 Senior Notes

In 2022, NRP redeemed all $300 million of its 9.125% senior notes due 2025 ("2025 Senior Notes"). Included in loss on extinguishment of debt on the Partnership's Consolidated Statements of Comprehensive Income for the year ended December 31, 2022, are $7.2 million of call premium and fees and the write off of $3.1 million of debt issuance costs related to the redemption of the 2025 Senior Notes. The cash paid for call premiums and fees is included in other items, net under cash used in financing activities on the Consolidated Statements of Cash Flows.

Opco Debt

All of Opco's debt is guaranteed by its wholly owned subsidiaries and is secured by certain of the assets of Opco and its wholly owned subsidiaries, other than BRP LLC and NRP Trona LLC. As of December 31, 2024 and 2023, Opco was in compliance with the terms of the financial covenants contained in its debt agreements.

Opco Credit Facility

In May 2023, the Partnership entered into the Sixth Amendment (the "Sixth Amendment") to the Opco Credit Facility (the "Opco Credit Facility"). The Sixth Amendment extended the term of the Opco Credit Facility until August 2027. Lender commitments under the Opco Credit Facility increased from $130.0 million to $155.0 million, with the ability to expand such commitments to $200.0 million with the addition of future commitments. In February 2024, the Partnership exercised its option under the Opco Credit Facility to increase the total aggregate commitment under the Opco Credit Facility twice, initially by $30.0 million from $155.0 million to $185.0 million and subsequently by $15.0 million from $185.0 million to $200.0 million. These increases in the total aggregate commitment were made pursuant to an accordion feature of the Opco Credit Facility. In connection with the initial increase, a new lender joined the lending group with a commitment of $30.0 million. In October 2024, NRP entered into the Seventh Amendment to the Opco Credit Facility which extended the maturity from August 2027 to October 2029. The Seventh Amendment also removed reference to the preferred units and warrants, which are no longer outstanding, and includes modifications to Opco's ability to declare and make certain restricted payments.

Indebtedness under the Opco Credit Facility bears interest, at Opco's option, at:

- the higher of (i) the prime rate as announced by the agent bank; (ii) the federal funds rate plus 0.50%; or (iii) SOFR plus 1%, in each case plus an applicable margin ranging from 2.50% to 3.50%; or
- a rate equal to SOFR plus an applicable margin ranging from 3.50% to 4.50%.

During the year ended December 31, 2023, the Partnership borrowed $248.8 million and repaid $223.0 million, resulting in $95.8 million in borrowings outstanding and $59.2 of available borrowing capacity under the Opco Credit Facility as of December 31, 2023. During the year ended December 31, 2024 the Partnership borrowed $167.9 million and repaid $150.0 million, resulting in $113.7 million in borrowings outstanding and $86.3 million of available borrowing capacity under the Opco Credit Facility as of December 31, 2024. The weighted average interest rate for the borrowings outstanding under the Opco Credit Facility for the year ended December 31, 2024 and 2023 was 8.77% and 8.70%, respectively. Opco will incur a commitment fee on the unused portion of the revolving credit facility at a rate of 0.50% per annum. Opco may prepay all amounts outstanding under the Opco Credit Facility at any time without penalty.

The Opco Credit Facility contains financial covenants requiring Opco to maintain:

- A leverage ratio of consolidated indebtedness to EBITDDA (as defined in the Opco Credit Facility) not to exceed 3.0x. As of December 31, 2024, this ratio was 0.6x; and
- an interest coverage ratio of consolidated EBITDDA to consolidated interest expense and consolidated lease expense (in each case as defined in the Opco Credit Facility) of not less than 3.5 to 1.0. As of December 31, 2024, this ratio was 14.7x.

The Opco Credit Facility contains certain additional customary negative covenants that, among other items, restrict Opco's ability to incur additional debt, grant liens on its assets, make investments, sell assets and engage in business combinations. Included in the investment covenant are restrictions upon Opco's ability to acquire assets where Opco does not maintain certain levels of liquidity. In addition, Opco is required to use 75% of the net cash proceeds of certain non-ordinary course asset sales to repay the Opco Credit Facility (without any corresponding commitment reduction) and use the remaining 25% of the net cash proceeds to offer to repay its Senior Notes on a pro-rata basis, as described below under "—Opco Senior Notes." The Opco Credit Facility also contains customary events of default, including cross-defaults under Opco's Senior Notes.

The Opco Credit Facility is collateralized and secured by liens on certain of Opco's assets with carrying values of $302.8 million and $316.3 million classified as mineral rights, net and other long-term assets, net and $23.5 million and $26.3 million classified as long-term contract receivable, net on the Partnership's Consolidated Balance Sheets as of December 31, 2024 and 2023, respectively. The collateral includes (1) the equity interests in all of Opco's wholly owned subsidiaries, other than BRP LLC and NRP Trona LLC (which owns a 49% non-controlling equity interest in Sisecam Wyoming), (2) the personal property and fixtures owned by Opco's wholly owned subsidiaries, other than BRP LLC and NRP Trona LLC, (3) Opco's material coal royalty revenue producing properties, and (4) certain of Opco's coal-related infrastructure assets, including its long-term contract receivable as described in Note 17. Financing Transaction.

Opco Senior Notes

Opco has issued several series of private placement senior notes (the "Opco Senior Notes") with various interest rates and principal due dates. As of December 31, 2024, only the 5.03% and 5.18% Opco Senior Notes, both due December 31, 2026, remain outstanding. These Opco Senior Notes have principal due annually in December and interest due semi-annually in June and December. As of December 31, 2024 and 2023, the Opco Senior Notes had cumulative principal balances of $28.7 million and $59.7 million, respectively. Opco made mandatory principal payments on the Opco Senior Notes of $31.0, $39.4 and $39.4 million during the year ended December 31, 2024, 2023 and 2022, respectively.

The Note Purchase Agreements relating to the Opco Senior Notes contain covenants requiring Opco to:

- maintain a ratio of consolidated indebtedness to consolidated EBITDDA (as defined in the note purchase agreement) of no more than 4.0 to 1.0 for the four most recent quarters;
- not permit debt secured by certain liens and debt of subsidiaries to exceed 10% of consolidated net tangible assets (as defined in the note purchase agreement); and
- maintain the ratio of consolidated EBITDDA (as defined in the note purchase agreement) to consolidated fixed charges (consisting of consolidated interest expense and consolidated operating lease expense) at not less than 3.5 to 1.0.

In addition, the Note Purchase Agreements include a covenant that provides that, in the event Opco or any of its subsidiaries is subject to any additional or more restrictive covenants under the agreements governing its material indebtedness (including the Opco Credit Facility and all renewals, amendments or restatements thereof), such covenants shall be deemed to be incorporated by reference in the Note Purchase Agreements and the holders of the Notes shall receive the benefit of such additional or more restrictive covenants to the same extent as the lenders under such material indebtedness agreement.

In September 2016, Opco amended the Opco Senior Notes. Under this amendment, Opco agreed to use certain asset sale proceeds to make mandatory prepayment offers to the holders of the Opco Senior Notes using an amount of net cash proceeds from certain asset sales that will be calculated pro-rata based on the amount of Opco Senior Notes then outstanding compared to the other total Opco senior debt outstanding that is being prepaid.

The mandatory prepayment offers described above will be made pro-rata across each series of outstanding Opco Senior Notes and will not require any make-whole payment by Opco. In addition, the remaining principal and interest payments on the Opco Senior Notes will be adjusted accordingly based on the amount of Opco Senior Notes actually prepaid. The prepayments do not affect the maturity dates of any series of the Opco Senior Notes.

Consolidated Principal Payments

The consolidated principal payments due are set forth below:

(In thousands)	Opco Senior Notes	Opco Credit Facility	Total
2025	$ 14,332	$ —	$ 14,332
2026	14,331	—	14,331
2027	—	—	—
2028	—	—	—
2029	—	113,684	113,684
Thereafter	—	—	—
	$ 28,663	$ 113,684	$ 142,347

12. Fair Value Measurements

Fair Value of Financial Assets and Liabilities

The Partnership's financial assets and liabilities consist of cash and cash equivalents, a contract receivable and debt. The carrying amounts reported on the Consolidated Balance Sheets for cash and cash equivalents approximate fair value due to their short-term nature. The Partnership uses available market data and valuation methodologies to estimate the fair value of its debt and contract receivable.

The following table shows the carrying value and estimated fair value of the Partnership's debt and contract receivable:

		December 31,			
		2024		2023	
(In thousands)	Fair Value Hierarchy Level	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Debt:					
Opco Senior Notes (1)	3	$ 28,384	$ 27,498	$ 59,224	$ 56,533
Opco Credit Facility (2)	3	113,684	113,684	95,834	95,384
Assets:					
Contract receivable, net (current and long-term) (3)	3	$ 26,321	$ 22,776	$ 28,946	$ 24,492

(1) The fair value of the Opco Senior Notes was estimated by management utilizing the present value replacement method incorporating the interest rate of the Opco Credit Facility.

(2) The fair value of the Opco Credit Facility approximates the outstanding borrowing amount because the interest rates are variable and reflective of market rates and the terms of the credit facility allow the Partnership to repay this debt at any time without penalty.

(3) The fair value of the Partnership's contract receivable was determined based on the present value of future cash flow projections related to the underlying asset at a discount rate of 15% at December 31, 2024 and 2023.

NRP had embedded derivatives in the preferred units related to certain conversion options, redemption features and the change of control provision that were accounted for separately from the preferred units as assets and liabilities at fair value on the Partnership's Consolidated Balance Sheets. Level 3 valuation of the embedded derivatives were based on numerous factors including the likelihood of the event occurring. The embedded derivatives were revalued quarterly and changes in their fair value would have been recorded in other expenses, net on the Partnership's Consolidated Statements of Comprehensive Income. The embedded derivatives had zero value as of December 31, 2023. As a result of the redemption of the Partnership's remaining preferred units in September 2024, NRP no longer has embedded derivatives associated with the preferred units as of December 31, 2024.

Fair Value of Non-Financial Assets

The Partnership discloses or recognizes its non-financial assets, such as impairments of coal and aggregates properties at fair value on a nonrecurring basis. Refer to Note 9. Mineral Rights, Net for additional disclosures related to the fair value associated with the impaired assets.

13. Related Party Transactions

Affiliates of our General Partner

The Partnership's general partner does not receive any management fee or other compensation for its management of NRP. However, in accordance with the partnership agreement, the general partner and its affiliates are reimbursed for services provided to the Partnership and for expenses incurred on the Partnership's behalf. Employees of Quintana Minerals Corporation ("QMC") and Western Pocahontas Properties Limited Partnership ("WPPLP"), affiliates of the Partnership, provide their services to manage the Partnership's business. QMC and WPPLP charge the Partnership the portion of their employee salary and benefits costs related to their employee services provided to NRP. These QMC and WPPLP employee management service costs are presented as operating and maintenance expenses and general and administrative expenses on the Partnership's Consolidated Statements of Comprehensive Income. NRP also reimburses overhead costs incurred by its affiliates, and other related parties, to manage the Partnership's business. These overhead costs include certain rent, information technology, administration of employee benefits and other corporate services incurred by or on behalf of the Partnership's general partner and its affiliates and are presented as operating and maintenance expenses and general and administrative expenses on the Partnership's Consolidated Statements of Comprehensive Income.

Related party general and administrative expenses included on the Partnership's Consolidated Statement of Comprehensive Income are as follows:

	For the Year Ended December 31,		
(In thousands)	**2024**	**2023**	**2022**
Operating and maintenance expenses	$ 7,106	$ 6,747	$ 6,694
General and administrative expenses	5,420	5,408	4,864

The Partnership had accounts payable to related parties of $0.6 million on its Consolidated Balance Sheets at both December 31, 2024 and 2023. The Partnership had other current assets of $0.2 million and $0.1 million on its Consolidated Balance Sheets related to a related party prepaid expense at December 31, 2024 and 2023, respectively.

As a result of its office lease with WPPLP, the Partnership had a right-of-use asset and lease liability of $3.4 million and $3.5 million included in other long-term assets, net and other non-current liabilities, on its Consolidated Balance Sheets at December 31, 2024 and 2023, respectively.

During the years ended December 31, 2024, 2023 and 2022, the Partnership recognized $0.1 million, $5.1 million and $8.5 million in operating and maintenance expenses, respectively, on its Consolidated Statements of Comprehensive Income related to an overriding royalty agreement with WPPLP. At December 31, 2024 the Partnership had $0.5 million of other long-term assets, net on its Consolidated Balance Sheets related to a prepaid royalty for this agreement. This amount was zero for the year ended December 31, 2023.

14. Major Customers

Revenues from customers that exceeded 10 percent of total revenues for any of the periods presented below are as follows:

	For the Year Ended December 31,					
	2024		2023		2022	
(In thousands)	Revenues	Percent	Revenues	Percent	Revenues	Percent
Alpha Metallurgical Resources, Inc. (1)	$ 67,714	28%	$ 86,118	23%	$ 102,352	26%
Foresight (1)	$ 39,178	16%	$ 60,495	16%	$ 65,597	17%
Alabama Kanu Holdings, LLC (1) (2)	$ 29,533	12%	$ 34,869	9%	$ 24,596	6%

(1) Revenues from Alpha Metallurgical Resources, Inc., Foresight and Alabama Kanu Holdings, LLC are included within the Partnership's Mineral Rights segment.

(2) Alabama Kanu Holdings, LLC purchased Hatfield Metallurgical Holdings, LLC in August 2024.

15. Commitments and Contingencies

Legal

NRP is involved, from time to time, in various legal proceedings arising in the ordinary course of business. While the ultimate results of these proceedings cannot be predicted with certainty, Partnership management believes these ordinary course matters will not have a material effect on the Partnership's financial position, liquidity or operations.

Environmental Compliance

The operations the Partnership's lessees conduct on its properties, as well as the industrial minerals, aggregates and oil and gas operations in which the Partnership has interests, are subject to federal and state environmental laws and regulations. See "Items 1. and 2. Business and Properties—Regulation and Environmental Matters." As an owner of surface interests in some properties, the Partnership may be liable for certain environmental conditions occurring on the surface properties. The terms of substantially all of the Partnership's coal leases require the lessee to comply with all applicable laws and regulations, including environmental laws and regulations. Lessees post reclamation bonds assuring that reclamation will be completed as required by the relevant permit, and substantially all of the leases require the lessee to indemnify the Partnership against, among other things, environmental liabilities. Some of these indemnifications survive the termination of the lease. The Partnership makes regular visits to the mines to ensure compliance with lease terms, but the duty to comply with all regulations rests with the lessees. The Partnership believes that its lessees will be able to comply with existing regulations and does not expect that any lessee's failure to comply with environmental laws and regulations will have a material impact on the Partnership's financial condition or results of operations. The Partnership has neither incurred, nor is aware of, any material environmental charges imposed on the Partnership related to its properties for the period ended December 31, 2024. The Partnership is not associated with any material environmental contamination that may require remediation costs. However, the Partnership's lessees are required to conduct reclamation work on the properties under lease to them. Because the Partnership is not the permittee of the mines being reclaimed, the Partnership is not responsible for the costs associated with these reclamation operations.

As a former owner of the working interests in oil and natural gas operations, the Partnership is responsible for its proportionate share of any losses and liabilities, including environmental liabilities, arising from uninsured and underinsured events during the period it was an owner.

16. Unit-Based Compensation

2017 Long-Term Incentive Plan

In December 2017, the Natural Resource Partners 2017 Long-Term Incentive Plan (the "2017 Plan") was approved and it became effective in January 2018. The 2017 Plan authorizes a total of 1,600,000 common units that are available for delivery by the Partnership pursuant to awards under the plan. The initial number of common units authorized for issuance pursuant to awards under the plan was 800,000 and in March 2022, an additional 800,000 units were authorized for issuance. The term is 10 years from the date of approval of the Board of Directors or, if earlier, the date the 2017 Plan is terminated by the Board of Directors or the committee appointed by the Board of Directors to administer the 2017 Plan, or the date all available common units available have been delivered. Common units delivered pursuant to the 2017 Plan will consist, in whole or part, of (i) common units acquired in the open market, (ii) common units acquired from the Partnership (including newly issued units), any of our affiliates or any other person or (iii) any combination of the foregoing.

Employees, consultants and non-employee directors of the Partnership, the general partner, GP LLC and their affiliates are generally eligible to receive awards under the 2017 Plan. The 2017 Plan provides for the issuance of a variety of equity-based grants, including grants of (i) options, (ii) unit appreciation rights, (iii) restricted units, (iv) phantom units, (v) cash awards, (vi) performance awards, (vii) distribution equivalent rights, and (viii) other unit-based awards. The plan is administered by the Compensation, Nominating and Governance Committee ("CNG Committee") of the Board of Directors, which determines the terms and conditions of awards granted under the 2017 Plan. The Partnership recognizes forfeitures for any awards issued under this plan as they occur.

Unit-Based Awards

Unit-based awards under the 2017 Plan are generally issued to certain employees and non-employee directors of the Partnership. Awards granted to employees either vest 3 years following the grant date or vest ratably over the 3 year period following the grant date. Awards granted to non-employee directors vest over a 1 year period. Directors are given the option to take immediate issuance of the vested awards or defer such issuance until a later date. Upon deferral of issuance, such units will continue to accumulate distribution equivalent rights ("DERs") until issuance.

In connection with the phantom unit awards, the CNG Committee also granted tandem DERs, which entitle the holders to receive distributions equal to the distributions paid on the Partnership's common units between the date the units are granted and the settlement date. The DERs are payable in cash upon vesting but may be subject to forfeiture if the grantee ceases employment prior to vesting.

During the years ended December 31, 2024 and 2023, the Partnership granted service, performance and market-based awards under its 2017 Plan and during the year ended December 31, 2022, the Partnership granted service-based awards. The Partnership's service and performance-based awards are valued using the closing price of NRP's common units as of the grant date while the Partnership's market-based awards are valued using a Monte Carlo simulation. The grant date fair value of the awards granted during the year ended December 31, 2024, 2023 and 2022 was $6.7 million, $16.0 million and $7.9 million, respectively. Included in these amounts is the grant-date fair value for the market-based awards valued using a Monte Carlo simulation of $2.5 million and $2.8 million for the year ended December 31, 2024 and 2023, respectively. Total unit-based compensation expense associated with these awards was $11.3 million, $10.9 million and $5.8 million for the year ended December 31, 2024, 2023 and 2022, respectively, and is included in general and administrative expenses and operating and maintenance expenses on the Partnership's Consolidated Statements of Comprehensive Income. The unamortized cost associated with unvested outstanding awards as of December 31, 2024 was $9.5 million, which will be recognized over a weighted average period of 1.5 years. The unamortized cost associated with unvested outstanding awards as of December 31, 2023 was $13.3 million. The Partnership paid $6.4 million, $3.2 million and $2.9 million in cash during the year ended December 31, 2024, 2023 and 2022, respectively, for taxes on the unit-based award settlements during the respective years. These cash payments are included in other items, net under cash flows from financing activities on the Partnership's Consolidated Statements of Cash Flows.

A summary of the unit activity in the outstanding grants during 2024 is as follows:

(In thousands)	Common Units	Weighted Average Grant Date Fair value per Common Unit
Outstanding grants at January 1, 2024	483	$ 46.21
Granted	65	$ 103.50
Fully vested and issued	(197)	$ 38.76
Forfeitures	(1)	$ 90.70
Outstanding at December 31, 2024	350	$ 60.81

17. Financing Transaction

The Partnership owns rail loadout and associated infrastructure at the Sugar Camp mine in the Illinois Basin operated by a subsidiary of Foresight. The infrastructure at the Sugar Camp mine is leased to a subsidiary of Foresight and is accounted for as a financing transaction (the "Sugar Camp lease"). The Sugar Camp lease expires in 2032 with renewal options for up to 80 additional years. Minimum payments are $5.0 million per year through the end of the lease term. The Partnership is also entitled to variable payments in the form of throughput fees determined based on the amount of coal transported and processed utilizing the Partnership's assets. In the event the Sugar Camp lease is renewed beyond 2032, payments become a fixed $10 thousand per year for the remainder of the renewed term.

18. Credit Losses

The Partnership is exposed to credit losses through the collection of its trade receivables resulting from contracts with customers and a long-term receivable resulting from a financing transaction with a customer. The Partnership records an allowance for current expected credit losses on these receivables based on the loss-rate method. NRP assessed the likelihood of collection of its receivables utilizing historical loss rates, current market conditions, industry and macroeconomic factors, reasonable and supportable forecasts and facts or circumstances of individual customers and properties. Examples of these facts or circumstances include, but are not limited to, contract disputes or renegotiations with the customer and evaluation of short and long-term economic viability of the contracted property. For its long-term contract receivable, management reverts to the historical loss experience immediately after the reasonable and supportable forecast period ends.

As of December 31, 2024 and 2023, NRP had the following current expected credit loss (“CECL”) allowance related to its receivables and long-term contract receivable:

	December 31,					
	2024			2023		
(In thousands)	Gross	CECL Allowance	Net	Gross	CECL Allowance	Net
Receivables	$ 37,270	$ (4,425)	$ 32,845	$ 47,170	$ (5,655)	$ 41,515
Long-term contract receivable	24,323	(843)	23,480	27,265	(944)	26,321
Total	$ 61,593	$ (5,268)	$ 56,325	$ 74,435	$ (6,599)	$ 67,836

NRP reversed $1.3 million and charged $1.1 million and $1.1 million in operating and maintenance expenses on its Consolidated Statements of Comprehensive Income related to the change in the CECL allowance during the year ended December 31, 2024, 2023 and 2022, respectively.

NRP has procedures in place to monitor its ongoing credit exposure through timely review of counterparty balances against contract terms and due dates, account and financing receivable reconciliations, bankruptcy monitoring, lessee audits and dispute resolution. The Partnership may employ legal counsel or collection specialists to pursue recovery of defaulted receivables.

19. Leases

As of December 31, 2024, the Partnership had two operating leases for office buildings. On January 1, 2019, the Partnership entered into a new lease for the West Virginia office building owned by WPPLP with a five-year base term and five additional five-year renewal options. Upon lease commencement and as of December 31, 2024 and 2023, the Partnership was reasonably certain to exercise all renewal options included in the lease and capitalized the right-of-use asset and corresponding lease liability on its Consolidated Balance Sheets using the present value of the future lease payments over 30 years. On January 1, 2023, the Partnership entered into a new lease for an office building in Houston with an 11.4 year initial term and two additional five-year renewal options. Upon lease commencement and as of December 31, 2024 and 2023, the Partnership was reasonably certain to exercise all renewal options included in the lease and capitalized the right-of-use asset and corresponding lease liability on its Consolidated Balance Sheets using the present value of the future lease payments over 21.4 years. The Partnership's right-of-use asset included within other long-term assets, net on its Consolidated Balance Sheets totaled $4.2 million and $4.3 million at December 31, 2024 and 2023, respectively. The Partnership's lease liability included in other non-current liabilities on its Consolidated Balance Sheets totaled $4.4 million and $4.3 million at December 31, 2024 and 2023, respectively. During the years ended December 31, 2024, 2023 and 2022, the Partnership incurred total operating lease expenses of $0.6 million, $0.6 million and $0.5 million included in both operating and maintenance expenses and general and administrative expenses on its Consolidated Statements of Comprehensive Income.

The following table details the maturity analysis of the Partnership's operating lease liability and reconciles the undiscounted cash flows to the operating lease liability included on its Consolidated Balance Sheet:

Remaining Annual Lease Payments (In thousands)	December 31, 2024
2025	$ 601
2026	604
2027	607
2028	611
2029	614
After 2029	11,425
Total lease payments (1)	$ 14,462
Less: present value adjustment (2)	(10,095)
Total operating lease liability	$ 4,367

(1) The remaining lease terms of the Partnership's two operating leases are 24 years and 19.4 years.

(2) The present value of the operating lease liability on the Partnership's Consolidated Balance Sheets was calculated using a 13.5% discount rate on the 30-year lease and a 13.4% discount rate on the 21.4-year lease. These rates represent the Partnership's estimated incremental borrowing rates under its two operating leases. As the Partnership's leases do not provide an implicit rate, the Partnership estimated the incremental borrowing rates at the time the leases were entered into by utilizing the rate of the Partnership's secured debt and adjusting it for factors that reflect the profile of borrowing over the 30-year and 21.4-year expected lease terms, respectively.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of December 31, 2024. This evaluation was performed under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer of GP Natural Resource Partners LLC, our managing general partner. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of December 31, 2024 at the reasonable assurance level in producing the timely recording, processing, summary and reporting of information and in accumulation and communication of information to management to allow for timely decisions with regard to required disclosures.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer of GP Natural Resource Partners LLC, our managing general partner, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2024 based on the framework in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission "2013 Framework" (COSO). Based on that evaluation, as of December 31, 2024, our management concluded that our internal control over financial reporting was effective at a reasonable assurance level based on those criteria. No changes were made to our internal control over financial reporting during the last fiscal quarter that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Ernst & Young, LLP, the independent registered public accounting firm who audited the Partnership's consolidated financial statements included in this Annual Report on Form 10-K, has issued a report on the Partnership's internal control over financial reporting, which is included herein.

Report of Independent Registered Public Accounting Firm

The Partners of Natural Resource Partners L.P.

Opinion on Internal Control Over Financial Reporting

We have audited Natural Resource Partners L.P.'s internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Natural Resource Partners L.P. (the Partnership) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Natural Resource Partners L.P. as of December 31, 2024 and 2023, the related consolidated statements of comprehensive income, partners' capital and cash flows for each of the three years in the period ended December 31, 2024, and the related notes and our report dated February 28, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

The Partnership'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 Partnership'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 Partnership 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/ Ernst & Young LLP

Houston, Texas
February 28, 2025

ITEM 9B. OTHER INFORMATION

During the fiscal quarter ended December 31, 2024, none of our officers or directors, as defined in Rule 16a-1(f), informed us of the adoption, modification or termination of any "Rule 10b5-1 trading arrangement" or a "non-Rule 10b5-1 trading arrangement," as those terms are defined in Item 408 of Regulation S-K.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE MANAGING GENERAL PARTNER AND CORPORATE GOVERNANCE

As a master limited partnership, we do not employ any of the people responsible for the management of our properties. Instead, we reimburse affiliates of our managing general partner, GP Natural Resource Partners LLC, for their services. The following table sets forth information concerning the directors and officers of GP Natural Resource Partners LLC as of the date of this Annual Report on Form 10-K. Each officer and director is elected for their respective office or directorship on an annual basis. RCM is entitled to appoint the members of the Board of Directors of GP Natural Resource Partners LLC.

Name	Age	Position with the General Partner
Corbin J. Robertson, Jr.	77	Chairman of the Board and Chief Executive Officer
Craig W. Nunez	63	President and Chief Operating Officer
Christopher J. Zolas	50	Chief Financial Officer
Kevin J. Craig	56	Executive Vice President
Philip T. Warman	54	General Counsel and Secretary
Gregory F. Wooten	68	Senior Vice President, Chief Engineer
Galdino J. Claro	65	Director
Paul B. Murphy, Jr.	65	Director
Richard A. Navarre	64	Director
Corbin J. Robertson, III	54	Director
Stephen P. Smith	63	Director
Leo A. Vecellio, Jr.	78	Director

Corbin J. Robertson, Jr. has served as Chief Executive Officer and Chairman of the Board of Directors of GP Natural Resource Partners LLC since 2002. Mr. Robertson, Jr. has vast business experience having founded and served as a director and as an officer of multiple companies, both private and public, and has served on the boards of numerous non-profit organizations. He has served as the Chief Executive Officer and Chairman of the Board of the general partner of Great Northern Properties Limited Partnership since 1992 and Quintana Minerals Corporation since 1978, as Chairman of the Board of Directors of New Gauley Coal Corporation since 1986, and the general partner of Western Pocahontas Properties Limited Partnership since 1986. Mr. Robertson, Jr. is also Chief Executive Officer and a member of the Board of Managers of Pocahontas Royalties LLC. He also served as a Principal with Quintana Capital Group until 2023. Mr. Robertson, Jr. is Chairman of the Board of the Cullen Trust for Higher Education, Chairman of the Board of KLX Energy Services Holdings, Inc. and is on the boards of the American Petroleum Institute, the National Petroleum Council, the Baylor College of Medicine and the Spirit Golf Association. In 2006, Mr. Robertson, Jr. was inducted into the Texas Business Hall of Fame. Mr. Robertson, Jr. is the father of Corbin J. Robertson, III.

Craig W. Nunez has served as President and Chief Operating Officer of GP Natural Resource Partners LLC since August 2017 and previously served as Chief Financial Officer and Treasurer of GP Natural Resource Partners LLC from January 2015 to August 2017. Prior to joining NRP, Mr. Nunez was an owner and Chief Executive Officer of Bocage Group, a private investment company specializing in energy, natural resources and master limited partnerships since March 2012. In addition, until joining NRP, he was a FINRA-registered Investment Advisor Representative with Searle & Co since July 2012 and served as an Executive Advisor to Capital One Asset Management since January 2014. From September 2011 through March 2012, Mr. Nunez served as the Executive Vice President and Chief Financial Officer of Quicksilver Resources Canada, Inc. Mr. Nunez was Senior Vice President and Treasurer of Halliburton Company from January 2007 until September 2011, and Vice President and Treasurer of Halliburton Company from February 2006 to January 2007. Prior to that, he was Treasurer of Colonial Pipeline Company from November 1995 to February 2006. Mr. Nunez has been involved in numerous charitable organizations and currently serves on the boards of Goodwill Industries of Houston and Medical Bridges, Inc.

Christopher J. Zolas has served as Chief Financial Officer since August 2017 and also served as Treasurer from August 2017 until May 2023. Mr. Zolas served as Chief Accounting Officer of GP Natural Resource Partners LLC from March 2015 to August 2017. Prior to joining NRP, Mr. Zolas served as Director of Financial Reporting at Cheniere Energy, Inc., a publicly traded energy company, where he performed financial statement preparation and analysis, technical accounting and SEC reporting for five separate SEC registrants, including a master limited partnership. Mr. Zolas joined Cheniere Energy, Inc. in 2007 as Manager of SEC Reporting and Technical Accounting and was promoted to Director in 2009. Prior to joining Cheniere Energy, Inc., Mr. Zolas worked in public accounting with KPMG LLP from 2002 to 2007.

Kevin J. Craig was named Executive Vice President of GP Natural Resource Partners LLC in February 2021, after serving as Executive Vice President, Coal of GP Natural Resource Partners LLC since September 2014. Mr. Craig was the Vice President of Business Development for GP Natural Resource Partners LLC since 2005. Mr. Craig also represents NRP as one of its appointees to the Board of Managers of Sisecam Wyoming LLC. Mr. Craig joined NRP in 2005 from CSX Transportation. He has extensive marketing, finance and operations experience within the energy industry. Mr. Craig served as a member of the West Virginia House of Delegates, having been elected in 2000 and re-elected in 2002, 2004, 2006, 2008, 2010 and 2012. In addition to other leadership positions, Delegate Craig served as Chairman of the Committee on Energy. Mr. Craig did not seek re-election in 2014 and his term ended in January 2015. Prior to joining CSX, he served as a Captain in the United States Army. Mr. Craig has served as the Chairman of the Huntington Regional Chamber of Commerce Board of Directors and continues as a member of both the West Virginia Chamber of Commerce and the Huntington Regional Chamber of Commerce's respective board of directors. He serves as a member of the Board of Directors of Encova Mutual Insurance Company, the West Virginia University Board of Governors and the WVU Medicine Board of Governors.

Philip T. Warman has served as General Counsel and Secretary of GP Natural Resource Partners LLC since August 2021. Mr. Warman previously served as Executive Vice President, General Counsel and Secretary of SandRidge Energy Inc. from August 2010 until June 2019. He was Associate General Counsel for SEC and finance matters for Spectra Energy Corporation from January 2007 through July 2010. From 1998 through 2006 he practiced law as a corporate finance attorney with Vinson & Elkins, LLP in Houston, Texas. Mr. Warman earned a Bachelor of Science in Chemical Engineering from the University of Houston in 1993 and graduated from the University of Texas School of Law in 1998.

Gregory F. Wooten was named Senior Vice President, Chief Engineer of GP Natural Resource Partners LLC in February 2021, after serving as Vice President, Chief Engineer of GP Natural Resource Partners LLC since December 2013. Mr. Wooten joined NRP in 2007, serving as Regional Manager. Prior to joining NRP, Mr. Wooten served as Vice President, Chief Operating Officer and Chief Engineer of Dingess Rum Properties, Inc., where he managed coal, oil, gas and timber properties from 1982 until 2007. Mr. Wooten has over 35 years of experience in the coal industry, working as a planning and production engineer and is a member of the American Institute of Mining, Metallurgical, and Petroleum Engineers. Mr. Wooten also serves as the President of the National Council of Coal Lessors and is a board member of the West Virginia, Kentucky, Indiana and Montana Coal Council. He also serves on the board of the Cabell-Huntington Hospital and is a member of the West Virginia School Building Authority.

Galdino J. Claro joined the Board of Directors of GP Natural Resource Partners LLC in March 2018. Mr. Claro has 30 years of worldwide executive leadership experience in the primary and secondary metals industries and is currently the Chief Executive Officer of the Wilmington Paper Corporation and an Independent Director of Phoenix Global. From October 2013 to August 2017, Mr. Claro served as the Group Chief Executive Officer and Managing Director of Sims Metal Management where he was also a member of the Safety, Health, Environment and Sustainability Committee, the Nomination Governance Committee and the Finance Investment Committee. Before joining Sims Metal Management, Mr. Claro served for four years as the Chief Executive Officer of Harsco Metals and Minerals. He joined Harsco from Aleris, where he served as CEO of Aleris Americas. Before that, he was the CEO of the Metals Processing Group of Heico Companies LLC. During his career with Alcoa Inc., Mr. Claro served for five years as the President of Alcoa China and for six years in Europe as the Vice President of Soft Alloys Extrusions and the President of Alcoa Europe Extrusions. While in South America, Mr. Claro worked for several different divisions of Alcoa Alumni SA as plant manager, technology manager, new products development director and Managing Director of Alcoa Cargo-Van. Before joining Alcoa in 1985, Mr. Claro started his career at Honda-Motogear as a Quality Control Manager where he worked for three years in both Brazil and Japan.

Paul B. Murphy, Jr. joined the Board of Directors of GP Natural Resource Partners LLC in March 2018. Mr. Murphy retired from Cadence Bank in April 2023 after a 42-year career as a commercial banker serving 21 of those years as a CEO. Mr. Murphy helped raise $1 billion to invest in the distressed banking industry in 2010. He acquired Cadence Bank and three others and had strong core growth reaching $18 billion in assets. In 2021 Cadence merged with BancorpSouth and today the company is $48 billion in assets with 400 branches in 9 states and trades on the NYSE (CADE). Previously, Mr. Murphy spent 20 years at Amegy Bank of Texas, helping to steer that institution from $75 million in assets and a single location to assets of $11 billion and 85 banking centers at the time of his departure as the Chief Executive Officer and a Director in 2009. Mr. Murphy is an advocate of the community and is a board member of Oceaneering International, Inc., Hope and Healing Center and Institute and the Houston Hispanic Chamber of Commerce. He previously served on the Board of the Houston branch of the Dallas Federal Reserve and the Houston Endowment.

Richard A. Navarre joined the Board of Directors of GP Natural Resource Partners LLC in October 2013. Mr. Navarre brings extensive operating, financial, strategic planning, public company and coal industry experience to the Board of Directors. Mr. Navarre is former Chairman, President and CEO of Covia Holdings, a leading provider of high quality minerals and material solutions for the industrial and energy markets. From 1993 until 2012, Mr. Navarre held senior executive positions with Peabody Energy Corporation, including President-Americas, President and Chief Commercial Officer, Executive Vice President of Corporate Development and Chief Financial Officer. Mr. Navarre serves on the Board of Directors of Civeo Corporation, where he serves as Chairman and member of the Environmental, Social, Governance and Nominating Committee and Core Natural Resources, where he serves as Lead Independent Director, Governance Committee Chair, and Compensation Committee Member. He is a member of the Hall of Fame of the College of Business and a member of the Board of Advisors of the College of Business and Analytics of Southern Illinois University Carbondale. He is the former Chairman of the Bituminous Coal Operators' Association. Mr. Navarre is a Certified Public Accountant. Mr. Navarre also has been involved in numerous civic and charitable organizations throughout his career.

Corbin J. Robertson, III joined the Board of Directors of GP Natural Resource Partners LLC in May 2013. Mr. Robertson, III is currently Principal, co-owner and director of Quintana Minerals Corporation and sole owner of CIII Capital Management, LLC, the primary investment vehicles for Mr. Robertson and his family's investments in various industries. He has over 30 years of experience in private equity and investing. Mr. Robertson, III is Vice President and on the Board of Managers of the general partner of Western Pocahontas Properties Limited Partnership, an affiliate of NRP, and previously served as it's CEO through 2023. Previously, Mr. Robertson was the co-Managing Partner of LKCM Headwater Investments GP, LLC, a billion dollar plus private equity firm he co-founded with Luther King Capital Management investing in industrial distribution, financial services, energy, consumer products and healthcare businesses. Mr. Robertson began his career as a business analyst for Deloitte & Touche Consulting Group LLP and has worked in the private equity/principal investing industry since 1995. Mr. Robertson has founded or acquired multiple successful businesses in his career prior to co-founding Headwater. Mr. Robertson is currently a Board member of Sunnova Energy International Inc. (NYSE: NOVA), Independent Life Insurance Company, and multiple private boards of Quintana Minerals Corporation affiliated/CIII Capital Management portfolio companies. Mr. Robertson also sits on a couple of philanthropic boards, Texas Parks & Wildlife Foundation and the University of Texas Development Board. Mr. Robertson graduated with a Bachelor of Arts in the nationally recognized Plan II Liberal Arts Honors program and two Bachelors of Business Administration in Business Honors and Finance from University of Texas at Austin and holds a Masters of Business Administration from Harvard Business School.

Stephen P. Smith joined the Board of Directors of GP Natural Resource Partners LLC in 2004. Mr. Smith brings extensive public company financial experience in the power and energy industries to the Board of Directors. Mr. Smith formerly served as Chief Financial Officer, Chief Accounting Officer and Director of the general partner of Columbia Pipeline Partners L.P. from September 2014 until June 2016. Mr. Smith also formerly served as Executive Vice President and Chief Financial Officer of Columbia Pipeline Group from July 2015 to June 2016. Mr. Smith served as Executive Vice President and Chief Financial Officer for NiSource, Inc. from August 2008 to June 2015. Prior to joining NiSource, he held several positions with American Electric Power Company, Inc, including Senior Vice President - Shared Services from January 2008 to June 2008, Senior Vice President and Treasurer from January 2004 to December 2007, and Senior Vice President - Finance from April 2003 to December 2003.

Leo A. Vecellio, Jr. joined the Board of Directors of GP Natural Resource Partners LLC in May 2007. Mr. Vecellio brings extensive experience in the aggregates and coal mine development industry to the Board of Directors. Mr. Vecellio and his family have been in the aggregates materials and construction business since the late 1930s. Since November 2002, Mr. Vecellio has served as Chairman and Chief Executive Officer of Vecellio Group, Inc, a major aggregates producer, contractor and oil terminal developer/operator in the Mid-Atlantic and Southeastern states. For nearly 30 years prior to that time Mr. Vecellio served in various capacities with Vecellio & Grogan, Inc., having most recently served as Chairman and Chief Executive Officer from April 1996 to November 2002. Mr. Vecellio is the former Chairman of the American Road and Transportation Builders and is a longtime member of the Florida Council of 100, as well as many other civic and charitable organizations.

Corporate Governance

Board Meetings and Executive Sessions

The Board of Directors met eight times in 2024. During 2024, our non-management directors met in executive sessions several times. The presiding director was Mr. Vecellio, the Chairman of our Compensation, Nominating and Governance Committee, or CNG Committee. In addition, our independent directors met several times in executive session in 2024. Mr. Vecellio was the presiding director at those meetings. Interested parties may communicate with our non-management directors by writing a letter to the Chairman of the CNG Committee, NRP Board of Directors, 1415 Louisiana Street, Suite 3325, Houston, Texas 77002.

Independence of Directors

The Board of Directors has affirmatively determined that Messrs. Claro, Navarre, Smith, and Vecellio are independent based on all facts and circumstances considered by the Board of Directors, including the standards set forth in Section 303A.02(a) of the NYSE's listing standards. Because we are a limited partnership as defined in Section 303A of the NYSE's listing standards, we are not required to have a majority of independent directors on the Board of Directors. The Board of Directors has an Audit Committee, a CNG Committee and a Conflicts Committee, each of which is staffed solely by independent directors.

Audit Committee

Our Audit Committee is comprised of Mr. Smith, who serves as chairman, Mr. Claro and Mr. Navarre. Mr. Smith and Mr. Navarre are "Audit Committee Financial Experts" as determined pursuant to Item 407 of Regulation S-K. During 2024, the Audit Committee met six times.

Report of the Audit Committee

Our Audit Committee is composed entirely of independent directors. The members of the Audit Committee meet the independence and experience requirements of the New York Stock Exchange. The Audit Committee has adopted, and annually reviews, a charter outlining the practices it follows. The charter complies with all current regulatory requirements. The Audit Committee Charter is available on our website at *www.nrplp.com* and is available in print upon request.

During 2024, at each of its meetings, the Audit Committee met with the senior members of our financial management team, our general counsel and our independent auditors. The Audit Committee had private sessions at certain of its meetings with our independent auditors and the senior members of our financial management team and the general counsel at which candid discussions of financial management, accounting and internal control and legal issues took place.

The Audit Committee approved the engagement of Ernst & Young LLP as our independent auditors for the year ended December 31, 2024 and reviewed with our financial managers and the independent auditors overall audit scopes and plans, the results of internal and external audit examinations, evaluations by the auditors of our internal controls and the quality of our financial reporting.

Management has reviewed the audited financial statements in the Annual Report with the Audit Committee, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant accounting judgments and estimates, and the clarity of disclosures in the financial statements. In addressing the quality of management's accounting judgments, members of the Audit Committee asked for management's representations and reviewed certifications prepared by the Chief Executive Officer and Chief Financial Officer that our unaudited quarterly and audited consolidated financial statements fairly present, in all material respects, our financial condition and results of operations, and have expressed to both management and auditors their general preference for conservative policies when a range of accounting options is available.

The Audit Committee has discussed with the independent auditors the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the Commission. The Audit Committee has received the written disclosures and the letter from the independent accountant required by applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the independent accountant the independent accountant's independence.

In performing all of these functions, the Audit Committee acts only in an oversight capacity. The Audit Committee reviews our Quarterly Reports on Form 10-Q and Annual Reports on Form 10-K prior to filing with the Securities and Exchange Commission. In 2024, the Audit Committee also reviewed quarterly earnings announcements with management and representatives of the independent auditor in advance of their issuance. In its oversight role, the Audit Committee relies on the work and assurances of our management, which has the primary responsibility for financial statements and reports, and of the independent auditors, who, in their report, express an opinion on the conformity of our annual financial statements with U.S. generally accepted accounting principles.

In reliance on these reviews and discussions, and the report of the independent auditors, the Audit Committee has recommended to the Board of Directors, and the Board of Directors has approved, that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2024, for filing with the Securities and Exchange Commission.

Stephen P. Smith, Chairman
Galdino J. Claro
Richard A. Navarre

Compensation, Nominating and Governance Committee

Executive officer compensation is administered by the CNG Committee, which is currently comprised of three members: Mr. Vecellio, as Chairman, Mr. Navarre and Mr. Smith. During 2024, the CNG Committee met four times. Our Board of Directors appoints the CNG Committee and delegates to the CNG Committee responsibility for:

- reviewing and approving the compensation for our executive officers in light of the time that each executive officer allocates to our business;
- reviewing and recommending the annual and long-term incentive plans in which our executive officers participate and approving awards thereunder; and
- reviewing and approving compensation for the Board of Directors.

Our Board of Directors has determined that each CNG Committee member is independent under the listing standards of the NYSE and the rules of the SEC.

Pursuant to its charter, the CNG Committee is authorized to obtain at NRP's expense compensation surveys, reports on the design and implementation of compensation programs for directors and executive officers and other data that the CNG Committee considers as appropriate. In addition, the CNG Committee has the sole authority to retain and terminate any outside counsel or other experts or consultants engaged to assist it in the evaluation of compensation of our directors and executive officers. The CNG Committee Charter is available in print upon request.

Partnership Agreement

Investors may view our partnership agreement and the amendments to the partnership agreement on our website at *www.nrplp.com*. The partnership agreement is also filed with the SEC and is available in print to any unitholder that requests them.

Corporate Governance Guidelines and Code of Business Conduct and Ethics

We have adopted Corporate Governance Guidelines. We have also adopted a Code of Business Conduct and Ethics that applies to our management, and complies with Item 406 of Regulation S-K. Our Corporate Governance Guidelines and our Code of Business Conduct and Ethics are available on our website at *www.nrplp.com* and are available in print upon request. We intend to disclose future amendments to certain provisions of the Code of Business Conduct and Ethics, and waivers of the Code of Business Conduct and Ethics granted to executive officers and directors, on the website within four business days following the date of the amendment or waiver.

NYSE Certification

Pursuant to Section 303A of the NYSE Listed Company Manual, in 2024, Corbin J. Robertson, Jr. certified to the NYSE that he was not aware of any violation by the Partnership of NYSE corporate governance listing standards.

ITEM 11. EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Overview

As a publicly traded partnership, we have a unique employment and compensation structure that is different from that of a typical public corporation. Our executive officers based in Houston, Texas are employed by Quintana Minerals Corporation ("Quintana"), and our executive officers based in Huntington, West Virginia are employed by Western Pocahontas Properties Limited Partnership ("Western Pocahontas"). Quintana and Western Pocahontas are controlled by our Chairman and Chief Executive Officer and are affiliates of NRP. While our executive officers are employed by affiliates of NRP, each of them has been appointed to serve as an executive officer of GP Natural Resource Partners LLC ("GP LLC"), the general partner of NRP (GP) LLC ("NRP GP"), the general partner of NRP. For a more detailed description of our structure, see "Items 1. and 2. Business and Properties—Partnership Structure and Management" in this Annual Report on Form 10-K.

Although our executives' salaries and bonuses are paid directly by the private companies that employ them, we reimburse those companies based on the time allocated to NRP by each executive officer. Our reimbursement for the compensation of executive officers is governed by our partnership agreement. For purposes of this Compensation Discussion and Analysis, our "named executive officers" are:

- Corbin J. Robertson, Jr.—Chairman and Chief Executive Officer
- Craig W. Nunez—President and Chief Operating Officer
- Christopher J. Zolas—Chief Financial Officer
- Philip T. Warman—General Counsel and Secretary
- Kevin J. Craig—Executive Vice President

Executive Officer Compensation Strategy and Philosophy

Under our partnership agreement, each quarter we are required to distribute all of our available cash, as such term is defined in our partnership agreement. The Board of Directors considers numerous factors each quarter in determining cash distributions including profitability, cash flow, debt service obligations, market conditions and outlook, estimated unitholder income tax liability and the level of cash reserves that the board determines are necessary for future operating and capital needs. Our primary objective over the last eight years has been to use all internally generated cash flow to reduce debt while paying distributions to common unitholders sufficient to cover income tax liability on their share of the partnership's taxable income. Our compensation philosophy is designed to attract, motivate and retain highly talented executives, while keeping them focused on promoting our strategic objectives to manage the business under current market conditions and position the partnership as a key beneficiary of the transitional energy economy of the future. Our objective in determining the compensation of our executive officers is to incentivize them to create long-term value for our unitholders and other stakeholders. We believe our compensation programs encourage sustained long-term profitability by making a portion of each executive officer's total direct compensation variable and dependent on our achievement of safety, financial and strategic performance goals as well as the total unitholder return of our common units. Thus, a significant portion of our executives' total compensation is performance-based and not guaranteed, as further described under "—Components of Compensation."

Although we reimburse Quintana and Western Pocahontas, as applicable, for the applicable portion of our executive officers' compensation, the CNG Committee is responsible for administering our executive officer compensation programs. To help retain and motivate executives, the CNG Committee aims to offer competitive compensation packages through a mix of cash and long-term, equity-based incentives. The CNG Committee does not have any formal policies for allocating total compensation among the various components. Instead, the CNG Committee uses its judgment, in consultation with the independent compensation consultant, to establish an appropriate balance of short-term and long-term compensation for such executive officers for their services to us. The balance may change from year to year based on the amount of time an executive spends in service to us, our corporate strategy, financial performance and non-financial objectives, among other considerations.

Summary of Compensation Practices

We strive to maintain judicious governance standards and compensation practices by regularly reviewing best practices. The CNG Committee incorporated many best practices when forming our 2024 compensation program, including the following:

What We Do

✔ Align our executive compensation with long-term performance

✔ Align executives' interests with those of unitholders

✔ Engage an independent compensation consultant, NFP Compensation Consultants ("NFP"), to assess our practices

✔ Maintain trading policies that restrict all employees and directors from pledging or short selling our securities, entering into any derivative transactions with respect to our securities, or otherwise hedging the risk and rewards of our securities

✔ Review the independence of any compensation consultant that is engaged to assist in our compensation analysis

✔ Provide limited perquisites

What We Don't Do

✘ Automatically increase salaries each year or make lock-step changes in compensation based on peer group compensation levels or metrics

✘ Pay guaranteed or multi-year cash bonuses

✘ Provide significant perquisites

✘ Provide tax gross-ups

The 2024 compensation for executive officers consisted of four primary components:

- base salaries;
- short-term cash incentive compensation;
- long-term equity incentive compensation; and
- perquisites and other benefits.

Mr. Robertson does not receive a salary in his capacity as Chief Executive Officer. Mr. Robertson is compensated through short-term cash and long-term equity incentive awards, all of which is allocated to NRP. To the extent other executive officers spend time on non-NRP matters, NRP bears only the proportionate cost of their base salaries, short-term cash incentive compensation and perquisites and other benefits.

In February of each year, the CNG Committee approves the short-term cash incentive awards for the year just ended and long-term incentive awards for the executive officers. The CNG Committee considers the performance of the partnership, the performance of the individuals and the outlook for the future in determining the amounts of the awards.

Each February, the CNG Committee also makes awards of equity-based awards to be settled in common units under the Natural Resource Partners 2017 Plan to NRP's officers in order to incentivize management and align the long-term interests of management and NRP unitholders.

Role of the CNG Committee

The CNG Committee oversees our executive compensation and employee benefit programs, and reviews and approves all compensation decisions relating to our executive officers and directors. The CNG Committee also approves its report for inclusion in this Annual Report and has reviewed and discussed this Compensation Discussion and Analysis with management.

Specifically, the CNG Committee reviews and approves the compensation for our executive officers. It reviews and approves the annual and long-term incentive plans in which our executive officers participate, and it also reviews and approves compensation programs for the members of the Board of Directors, as described further below.

Role of Independent Compensation Consultant and Market Data

The CNG Committee engaged NFP to review our compensation practices for executive officers and directors relative to our peers. NFP provides no services to management or the CNG Committee that are unrelated to the duties and responsibilities of the CNG Committee, and the CNG Committee makes all decisions regarding the compensation of our executive officers and directors. NFP reports directly to the CNG Committee, and all work conducted by NFP for us is on behalf of the CNG Committee. The CNG Committee has determined that no conflicts of interest exist as a result of the engagement of NFP.

The CNG Committee, with input from NFP, selected our peer group (the "Peer Group") after reviewing annual revenue, market capitalization, total enterprise value and total assets of relevant public companies to determine which companies were representative of the marketplace for talent within which we compete. The CNG Committee will review the Peer Group annually to ensure continued appropriateness for comparative purposes. The CNG Committee determined that the companies below reflect an appropriate Peer Group for 2024:

Amplify Energy Corp.
Berry Corporation
Black Stone Minerals, L.P.
Brigham Minerals, Inc.
CatchMark Timber Trust, Inc.
CONSOL Coal Resources LP
Earthstone Energy Inc.
Falcon Minerals Corporation
Kimbell Royalty Partners, LP
NACCO Industries, Inc.
PHX Minerals, Inc.
Ramaco Resources, Inc.
Ranger Oil Corporation
Ring Energy, Inc.
SilverBow Resources, Inc.
Smart Sand, Inc.
SunCoke Energy, Inc.
W&T Offshore Inc.

NFP provides the CNG Committee with Peer Group data for comparison purposes, such as to compare equity and pay mix practices. Market pay levels are one of multiple factors considered by the CNG Committee in setting applicable compensation amounts and determining the appropriate design of incentive compensation programs. The Peer Group used in 2024 is identical to the Peer Group used in 2023 except that companies that are no longer publicly traded were removed.

Role of Our Executive Officers in the Compensation Process

With respect to 2024 salaries and short-term cash incentive awards and long-term equity incentive awards, Mr. Nunez, our President and Chief Operating Officer, provided Mr. Robertson with recommendations relating to the executive officers other than himself. Mr. Robertson considered those recommendations and provided the CNG Committee with recommendations for all of the executive officers other than himself. Messrs. Robertson and Nunez considered the factors described elsewhere in this Compensation Discussion and Analysis in recommending, in their discretion, the appropriate amounts of compensation for each executive officer (other than for themselves). Messrs. Robertson and Nunez attended the CNG Committee meetings, other than executive sessions called by the CNG Committee, at which the CNG Committee deliberated and approved the salaries, short-term cash incentive awards and long-term equity incentive awards for 2024. Messrs. Robertson and Nunez were excused from the meetings when the CNG Committee discussed their compensation.

Components of Compensation

Base Salaries

With the exception of Mr. Robertson, who does not receive a salary for his services as Chief Executive Officer, our executive officers are paid an annual base salary by Quintana or Western Pocahontas for services rendered to us by the executive officers during the fiscal year. We then reimburse Quintana and Western Pocahontas based on the time allocated to our business by each executive officer. The base salaries of our executive officers are reviewed on an annual basis as well as at the time of a promotion or other material change in responsibilities. The CNG Committee reviews and approves the full salaries paid to each executive officer by Quintana and Western Pocahontas, based on both the actual time allocations to NRP in the prior year and the anticipated time allocations in the coming year.

In determining salaries for NRP's executive officers for 2024, the CNG Committee considered several factors including the executive's position and level of responsibility within our organization, comparative market data and other external market-based factors. The CNG Committee also considered the individual performance, our partnership's overall performance during the fiscal year and the individual's contribution to our overall performance of each member of the executive management team during 2023. Salaries for 2024 are shown in the Summary Compensation Table below.

Short-Term Cash Incentive Compensation

Short-term cash incentive awards are determined based on the Partnership meeting and exceeding certain annual financial, strategic objectives and safety goals. Short-term cash incentive awards are used to motivate and reward our executive officers. Each executive officer received a short-term cash incentive award approved in February 2025 by the CNG Committee. The amounts awarded with respect to 2024 under this program are disclosed in the Summary Compensation Table under the Bonus column. With respect to 2024, the CNG Committee, using recommendations from NFP, determined that cash bonuses would be paid based on a percentage of base salary, with our Chief Executive Officer (who is not paid a base salary) receiving a bonus target of approximately 2.3 times a deemed base salary of $556,973 (which is the base salary of our President and Chief Operating Officer). For 2024, the CNG Committee used free cash flow, strategic objectives and safety as performance measures in determining the amount of bonuses paid under the plan, representing 75%, 20% and 5% of the total award, respectively. Based on the level of achievement of the performance measures, the CNG Committee used its discretion to set the amount of bonus payments as a percentage of target.

The following table shows the performance measures used in the 2024 short-term cash incentive compensation for our executive officers, together with the percentage of the total annual cash incentive grant that such component comprises. Each of the components for the executive officers is described in greater detail below:

Performance Measure	2024 Portion of Total Target Award
Free Cash Flow	75%
Strategic Objectives	20%
Safety	5%

We believe that these performance measures align our short-term incentive compensation with both unitholder and employee interests by targeting specific performance goals set forth in the first quarter of each year. By identifying meaningful performance measures, and by assigning greater weight to certain measures, we are able to more closely align compensation to the achievement of those business objectives over which particular employees have the greatest impact.

If the target level of performance is achieved with respect to a particular performance measure, the applicable payout percentage for that performance measure will equal 100%. Achievement at the threshold performance level results in a payout percentage for that performance measure that will equal 50%. If the maximum level of performance is achieved with respect to a particular performance measure the payout percentage for that measure will equal 200% of target performance, with the exception of safety which is capped at 100%. We interpolate payouts under the annual cash incentive awards for performance levels that fall between the threshold, target and maximum performance levels. There is no payout for performance that does not meet the threshold level criteria and there is no payout in excess of the maximum performance level.

Free Cash Flow

"Free Cash Flow" is calculated as cash flow from operating activities plus return on long-term contract receivable less cash flow used in investing activities, excluding proceeds from asset sales. Further, the CNG Committee determined that Free Cash Flow would be adjusted to exclude free cash flow received from Sisecam Wyoming and include the additional cash paid for interest on debt used for early settlement of outstanding warrants and preferred units. The CNG Committee utilized the budget approved by the Board during the annual review process and set the "target" level for this performance measure at 100% of budget. The threshold payout value was set at 80% of the Free Cash Flow budget and the maximum payout value was set at 120% of the budget. We consider this performance measure to be difficult to attain and appropriately reflective of our position in the inherently volatile commodities market. The following table shows the threshold, target and maximum levels for the 2024 short-term cash incentive compensation plan:

Performance Measure	Threshold	Target	Maximum
Free Cash Flow	$155,830,400	$194,788,000	$233,745,600

Strategic Objectives

Strategic Objectives are approved by the Board of Directors each year and reflect the broad strategic objectives of the Partnership, which may change year to year. The measure of performance of these strategic objectives is evaluated annually by the CNG Committee and the threshold, target and maximum payouts are at the discretion of the CNG Committee.

Safety

Safety is an important emphasis for the Partnership and, the Board of Directors believes, each of the Partnership's stakeholders. Strong safety performance leads to improved employee performance and lower costs associated with regulatory citations, insurance and litigation matters, which in turn lead to improved operating performance. Because of these factors, the CNG Committee uses Reportable Injuries and Lost Time Incidents as a component of the annual incentive compensation plan. Due to the non-operating nature of our business, the “Reportable Injuries and Lost Time Incidents” are set at a target of zero, with threshold or maximum measure. Additionally, the CNG Committee considers the Partnership's completion rate for annual safety trainings with a 100% employee completion rate.

2024 Payout Under the Short-term Cash Incentive Compensation Plan

In early 2025, the CNG Committee evaluated the levels of achievement of the various performance measures for 2024 and made the following determinations:

Performance Measure	Actual Performance	Applicable Payout Percentage	Relative Weighting	Weighted Payout Percentage
Free Cash Flow	$217,849,000	159%	75%	119%
Strategic Objectives	Board Satisfaction	100%	20%	20%
Safety	100%	100%	5%	5%

Based on the actual performance as set forth above, the cumulative amounts listed below were earned under the 2024 short-term cash incentive compensation for the Partnership's 2024 performance.

Name	Target as a % of Base Salary	Actual payout as a % of Base Salary	Dollar Amount of Actual payout ($)
Corbin J. Robertson, Jr. (1)	2.3x	2.3x	1,844,693
Craig Nunez	100%	144%	802,040
Christopher J. Zolas	80%	115%	454,749
Philip Warman	76%	109%	432,012
Kevin Craig (2)	80%	115%	415,753

(1) As Mr. Robertson does not receive a salary, his annual cash incentive is calculated as a multiple of the President and Chief Operating Officer’s actual payout.

(2) Mr. Craig allocated approximately 94% of his time to NRP during the year ended December 31, 2024, and the amount of short-term cash incentive compensation reflects this allocation.

The following table shows the target opportunities available to the named executive officers as a percentage of base salary and the actual payouts as a percentage of their base salaries for each of the last three years:

	2022		2023		2024	
Name	Target as % of Base Salary	Actual Payout as % of Target	Target as % of Base Salary	Actual Payout as % of Target	Target as % of Base Salary	Actual Payout as % of Target
Corbin J. Robertson, Jr. (1)	2.3x	195%	2.3x	185%	2.3x	144%
Craig Nunez	100%	195%	100%	185%	100%	144%
Christopher J. Zolas	80%	195%	80%	185%	80%	144%
Philip Warman	76%	195%	76%	185%	76%	144%
Kevin Craig	80%	195%	80%	185%	80%	144%

(1) As Mr. Robertson does not receive a salary, his annual cash incentive is calculated as a multiple of the President and Chief Operating Officer’s base salary.

Long-Term Equity Incentive Compensation

We have adopted the 2017 Plan pursuant to which we may grant equity-based compensation to our executive officers and other officers. Our CNG Committee believes that awards under the 2017 Plan promote the alignment of the interests of management with those of our unitholders and promote creation of value for our unitholders. In 2023, the CNG Committee determined it was appropriate to introduce additional performance measures in connection with long-term compensation to better align executive compensation with the Partnership's performance. We refer to these awards issued in 2024 as “2017 Plan Phantom Units.” The 2024 awards were made in the form of phantom units that will settle (following vesting) in NRP common units on a one-for-one basis and will accrue tandem distribution equivalent rights (“DERs”) to be paid in cash upon settlement.

2024 Annual Grants

The award granted in February 2024 (“2024 Award”) provided a form of performance-based long-term incentive compensation. This award included a mix of time-based and performance-based phantom units awarded at target; 35% will time-vest ratably over a three-year period and 65% will cliff vest with the actual number of units issued vesting for each phantom unit to be determined by the performance score. The performance score shall be the relative total unit holder return (“TUR”) performance score plus the financial performance score, both weighted at 50%. The 2017 Plan Phantom Units are subject to forfeiture and will vest on an accelerated basis following death or disability of the award recipient, following a change in control of NRP, or termination without cause or for good reason. The grant date fair value of the 2017 Plan Phantom Units awarded in 2024 is disclosed in the Summary Compensation Table under the Stock Awards column. In determining the award amounts the CNG Committee used a percent target of base salary.

The following table sets forth the long-term equity award targets and number of units granted to each named executive officer in 2024:

	2024 Award		
Named Executive Officer	**Target as % of Base Salary**	**Time-Based**	**Performance-Based**
Corbin J. Robertson, Jr. (1)	1.84x	8,267	15,354
Craig W. Nunez	224%	4,493	8,344
Christopher J. Zolas	153%	2,175	4,040
Philip T. Warman	85%	1,209	2,244
Kevin J. Craig	90%	1,244	2,311

(1) As Mr. Robertson does not receive a salary, his annual cash incentive is calculated as a multiple of the President and Chief Operating Officer’s base salary.

Relative Total Unitholder Return

For the relative TUR measure, the performance-based units will be eligible to vest based on the Partnership's TUR relative to the Partnership's performance peer group over the three-year performance period. The TUR calculation will be based on a “point-to-point” approach using the 20 calendar-day volume-weighted average of the closing price per share of the Partnership or a member of the peer group, as applicable, at the beginning and end of the performance period. In the event that our TUR is negative, the payout will be capped at target, regardless of peer group performance. In the instance of a merger, acquisition or delisting of a peer company during the performance period, the company would be removed from the peer group. The companies used for our performance peer group for the 2024 Award at the time of the grant are listed below:

Alliance Resource Partners, L.P.
Alpha Metallurgical Resources, Inc.
Arch Resources, Inc.
CONSOL Coal Resources LP
Corsa Coal Corp.
Enviva Inc.
Peabody Energy Corporation
Ramaco Resources, Inc. (NYSE: METC)
Ramaco Resources, Inc. (NYSE: METCB)
SunCoke Energy, Inc.
Warrior Met Coal, Inc.

If the target level of performance is achieved, the payout percentage will equal 100%. Achievement at the threshold performance level will result in a payout at 50% of target performance and achievement at the maximum performance level will result in a payout at 200% of target performance. We interpolate payouts for performance levels that fall between the stated performance levels. There is no payout for performance that does not meet the threshold level and there is no payout in excess of the maximum performance level. The following table shows the performance levels for the 2024 long-term performance-based equity awards:

Performance Measure	Threshold	Target	Maximum
Relative Total Unitholder Return	18th Percentile	45th Percentile	91st Percentile

Financial Performance Score

The financial performance score is calculated based on cumulative three-year free cash flow. “Free Cash Flow” is defined as cash from operating activities plus return on long-term contract receivable less cash flow used in investing activities, excluding proceeds from asset sales. Payouts will be determined based on the achievement of cumulative free cash flow relative to targets set by the Committee. We consider this performance measure to be difficult to attain and appropriately reflective of our position in the inherently volatile commodities market.

Perquisites and Other Personal Benefits

Both Quintana and Western Pocahontas maintain employee benefit plans that provide our executive officers and other employees with the opportunity to enroll in health, dental and life insurance plans. Each of these benefit plans requires the employee to pay a portion of the health and dental premiums, with the company paying the remainder. These benefits are offered on the same basis to all employees of Quintana and Western Pocahontas, and the company costs are reimbursed by us to the extent the employee allocates time to our business.

In 2024, Quintana and Western Pocahontas maintained tax-qualified 401(k) plans. During 2024, Quintana and Western Pocahontas matched 100% of the first 6.0% of the employee contributions under their respective 401(k) plans. As with the other contributions, any amounts contributed by Quintana and Western Pocahontas are reimbursed by us based on the time allocated by the employee to our business. None of NRP, Quintana or Western Pocahontas maintains a pension plan or a defined benefit retirement plan.

Other Compensation Policies and Practices

Unit Ownership Requirements

NRP maintains Unit Ownership and Retention Guidelines (the “ownership guidelines”) that are administered by the CNG Committee and require NRP’s officers who are required to file ownership reports under Section 16 of the Securities Exchange Act of 1934 (the “Exchange Act”) and certain other officers as designated from time-to-time by the Board of Directors or the CNG Committee to retain all common units awarded under any NRP incentive plan (net of any units withheld or sold to cover tax liabilities) until certain ownership guidelines are met. The following table sets forth the ownership guidelines. There is no minimum time period required to achieve the unit ownership guidelines.

Position	Requirement
Chief Executive Officer (1)	N/A
President and Chief Operating Officer	3 x Salary
Chief Financial Officer	3 x Salary
General Counsel	1.5 x Salary
Executive Vice President	2 x Salary

(1) Ownership guidelines due not currently apply to our Chief Executive Officer due to his substantial ownership in NRP.

The ownership guidelines also require directors who are not officers to retain common units with a value equal to three times the amount of the annual cash retainer paid to directors. Directors are required to achieve the unit ownership guideline within five years. Until the unit ownership guideline is achieved, each director is encouraged to retain all common units awarded under any NRP incentive plan (net of any units sold to cover tax liabilities).

Units that count towards the satisfaction of the officer and director guidelines include common units held directly by the executive officer or director, common units owned indirectly by the executive officer or director (e.g., by a spouse or other immediate family member residing in the same household or a trust for the benefit of the executive officer or director or his or her family), units granted under NRP’s long-term incentive plans (including phantom units representing the right to receive units) and units purchased in the open market (whether purchased before or after the effective date of the ownership guidelines). As of December 31, 2024, all executive officers were in compliance with ownership guidelines.

Incentive Compensation Recoupment Policy

NRP maintains the Natural Resource Partners L.P. Incentive-Based Compensation Recoupment Policy, which is administered by the CNG Committee. The policy authorizes the Board of Directors or any committee thereof to recoup incentive compensation in the event of a restatement of financial statements due to material non-compliance with securities laws, fraud or misconduct. See policy at Exhibit 97.1 in this Annual Report on Form 10-K.

Securities Trading Policy

Our insider trading policy restricts employees and directors, as well as their designees, from purchasing or selling puts or calls to sell or buy our common units, engaging in short sales with respect to our common units, buying our securities on margin or pledging our securities to secure debt or engaging in any transactions that would be deemed to be a hedging transaction involving our securities. See policy as Exhibit 19.1 in this Annual Report on Form 10-K.

Policies and Practices Related to Stock Options

We do not currently grant, nor have we historically granted, stock options or similar awards as part of our equity compensation programs. If stock options or similar awards were to be granted in the future, NRP would not grant such options or similar awards in anticipation of the release of material nonpublic information that is likely to result in changes to the price of our common units. During fiscal year 2024, we did not time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation.

Risk Assessment of Compensation Plans

We believe that our compensation program does not encourage excessive or unnecessary risk taking. This is primarily due to the fact that our compensation programs and the compensation arrangements are designed to encourage our employees, including our executive officers, to focus on both short-term and long-term strategic goals, thereby creating an ownership culture and helping to align the interests of our employees and our unitholders. Accordingly, our compensation program is balanced between short-term and long-term incentives, as well as cash and equity-based forms of settlement.

Overall, we believe that the balance within our compensation program results in an appropriate compensation structure and that the program does not pose risks that could have a material adverse effect on our business or financial performance.

Report of the Compensation, Nominating and Governance Committee

The CNG Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on the reviews and discussions referred to in the foregoing sentence, the CNG Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K for the year ended December 31, 2024.

Leo A. Vecellio, Jr., Chairman
Richard A. Navarre
Stephen P. Smith

Summary Compensation Table

The following table sets forth the amounts reimbursed to affiliates of our general partner for compensation for 2022, 2023 and 2024:

Name and Principal Position (1)	Year	Salary ($)	Bonus ($)	Stock Awards ($) (2)	All Other Compensation ($) (3)	Total ($)
Corbin J. Robertson, Jr.—Chief Executive Officer						
	2024	—	1,844,693	2,142,425	—	3,987,118
	2023	—	2,369,918	5,638,047	—	8,007,965
	2022	—	2,379,068	3,096,757	—	5,475,825
Craig W. Nunez—President and Chief Operating Officer						
	2024	556,973	802,040	1,164,316	20,700	2,544,029
	2023	556,973	1,030,400	3,064,159	19,800	4,671,332
	2022	530,450	1,034,378	1,683,020	18,300	3,266,148
Christopher J. Zolas—Chief Financial Officer						
	2024	394,748	454,749	563,701	20,700	1,433,898
	2023	394,748	584,226	1,369,645	19,800	2,368,419
	2022	375,950	586,482	709,414	18,300	1,690,146
Philip T. Warman—General Counsel and Secretary (4)						
	2024	394,748	432,012	313,187	20,700	1,160,647
	2023	394,748	555,015	849,337	19,800	1,818,900
Kevin J. Craig—Executive Vice President (5)						
	2024	360,897	415,753	322,439	28,670	1,127,759
	2023	337,861	500,034	871,561	26,243	1,735,699

(1) In 2024, Messrs. Robertson, Nunez, Zolas, Warman and Craig spent approximately 50%, 100%, 100%, 100% and 94%, respectively, of their time on NRP matters.

(2) Amounts represent the grant date fair value of phantom unit awards determined in accordance with Accounting Standards Codification Topic 718 determined without regard to forfeitures. For information regarding the assumptions used in calculating these amounts, see "Item 8. Financial Statements and Supplementary Data—Note 16. Unit-Based Compensation" elsewhere in this Annual Report on Form 10-K for more information.

(3) Includes portions of 401(k) matching allocated to Natural Resource Partners by Quintana and Western Pocahontas.

(4) Mr. Warman was not a named executive officer in 2022.

(5) Mr. Craig was not a named executive officer in 2022. Mr. Craig allocated approximately 94% of his time to NRP during the year ended December 31, 2024 and amounts included under the “Salary,” “Bonus” and “All Other Compensation” columns reflect this allocation. Amounts included under “Stock Awards” are paid 100% by NRP.

Grants of Plan-Based Awards in 2024

The following table shows the 2017 Plan Phantom Units granted to named executive officers during 2024. Based on the grant, the awards in the table below will either vest ratably in 2025, 2026 and 2027 or cliff vest in 2027. Upon settlement, an equivalent number of common units will be issued to each named executive officer, subject to withholding. The 2017 Plan Phantom Units also accrue DERs from the grant date, which will be paid out in cash upon settlement following and subject to vesting.

		2017 Plan Phantom Units				
		Estimated Future Payouts Under Equity Incentive Plan Awards (1)			All other Unit Awards (2)	
Named Executive Officer	Grant Date	Threshold (#)	Target (#)	Maximum (#)	Units (#)	Grant Date Fair Value ($)
Corbin J. Robertson, Jr	2/7/2024	7,677	15,354	30,708		1,392,608
	2/7/2024				8,267	749,817
Craig W. Nunez	2/7/2024	4,172	8,344	16,688		756,801
	2/7/2024				4,493	407,515
Christopher J. Zolas	2/7/2024	2,020	4,040	8,080		366,428
	2/7/2024				2,175	197,273
Philip T. Warman	2/7/2024	1,122	2,244	4,488		203,531
	2/7/2024				1,209	109,656
Kevin J. Craig	2/7/2024	1,156	2,311	4,622		209,608
	2/7/2024				1,244	112,831

(1) The units represent performance-based awards and cliff vest in February 2027. The number of units that vest, if at all, will be between the threshold and maximum.

(2) The units represent time-based awards and vest ratably in February 2025, 2026 and 2027.

Employment Agreements

None of our named executive officers have an employment agreement.

Outstanding Equity Awards at December 31, 2024

The table below shows the total number of outstanding 2017 Plan Phantom Units held by each named executive officer at December 31, 2024. Performance-based units are valued assuming target is met.

Named Executive Officer	Unvested 2017 Plan Phantom Units	Market Value of Unvested 2017 Plan Phantom Units ($) (6)
Corbin J. Robertson, Jr. (1)	135,602	15,051,822
Craig W. Nunez (2)	73,697	8,180,367
Christopher J. Zolas (3)	33,228	3,688,308
Philip T. Warman (4)	17,847	1,981,017
Kevin J. Craig (5)	20,910	2,321,010

(1) 90,782 units are time-based and vest ratably in February 2025, 2026 and 2027, and 44,820 units are performance based and cliff vest in February 2026 and 2027.

(2) 49,339 units are time-based and vest ratably in February 2025, 2026 and 2027, and 24,358 units are performance based and cliff vest in February 2026 and 2027.

(3) 21,437 units are time-based and vest ratably in February 2025, 2026 and 2027, and 11,791 units are performance based and cliff vest in February 2026 and 2027.

(4) 11,311 units are time-based and vest ratably in February 2025, 2026 and 2027, and 6,536 units are performance based and cliff vest in February 2026 and 2027.

(5) 14,179 units are time-based and vest ratably in February 2025, 2026 and 2027, and 6,731 units are performance based and cliff vest in February 2026 and 2027.

(6) Based on a unit price of $111.00, the closing price for the common units on December 31, 2024.

Units Vested in 2024

The table below shows the value realized by each named executive officer as a result of the vesting of their phantom unit awards granted under the 2017 Plan:

Named Executive Officer	2017 Plan Phantom Units	Value Realized on Vesting ($) (1) (2)
Corbin J. Robertson, Jr.	73,529	6,906,277
Craig W. Nunez	43,858	4,129,007
Christopher J. Zolas	20,791	1,961,680
Philip T. Warman	5,951	550,458
Kevin J. Craig	14,151	1,335,633

(1) Based on a unit price of $86.91, the closing price for the common units on February 14, 2024.

(2) Includes DERs accrued from the issue date to the settlement date.

Potential Payments upon Termination or Change in Control

Upon the occurrence of a change in control or termination without cause of NRP, our general partner, or GP Natural Resource Partners LLC, 2017 Plan Phantom Units held by each of our named executive officers would immediately vest and become payable and they are entitled to no other benefits because we do not have employment contracts. The table below indicates the estimated payments to each named executive officer following a change in control at December 31, 2024.

	2017 Plan Equity Awards			
Named Executive Officer	Unvested Phantom Units	Market Value ($) (1)	Accumulated DERs ($)	Total Potential Payments ($)
Corbin J. Robertson, Jr.	135,602	15,051,822	1,328,258	16,380,080
Craig W. Nunez	73,697	8,180,367	721,886	8,902,253
Christopher J. Zolas	33,228	3,688,308	321,816	4,010,124
Philip T. Warman	17,847	1,981,017	167,271	2,148,288
Kevin J. Craig	20,910	2,321,010	205,593	2,526,603

(1) Calculated based on a unit price of $111.00, the closing price for the common units on December 31, 2024.

Directors' Compensation for the Year Ended December 31, 2024

For more information regarding the Board of Directors and committees thereof, see "Item 10. Directors and Executive Officers of the Managing General Partner and Corporate Governance" elsewhere in this Annual Report on Form 10-K. Director compensation during 2024 consisted of a $75,000 cash retainer and an award of common units under the 2017 Plan. The phantom units awarded to Board of Directors members in 2024 vest after one year; however, the Board of Directors members had the option in advance of receipt of the award to elect to defer settlement of the award until after 90 days following such director's retirement or earlier departure from the Board of Directors. In addition, members of Board of Directors committees received $8,000, $7,500 and $5,000 for serving on the audit, CNG and conflicts committees, respectively, and the chairman of the audit, compensation, nominating and governance and conflicts committees received an additional $20,000, $15,000 and $15,000, respectively, for acting as chairman.

The table below shows the directors' compensation for the year ended December 31, 2024:

Name of Director	Fees Earned or Paid in Cash ($)	2017 Plan Common Unit Awards ($) (1)	Total Compensation ($)
S. Reed Morian (2)	37,500	115,021	152,521
Richard A. Navarre (3)	110,500	115,021	225,521
Corbin J. Robertson, III	75,000	115,021	190,021
Stephen P. Smith (4)	110,500	115,021	225,521
Leo A. Vecellio, Jr.	102,500	115,021	217,521
Paul B. Murphy, Jr.	75,000	115,021	190,021
Galdino J. Claro	88,000	115,021	203,021

(1) Amounts represent the grant date fair value of phantom unit awards determined in accordance with Accounting Standards Codification Topic 718 determined without regard to forfeitures. For information regarding the assumptions used in calculating these amounts, see "Item 8. Financial Statements and Supplementary Data—Note 16. Unit-Based Compensation" elsewhere in this Annual Report on Form 10-K. All of the phantom units reported in this column were outstanding on December 31, 2024 and will vest on February 7, 2025. As of December 31, 2024, each of the current directors hold the following number of outstanding phantom unit awards: Mr. Navarre, 5,537; Mr. Robertson, 1,183; Mr. Smith, 19,265; Mr. Vecellio, 1,183; Mr. Murphy, 1,183 and Mr. Claro, 1,183.

(2) Mr. Morian passed away in April 2024 at which time his phantom units awarded in February 2024 were forfeited.

(3) Mr. Navarre elected to defer settlement of his common units awarded under the 2017 Plan in 2018 and 2019 until 90 days following his retirement or earlier departure from the Board of Directors. As of December 31, 2024, 5,537 phantom units previously awarded to Mr. Navarre were outstanding but only 1,183 were unvested.

(4) Mr. Smith elected to defer settlement of his common units awarded under the 2017 Plan in 2018, 2019, 2020, 2021 and 2022 until 90 days following his retirement or earlier departure from the Board of Directors. As of December 31, 2024, 19,265 phantom units previously awarded to Mr. Smith were outstanding but only 1,183 were unvested.

Compensation Committee Interlocks and Insider Participation

During the year ended December 31, 2024, Messrs. Vecellio, Navarre, and Smith served on the CNG Committee. None of Messrs. Vecellio, Navarre and Smith has ever been an officer or employee of NRP or GP LLC. None of our executive officers serve as a member of the board of directors or compensation committee of any entity that has any executive officer serving as a member of our Board or CNG Committee.

Pay Ratio Disclosure

The Securities and Exchange Commission has adopted a rule requiring annual disclosure of the ratio of the median employee's total annual compensation to the total annual compensation of the principle executive officer.

The personnel providing services to us, including our executive officers, are employed by Quintana or Western Pocahontas. As of December 31, 2024, 54 such persons were providing services to us. We identified a new median service provider for 2024 by examining the 2024 total taxable compensation, as reflected in our payroll records as reported to the Internal Revenue Service on Form W-2, for all individuals who provided services to us as of December 31, 2024. We did not make any assumptions, adjustments or estimates with respect to total cash compensation or equity compensation and we did not annualize the compensation for any service providers that were not employed for all of 2024.

After identifying the median service provider based on total compensation, we calculated annual 2024 compensation for the median service provider using the same methodology used to calculate the Chief Executive Officer's total compensation as reflected in the Summary Compensation Table above. The median service provider's annual 2024 compensation was as follows:

Name	Year	Salary ($)	Bonus ($)	Non-Equity Incentive Plan Compensation ($)	Stock Awards ($)	All Other Compensation ($)	Total ($)
Median Service Provider	2024	182,514	—	17,693	—	9,330	182,514

Our 2024 ratio of Chief Executive Officer total compensation of $3,987,118 to our median service provider's total compensation of $182,514 is reasonably estimated to be 22:1.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following tables set forth, as of February 14, 2025, the amount and percentage of our common units beneficially held by (1) each person known to us to beneficially own 5% or more of any class of our units, (2) by each of our directors and named executive officers and (3) by all directors and executive officers as a group. Unless otherwise noted, each of the named persons and members of the group has sole voting and investment power with respect to the units shown.

Name of Beneficial Owner	Common Units	Percentage of Common Units (1)
Corbin J. Robertson, Jr. (2)	2,604,255	19.8%
Quintana Management LLC (3)	1,883,986	14.3%
The Goldman Sachs Group, Inc. (4)	685,315	5.2%
Kevin J. Craig	40,505	*
Craig W. Nunez	108,474	*
Philip T. Warman	8,411	*
Christopher J. Zolas	51,958	*
Galdino J. Claro	21,292	*
Paul B. Murphy, Jr.	23,985	*
Richard A. Navarre (5)	18,178	*
Corbin J. Robertson III (6)	255,834	1.9%
Stephen P. Smith (7)	3,805	*
Leo A. Vecellio, Jr.	23,532	*
Directors and Officers as a Group (8)	3,197,492	24.3%

* Less than one percent.

(1) 13,138,097 common units issued and outstanding as of February 14, 2025.

(2) Mr. Robertson, Jr. may be deemed to beneficially own 703,955 common units owned in his capacity as controlling owner of Quintana Holdings, LP, 1,727,986 common units in his capacity as controlling member of Quintana Management LLC, which is the sole member of Western Pocahontas GP LLC, which is the general partner of Western Pocahontas Properties Limited Partnership, 156,000 common units in his capacity as the controlling member of Quintana Management LLC, which is the sole member of Robertson Coal Management LLC, which is the sole member of GP Natural Resource Partners LLC, which is the general partner of NRP (GP) LP, 11,021 common units in his capacity as controlling shareholder of Western Pocahontas Corporation, and 5,293 common units in his capacity as controlling shareholder of GNP Management Corporation. Mr. Robertson, Jr.'s address is 1415 Louisiana Street, Suite 2400, Houston, Texas 77002.

(3) Quintana Management LLC has voting and dispositive power with respect to 1,727,986 common units in its capacity as sole member of Western Pocahontas GP LLC, which is the general partner of Western Pocahontas Properties Limited Partnership and 156,000 common units in its capacity as the sole member of Robertson Coal Management LLC, which is the sole member of GP Natural Resource Partners LLC, which is the general partner of NRP (GP) LP. The business address of Quintana Management LLC is 1415 Louisiana Street, Suite 2400, Houston, Texas 77002.

(4) According to a Schedule 13G/A filing with the SEC on November 7, 2024, The Goldman Sachs Group holds shared voting power and shared dispositive power with respect to 685,315 common units in the Partnership. The business address of The Goldman Sachs Group is 200 West Street, New York, NY 10282.

(5) Does not include 4,354 common units awarded pursuant to NRP's long-term incentive plan that Mr. Navarre has elected to defer settlement of until 90 days following the date that he no longer serves on NRP's Board of Directors.

(6) Mr. Robertson III may be deemed to beneficially own 9,783 common units held by CIII Capital Management, LLC, 10,000 common units held by BHJ Investments LP, 19,663 common units held by The Corbin James Robertson III, 2009 Family Trust and 39 common units held by his spouse, Brooke Robertson. The address for CIII Capital Management, LLC, BHJ Investments LP, and The Corbin James Robertson III, 2009 Family Trust is 1415 Louisiana Street, Suite 2400, Houston, Texas 77002. The following common units are pledged as collateral for loans: 68,873 common units owned by Mr. Robertson III.

(7) Does not include 18,082 common units awarded pursuant to NRP's long-term incentive plan that Mr. Smith has elected to defer settlement of until 90 days following the date that he no longer serves on NRP's Board of Directors. Mr. Smith may be deemed to beneficially own 2,622 common units owned by the SP Smith 2002 Revocable Trust.

(8) NRP's directors and executive officers as a group consists of 12 individuals.

Securities Authorized for Issuance under Equity Compensation Plans

The following table shows the securities authorized for issuance under our 2017 Long-Term Incentive Plan as of December 31, 2024. The initial number of common units authorized for issuance pursuant to awards under the plan was 800,000 and in March 2022, an additional 800,000 units were authorized for issuance.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	—	—	720,957 (1)
Equity compensation plans not approved by security holders	n/a	n/a	n/a
Total	—	—	720,957

(1) As of December 31, 2024, 349,764 of the 2017 Plan Phantom Units were outstanding. Each 2017 Plan Phantom Units represents the right to receive one common unit, together with associated distribution equivalent rights.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Relationships with Entities Associated with Corbin J. Robertson, Jr.

Western Pocahontas Properties Limited Partnership, New Gauley Coal Corporation, and Great Northern Properties Limited Partnership are three privately held companies that are primarily engaged in owning and managing mineral properties. We refer to these companies collectively as the "WPP Group". Corbin J. Robertson, Jr. controls the general partner of Western Pocahontas Properties, 85% of the general partner of Great Northern Properties Limited Partnership and is the Chairman and Chief Executive Officer of New Gauley Coal Corporation.

Omnibus Agreement

As part of the omnibus agreement entered into concurrently with the closing of our initial public offering (the "Omnibus Agreement"), the WPP Group and any entity controlled by Corbin J. Robertson, Jr., which we refer to in this section as the “GP affiliates,” each agreed that neither they nor their affiliates will, directly or indirectly, engage or invest in entities that engage in the following activities (each, a "restricted business") in the specific circumstances described below:

- the entering into or holding of leases with a party other than an affiliate of the GP affiliate for any GP affiliate-owned fee coal within the United States; and
- the entering into or holding of subleases with a party other than an affiliate of the GP affiliate for coal within the United States controlled by a paid-up lease owned by any GP affiliate or its affiliate.

"Affiliate" means, with respect to any GP affiliate or, any other entity in which such GP affiliate owns, through one or more intermediaries, 50% or more of the then outstanding voting securities or other ownership interests of such entity. Except as described below, the WPP Group and its controlled affiliates will not be prohibited from engaging in activities in which they compete directly with us.

A GP affiliate may, directly or indirectly, engage in a restricted business if:

- the GP affiliate was engaged in the restricted business at the closing of the offering; provided that if the fair market value of the asset or group of related assets of the restricted business subsequently exceeds $10 million, the GP affiliate must offer the restricted business to us under the offer procedures described below.
- the asset or group of related assets of the restricted business have a fair market value of $10 million or less; provided that if the fair market value of the assets of the restricted business subsequently exceeds $10 million, the GP affiliate must offer the restricted business to us under the offer procedures described below.
- the asset or group of related assets of the restricted business have a fair market value of more than $10 million and the general partner (with the approval of the conflicts committee) has elected not to cause us to purchase these assets under the procedures described below.
- its ownership in the restricted business consists solely of a non-controlling equity interest.

For purposes of this paragraph, "fair market value" means the fair market value as determined in good faith by the relevant GP affiliate.

The total fair market value in the good faith opinion of the WPP Group of all restricted businesses engaged in by the WPP Group, other than those engaged in by the WPP Group at closing of our initial public offering (and except as described below under "—Pocahontas Royalties LLC"), may not exceed $75 million. For purposes of this restriction, the fair market value of any entity engaging in a restricted business purchased by the WPP Group will be determined based on the fair market value of the entity as a whole, without regard for any lesser ownership interest to be acquired.

If the WPP Group desires to acquire a restricted business or an entity that engages in a restricted business with a fair market value in excess of $10 million and the restricted business constitutes greater than 50% of the value of the business to be acquired, then the WPP Group must first offer us the opportunity to purchase the restricted business. If the WPP Group desires to acquire a restricted business or an entity that engages in a restricted business with a value in excess of $10 million and the restricted business constitutes 50% or less of the value of the business to be acquired, then the GP affiliate may purchase the restricted business first and then offer us the opportunity to purchase the restricted business within six months of acquisition.

For purposes of this paragraph, "restricted business" excludes a general partner interest or managing member interest, which is addressed in a separate restriction summarized below. For purposes of this paragraph only, "fair market value" means the fair market value as determined in good faith by the relevant GP affiliate.

If we want to purchase the restricted business and the GP affiliate and the general partner, with the approval of the conflicts committee, agree on the fair market value and other terms of the offer within 60 days after the general partner receives the offer from the GP affiliate, we will purchase the restricted business as soon as commercially practicable. If the GP affiliate and the general partner, with the approval of the conflicts committee, are unable to agree in good faith on the fair market value and other terms of the offer within 60 days after the general partner receives the offer, then the GP affiliate may sell the restricted business to a third party within two years for no less than the purchase price and on terms no less favorable to the GP affiliate than last offered by us. During this two-year period, the GP affiliate may operate the restricted business in competition with us, subject to the restriction on total fair market value of restricted businesses owned in the case of the WPP Group.

If, at the end of the two-year period, the restricted business has not been sold to a third party and the restricted business retains a value, in the good faith opinion of the relevant GP affiliate, in excess of $10 million, then the GP affiliate must reoffer the restricted business to the general partner. If the GP affiliate and the general partner, with the approval of the conflicts committee, agree on the fair market value and other terms of the offer within 60 days after the general partner receives the second offer from the GP affiliate, we will purchase the restricted business as soon as commercially practicable. If the GP Affiliate and the general partner, with the concurrence of the conflicts committee, again fail to agree after negotiation in good faith on the fair market value of the restricted business, then the GP affiliate will be under no further obligation to us with respect to the restricted business, subject to the restriction on total fair market value of restricted businesses owned.

In addition, if during the two-year period described above, a change occurs in the restricted business that, in the good faith opinion of the GP affiliate, affects the fair market value of the restricted business by more than 10 percent and the fair market value of the restricted business remains, in the good faith opinion of the relevant GP affiliate, in excess of $10 million, the GP affiliate will be obligated to reoffer the restricted business to the general partner at the new fair market value, and the offer procedures described above will recommence.

If the restricted business to be acquired is in the form of a general partner interest in a publicly held partnership or a managing member interest in a publicly held limited liability company, the WPP Group may not acquire such restricted business even if we decline to purchase the restricted business. If the restricted business to be acquired is in the form of a general partner interest in a non-publicly held partnership or a managing member of a non-publicly held limited liability company, the WPP Group may acquire such restricted business subject to the restriction on total fair market value of restricted businesses owned and the offer procedures described above.

The Omnibus Agreement may be amended at any time by the general partner, with the concurrence of the conflicts committee. The respective obligations of the WPP Group under the Omnibus Agreement terminate when the WPP Group and its affiliates cease to participate in the control of the general partner. For more information, see the Omnibus Agreement attached as Exhibit 10.3 to this Annual Report on Form 10-K.

Pocahontas Royalties LLC

On February 28, 2020, Pocahontas Royalties LLC ("Pocahontas Royalties") completed the acquisition of a private company that owns approximately one million acres of mineral rights and leases coal to coal mine operators in Central Appalachia. Pocahontas Royalties is controlled by Corbin J. Robertson, Jr. and members of his family. Reed Morian, one of the former directors of GP Natural Resource Partners LLC, also serves on the Board of Managers of Pocahontas Royalties.

In connection with the closing of the acquisition, we and Pocahontas Royalties entered into a limited waiver of the Omnibus Agreement pursuant to which we waived the provision of the Omnibus Agreement that restricts Mr. Robertson, Jr. and his affiliates (other than NRP) from owning, operating or investing in fee coal in the United States with an aggregate fair market value in excess of $75 million. Mr. Robertson had previously offered NRP the opportunity to participate in the acquisition and we determined, after due consideration, not to participate.

In addition, on February 28, 2020, we and Pocahontas Royalties entered into a right of first offer agreement pursuant to which Pocahontas Royalties granted us the exclusive right of first offer to purchase any assets (or entities holding such assets) proposed to be sold at any time by Pocahontas Royalties or any of its subsidiaries with a fair market value exceeding $2 million (individually or in the aggregate), excluding surface acreage, assets or rights (other than surface rights that are appurtenant to or necessary for the development of mineral rights). Provided that Pocahontas Royalties has provided us the opportunity to make a first offer within the time periods specified in the agreement, Pocahontas Royalties will be under no obligation to accept any offer timely made by us and may determine, in its sole discretion, to consummate a transaction with a third party free and clear of any obligations to us.

Office Building in Huntington, West Virginia

We lease an office building in Huntington, West Virginia from Western Pocahontas Properties Limited Partnership. The initial 10-year term of the lease expired at the end of 2018. On January 1, 2019, we entered into a new lease on the building for a five-year base term, with five additional five-year renewal options. We paid approximately $0.8 million to Western Pocahontas under the lease during the year ended December 31, 2024.

Conflicts of Interest

Conflicts of interest exist and may arise in the future as a result of the relationships between our general partner and its affiliates (including the WPP Group and Pocahontas Royalties) on the one hand, and our partnership and our limited partners, on the other hand. The directors and officers of GP Natural Resource Partners LLC have duties to manage GP Natural Resource Partners LLC and our general partner in a manner beneficial to its owners. At the same time, our general partner has a duty to manage our Partnership in a manner beneficial to us and our unitholders. The Delaware Revised Uniform Limited Partnership Act, which we refer to as the "Delaware Act", provides that Delaware limited partnerships may, in their partnership agreements, expand, restrict or eliminate the fiduciary duties otherwise owed by a general partner to limited partners and the partnership. Pursuant to these provisions, our partnership agreement contains various provisions modifying the fiduciary duties that would otherwise be owed by our general partner with contractual standards governing the duties of the general partner and the methods of resolving conflicts of interest. Our partnership agreement also specifically defines the remedies available to limited partners for actions taken that, without these defined liability standards, might constitute breaches of fiduciary duty under applicable Delaware law.

Whenever a conflict arises between our general partner or its affiliates, on the one hand, and our partnership or any other partner, on the other, our general partner will resolve that conflict. Our general partner may, but is not required to, seek the approval of the conflicts committee of the Board of Directors of such resolution. The partnership agreement contains provisions that allow our general partner to take into account the interests of other parties in addition to our interests when resolving conflicts of interest.

Our general partner will not be in breach of its obligations under the partnership agreement or its duties to us or our unitholders if the resolution of the conflict is considered to be fair and reasonable to us. Any resolution is considered to be fair and reasonable to us if that resolution is:

- approved by the conflicts committee, although our general partner is not obligated to seek such approval and our general partner may adopt a resolution or course of action that has not received approval;
- on terms no less favorable to us than those generally being provided to or available from unrelated third parties; or
- fair to us, taking into account the totality of the relationships between the parties involved, including other transactions that may be particularly favorable or advantageous to us.

In resolving a conflict, our general partner, including its conflicts committee, may, unless the resolution is specifically provided for in the partnership agreement, consider:

- the relative interests of any party to such conflict and the benefits and burdens relating to such interest;
- any customary or accepted industry practices or historical dealings with a particular person or entity;
- generally accepted accounting practices or principles; and
- such additional factors it determines in its sole discretion to be relevant, reasonable or appropriate under the circumstances.

Conflicts of interest could arise in the situations described below, among others.

Actions taken by our general partner may affect the amount of cash available for distribution to unitholders.

The amount of cash that is available for distribution to unitholders is affected by decisions of our general partner regarding such matters as:

- amount and timing of asset purchases and sales;
- cash expenditures;
- borrowings;
- the issuance of additional common units; and
- the creation, reduction or increase of mineral rights in any quarter.

In addition, borrowings by us and our affiliates do not constitute a breach of any duty owed by our general partner to the unitholders, including borrowings that have the purpose or effect of enabling our general partner to receive distributions.

For example, in the event we have not generated sufficient cash from our operations to pay the quarterly distribution on our common units, our partnership agreement permits us to borrow funds which may enable us to make this distribution on all outstanding common units.

The partnership agreement provides that we and our subsidiaries may borrow funds from our general partner and its affiliates. Our general partner and its affiliates may not borrow funds from us or our subsidiaries.

We do not have any officers or employees. We rely on officers and employees of GP Natural Resource Partners LLC and its affiliates.

We do not have any officers or employees and rely on officers and employees of GP Natural Resource Partners LLC and its affiliates. Affiliates of GP Natural Resource Partners LLC conduct businesses and activities of their own in which we have no economic interest. If these separate activities are significantly greater than our activities, there could be material competition for the time and effort of the officers and employees who provide services to our general partner. The officers of GP Natural Resource Partners LLC are not required to work full time on our affairs. Certain of these officers devote significant time to the affairs of the WPP Group or its affiliates and are compensated by these affiliates for the services rendered to them.

We reimburse our general partner and its affiliates for expenses.

We reimburse our general partner and its affiliates for costs incurred in managing and operating us, including costs incurred in rendering corporate staff and support services to us. The partnership agreement provides that our general partner determines the expenses that are allocable to us in any reasonable manner determined by our general partner in its sole discretion.

Our general partner intends to limit its liability regarding our obligations.

Our general partner intends to limit its liability under contractual arrangements so that the other party has recourse only to our assets, and not against our general partner or its assets. The partnership agreement provides that any action taken by our general partner to limit its liability or our liability is not a breach of our general partner's fiduciary duties, even if we could have obtained more favorable terms without the limitation on liability.

Common unitholders have no right to enforce obligations of our general partner and its affiliates under agreements with us.

Any agreements between us on the one hand, and our general partner and its affiliates, on the other, do not grant to the unitholders, separate and apart from us, the right to enforce the obligations of our general partner and its affiliates in our favor.

Contracts between us, on the one hand, and our general partner and its affiliates, on the other, are not the result of arm's-length negotiations.

The partnership agreement allows our general partner to pay itself or its affiliates for any services rendered to us, provided these services are rendered on terms that are fair and reasonable. Our general partner may also enter into additional contractual arrangements with any of its affiliates on our behalf. Neither the partnership agreement nor any of the other agreements, contracts and arrangements between us, on the one hand, and our general partner and its affiliates, on the other, are the result of arm's-length negotiations.

All of these transactions entered into after our initial public offerings are on terms that are fair and reasonable to us.

Our general partner and its affiliates have no obligation to permit us to use any facilities or assets of our general partner and its affiliates, except as may be provided in contracts entered into specifically dealing with that use. There is no obligation of our general partner or its affiliates to enter into any contracts of this kind.

We may not choose to retain separate counsel for ourselves or for the holders of common units.

The attorneys, independent auditors and others who have performed services for us in the past were retained by our general partner, its affiliates and us and have continued to be retained by our general partner, its affiliates and us. Attorneys, independent auditors and others who perform services for us are selected by our general partner or the conflicts committee and may also perform services for our general partner and its affiliates. We may retain separate counsel for ourselves or the holders of common units in the event of a conflict of interest arising between our general partner and its affiliates, on the one hand, and us or the holders of common units, on the other, depending on the nature of the conflict. We do not intend to do so in most cases. Delaware case law has not definitively established the limits on the ability of a partnership agreement to restrict such fiduciary duties.

Our general partner's affiliates may compete with us.

The partnership agreement provides that our general partner is restricted from engaging in any business activities other than those incidental to its ownership of interests in us. Except as provided in our partnership agreement and the Omnibus Agreement, affiliates of our general partner will not be prohibited from engaging in activities in which they compete directly with us.

The Conflicts Committee Charter is available upon request.

Director Independence

For a discussion of the independence of the members of the Board of Directors of our managing general partner under applicable standards, see "Item 10. Directors and Executive Officers of the Managing General Partner and Corporate Governance—Corporate Governance—Independence of Directors," which is incorporated by reference into this Item 13.

Review, Approval or Ratification of Transactions with Related Persons

If a conflict or potential conflict of interest arises between our general partner and its affiliates (including the WPP Group and Pocahontas Royalties) on the one hand, and our partnership and our limited partners, on the other hand, the resolution of any such conflict or potential conflict is addressed as described under "—Conflicts of Interest."

Pursuant to our Code of Business Conduct and Ethics, conflicts of interest are prohibited as a matter of policy, except under guidelines approved by the Board of Directors and as provided in the Omnibus Agreement and our partnership agreement. For the year ended December 31, 2024 there were no transactions where such guidelines were not followed.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Audit Committee of the Board of Directors of GP Natural Resource Partners LLC recommended, and we engaged Ernst & Young LLP to audit our accounts and assist with tax compliance for fiscal 2024 and 2023. All of our audit, audit-related fees and tax services have been approved by the Audit Committee of our Board of Directors. The following table presents fees for professional services rendered by Ernst & Young LLP:

	2024	2023
Audit Fees (1)	$ 1,002,500	$ 972,500
Tax Fees (2)	455,000	442,270

(1) Audit fees include fees associated with the annual integrated audit of our consolidated financial statements and internal controls over financial reporting, separate audits of subsidiaries and reviews of our quarterly financial statement for inclusion in our Form 10-Q and comfort letters; consents; work related to acquisitions; assistance with and review of documents filed with the SEC.

(2) Tax fees include fees principally incurred for assistance with tax planning, compliance, tax return preparation and filing of Schedules K-1.

Audit and Non-Audit Services Pre-Approval Policy

I. Statement of Principles

Under the Sarbanes-Oxley Act of 2002 (the "Act"), the Audit Committee of the Board of Directors is responsible for the appointment, compensation and oversight of the work of the independent auditor. As part of this responsibility, the Audit Committee is required to pre-approve the audit and non-audit services performed by the independent auditor in order to assure that they do not impair the auditor's independence from the Partnership. To implement these provisions of the Act, the SEC has issued rules specifying the types of services that an independent auditor may not provide to its audit client, as well as the audit committee's administration of the engagement of the independent auditor. Accordingly, the Audit Committee has adopted, and the Board of Directors has ratified, this Audit and Non-Audit Services Pre-Approval Policy (the "Policy"), which sets forth the procedures and the conditions pursuant to which services proposed to be performed by the independent auditor may be pre-approved.

The SEC's rules establish two different approaches to pre-approving services, which the SEC considers to be equally valid. Proposed services may either be pre-approved without consideration of specific case-by-case services by the Audit Committee ("general pre-approval") or require the specific pre-approval of the Audit Committee ("specific pre-approval"). The Audit Committee believes that the combination of these two approaches in this Policy will result in an effective and efficient procedure to pre-approve services performed by the independent auditor. As set forth in this Policy, unless a type of service has received general pre-approval, it will require specific pre-approval by the Audit Committee if it is to be provided by the independent auditor. Any proposed services exceeding pre-approved cost levels or budgeted amounts will also require specific pre-approval by the Audit Committee.

For both types of pre-approval, the Audit Committee will consider whether such services are consistent with the SEC's rules on auditor independence. The Audit Committee will also consider whether the independent auditor is best positioned to provide the most effective and efficient service for reasons such as its familiarity with our business, employees, culture, accounting systems, risk profile and other factors, and whether the service might enhance the Partnership's ability to manage or control risk or improve audit quality. All such factors will be considered as a whole, and no one factor will necessarily be determinative.

The Audit Committee is also mindful of the relationship between fees for audit and non-audit services in deciding whether to pre-approve any such services and may determine, for each fiscal year, the appropriate ratio between the total amount of fees for audit, audit-related and tax services.

The appendices to the Policy describe the audit, audit-related and tax services that have the general pre-approval of the Audit Committee. The term of any general pre-approval is 12 months from the date of pre-approval, unless the Audit Committee considers a different period and states otherwise. For the audit, pre-approval is for the fiscal year as the time between approval and the actual issuance of the audit may be more than 12 months. The Audit Committee will annually review and pre-approve the services that may be provided by the independent auditor without obtaining specific pre-approval from the Audit Committee. The Audit Committee will add or subtract to the list of general pre-approved services from time to time, based on subsequent determinations.

The purpose of this Policy is to set forth the procedures by which the Audit Committee intends to fulfill its responsibilities. It does not delegate the Audit Committee's responsibilities to pre-approve services performed by the independent auditor to management.

Ernst & Young LLP, our independent auditor reviews this Policy annually and it does not adversely affect its independence.

II. Delegation

As provided in the Act and the SEC's rules, the Audit Committee has delegated either type of pre-approval authority to Stephen P. Smith, the Chairman of the Audit Committee. Mr. Smith must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting.

III. Audit Services

The annual Audit services engagement terms and fees will be subject to the specific pre-approval of the Audit Committee. Audit services include the annual financial statement audit (including required quarterly reviews), subsidiary audits and other procedures required to be performed by the independent auditor to be able to form an opinion on the Partnership's consolidated financial statements. These other procedures include information systems and procedural reviews and testing performed in order to understand and place reliance on the systems of internal control, and consultations relating to the audit or quarterly review. Audit services also include the attestation engagement for the independent auditor's report on internal controls for financial reporting. The Audit Committee monitors the audit services engagement as necessary, but not less than on a quarterly basis, and approves, if necessary, any changes in terms, conditions and fees resulting from changes in audit scope, partnership structure or other items.

In addition to the annual audit services engagement approved by the Audit Committee, the Audit Committee may grant general pre-approval to other audit services, which are those services that only the independent auditor reasonably can provide. Other audit services may include statutory audits or financial audits for our subsidiaries or our affiliates and services associated with SEC registration statements, periodic reports and other documents filed with the SEC or other documents issued in connection with securities offerings.

IV. Audit-related Services

Audit-related services are assurance and related services that are reasonably related to the performance of the audit or review of the Partnership's financial statements or that are traditionally performed by the independent auditor. Because the Audit Committee believes that the provision of audit-related services does not impair the independence of the auditor and is consistent with the SEC's rules on auditor independence, the Audit Committee may grant general pre-approval to audit-related services. Audit-related services include, among others, due diligence services pertaining to potential business acquisitions/dispositions; accounting consultations related to accounting, financial reporting or disclosure matters not classified as "Audit Services"; assistance with understanding and implementing new accounting and financial reporting guidance from rulemaking authorities; financial audits of employee benefit plans; agreed-upon or expanded audit procedures related to accounting and/or billing records required to respond to or comply with financial, accounting or regulatory reporting matters; and assistance with internal control reporting requirements.

V. Tax Services

The Audit Committee believes that the independent auditor can provide tax services to the Partnership such as tax compliance, tax planning and tax advice without impairing the auditor's independence, and the SEC has stated that the independent auditor may provide such services. Hence, the Audit Committee believes it may grant general pre-approval to those tax services that have historically been provided by the auditor, that the Audit Committee has reviewed and believes would not impair the independence of the auditor and that are consistent with the SEC's rules on auditor independence. The Audit Committee will not permit the retention of the independent auditor in connection with a transaction initially recommended by the independent auditor, the sole business purpose of which may be tax avoidance and the tax treatment of which may not be supported in the Internal Revenue Code and related regulations. The Audit Committee will consult with the Chief Financial Officer or outside counsel to determine that the tax planning and reporting positions are consistent with this Policy.

VI. Pre-Approval Fee Levels or Budgeted Amounts

Pre-approval fee levels or budgeted amounts for all services to be provided by the independent auditor will be established annually by the Audit Committee. Any proposed services exceeding these levels or amounts will require specific pre-approval by the Audit Committee. The Audit Committee is mindful of the overall relationship of fees for audit and non-audit services in determining whether to pre-approve any such services. For each fiscal year, the Audit Committee may determine the appropriate ratio between the total amount of fees for audit, audit-related and tax services.

VII. Procedures

All requests or applications for services to be provided by the independent auditor that do not require specific approval by the Audit Committee will be submitted to the Chief Financial Officer and must include a detailed description of the services to be rendered. The Chief Financial Officer will determine whether such services are included within the list of services that have received the general pre-approval of the Audit Committee. The Audit Committee will be informed on a timely basis of any such services rendered by the independent auditor.

Requests or applications to provide services that require specific approval by the Audit Committee will be submitted to the Audit Committee by both the independent auditor and the Chief Financial Officer, and must include a joint statement as to whether, in their view, the request or application is consistent with the SEC's rules on auditor independence.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) and (2) Financial Statements and Schedules

(1) See "Item 8. Financial Statements and Supplementary Data."

(2) All schedules are omitted because they are not required or because the information is immaterial or provided elsewhere in the Consolidated Financial Statements and Notes thereto.

(a)(3) Sisecam Wyoming LLC Financial Statements

The financial statements of Sisecam Wyoming LLC required pursuant to Rule 3-09 of Regulation S-X are included in this filing as Exhibit 99.1.

(a)(4) Exhibits

Exhibit Number	Description
3.1	Fifth Amended and Restated Agreement of Limited Partnership of Natural Resource Partners L.P., dated as of March 2, 2017 (incorporated by reference to Exhibit 3.1 to Current Report on Form 8-K filed on March 6, 2017).
3.2	Fifth Amended and Restated Agreement of Limited Partnership of NRP (GP) LP, dated as of December 16, 2011 (incorporated by reference to Exhibit 3.1 to Current Report on Form 8-K filed on December 16, 2011).
3.3	Fifth Amended and Restated Limited Liability Company Agreement of GP Natural Resource Partners LLC, dated as of October 31, 2013 (incorporated by reference to Exhibit 3.1 to Current Report on Form 8-K filed on October 31, 2013).
3.4	Amended and Restated Limited Liability Company Agreement of NRP (Operating) LLC, dated as of October 17, 2002 (incorporated by reference to Exhibit 3.4 of Annual Report on Form 10-K for the year ended December 31, 2002).
3.5	Certificate of Limited Partnership of Natural Resource Partners L.P. (incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 filed April 19, 2002, File No. 333-86582).
4.1	Note Purchase Agreement dated as of June 19, 2003 among NRP (Operating) LLC and the Purchasers signatory thereto (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed June 23, 2003).
4.2	First Amendment, dated as of July 19, 2005, to Note Purchase Agreement dated as of June 19, 2003 among NRP (Operating) LLC and the purchasers signatory thereto (incorporated by reference to Exhibit 4.2 to Current Report on Form 8-K filed on July 20, 2005).
4.3	Second Amendment, dated as of March 28, 2007, to Note Purchase Agreement dated as of June 19, 2003 among NRP (Operating) LLC and the purchasers signatory thereto (incorporated by reference to Exhibit 4.2 to Current Report on Form 8-K filed on March 29, 2007).
4.4	First Supplement to Note Purchase Agreement, dated as of July 19, 2005 among NRP (Operating) LLC and the purchasers signatory thereto (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on July 20, 2005).
4.5	Second Supplement to Note Purchase Agreement, dated as of March 28, 2007 among NRP (Operating) LLC and the purchasers signatory thereto (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on March 29, 2007).
4.6	Third Supplement to Note Purchase Agreement, dated as of March 25, 2009 among NRP (Operating) LLC and the purchasers signatory thereto (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on March 26, 2009).
4.7	Fourth Supplement to Note Purchase Agreement, dated as of April 20, 2011 among NRP (Operating) LLC and the purchasers signatory thereto (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on April 21, 2011).
4.8	Subsidiary Guarantee of Senior Notes of NRP (Operating) LLC, dated June 19, 2003 (incorporated by reference to Exhibit 4.5 to Current Report on Form 8-K filed June 23, 2003).
4.9	Form of Series A Note (incorporated by reference to Exhibit 4.2 to Current Report on Form 8-K filed June 23, 2003).
4.10	Form of Series D Note (incorporated by reference to Exhibit 4.12 to Annual Report on Form 10-K filed February 28, 2007).

Exhibit Number	Description
4.11	Form of Series E Note (incorporated by reference to Exhibit 4.3 to Current Report on Form 8-K filed March 29, 2007).
4.12	Form of Series F Note (incorporated by reference to Exhibit 4.2 to Quarterly Report on Form 10-Q filed May 7, 2009).
4.13	Form of Series G Note (incorporated by reference to Exhibit 4.3 to Quarterly Report on Form 10-Q filed May 7, 2009).
4.14	Form of Series H Note (incorporated by reference to Exhibit 4.2 to Quarterly Report on Form 10-Q filed May 5, 2011).
4.15	Form of Series I Note (incorporated by reference to Exhibit 4.3 to Quarterly Report on Form 10-Q filed May 5, 2011).
4.16	Form of Series J Note (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on June 15, 2011).
4.17	Form of Series K Note (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on October 3, 2011).
4.18	Registration Rights Agreement, dated as of January 23, 2013, by and among Natural Resource Partners L.P. and the Investors named therein (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on January 25, 2013).
4.19	Third Amendment, dated as of June 16, 2015, to Note Purchase Agreements, dated as of June 19, 2003, among NRP (Operating) LLC and the holders named therein (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on June 18, 2015).
4.20	Fourth Amendment, dated as of September 9, 2016, to Note Purchase Agreements, dated as of June 19, 2003, among NRP (Operating) LLC and the holders named therein (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on September 12, 2016).
4.21	Indenture, dated April 29, 2019, by and among Natural Resource Partners L.P. and NRP Finance Corporation, as issuers, and Wilmington Trust, National Association, as trustee (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on May 2, 2019).
4.22	Form of 9.125% Senior Notes due 2025 (contained in Exhibit 1 to Exhibit 4.21).
4.23	Registration Rights Agreement dated as of March 2, 2017, by and among Natural Resource Partners L.P. and the Purchasers named therein (incorporated by reference to Exhibit 4.2 to Current Report on Form 8-K filed on March 6, 2017).
4.24	Form of Warrant to Purchase Common Units (incorporated by reference to Exhibit 4.1 to Current Report on Form 8-K filed on March 6, 2017).
4.25	Description of Equity Securities of Natural Resource Partners L.P. (incorporated by reference to Exhibit 4.25 to Annual Report on Form 10-K filed on February 27, 2020).
10.1	Third Amended and Restated Credit Agreement, dated as of June 16, 2015, by and among NRP (Operating) LLC, the lenders party thereto, Citibank, N.A. as Administrative Agent and Collateral Agent, Citigroup Global Markets Inc. and Wells Fargo Securities LLC as Joint Lead Arrangers and Joint Bookrunners, and Citibank, N.A., as Syndication Agent (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on June 18, 2015).
10.2	First Amendment, dated as of June 3, 2016, to Third Amended and Restated Credit Agreement, dated as of June 16, 2015, by and among NRP (Operating) LLC, the lenders party thereto, Citibank, N.A. as Administrative Agent and Collateral Agent, Citigroup Global Markets Inc. and Wells Fargo Securities LLC as Joint Lead Arrangers and Joint Bookrunners, and Citibank, N.A., as Syndication Agent (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on June 7, 2016).
10.3	First Amended and Restated Omnibus Agreement, dated as of April 22, 2009, by and among Western Pocahontas Properties Limited Partnership, Great Northern Properties Limited Partnership, New Gauley Coal Corporation, Robertson Coal Management LLC, GP Natural Resource Partners LLC, NRP (GP) LP, Natural Resource Partners L.P. and NRP (Operating) LLC (incorporated by reference to Exhibit 10.1 to Quarterly Report on Form 10-Q filed May 7, 2009).
10.4	Limited Liability Company Agreement of Sisecam Wyoming LLC, dated June 30, 2014 (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed by Sisecam Resources LP on July 2, 2014).
10.5	Amendment No. 1 to the Limited Liability Company Agreement of Sisecam Wyoming LLC dated November 5, 2015 (incorporated by reference to Exhibit 10.22 to Annual Report on Form 10-K filed by Sisecam Resources LP on March 11, 2016).

Exhibit Number	Description
10.6	Second Amendment, dated as of March 2, 2017, to Third Amended and Restated Credit Agreement, dated as of June 16, 2015, by and among NRP (Operating) LLC, the lenders party thereto, Citibank, N.A. as Administrative Agent and Collateral Agent, Citigroup Global Markets Inc. and Wells Fargo Securities LLC as Joint Lead Arrangers and Joint Bookrunners, and Citibank, N.A., as Syndication Agent (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K filed on March 6, 2017).
10.7	Fourth Amendment, dated as of April 3, 2019, to Third Amended and Restated Credit Agreement, dated as of June 16, 2015, by and among NRP (Operating) LLC and the lenders party thereto (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on April 9, 2019).
10.8	Master Assignment Agreement and Fifth Amendment to Third Amended Credit Agreement, dated as of August 9, 2022 by and among NRP (Operating) LLC, the Lenders party thereto, the Exiting Lenders, and Zions Bancorporation, N.A. dba Amegy Bank, as administrative agent for the Lenders, as Swingline Lender, and as an Issuing Bank (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on August 11, 2022).
10.9	Sixth Amendment to the Third Amended and Restated Credit Agreement, dated as of May 11, 2023, by and among NRP (Operating) LLC, the lenders party thereto and Zions Bancorporation, N.A. dba Amegy Bank, as administrative agent and collateral agent (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on May 15, 2023).
10.10	New Lender Agreement, dated as of May 11, 2023, by and among NRP (Operating) LLC, Zions Bancorporation, N.A. dba Amegy Bank, and Gulf Capital Bank (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed on May 15, 2023).
10.11	New Lender Agreement, dated as of February 1, 2024, by and among NRP (Operating) LLC, Zions Bancorporation, N.A. dba Amegy Bank, and Summit Community Bank (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on February 6, 2024).
10.12	Commitment Increase Agreement dated as of February 14, 2024, by and among NRP (Operating) LLC, Zions Bancorporation, N.A. dba Amegy Bank, and Frost Bank (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on February 20, 2024).
10.13	New Lender Agreement, dated as of September 1, 2022 by and among NRP (Operating) LLC, the Borrower, Zions Bancorporation, N.A. dba Amegy Bank, in its capacity as administrative agent under the Fifth Amendment to Third Amended Credit Agreement and Prosperity Bank, the New Lender (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on September 8, 2022).
10.14	New Lender Agreement, dated as of April 8, 2019, by and among NRP (Operating) LLC and the lenders party thereto (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed on April 9, 2019).
10.15	Master Amendment and Supplement to Coal Mining and Transportation Lease Agreements and Parent Guaranty dated June 30, 2020 by and among NRP (Operating) LLC, WPP LLC, Hod LLC, Independence Land Company, LLC, Williamson Transport LLC, Foresight Energy LP, Foresight Energy GP LLC, Foresight Energy LLC, Macoupin Energy, LLC, Williamson Energy, LLC, Sugar Camp Energy, LLC, Hillsboro Energy LLC, Foresight Energy Resources LLC, and Foresight Energy Operating LLC (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on July 1, 2020).
10.16	Limited Waiver dated February 28, 2020 by Natural Resource Partners L.P., GP Natural Resource Partners LLC, NRP (GP) LP, and NRP (Operating) LLC (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on March 3, 2020).
10.17	Right of First Offer Agreement dated as of February 28, 2020 by and among Pocahontas Royalties LLC, Natural Resource Partners L.P., GP Natural Resource Partners LLC, NRP (GP) LP, and NRP (Operating) LLC. (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed on March 3, 2020).
10.18+	Natural Resource Partners L.P. 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on January 17, 2018).
10.19+	Form of Phantom Unit Award Agreement (Employees and Service Providers) (incorporated by reference to Exhibit 4.5 to Registration Statement on Form S-8 filed on February 9, 2018).
10.20+	Form of Phantom Unit Award Agreement (Directors) (incorporated by reference to Exhibit 4.6 to Registration Statement on Form S-8 filed on February 9, 2018).
10.21+	Form of Phantom Unit Award Agreement (Employees and Service Providers) (incorporated by reference to Exhibit 10.13 to Annual Report on Form 10-K filed on February 27, 2020).
10.22+	Form of Phantom Form of Phantom Unit Award Agreement (Directors) (incorporated by reference to Exhibit 10.14 to Annual Report on Form 10-K filed on February 27, 2020).
10.23+	Form of Phantom Unit Award Agreement (Directors with Deferral Election) (incorporated by reference to Exhibit 10.15 to Annual Report on Form 10-K filed on February 27, 2020).
10.24	Seventh Amendment to the Third Amended and Restated Credit Agreement, dated as of October 15, 2024, by and among NRP (Operating) LLC, the lenders party thereto and Zions Bancorporation, N.A. dba Amegy Bank, as administrative agent and collateral agent (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed on October 17, 2024).
19.1*	Natural Resource Partners L.P. Insider Trading Policy
21.1*	List of Subsidiaries of Natural Resource Partners L.P.
23.1*	Consent of Ernst & Young LLP.
23.2*	Consent of PricewaterhouseCoopers LLP.
23.3*	Consent of BDO USA, P.C.
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley.
31.2*	Certification of Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. § 1350.
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. § 1350.
96.1*	S-K 1300 Technical Report Summary on the Big Island Mine, Sweetwater County, Wyoming, USA, dated February 27, 2025.
97.1*	Natural Resource Partners L.P. Incentive-Based Compensation Recoupment Policy, dated August 2, 2023 (incorporated by reference to Exhibit 97.1 to Annual Report on Form 10-K filed on March 7, 2024).
99.1*	Financial Statements of Sisecam Wyoming LLC as of December 31, 2024 and 2023 and for the years ended December 31, 2024, 2023 and 2022.

Exhibit Number	Description
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Labels Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)

*	Filed herewith
**	Furnished herewith
+	Management compensatory plan or arrangement

SIGNATURES

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

NATURAL RESOURCE PARTNERS L.P.
By: NRP (GP) LP, its general partner
By: GP NATURAL RESOURCE
PARTNERS LLC, its general partner

Date: February 28, 2025

By: /s/ CORBIN J. ROBERTSON, JR.
Corbin J. Robertson, Jr.
Chairman of the Board, Director and
Chief Executive Officer
(Principal Executive Officer)

Date: February 28, 2025

By: /s/ CHRISTOPHER J. ZOLAS
Christopher J. Zolas
Chief Financial Officer
(Principal Financial and Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Date: February 28, 2025

/s/ GALDINO J. CLARO
Galdino J. Claro
Director

Date: February 28, 2025

/s/ PAUL B. MURPHY, JR.
Paul B. Murphy, Jr.
Director

Date: February 28, 2025

/s/ RICHARD A. NAVARRE
Richard A. Navarre
Director

Date: February 28, 2025

/s/ CORBIN J. ROBERTSON III
Corbin J. Robertson III
Director

Date: February 28, 2025

/s/ STEPHEN P. SMITH
Stephen P. Smith
Director

Date: February 28, 2025

/s/ LEO A. VECELLIO, JR.
Leo A. Vecellio, Jr.
Director

Exhibit 19.1

GP NATURAL RESOURCE PARTNERS LLC

POLICY ON INSIDER TRADING

THIS POLICY WAS ADOPTED BY THE BOARD OF DIRECTORS OF GP NATURAL RESOURCE PARTNERS LLC ON MAY 24, 2023.

This policy should be read carefully by all directors, officers and consultants of GP Natural Resource Partners LLC (the "Company"), by such employees of Quintana Minerals Corporation, Western Pocahontas Properties Limited Partnership and their affiliates that provide services to the Company or Natural Resource Partners L.P. ("NRP"), as well as by other individuals to whom this policy is delivered. All are encouraged to ask questions and seek any follow-up information that they may require about this Policy. Any questions should be directed to the persons listed below.

General Counsel
GP Natural Resource Partners LLC
1415 Louisiana Street, Suite 3325
Houston, TX 77002

The Company has adopted this policy on Insider Trading to apply to each consultant, director and officer of the Company, to such employees of Quintana Minerals Corporation, Western Pocahontas Properties Limited Partnership and their affiliates that provide services to the Company or NRP, as well as to other individuals to whom this policy is delivered (collectively, the "Insiders"). The Company reserves the right to amend or rescind this policy or any portion of it at any time and to adopt different policies and procedures at any time. This policy must be strictly followed.

INTRODUCTION

It is generally illegal for any person, either personally or on behalf of others, to trade in securities on the basis of "Inside Information." Inside Information is generally defined as any non-public information about an entity that may be considered material to an investor in making a decision regarding the purchase, holding or sale of securities of that entity. For purposes of this policy, Inside Information includes all material, non-public information about NRP, the Company, or any other entity, learned as a result of the Insider's relationship with the Company or NRP. Information is "non-public" until it is widely disseminated to the public (generally through a news release by the Partnership to one or more national wire services). Information is "material" if there is a substantial likelihood that an investor would reasonably consider it important in arriving at a decision to buy, sell or hold securities. It is also generally illegal to communicate (or "tip") material, nonpublic information to others who may trade in securities on the basis of that information. These illegal activities are commonly referred to as "insider trading."

Recent amendments of the federal securities laws have dramatically increased the severity of the penalties for illegal trading or tipping and have greatly enhanced the enforcement powers of the Securities and Exchange Commission and the Department of Justice to prosecute such crimes. **Potential penalties for insider trading violations include administrative sanctions, damage awards to private plaintiffs, civil fines equal to the greater of $1,000,000 or three times the profits resulting from illegal trading or tipping, as well as criminal fines of up to $1,000,000 and a maximum of ten years in jail.**

General Statement

The Company's policy prohibits all Insiders who, by virtue of their relationship with the Company or NRP, have access to Inside Information about the Company, its affiliates (including NRP), or any other publicly traded entity, from (i) buying or selling securities of NRP or such other entity while in possession of such information or (ii) passing on such information, directly or indirectly, to others ("tipping").

Scope of The Policy

Persons Covered by This Policy. This policy shall be strictly adhered to by all Insiders and all members of their immediate families and personal households. All Insiders are responsible for the compliance with this policy by members of their immediate families and personal households.

Transactions Covered by This Policy. This policy applies to all transactions in the securities of NRP and other publicly traded entities, with the exception of the acquisition of securities under Company-sponsored plans such as the Long-Term Incentive Plan. The trading restrictions of this policy do apply, however, to all sales of securities acquired under such plans.

Purpose of the Policy

This policy is implemented (1) to make all Insiders aware of what constitutes Inside Information and the severe consequences that may result from the illegal trading on or tipping of such information, and (2) to protect the Company and its affiliates against legal liability and to preserve the reputation of the Company and its Insiders for integrity and ethical conduct by setting forth procedures to prevent the illegal use of Inside Information.

Compliance Procedures

1. Tipping is Prohibited. All Inside Information is to be held in the strictest confidence and not disclosed to anyone outside the Company, unless and until the information has been properly disseminated to the public. Unauthorized disclosure of any Inside Information learned as a result of an Insider's relationship to the Company or NRP is strictly prohibited. Inside Information is often inadvertently disclosed or overheard in casual, social conversations. Care must be taken to avoid such inadvertent disclosures. This prohibition against tipping includes Inside Information about a company, other than the Company or NRP, learned by an Insider as a result of his relationship with the Company or NRP.

2. Inquiries by Stock Analysts, Investors and the Media. Unless expressly authorized by the Chief Executive Officer, the only persons authorized to communicate with stock analysts, NRP investors or potential investors and members of the media are the Company's Chief Executive Officer, President, Chief Financial Officer, Investor Relations and General Counsel. All inquiries from stock analysts, NRP investors or potential investors and members of the media, and any inquiry regarding rumors, price movement or activity in the common units of NRP, should immediately be referred to one of the persons designated above.

3. Restrictions on Trading in Securities and Other Entities. If an Insider obtains Inside Information concerning another entity as a result of his relationship with the Company or NRP, such Insider may not trade in the securities of such other entity until at least the third business day after such entity has made a formal public disclosure of such information. (An example of information of this nature would be knowledge of an imminent acquisition of coal properties by such other entity).

Prohibition on Short Sales, Derivatives, Hedging and Pledging

All Insiders and members of their immediate families and personal households are prohibited from making any short sales of NRP securities and from pledging any NRP securities as collateral. Also, no such person may buy or sell any puts, calls, options or other derivatives in respect of NRP securities at any time. This prohibition includes hedging transactions involving NRP securities or any other financial instruments or other action designed to hedge or offset or speculate on any change in the value of NRP securities.

Short sales are sales of securities that the seller does not own at the time of the sale or, if owned, that will not be delivered within 20 days of the sale. One usually sells short when one thinks the market is going to decline substantially or the stock will otherwise drop in value. If the stock falls in price as expected, the person selling short can then buy the stock at a lower price for delivery at the earlier sale price (this is called "covering the short") and pocket the difference in price as profit. In addition to the fact that it is illegal for directors and officers to sell their company's securities short, the Company believes that it is inappropriate for its Insiders to bet against the securities of NRP or any of its affiliates in this way.

Puts, calls, options and other derivatives, including hedging transactions, for NRP units (other than options granted pursuant to employee benefit plans) also afford the opportunity to profit from a market view that is adverse to NRP and its affiliates, and they carry a high risk of inadvertent securities law violations and could create a perception of Insider speculation on short-term swings in the value of NRP securities.

NRP securities that are pledged as collateral as of the adoption of this policy are not subject to the prohibition on pledging contained in this policy.

The Company may impose sanctions for failure to comply with the provisions of this policy. Such sanctions may include suspension without pay and dismissal without cause.

Exhibit 21.1

List of Subsidiaries of Natural Resource Partners L.P.

NRP (Operating) LLC
NRP Finance Corporation
WPP LLC
ACIN LLC
WBRD LLC
Hod LLC
Shepard Boone Coal Company LLC
Gatling Mineral, LLC
Independence Land Company, LLC
Williamson Transport, LLC
Rivervista Mining, LLC
NRP Trona LLC
BRP LLC
BRP Minerals LLC
CoVal Leasing Company, LLC

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1) Registration Statement (Form S-3 No. 333-217205) of Natural Resource Partners L.P.,

2) Registration Statement (Form S-3 No. 333-187883) of Natural Resource Partners L.P.,

3) Registration Statement (Form S-3 No. 333-262435) of Natural Resource Partners L.P., and

4) Registration Statement (Form S-8 No. 333-222970) pertaining to the Natural Resource Partners L.P. 2017 Long-Term Incentive Plan;

of our reports dated February 28, 2025, with respect to the consolidated financial statements of Natural Resource Partners L.P., and the effectiveness of internal control over financial reporting of Natural Resource Partners L.P., included in this Annual Report (Form 10-K) of Natural Resource Partners L.P. for the year ended December 31, 2024.

/s/ Ernst & Young LLP

Houston, Texas
February 28, 2025

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-217205, 333-187883 and 333-262435) and Form S-8 (No. 333-222970) of Natural Resource Partners L.P. of our report dated February 28, 2025 relating to the financial statements of Sisecam Wyoming LLC for the year ended December 31, 2024, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Charlotte, North Carolina
February 28, 2025

Exhibit 23.3

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-217205, 333-187883, 333-262435) and Form S-8 (No. 333-222970) of Natural Resource Partners LP of our report dated March 7, 2024, relating to the financial statements of Sisecam Wyoming LLC, which appears in this Annual Report on Form 10-K of Natural Resource Partners LP.

/s/ BDO USA, P.C.

Charlotte, North Carolina
February 28, 2025

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Corbin J. Robertson, Jr., certify that:

1 I have reviewed this report on Form 10-K of Natural Resource Partners L.P.

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4 The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5 The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions);

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Corbin J. Robertson, Jr.
Corbin J. Robertson, Jr.
Chief Executive Officer

Date: February 28, 2025

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Christopher J. Zolas, certify that:

1. I have reviewed this report on Form 10-K of Natural Resource Partners L.P.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions);

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Christopher J. Zolas
Christopher J. Zolas
Chief Financial Officer

Date: February 28, 2025

Exhibit 32.1

CERTIFICATION OF
CHIEF EXECUTIVE OFFICER
OF GP NATURAL RESOURCE PARTNERS LLC
PURSUANT TO 18 U.S.C. § 1350

In connection with the accompanying report on Form 10-K for the year ended December 31, 2024 filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Corbin J. Robertson, Jr., Chief Executive Officer of GP Natural Resource Partners LLC, the general partner of the general partner of Natural Resource Partners L.P. (the "Company"), hereby certify, to my knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Corbin J. Robertson, Jr.
Corbin J. Robertson, Jr.
Chief Executive Officer

Date: February 28, 2025

Exhibit 32.2

CERTIFICATION OF
CHIEF FINANCIAL OFFICER
OF GP NATURAL RESOURCE PARTNERS LLC
PURSUANT TO 18 U.S.C. § 1350

In connection with the accompanying report on Form 10-K for the year ended December 31, 2024 filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christopher J. Zolas, Chief Financial Officer of GP Natural Resource Partners LLC, the general partner of the general partner of Natural Resource Partners L.P. (the "Company"), hereby certify, to my knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Christopher J. Zolas
Christopher J. Zolas
Chief Financial Officer

Date: February 28, 2025

Exhibit 96.1

NATURAL RESOURCE PARTNERS

TECHNICAL REPORT SUMMARY

STATEMENT OF RESOURCES AND RESERVES
CURRENT AS OF
DECEMBER 31, 2024

BIG ISLAND MINE

SWEETWATER COUNTY
WYOMING, USA

FINAL
2B
(29-24-001)

FEBRUARY 27, 2025

PREPARED BY:

HOLLBERG PROFESSIONAL GROUP, PC
Consulting Mining Engineers
Green River Wyoming

Hollberg Professional Group, PC

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Glossary of Terms and Abbreviations		
Term/Abbreviation	**Description**	**Definition**
BIM	Big Island Mine	Şişecam's Mine Workings
CAPEX	Capital Expenditures	Expenditures that are not charged to production costs but are either depreciated or amortized.
Conventional mining methods	Drill and Blast Mining	Mining drill and blast methods or undercut, drill and blast mining.
CM	Continuous Miner	Mining using continuous mining machines. These can be drum type or rotor type.
Crosscut (X-Cut)	underground passageway	Mined at or near right angles to the mining direction
DECA	Decahydrate Crystal	Sodium Carbonate Decahydrate
EIS	Environmental Impact Statement	A specific study of a project's environmental impacts.
FOB	Free-on-Board	Basis of selling cargo excluding freight and insurance but including loading costs.
GR RMP	Green River Resource Management Plan	Resource plan produced by the BLM for management of the multiple resources on BLM lands in the Green River area.
GDP	Gross Domestic Product	The total value of all goods and services produced within a country over a specific period of time
Gate Entry	Longwall Entry	Access entries specifically configured to support longwall mining.
Headgate	Longwall Entry	Longwall gate entry on fresh air side of longwall face containing main access facilities and conveyors.
IRR	Internal Rate of Return	An annual rate of growth that an investment is expected to generate.
JICOG	Joint Industry Committee on Oil and Gas	Committee created to help resolve lease conflicts in the KSLA between oil and gas producers and sodium mineral producers.
JORC	Joint Ore Reserve Committee	Part of the Australian Institute of Mining and Metallurgy issuing internationally recognized criteria for defining trona resource and reserves.
JV	Joint Venture	A combination of two or more parties that seek the development of a single enterprise or project for profit
KSLA	Known Sodium Lease Area	Area in Southwest Wyoming designated for sodium mineral leasing
K gal	1000 gallons	Raw water measurement
LB	Lower Bed	Trona Bed 24
LW	Longwall	Highly productive method of underground trona mining and a specific type of trona mining equipment.
LOM	Life of Mine Plan	Mining plan for the life of the property.
NPV	Net Present Value	The present value of the expected future cash flows minus the cost.
OPEX	Operating Expenses	Expenses for labor and expendable items used in the mining and processing of minerals.

Glossary of Terms and Abbreviations		
Term/Abbreviation	**Description**	**Definition**
O&G	Oil and Gas Production	The production of oil and gas from the surface.
MST	Million Short Tons	Million short tons of material.
MTPY	Million Short Tons per Year	Million short tons of material per year.
Mono	Monohydrate Process	Process to convert trona to soda ash
MMTA	Mechanically Mining Trona Area	Area designated by the BLM in southwest Wyoming that can be mechanically mined.
MM gallons	Million Gallons	Raw water measurement
MRE	Mineral Resource Estimate	Mineral Resource Estimate
RCRA	Resource Conservation and Recovery Act	Regulation of identification and regulation of hazardous waste
ROM Trona	Run-of-Mine Trona	Raw trona production from mines prior to trona preparation.
RS RMP	Rock Springs Resource Management Plan	Resource plan produced by the BLM for management of the multiple resources on BLM lands in the Rock Springs, Wyoming District.
RFDS	Reasonably Foreseeable Development Scenario	BLM study to determine a resource's probability of development in the foreseeable future.
SSDA	Special Sodium Drilling Area	Area designated under the 1997 Green River Resource Management Plan to limit O&G drilling
TA	Total Alkalinity	Measure of soda ash level in solution mine water.
TSA	Short Tons of Soda Ash	Measure of production capacity
Tons	Short Tons	All references to "tons" in this report shall refer to "short tons." A short ton is equal to 2000 pounds.
tph	tons per day	Measure of production capacity.
tph	tons per hour	Measure of production capacity.
types	tons per unit shift	Measure of mining productivity.
toy	tons per year	Measure of production capacity.
TRM	Tailings Return to the Mine	The process by which the refinery tailings are thickened and pumped into old mine workings for disposal.
UB	Upper Bed	Trona Bed 25
USGS	United States Geologic Survey	Branch of the US Government charged with mapping and surveying the resources of the US.

APPROACH

Hollberg Professional Group, PC ("HPG") has conducted an independent technical review of the lands held by Şişecam Wyoming, LLC ("Şişecam Wyoming") referred to as the "Big Island Mine," which is located in the area commonly referred to as the Know Sodium Lease Area (the "KSLA"), near the town of Green River, Sweetwater County, Wyoming. HPG professionals involved in the preparation of this independent technical report ("Report") have visited the mine on multiple occasions and are knowledgeable concerning the Big Island Mine and the KSLA trona deposits. HPG has reviewed technical data, reports, and studies produced by other consulting firms, as well as information provided by Şişecam Wyoming, and others listed in Sections 24.0 and 25.0. This review was conducted on a reasonableness basis, and HPG has noted herein where such provided information engendered questions. Except for the instances in which we have noted questions or made specific comments regarding the nature of the information, HPG considers the information provided by Şişecam as being accurate and suitable for use in this Report. Consent has been given for the distribution of this independent technical review in the form and context in which it appears. HPG has no reason to doubt the authenticity or substance of the information provided.

INDEPENDENCE

HPG and its principals and employees are not and do not intend to be a director, officer, or other direct employee of Şişecam Wyoming and has no material interest in the Big Island Mine or Şişecam Wyoming. The relationship with Şişecam Wyoming is solely one of professional association between client and independent consultant. The review work and this Report are prepared in return for professional fees based upon agreed commercial rates, and the payment of these fees is in no way contingent on the results of this Report.

ELECTRONIC DISCLAIMER

Electronic mail copies of this Report are not official unless authenticated and signed by HPG and are not to be modified in any manner without HPG's express written consent.

UNITS OF MEASUREMENT AND CURRENCY

Measurement units used in this Report are in the English system. The currency is United States (US) dollars unless specifically stated otherwise.

NOTE REGARDING FORWARD-LOOKING INFORMATION

This Technical Report Summary contains forward-looking statements within the meaning of the U.S. Securities Act of 1933 and the U.S. Securities Exchange Act of 1934, that are intended to be covered by the safe harbor created by such sections. Such forward-looking statements include, without limitation, statements regarding Hollberg Professional Group's (HPG) expectation for Şişecam's mine and any related development or expansions, including estimated cashflows, production forecasts, mine plans, revenue, income, costs, taxes, capital, rates of return, mine, material mined and processed, recoveries and grade, future mineralization, future adjustments and sensitivities and other statements that are not historical facts.

Forward-looking statements address activities, events, or developments that HPG expects or anticipates will or may occur in the future and are based on current expectations and assumptions. Although Hollberg Professional Group believes that its expectations are based on reasonable assumptions, it can give no assurance that these expectations will prove correct. Such assumptions, include, but are not limited to: (i) there being no significant change to current geotechnical, trona bed thickness, trona grades, hydrological and other physical conditions; (ii) permitting, development, operations and expansion of operations and projects being consistent with current expectations and mine plans; (iii) political developments in jurisdiction in which Şişecam Wyoming operates being consistent with current expectations; (iv) certain exchange rate assumptions being approximately consistent with current levels; (v) certain price assumptions for soda ash; (vi) prices for key supplies being approximately consistent with current levels; and (vii) other planning assumptions.

Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among others, risks that estimates of mineral reserves and mineral resources are uncertain and the volume and grade of ore actually recovered may vary from our estimates, risks relating to fluctuations in soda ash prices; risks due to the inherently hazardous nature of mining-related activities; risks related to the jurisdictions in which Şişecam operates, uncertainties due to health and safety considerations, including pandemics, uncertainties related to environmental considerations, including, without limitation, climate change, uncertainties relating to obtaining approvals and permits, including renewals, from governmental regulatory authorities; and uncertainties related to changes in law; as well as those factors discussed in NRP's filings with the U.S. Securities and Exchange Commission, including NRP's latest Annual Report on Form 10-K for the period ended December 31, 2023.

This notice is an integral component of the Technical Report Summary (TRS) and should be read in its entirety and must accompany every copy made of the TRS.

HPG has used their experience and industry expertise to produce the estimates in the TRS. Where HPG has made these estimates, they are subject to qualifications and assumptions, and it should also be noted that all estimates contained in the TRS may be prone to fluctuations with time and changing industry circumstances.

HPG
Hollberg Professional Group PC.
Consulting Engineers

Kurt F. Hollberg, PE
Hollberg Professional Group, PC

QUALIFIED PERSON

I, Kurt F. Hollberg, certify as the Qualified Person that the attached report titled "Statement of Resources and Reserves as of December 31, 2024– Big Island Mine, Sweetwater County, Wyoming, USA" and dated February 20, 2025 (the "Technical Report Summary") by Hollberg Professional Group PC has been carried out in accordance with the requirements of US Securities and Exchange Commission (SEC Regulation S-K Item 102 and Subpart 1300).

Dated February 27, 2025

/s/Kurt F Hollberg
Signature of Qualified Person
Electronic Signature

Kurt F. Hollberg, PE
Qualified Person

Professional Engineer (Mining)
KURT F. HOLLBERG
6599
Date
WYOMING

/s/Kurt F. Hollberg
Electronic Signature
31-DEC-2025

SME
Society for Mining, Metallurgy & Exploration
Kurt F. Hollberg
SME Registered Member No. 1475226
Signature /s/Kurt F. Hollberg
Date Signed 27-FEB-2025
Expiration date 31-DEC-2025
Electronic Signature

1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

Natural Resource Partners LP ("NRP"), engaged Hollberg Professional Group (HPG) to update HPG's December 2021 Technical Report Summary on the trona mineral assets of Şişecam Wyoming LLC ("SCW") comprising Şişecam's Green River Property (Big Island Mine & Refinery), Sweetwater County, Wyoming, United States of America ("USA"). Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC (SCW LLC) 51% and by NRP Trona LLC ("NRP Trona") 49%. NRP Trona LLC is a wholly owned subsidiary of NRP. Natural Resource Partners LP is the registrant.

1.2 HISTORY

Şişecam Wyoming owns and operates the Big Island Mine complex that consists of an underground trona mine and associated refinery ("Şişecam Wyoming Mine and Refinery"). The Şişecam Wyoming Mine and Refinery lies northwest of the town of Green River in Sweetwater County, Wyoming (Figure 3.1). Mining occurs in two trona seams, Bed 24 and Bed 25, nominally at 850-feet and 900-feet deep, respectively. The Big Island Mine was started in 1962 by the Stauffer Chemical Company and has been in continuous operation since that time. In 1985, the Big Island Mine and Refinery was acquired by Chesebrough Ponds and changed ownership several times over the next few years, first to Imperial Chemical Industries in 1986 and a year later, to Rhone-Poulenc. In 1996, Rhone-Poulenc sold its interest in the soda ash business to OCI Company, LTD, later renamed OCI Chemical Corporation. In September of 2013, OCI announced its Initial Public Offering (IPO) on the NYSE under 'OCIR', a master limited partnership. In 2015, Ciner Enterprises Inc., a subsidiary of Ciner Group, acquired OCI Chemical Corporation. The company was renamed Ciner Resources Corporation. In 2021, Ciner Group sold 60% of its US soda ash business to Şişecam Chemicals and the company was renamed to Şişecam Resources LP.

In 2023, Şişecam Resources LP was dissolved and Şişecam Chemicals Wyoming LLC ("SCW LLC") became the direct owner of 51% of Şişecam Wyoming. SCW LLC, the operating partner, controls and operates Şişecam Wyoming with non-operating ownership of 49% by NRP Trona. SCW LLC is 100% owned by Şişecam Chemicals Resources LLC ("Şişecam Chemicals,") which is 100% owned by Şişecam USA Inc. ("Şişecam USA"). Şişecam USA is a direct wholly-owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish Corporation ("Şişecam Parent"), which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi Turkiye Is Bankasi ("Isbank").

The Şişecam Wyoming refinery purifies trona ore into soda ash (sodium carbonate). Soda ash is an essential raw material in glass making, chemicals, detergents, and other industrial products. Şişecam Wyoming's refining facility is well established and has been converting trona into salable soda ash for over 60 years. Şişecam Wyoming sells the soda ash domestically through Şişecam Chemicals Wyoming LLC ("SCW LLC") and its affiliates. Product is shipped via truck or rail from loadouts at the Şişecam site and a rail spur to the Union Pacific Railroad mainline along Interstate 80 (I-80).

Şişecam Parent was founded over 88 years ago, is based in Türkiye and is one of the largest industrial publicly-listed companies on the Istanbul exchange. Şişecam has operations in 14 countries on four continents. 'It ranks among the world's top two producers in glassware, and among the top five global producers in glass packaging and flat glass. Şişecam is also one of top three largest producers of soda ash and a world leader in chromium chemicals.' (Şişecam Website).

The Big Island Mine has been in continuous operation since 1962 producing over 183.3 MST of trona ore from Beds 24 and Bed 25 as of December 31, 2024.

1.3 PROPERTY DESCRIPTION

Şişecam Wyoming's facility is located approximately 23 miles north of the City of Green River in Sweetwater County. The facility includes the processing and refinement of Trona ore into Soda Ash, an underground mine (Big Island Mine), ore hoist, mine fans, surface tailings disposal ponds, evaporation ponds, sewer ponds, site containment ponds, and administration and supporting structures.

Access to Şişecam Wyoming is by County Highway 6 from Wyoming Highway 372 and County Highway 4. Union Pacific Railroad provides a rail spur to transport products. Adjoining this spur is a rail holding yard adjacent to WY 372. Figure 3.1 through Figure 3.5 show the location, sodium leasing area as well as the surface and mineral ownership.

Şişecam is located in the semi-arid high plateau region of southwestern Wyoming at elevations between 6,200 and 6,600-feet above mean sea level (MSL). Only about one percent (1%) of the land is barren, but the short growing season, rugged topography, poor soils, and limited availability of precipitation make vegetation rather sparse in both variety and productivity.

The Şişecam property is crossed by the Green River which is a primary tributary to the Colorado River and located in the Upper Green Slate Watershed and designated Class 2AB waterway.

The site infrastructure is established and adequate for the purposes including: four existing surface to ore bed shafts, offices, warehouses, processing plants, product storage, dedicated rail spur with rail yard, tailings facilities, and dedicate utilities including natural gas, electricity, and water.

The Şişecam site is serviced by a dedicated railroad spur line off the main East West Union Pacific rail line. Şişecam's spur line connects to the Union Pacific Main line just east of the FMC/Genesis Westvaco Facilities.

Green River (pop.11,496, 2023 Census), and Rock Springs Wyoming (pop. 22,954) are the two closest towns to Şişecam, 23 miles and 42 miles respectively. Evanston Wyoming (pop. 11,807) is 111 miles to the west and the major metropolitan area of Salt Lake City, UT (pop. 1,270,000) is 194 miles to the West. Green River and Rock Springs are well established communities with histories dating back to the 1800's as stops along the Union Pacific railroad with coal mining.

1.4 MINERAL DEPOSIT AND MINERAL LEASES

The trona deposits of SW Wyoming are the world's largest occurrence of natural soda ash. The deposit was formed from the evaporation of a shallow lake, Lake Gosiute, that covered SW Wyoming and NE Utah 50-60 million years ago (wyomingmining.org, 2020) (Lake Gosiute, Figure 6.1).

Trona is a non-metallic industrial mineral of the compound sodium sesquicarbonate which is a partially hydrated double salt of sodium carbonate (commonly known as soda ash (Na_2CO_3)) and sodium bicarbonate (commonly known as baking soda ($Na_2CO_3.NaHCO_3.2H_2O$)). The US Geological Survey recognizes 25 trona beds of economic importance (at least 1 meter in thickness and 300 km^2 in areal extent) within the Green River Basin. Identified in ascending order, the trona beds are numbered 1 through 25 from the oldest (stratigraphically lowest) to the youngest (stratigraphically highest). Şişecam Wyoming has mineable reserves in the shallowest mechanically minable Trona Beds 24 and 25 (800 to 1,100-feet. deep). Figure 6.2, Figure 6.3, and Figure 6.5 show cross sections of the Green River Basin and Bed 24 25 lithology.

The Bureau of Land Management designates available sodium leasing as the Known Sodium Leasing Area ("KSLA"). The KSLA is where trona thickness exceeds 1-meter, extends for over 300 km^2, and is greater than 80% grade. The known Mechanically Mining Trona Area ("MMTA") is defined where trona exceeds 8-feet thickness, has a grade greater than 85%, contains less than 2% salt (NaCl), and is at a depth no greater than 2,000-feet. Figure 3.2 shows the KSLA and MMTA boundaries along with the major leaseholders.

Şişecam Wyoming holds both private and public mineral leases and license over the Big Island Mine within the KSLA boundary. In addition to the mineral leases and license, Şişecam Wyoming has several other permits with both U.S. Federal and Wyoming state agencies that give it the right to operate the Big Island Mine.

Şişecam Wyoming has approximately 23,999 acres of sodium (Trona) under lease made up of approximately 8,094 Federal acres, 2,986 State acres, and 12,919 private acres. Table 1.1 and Table 3.1 list the current sodium lease and the license acreage owned by Şişecam Wyoming. The location of Şişecam's trona leases is illustrated in Figure 3.1, Figure 3.2 and Figure 3.3.

TABLE 1.1
ŞIŞECAM WYOMING SODIUM MINERAL LEASES AND LICENSE

Mineral Owner Lessor/Licensor	Contiguous Leases (Acres)	Non-Contiguous Leases (Acres)	Total (Acres)
Wyoming State	2,346	640	2,986
United Stated - Federal	8,094		8,094
Private - Sweetwater	12,759		12,759
Private - PAL	160		160
Total Area (Acres)	**23,359**	**640**	**23,999**

1.5 EXPLORATION

Exploration drilling has been the primary method to delineate trona Beds 24 and 25 with both surface-to-bed drilling and where possible bed-to-bed drilling. Over the history of the property 93 surface borings have been completed and 55 bed-to-bed core holes drilled for a total of 148 borings.

In general, the core samplings were collected from each boring and prepared for analysis. Methodology utilized for coring varied through time and has included mud drilling, saturated brine drilling, air-foam drilling, wireline drilling and continuous coring from surface. A limited number of borings were logged with geophysical techniques including gamma, sonic, neutron, caliper, and high-resolution rock mechanics tools.

In addition to the exploration drilling, Şişecam has taken observations and measurements from the mine workings with over 4,000 measurements taken to date.

For recent exploration drilling the core samples were examined, photographed, and logged in the field then boxed, labeled, and prepared for transportation. Early exploration had minimal documentation on preparation and core logging. More recent exploration campaigns are better documented with photographs of the core prior to boxing.

Standard practice was to split the core samples along the length of the core with half the sample sent to in mine storage. Sample intervals were generally between six and twelve inches in length. The split sample was then analyzed by the Şişecam plant laboratories. The Şişecam Wyoming laboratory has multiple certifications including ISO 9001-2015 and NSF. The lab has multiple well documented quality control and quality assurance processes which were reviewed during earlier site visits.

Records from the exploration projects are stored in a locked storage location in Şişecam Wyoming's technical office building at the mine site with the core samples stored in the mine where the stable humidity and temperature helps preserve the samples.

The sample preparation, analysis, quality control, and security procedures used by the Şişecam Wyoming Operations have changed over time to meet evolving industry practices. Practices at the time the information was collected were industry-standard, and frequently were industry-leading practices. In HPG's opinion, the sample preparation, analyses, and security procedures at the mine are acceptable, and are adequate for mineral resource and mineral reserve estimation and mine planning purposes.

1.6 DATA VERIFICATION

In addition to their historical knowledge of the subject property, both Mr. Hollberg and Mr. Leigh visited the Big Island Mine on November 7th, 11th, and 13th, 2024.

The purpose of these visits was to inspect both the surface and underground facilities, collect information for this effort and interview technical personnel working for Şişecam. During the visits HPG interviewed the following Şişecam technical and management personnel:

- Robert Calderone (Surface Manager);
- John Lewis (Mine Engineering Superintendent);
- Tyler Schiltz (Environmental Manager);
- Jessica Annala (Accounting Manager);
- Steve Thompson (Project Specialist – Technical Services);
- Don McCallum (Project Specialist – Technical Services);
- Shannon Larson (QC QA Laboratory Supervisor).); and
- Mikail Demir (Technical Services Manager):

Şişecam Wyoming's excellent mine ground conditions allows examination of most areas of the existing mine and old workings. Mr. Leigh and Mr. Hollberg have examined many of these areas for this study. Mr. Leigh spent several days underground taking spot measurement of the Trona thickness in several areas of interest. Section 9.0 contains additional information on these inspections.

Surface tours included examination of the processing facilities (Units 3, 4, 5, 6 and 7), tailings facilities, DECA ponds and processing facility.

During the interviews it was clear that Şişecam personnel have a good understanding of current mine operations, of the geology and mine planning, chemical processing and environmental obligations and are in good standing with their responsibilities.

Şişecam Wyoming's available geologic data is well documented and has been vetted over the history of the property. The fact that the property has been in successful operation for over 60 years and has extracted trona from both beds gives confidence in the available geologic information and proposed mining methods.

HPG reviewed the recent exploration drilling information and concludes it meets industry standards. Comparison of drilling data with in-mine measurements generally concur with in-mine measurements with anomalies typically explained by localized trona bed disruptions described in Section 6.4. The successful mining of Bed 24 and Bed 25 over the long history of the property gives added validation of the exploration data, analysis and quality control. HPG concludes that Şişecam Wyoming's geologic data, procedures and processes are adequate for mineral resource and mineral reserve estimation and mine planning purposes.

1.7 MINERAL PROCESSING

Trona is a compound of sodium sesquicarbonate with the following formula, $Na_2CO_3.NaHCO_3.2H_2O$. It is the combination of sodium carbonate and sodium bicarbonate. The finished product, soda ash, is sodium carbonate. In very general terms, the conversion of trona into soda ash is the conversion of the sodium bi-carbonate portion of the trona into sodium carbonate and then a purification process to remove the insoluble minerals by dissolution and recrystallization.

Şişecam uses the monohydrate process which converts the bicarbonate by calcining the dry ore in rotary kilns at temperatures between 150° and 200° C. The general formula for this conversion follows:

$$2NaCO_3 \blacklozenge NaHCO_3 \blacklozenge 2H_2O \rightarrow 3Na_2CO_3 + CO_2 + 5H_2O$$

Şişecam Wyoming currently is operating five soda ash processing units. Two ore calcining and dissolving units with four soda ash processing plants. Unit 6 is a single large integrated plant and has its own crushing plant, rotary kiln, dissolvers, crystallizers, dryers and TRM (tailings) pumps. Unit 7 is a large rotary kiln and dissolver capable of feeding liquor to the older crystallizer Units 3 through 5 which use the existing crushers and TRM facilities. Soda ash crystals from are dried and stored in silos prior to shipping via truck or rail. All the plants have had significant upgrades over the years to both improve recovery, energy efficiency, and increase soda ash production.

Şişecam has had an onsite laboratory throughout its history that is used to test and analyze plant feeds (trona), intermediate process streams (liquor) as well as the final product to ensure compliance with Şişecam published standards. The testing and analysis procedures and protocols are well established and have been developed and refined over the 60 years of operation.

In HPG's opinion, the sampling methods, sample preparation, analyses, and security procedures at the mine are acceptable and are adequate for mineral resource and mineral reserve estimation and mine planning purposes.

1.8 MINERAL RESOURCE ESTIMATE

Using the data provided by Şişecam Wyoming, HPG has completed its review of the Big Island Mine and concludes that the Big Island Mine's remaining leased and licensed Measured and Indicated in-place trona Resources ***exclusive of reserves*** as of December 31, 2024, total 153.3 million short tons (MST), of which 99.1 MST remain in the Lower Bed 24 and 54.3 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 74.7 MST and Indicated In-Place Resources calculate as 78.7. Table 1.2 summarizes the estimated In-Place Trona Resource ***exclusive of the mineral reserves.***

The Mineral Resource ***exclusive*** of the mineral reserves is that portion of the ore body that has not been extracted because it was outside what is considered the economic limits, has been left in place to support the mine openings or has been sterilized by previous mining and cost-effective access is not considered practical. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

TABLE 1.2
ESTIMATED IN-PLACE TRONA RESOURCES WITHIN BIG ISLAND
EXCLUSIVE OF RESERVES
MINING LICENSE AS OF DECEMBER 31, 2024
BASED ON $165/TSA

	Measured Resource		Indicated Resource		Measured +Indicated Resources			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	45.4	88.5	53.6	86.6	99.1	87.5	8.6	-	-
Upper Bed 25	29.3	84.9	25.0	86.2	54.3	85.5	7.9	-	-
Total	**74.7**	**87.1**	**78.7**	**86.5**	**153.3**	**86.8**	**8.3**	-	-

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2024, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%. .

Based on the current study, the Şişecam Wyoming Big Island remaining leased and licensed Measured and Indicated in-place trona Resources ***inclusive of reserves*** as of December 31, 2024, total 570.7 million short tons (MST), of which 377.9 MST remain in the Lower Bed 24 and 192.9 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 300.1 MST and Indicated In-Place Resources calculate as 270.6 MST and Inferred In-Place Resources are calculated at 0.10 MST. Table 1.3 provides the In-Place Trona Resource ***Inclusive of the mineral reserves***.

The Mineral Resource ***inclusive*** of the mineral reserves is that portion of the ore body that is considered either economically viable for mining and can be converted to reserves or of economic interest but considered outside the current economic limits. Figure 11.3 and Figure 11.4 present the remaining in-place trona showing measured, indicated, and inferred resource areas. This is the material considered of economic interest that has the potential to be converted to reserves.

TABLE 1.3
ESTIMATED IN-PLACE TRONA RESOURCES WITHIN BIG ISLAND
INCLUSIVE OF RESERVES
MINING LICENSE AS OF DECEMBER 31, 2024
BASED ON $165/ TSA

	Measured Resource		Indicated Resource		Measured +Indicated Resources			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	186.5	88.6	191.3	88.0	377.9	88.3	9.8	0.10	87.6
Upper Bed 25	113.6	87.6	79.3	87.3	192.9	87.5	9.1	-	-
Total	**300.1**	**88.3**	**270.6**	**88.1**	**570.7**	**88.0**	**9.6**	**0.10**	**88.8**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2024, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

Only the contiguous mineral leases were considered for this resource and reserve estimate. Section 16, T21N, R108W, (State Lease 0-42570), was excluded from this estimate because this state lease is isolated from the other contiguous lease blocks. The one-mile isolation makes accessing this for mechanical mining unlikely.

Criteria for this analysis are based upon a 6.0-feet minimum ore thickness and 75% minimum seam grade. This Resource evaluation is based upon 93 exploration drill holes, 55 borings from the mine workings, and several thousand available mine observations and measurements. The in-seam ore horizon includes the T2 to T4 zones and excludes the T1 zone as described in Section 6.4. Additionally, this updated report considers the 2021-2024 mine advancement in the northeast of Bed 24 and mining in the northeast and southwest extents of Bed 25.

Because of Şişecam's proximity to the Green River this resource and reserve estimate does not consider solution mining due to its likely subsidence and impact to this major water source. Therefore, HPG is only considering mechanical mining of the deposit using established systems and methods.

The reference point for the mineral resources is reported in-place (insitu) inclusive of impurities and insoluble content. The grade is percent trona, sodium sesquicarbonate ($Na_2CO_3.NaHCO_3.2H_2O$), the double salt of sodium carbonate (soda ash) and sodium bicarbonate (baking soda). A bulk density of 133 pounds per cubic foot (2.13 g/cc), was applied to convert volumes to tonnage. Several published documents list bulk densities of trona between 2.11 and 2.17 g/cc.

Mineral resources are current as of December 31, 2024, using the definitions in SK1300. Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Resources LLC ("Şişecam Chemicals,") 51% and by NRP Trona LLC ("NRP Trona") 49%.

Mineral resources are not mineral reserves. Mineral reserves are the economically mineable part of a measured or indicated mineral resource based upon application of modifying factors such as costs and revenues associated with the proposed operation and producing the final product in an economic and environmental assessment. Section 11.3 describes these factors. There is no certainty that any mineral resources in this report will ultimately be reclassified as reserves. Please refer to the note regarding forward-looking information at the front of the Report.

1.8.1 Factors That May Affect the Mineral Resource Estimate

Factors that may affect the mineral resource estimate include: changes to long-term soda ash price assumptions; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and grade shape and geological and grade continuity assumptions; changes to the cut-off grades used to constrain the estimates; variations in geotechnical, mining, and processing recovery assumptions; and changes to environmental, permitting and social license assumptions.

1.9 MINERAL RESERVE ESTIMATE

This independent Mineral Resource and Mineral Reserve estimate is completed in accordance with the requirements of the US Securities and Exchange Commission (SEC Regulation S-K Item 102 and Subpart 1300). The Mineral Resource Estimates included in this report have been used in conjunction with current dry mining operations to establish the "Proven" and "Probable" Mineral Reserves. The remaining in-place (insitu) and mineable trona reserves for the Big Island Mine are based on a life-of-mine plan ("LOM") using current mining methods.

No independent feasibility study was prepared in the determination of this reserve estimate. Instead HPG used the plus 60 years of mining and processing history at the Big Island to determine the mining, processing and economic parameters used for this reserve estimate. Based on this information the capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

In determining the reserve parameters and assumptions HPG considered the following circumstances:

- Şişecam's 60-year long history and economics of mining the deposit and producing soda as
  - The 183.3 MST of trona ore produced from these two beds;
- The projected long life of the mine and resulting likely change in economics, mining, and processing methods over its projected 40-year mine life;
- Şişecam's current processing facilities capabilities and projected future changes to these facilities;
- The economics associated with Şişecam's current mining equipment and history of "high grading" the thickest portions of the deposit;
- Şişecam's current mining equipment limitations and required future changes to these systems; and
- HPG's knowledge operating and managing other trona and potash mines.

Using current mining and refining technologies, it is our professional opinion that Şişecam Wyoming can realistically expect to economically recover 217.7 MST of trona ore at an average grade of 85.6 percent from these reserves as of the end of December 2024. This is made up of 72.8 MST from Bed 25 and 145.0 MST from Bed 24. Proven recoverable tons are calculated as 109.2 MST, of which 39.5 MST remain in the Upper Bed and 69.7 MST remain in the Lower Bed. Probable recoverable tons are calculated at 108.5 MST of which 33.3 MST remain in the Upper Bed and 75.2 MST remain in the Lower Bed. This is based on Şişecam continuing to mine using its existing mining methods and extraction rates for the remaining life of the currently controlled reserves. Estimated finished soda ash reserves are 118.0 MST. Table 1.4 below and Section 12.2 summarizes these findings.

In determining whether the reserves meet these economic standards, HPG made certain assumptions regarding the remaining life of the Big Island Mine, including, among other things, that:

- The point of reference is run-of-mine ore delivered to the processing facilities;

- The cost of products sold per short ton will remain consistent with Şişecam Wyoming's cost of products sold for the five years ended December 31, 2024;
- The weighted average net sales per short ton FOB plant, $165/ton, based on USGS pricing and historical pricing provided by Şişecam;
- Şişecam Wyoming's mining costs will remain consistent with the five years ended December 31, 2024, until they begin two-seam mining, at which time mining costs for the two-seam mining tonnage could increase by as much as 30%;
- Şişecam Wyoming's processing costs will remain consistent with the five years ended December 31, 2024, and rise in 10-years to account for lower grade material;
- Şişecam Wyoming will maintain an annual mining rate of approximately 4.3 million short tons of trona;
- Şişecam Wyoming will process soda ash with a 90% rate of recovery, without accounting for the deca rehydration process;
- The ore to ash ratio for the stated trona reserves is 1.835:1.0 (short tons of trona run-of-mine to short tons of soda ash);
- The run-of-mine ore estimate contains dilution from the mining process;
- Şişecam Wyoming will continue to conduct only conventional mining using the room and pillar method and a non-subsidence mine design;
- Şişecam Wyoming will, in approximately 10 years, make necessary modifications to the processing facilities to allow localized mining of 75% ore grade in areas where the floor seam or insoluble disruptions have moved up into the mining horizon causing mining to be halted early due to processing facility limitations;
- Şişecam Wyoming will, in approximately 20 years, make necessary equipment modifications to operate at a seam height of 7-feet, the current mining limit is 9-feet;
- Şişecam Wyoming has and will continue to have valid leases and license in place with respect to the reserves, and that these leases and license can be renewed for the life of the mine based on their extensive history of renewing leases and license;
- Şişecam Wyoming has and will continue to have the necessary permits to conduct mining operations with respect to the reserves; and
- Şişecam Wyoming will maintain the necessary tailings storage capacity to maintain tailings disposal between the mine and surface placement for the life-of-mine (LOM).

This reserve estimate is based on Şişecam Wyoming's current basis for mine design that is predicated upon no subsidence. Higher mining extraction rates could be achieved, but are complicated by the overlying Green River Drainage, plant facilities, and gas pipelines, which are sensitive to mine induced subsidence. HPG does not recommend that Şişecam Wyoming alter the current 'no subsidence' mine design.

Long-term recovery of the remaining mine trona pillars by secondary extraction methods, including solution mining, is not considered in this reserve estimate but may be available to Şişecam Wyoming in the future. Any secondary recovery will be limited by the non-subsidence zones surrounding the Green River and plant facilities discussed in Section 12.4. Where mining induced subsidence is possible, subsidence mitigation will be required over a large portion of the available mine resource.

TABLE 1.4
RECOVERABLE TRONA RESERVES – BIG ISLAND MINE AND REFINERY
TRONA BEDS 24 AND 25 AS OF DECEMBER 31, 2024
WITHIN THE CONTIGUOUS LEASES AND LICENSE
BASED ON $165/TSA

Bed	Proven (millions) Tons	Average Grade % Trona	Probable (millions) Tons	Average Grade % Trona	Total Reserves (Millions) Tons	Average Grade % Trona
Lower Bed 24	69.7	85.9	75.2	85.6	145.0	85.8
Upper Bed 25	39.5	85.6	33.3	84.8	72.8	85.3
Total	109.2	85.8	108.5	85.3	217.7	85.6

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

1.9.1 Factors That May Affect the Mineral Reserve Estimate

Factors that may affect the mineral reserve estimate include: changes to long-term soda ash price assumptions; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and grade shape and geological and grade continuity assumptions; changes to the cut-off grades used to constrain the estimates; variations in geotechnical, mining, and processing recovery assumptions; and changes to environmental, permitting and social license assumptions.

1.10 MINING METHOD LIFE OF MINE PLAN

The underground mining operation uses continuous miners mining in a modified room and pillar method employing a ‘no surface subsidence’ mine design.

For the purposed of this study HPG has developed a detailed Life-of-Mine (LOM) plan that in HPG’s opinion is a reasonable mining sequence for this deposit over its remaining 40 plus years assuming Şişecam choses to mine as much of the resource as possible (Figure 12.1 and Figure 12.2). A two-stage mine plan has been developed. The first stage mines the deposit based upon the current mining equipment and processing plant limitations mining to the 9-foot isopach. This matches the practice employed over the last 20 years and should be viable for another 20 years.

The second stage mining is based upon smaller mining equipment and assumes changes to the dissolver sections of the processing plants. These changes should allow mining to the 7-foot isopach and processing areas of the trona resource where disruptions to the ore body have been and will be encountered as mining progresses towards the edge of the ore body. The 7-foot mining limit was selected based on current economics and practices at similar operations.

This type of two-stage mining is only possible when underground conditions allow access to the bypassed areas long after the first stage of mining was completed. This is true for the Big Island Mine where the old mine workings developed 60 years ago are still open, accessible, and currently in use. Where possible the LOM plan accounts for future access to the thinner areas. In areas where future access was determined to be too difficult or costly, the thinner trona resource have been considered sterilized and are not reserves.

Portions of the remaining Bed 24 trona are located under previously mined areas in Bed 25. These areas are where 'two-seam mining' is required. Two-seam mining extracts the mineral from both beds. Due to the thin interburden (25 to 40-feet) between Bed 24 and 25 and wide entries mined, mining induced stresses are higher in these areas of two-seam mining, Şişecam Wyoming has conducted significant computer modeling of the rock mechanics and predicted mine entry stability surrounding two-seam mining. Additionally, three test panels and one production panel have been mined in areas where lower extraction conventional mining techniques were employed. These panels were mined successfully and remain accessible and stable for many years after mining.

Since the 2021 TRS, Şişecam has mined two full CM panels under existing CM panels, extended the LB North Mains and are developing two additional CM panels. These initial panels have been instrumented, will be monitored and analyzed as adjacent panels are developed. Two more CM panels are planned to complete the analysis and verification of the current two-seam mining methods.

Examination of the two-seam areas during the site visit indicates favorable mining conditions consistent with predicted results. Based on the two-seam mining to date, the existing test panels, and the cost structure at Şişecam Wyoming, it is reasonable to conclude that the two-seam areas can be economically mined and therefore are considered reserves in this study.

Portions of the LB West mine have been flooded, and areas have collapsed, limiting access to trona resource west of the existing mine workings. This area is considered a resource but not reserves and the area is not part of the LOM plan due to the risks and high costs associated with seismicity, water inflow, less competent roof strata, and soft ore.

1.11 INFRASTRUCTURE

The Şişecam Facility has been in operation for over 60 years and the infrastructure is more than adequate and well developed for its purposes. The site infrastructure includes among other things:

- Soda Ash Process facilities;
- Electrical generation and transmission facilities;
- Natural gas pipelines and distribution facilities;
- Water supply and pumping station;
- Water pipelines, treatment, and distribution;
- Process waste tailings facilities;
- Sewage waste and runoff treatment facilities;
- Truck and rail loadout;
- Railyard and rail maintenance facilities;
- Mine access shafts. ore hoists, and ventilation fans;
- Mine infrastructure, belt haulage, crushing, and mining equipment; and
- Ample buildings for offices, labs, change-rooms, warehouses, and maintenance shops.

Section 15.0 contains a more detailed discussion of the site infrastructure.

1.12 ENVIRONMENTAL, PERMITTING AND SOCIAL CONSIDERATIONS

The Big Island Mine and Refinery's permit area encompasses 28,125 acres which includes the processing plants, ore hoist, mine fans, surface tailings disposal ponds, evaporation ponds, sewer ponds, site containment ponds, and administration, supporting structures and leased minerals. Şişecam's permit boundary is illustrated in Figure 3.4 and Figure 3.5.

The primary permit agencies include Federal and Wyoming State Departments including:

- State of Wyoming;
  - Sodium Leases;
- US Bureau of Land Management;
  - Sodium Leases and Right-of-Ways;
- Us Environmental Protection Agency;
  - Air and Water quality;
  - Waste and toxic substances;
- US Fish and Wildlife;
  - Migratory birds;
- US Nuclear Regulatory Communion;
  - License for instrumentation;
- Wyoming Department of Environmental Quality;
  - Title V Operating Permit;
  - Permit to Mine;
  - Asbestos ;
  - Water Quality;
  - Underground injection control;
- Wyoming Game and Fish Department
  - Chapter 33 and Chapter 10 Permit;
- Wyoming Office of Homeland Security;
  - Emergency and Hazardous Chemical Inventory;
- Wyoming State Engineers office;
  - Industrial/pollution control ground water wells;
  - Sewage, tailings and evaporative ponds; and
  - Water rights.

Şişecam Wyoming permitting, and environmental reporting appear to be current.

Areas where Şişecam has incurred challenges with environmental compliance are typical of the basin soda ash mines and include process emissions, fugitive dust, tailings, pond seepage, site containment, and drinking water TOC. Over the many years of operation, very few Notices of Violations ("NOVs") have issued and there are no currently outstanding non-compliant NOVs or material citations. The drinking water TOC problem and site containment overflow were primarily operational in nature and appear to be solved. Based upon the reports and documentation provided by Şişecam, the tailings pond and associated seepage continues to be successfully controlled by the groundwater systems and is acceptable to WDEQ.

Şişecam has an active consent decree as a settlement of a violation notice received in December of 2021, from Air Quality concerning PM10 monitoring at the No. 2 Crusher Area and Ore Stockpile building. The settlement was reached May 21, 2024, with Şişecam paying a fine of $26,000 and agreeing to modify beltlines, install multimodule baghouses and implement inspections and maintenance plans. Design work for the changes needs to be completed by June 2025 with installation complete within 24 months of obtaining all required permits for the new equipment. Funds have been budgeted, and design work is ongoing.

The low to zero toxicity waste generated by the mining and the processing facilities, (mine and process tailings), are deposited into a series of storage impoundments (ponds) or are re-injected as thickened slurries into abandoned areas of the mine. The process tailings, made up of shales, mudstones, and process purge are exempt from hazardous waste regulation under Section 3001(b) of the Resource Conservation and Recovery Act (RCRA). The Şişecam Wyoming tailings facility has four surface evaporation tailings ponds that are located primarily within prehistoric playa lakes. Except for Pond 2, which has a lined membrane, the remaining ponds are unlined.

Şişecam is converting the tailings disposal from a thickened slurry to a coarse tailings disposal which will separate the coarse and fine tailings. The coarse tailings will be stacked in the recently completed lined Pond 2 disposal area and the fine material will be disposed of in the existing ponds. The separation of coarse tailings will provide an opportunity for stacking utilizing earth moving equipment and extending the life of the current tailings ponds. With this change, the life of Pond 2 is estimated to be 30 years.

Based on the current surface tailings basin life of over 30 years and available alternative disposal areas and methods HPG considers the assumption that Şişecam Wyoming will maintain adequate tailings disposal storage for the life of the reserves to be reasonable.

There is an approved reclamation plan in place with a bond in the amount of $45.6 million for reclamation of all disturbed lands and facilities.

1.13 MARKETING

The Big Island Mine and Refinery has an extensive history of consistent sales with an established customer base, logistics and marketing. Şişecam has multiple contracts for soda ash sales both short and long term.

As part of this evaluation HPG reviewed confidential marketing studies provided by Şişecam. These studies indicate a steady increase in demand for soda ash long into the future. Price fluctuations are forecast based on expected additional new production and/or shutdowns of synthetic plants.

Soda ash is a basic industrial mineral used in manufacturing for thousands of years. As a basic commodity, soda ash demand is strongly correlated with gross domestic product (GDP). As developing economies grow and industrialize the world demand for soda ash has consistently increased. Historical soda ash demand has increased 2-3% annually with this trend expected to continue well into the future. Significant increase in demand is predicted in India, Africa, South America and China's demand continues to grow. US demand for soda ash is expected to remain constant with little if any growth.

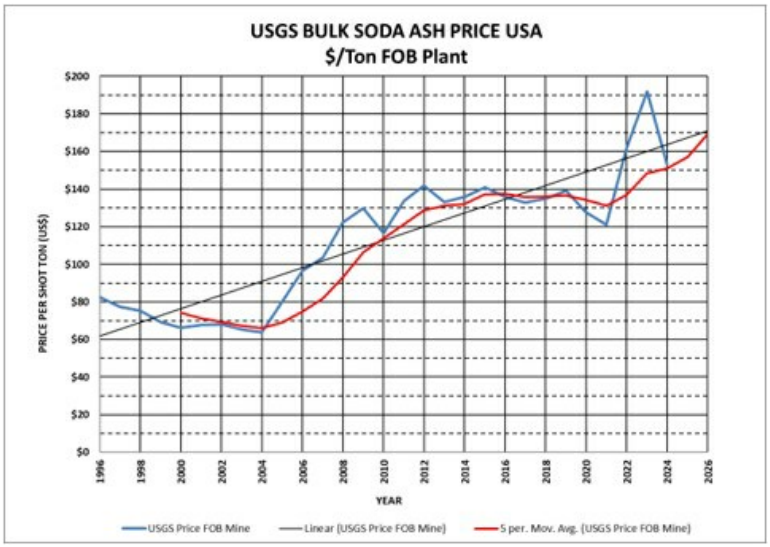
The end uses of soda ash are consistent with growth in solar glass and lithium batteries as lithium carbonate. Historically, glass making was 50% of demand. That has grown to nearly 60% for flat glass, bottled glass and increasingly solar glass. The increase in solar glass is offsetting decreases in bottled glass. Uses for chemicals, soaps, detergents, sodium bicarbonate make up the remaining demand. The projected demand for electric vehicles has created an increasing market for soda ash in the manufacturing of lithium carbonate needed for the batteries. This demand is expected to double in the next ten years. Similarly solar glass has become an important market but is dominated by China.

Historical soda ash pricing has been controlled by general global economic conditions and by the impact of added or removed production. Green River's naturally produced soda ash has a historic cost advantage over synthetically produced soda ash as illustrated by the long history of the Green River Basin production being exported successfully throughout the world to countries with local synthetic soda ash production (i.e., China, Mid-East, and Europe).

Multiple soda ash brown field and green field expansion projects have been announced or are currently being constructed. US expansion in the is expected to add 6 to 7 million tons of production by the early 2030's. China has added nearly 6 million tons of new natural soda ash capacity with plans for an additional 3 million tons. This follows the closure of some of China's synthetic plants but is predicted to be a net increase to global supply. As supply increases, the higher cost synthetic producers are impacted the most. Their costs are 50% higher than the natural soda ash producers and historically lower prices have forced closures of these plants.

Historically, when new relatively large influxes soda ash production enters the market, it impacts the overall soda ash supply and demand by putting pressure on prices first in the domestic market but also internationally until the consistently increasing soda ash demand catches up. These swings in soda ash price can be seen in Figure 1.1 showing the historical US soda ash price FOB the Green River plants and are typical for an industrial commodity. The overall trend is for steadily increasing soda ash price and demand.

For the purposes of this estimate a 2025 soda ash price of $165/ton FOB plant was assumed. This price is based on published USGS pricing and is consistent with Sisecam's historical revenues and confidential market studies.



Source: USGS

Figure 1.1 USGS Published Soda Ash Prices $/Ton FOB Plant

1.14 ECONOMIC ANALYSIS

Cost effective mining and processing has been conducted since the early 1960's at Şişecam Wyoming generally under the same mine design assumptions utilized in this reserve estimate.

With the information provided in previous reviews and this review HPG has been able to examine the last eight years of actual production costs and revenues. This long history shows a stable and predictable cost structure and consistent revenue. The only exception was 2020 and 2021 where costs and revenues were lower due to the worldwide COVID-19 slowdown. Despite this historic business interruption both years were cash positive with 2021 rebounding to near normal levels. Therefore, HPG considers using historical costs for mining the reserves and producing soda ash a reliable basis to forecast future costs and revenues.

The financial model that supports the mineral reserve declaration is a standalone model that calculates annual cashflows based on scheduled ore production, assumed processing recoveries, soda ash sale prices, projected operating and capital costs. Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

Because Şişecam and NRP are structured as a pass-through entities for income tax purposes no income taxes were included in the economic analysis. The currency used to document the cashflow is US$ based on constant 2024 dollars.

The basis for the economic analysis is the previous five years of actual performance adjusted for expected changes in operating costs and necessary capital expenditures to execute the proposed life of mine (LOM) plan. Table 1.5 illustrates the expected cash flows for the LOM in ten-year increments. The economic model indicates positive cash flow, a 20.9% internal rate of return (IRR) and a positive net present value (NPV) of $1,226 million at a 5% discount rate. The full financial model by year is shown in Table 19.1. This analysis shows that the operation will provide positive cash operating profits and is therefore considered to be economically viable.

TABLE 1.5
CASH FLOW PROJECTION

	OPERATING YEARS (Year 1 - 2025)					
	1-10	11-20	21-30	31-40	41-50	TOTALS
REVENUE						
Mine Production Trona (Mst)	43.0	43.0	43.0	43.0	43.0	215.0
Ore to Ash	1.835	1.835	1.835	1.835	1.835	1.835
Soda Ash Production (Mst)	23.4	23.4	23.4	23.4	23.4	117.2
Revenue $/ton	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165
Gross Revenue ($ millions)	**$ 3,866**	**$ 3,866**	**$ 3,866**	**$ 3,866**	**$ 3,866**	**$ 19,332**
Cost of Goods Sold						
Variable Costs	$ 906	$ 906	$ 906	$ 906	$ 906	$ 4,532
Fixed Cost	$ 1,279	$ 1,399	$ 1,411	$ 1,517	$ 1,517	$ 7,123
Other Cost	$ 263	$ 263	$ 263	$ 263	$ 263	$ 1,317
Total Operating Costs ($ millions)	$ 2,449	$ 2,569	$ 2,581	$ 2,687	$ 2,687	$ 12,973
CAPEX ($ millions)	$ 325	$ 400	$ 320	$ 300	$ 346	$ 1,691
Pre-Tax Operating Profit ($ millions)	**$ 1,092**	**$ 897**	**$ 965**	**$ 880**	**$ 834**	**$ 4,669**

Note: Numbers have been rounded; totals may not sum due to rounding.

1.15 OBSERVATIONS AND CONCLUSIONS

Approximately 116 MST of the reported recoverable Trona (48%) is dependent upon Şişecam confirming the viability of two-seam mining in the next four years. Most of these tons (approximately 69 MST, 60%) are in areas with thickness over 9-feet.

The November 2024 site visit revealed that since the 2021 report was completed, Şişecam has made significant progress developing the LB North mains and panel entries. Ground conditions were found to be good for the mains entries and production panels confirming the current design. Based on current projections it will be two to four years before Şişecam will verify the viability of two-seam mining. It is possible that two-seam mining may require significant variations from current mining equipment and practices.

Approximately 141 MST of the reported recoverable tonnage is above 9-feet thick and can be mined and processed with the existing equipment, but areas will require ore blending or modification of the processing facilities to handle lower grade ore for short periods. These areas comprise 31 MST of the total reserves. It is anticipated that these plant modifications need to be made within 10-15 years.

The practice of "high grading" the deposit and only mining the thicker material first risks sterilization of the thinner areas if access is lost. Recovery of the reserves less than 9-feet will require changes to the mining and utility equipment, will incur higher mining costs, require access rehabilitation costs and is dependent upon the ability to access these areas through old workings or via extensions of old mains entries as shown in the LOM plan developed for this estimate. As future mining continues, with the current large mining equipment, some loss of portions of the edge of the ore bodies will occur, especially when long production panels are developed. This material makes up 73 MST of the estimated recoverable tonnage. There is some risk that access to these areas 20 years after mining might not be possible.

The roof failure, water inflow and associated subsidence of the Lower Bed West mine area has intrinsic risks to an evaporite mine below a major waterway that must be continuously monitored and evaluated for any changes. These include increased water flow or changes in water type indicating its source could be surface waters. Risks due to high inflow of water can range from higher mining costs to loss of access.

1.16 RECOMMENDATIONS

HPG supports Şişecam's plan to perform additional exploration drilling to improve data density. Additional exploration drilling would result in a higher percentage of the reserve base classified as proven and should better define the trona grades near the drilling locations. Drilling south of the existing lease boundary would help to identify available future reserves and grades. Additionally, it is recommended that Şişecam undertake Bed to Bed drilling from areas in the Upper Bed that overly future LB two-seam mining. Bed to Bed core drilling is significantly less expensive than surface exploration but is limited to two-seam areas.

It is recommended that Şişecam continue to pursue optimization of the refinery facilities to allow efficient processing of the predicted long-term decline in run-of-mine (ROM) trona grades as mining moves to the edges of the ore bodies. A more robust processing facility would allow a more complete recovery of the remaining ore reserves in areas where localized seam rolls and post depositional insoluble infilling has impacted recovery and stopped mining.

It is recommended that Şişecam optimize its ability to blend ore from multiple production areas of the mine to minimize the impact of the lower grade ore from the miners producing from the edge of the deposit or encountering seam rolls. This would also allow improved recovery of the deposit by maintaining a higher average ore grade and minimize sterilization of the thinner or lower grade areas of the deposit.

It is recommended that Şişecam continue close monitoring of the west end water inflows and associated subsidence. HPG would advise more frequent isotope testing of the inflow as well as additional hydrologic studies including source tracing.

2.0 INTRODUCTION

2.1 BACKGROUND

Natural Resource Partners LP ("NRP"), engaged Hollberg Professional Group (HPG) to update HPG's December 2021 Technical Report Summary on the trona mineral assets of Şişecam Wyoming LLC ("SCW") comprising Şişecam's Green River Property (Big Island Mine & Refinery), Sweetwater County, Wyoming, United States of America ("USA"). Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC (SCW LLC) 51% and by NRP Trona LLC ("NRP Trona") 49%. NRP Trona LLC is a wholly owned subsidiary of NRP. Natural Resource Partners LP is the registrant.

This Technical Report Summary (TRS) has been prepared in accordance with the requirements of the US Securities and Exchange Commission (SEC Regulation S-K Item 102 and Subpart 1300). This resource and reserve estimate of the remaining in-place and mineable trona reserves for the Big Island Mine is based on a life-of-mine plan ("LOM") using current mining methods.

HPG personnel involved in this project include:

- Kurt F. Hollberg, PE, Project Manager, Mining Specialist, Competent Person.
- Terry Leigh, AIPG, CPG, PG, (Leigh Geological Services, Inc.) Resource Specialist.

This report was authored by Mr. Hollberg and Mr. Leigh.

Mr. Hollberg is a Licensed Professional Engineer in Wyoming, Colorado, Utah, and Nevada as well as being a Registered Professional Member of the Society for Mining, Metallurgy, and Exploration (SME).

Mr. Leigh is an AIPG Certified Professional Geologist and a Licensed Professional Geologist (PG) in Wyoming.

Both Mr. Hollberg and Mr. Leigh are considered 'qualified persons' for trona reserve estimation as defined by the JORC, SEC, and NI 43-101 Codes. Mr. Hollberg has over 35 years of experience and Mr. Leigh has over 40 years of experience in the Green River Trona Basin. Section 26.0 contains summary information on the team members.

Neither HPG nor any of its employees and associates employed in the preparation of this report has any beneficial interest in Şişecam Wyoming or in the assets of Şişecam USA or NRP. HPG will be paid a fee for this work in accordance with normal professional consulting practice as a consultant to Şişecam Wyoming. Şişecam Wyoming's predecessor OCI Wyoming (OCI) employed Mr. Hollberg from 1999 to 2003 and employed Mr. Leigh from 2003 to 2010. Mr. Hollberg left OCI Wyoming in 2002 to engage in consulting work and started HPG. Mr. Leigh retired from OCI Wyoming in 2010.

Mr. Hollberg and Mr. Leigh have over 70 years of combined experience in the Green River Trona Basin and its mining operations. They have performed engineering and geological services for Şişecam Wyoming, Genesis Alkali Corporation, Tata Chemicals, and TG Soda Ash Inc. HPG has served as a consultant to Şişecam Wyoming and its predecessor OCI performing mine engineering services since 2003 as well as other trona operators. Mr. Leigh has performed numerous geological services for Şişecam Wyoming and its predecessor OCI including supervision of exploratory drilling, seismic exploration, in-mine geologic mapping, and construction of a geologic model for the Big Island Mine as well as two other Green River Trona Basin operations.

The individuals responsible for this report have extensive experience in the mining industry, in the Green River Trona Basin, and are members in good standing of appropriate professional organizations.

Kurt F. Hollberg, BSc, PE Colorado (PE-36599), Wyoming (PE-6599), Nevada (PE-018102), Utah, (PE 10385339), Registered Professional Member SME # 1475226. Richard Terry Leigh, MSc, AIPG (6708), CPG, Wyoming (PG-53).

No independent feasibility study was prepared in the determination of this reserve estimate. HPG has utilized the 60-plus year history of the Big Island Mine and Refinery mining trona and processing soda ash along with the past eight years of operational and economic data demonstrating that the operation is economically viable.

2.2 SOURCES OF INFORMATION

This study uses the existing Şişecam Wyoming geologic database, drilling information, recent mine Trona thickness observations, current and historical financial information, and market studies, to estimate the trona resources available to Şişecam Wyoming. Based on this Mineral Resource Estimate and current business economics, a LOM plan was developed to estimate the recoverable trona and finished soda ash reserves which are the basis of this Mineral Reserve Estimate.

Section 24.0 contains a listing of the data files and sources provided by Şişecam Wyoming.

In addition to their historical knowledge of the subject property, both Mr. Hollberg and Mr. Leigh visited property for multiple days in November of 2024. The purpose of these visits was to inspect both the surface and underground facilities, collect information for this effort and interview technical personnel working for Şişecam. During the visits HPG interviewed the following Şişecam technical and management personnel:

- Robert Calderone (Surface Manager);
- John Lewis (Mine Engineering Superintendent);
- Tyler Schiltz (Environmental Manager);
- Jessica Annala (Accounting Manager);
- Steve Thompson (Project Specialist – Technical Services);
- Don McCallum (Project Specialist – Technical Services);
- Shannon Larson (QC QA Laboratory Supervisor).); and
- Mikail Demir (Technical Services Manager):

Şişecam Wyoming's excellent mine ground conditions allows examination of most areas of the existing mine and old workings. Mr. Leigh and Mr. Hollberg have examined many of these areas for this study. Mr. Leigh spent several days underground taking spot measurement of the Trona thickness in several areas of interest. Section 9.0 contains additional information on these inspections.

Surface tours included examination of the processing facilities (Units 3, 4, 5, 6 and 7), tailings facilities, DECA ponds and processing facility.

During the interviews it was clear that Şişecam personnel have a good understanding of current mine operations, of the geology and mine planning, chemical processing and environmental obligations and are in good standing with their responsibilities.

3.0 PROPERTY DESCRIPTION

3.1 BIG ISLAND MINE OPERATIONS

Şişecam Wyoming owns and operates the Big Island Mine complex that consists of an underground trona mine and associated refinery ("Şişecam Wyoming Mine and Refinery"). The Şişecam Wyoming Mine and Refinery lies northwest of the town of Green River in Sweetwater County, Wyoming as shown in Figure 3.1 below. Mining occurs in two trona seams, Bed 24 and Bed 25, nominally at 850-feet and 900-feet deep, respectively. The Big Island Mine was started in 1962 by the Stauffer Chemical Company and has been in continuous operation since that time. Şişecam gained control of the property in 2021and is the controlling partner with 49% owned by NRP. A full history of the ownership chain is discussed in Section 5.0.

The underground mining operation uses continuous miners mining in a modified room and pillar method. As of December 31, 2024, 183.3 MST of trona ore have been mined from these two beds, according to Şişecam Wyoming production records.

The Şişecam Wyoming refinery purifies the trona ore into soda ash (sodium carbonate). The soda ash is stored in silos on site then shipped via rail, truck or to bulk ocean carriers to international customers. Soda ash is an essential raw material in glass making, chemicals, detergents, and other industrial products.

Şişecam Wyoming sells the soda ash internationally and domestically through Şişecam Chemical Resources, which act as Şişecam Wyoming's marketing and sales agent for all its domestic sales. In 2020, Şişecam Chemicals exited the American Natural Soda Ash Corporation ("ANSAC"). ANSAC was set up in 1984 to act as the international sales, marketing, and distribution cooperative for the leading producers of natural soda ash in the United States. Şişecam Chemicals now manages all its international sales, marketing and logistics.

Şişecam's customers are primarily glass manufacturing companies, chemical manufacturing companies and distributors who serve certain markets.

Şişecam Parent was founded in 1935 and is a global leader in chemicals and glass industries with operations in 14 countries and 22 thousand employees. Şişecam is one of the largest glass and chemicals producers in the world.

> "Şişecam is the only global producer operating in all three key areas of the global glass industry: flat glass, glassware and glass packaging. It ranks among the world's top two producers in glassware, and among the top five global producers in glass packaging and flat glass. Şişecam is also one of top three largest producers of soda and a world leader in chromium chemicals." (Ref: Şişecam Website)

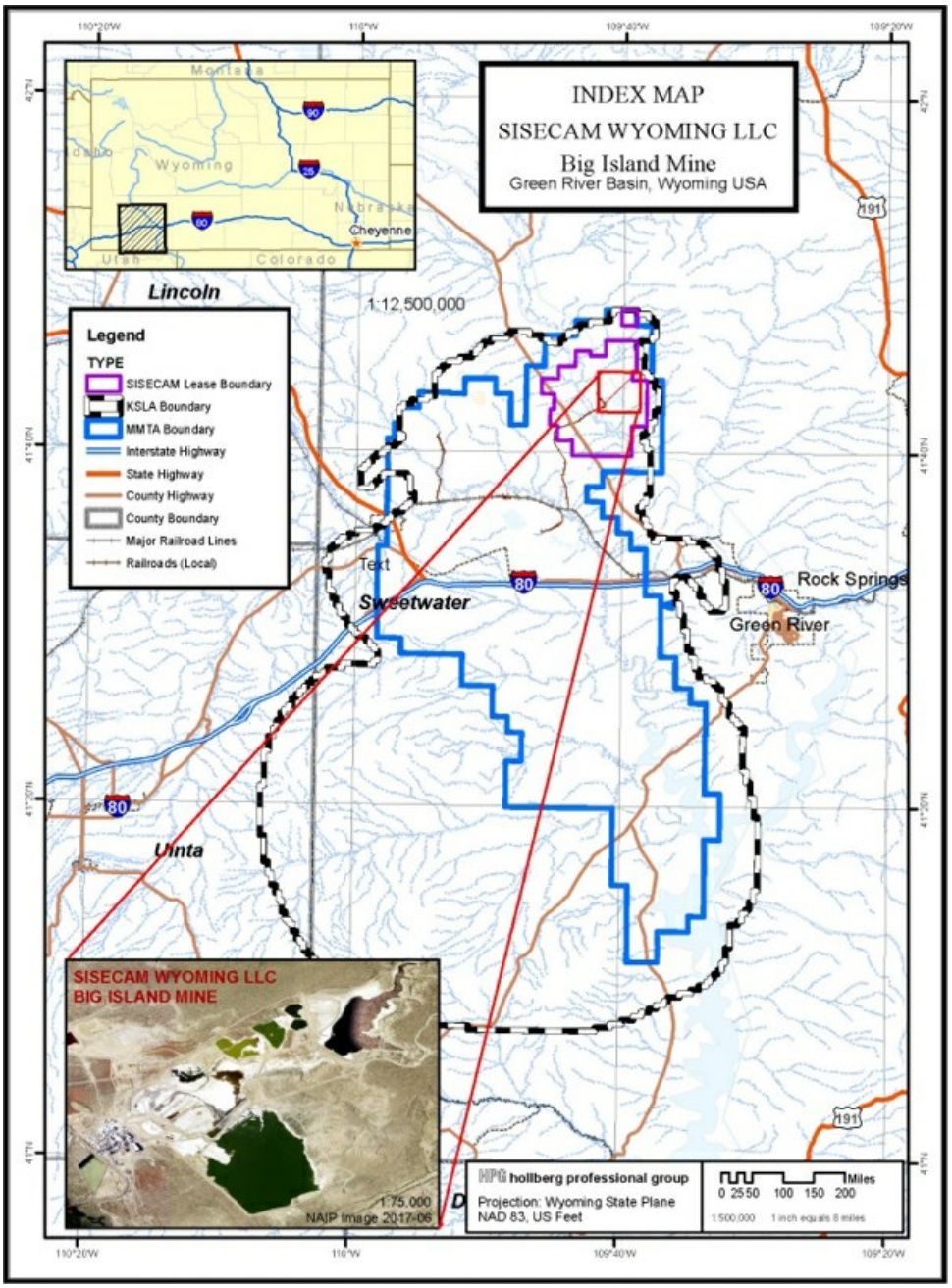


Figure 3.1 Big Island Mine General Location

3.2 OWNERSHIP

3.2.1 Trona Lease Area

Trona is defined by the US government as a "solid leasable mineral," subject to the Mineral Leasing Act of 1920. Federally owned sodium resources are controlled by the Department of the Interior and managed by the Bureau of Land Management ("BLM") and limited by Title 30§184(b). The act stipulates 10-year renewable lease periods, subject to annual rental and royalty fees, and demonstrated diligence. The federal government limits sodium leases to 5,120 acres by any one operator in one state but an exception in 30§184(b)(2) allows the Secretary, at his discretion, sodium leases or permits on up to 30,720 acres in any one State. Privately controlled sodium resource acreage is not limited.

The Bureau of Land Management designates available sodium leasing as the Known Sodium Leasing Area ("KSLA"). The KSLA is where trona thickness exceeds 1-meter, extends for over 300 km^2, and is greater than 80% grade. The known Mechanically Mining Trona Area ("MMTA") is defined where trona exceeds 8-feet thickness, has a grade greater than 85%, contains less than 2% salt (NaCl), and is at a depth no greater than 2,000-feet. Figure 3.2 shows the KSLA and MMTA boundaries along with the major leaseholders.

Other mineral owners in the Green River Basin include the State of Wyoming, along Sweetwater Royalties LLC (Sweetwater) and other private mineral owners. Sweetwater Royalties LLC is a subsidiary of Sweetwater Trona OpCo LLC (Sweetwater OpCo). Sweetwater is the second largest mineral owner in the KSLA. Sweetwater's current holdings were part of the Pacific Railroad Act of 1864 granting every other section 20 miles on either side of the railroad to the Union Pacific Railroad. Sweetwater acquired ownership through a spin-off from Occidental Petroleum's recent acquisition of Anadarko Petroleum in 2019. In 2020 Occidental sold the Land Grant to Sweetwater Royalties, LLC.

Because the Green River Basin is also an area of extensive oil and gas exploration and production ("O&G"), there is a possibility of conflict between O&G and underground mining. The regional BLM and the Joint Industry Committee on Oil and Gas ("JICOG") have established an O&G drilling moratorium area along with a Special Sodium Drilling Area ("SSDA") under the 1997 Green River Resource Management Plan ("GR RMP") (BLM 2011) within the KSLA that completely restricts O&G drilling. The area was largely defined by the BLM MMTA boundary. The KSLA is in the Kemmerer and Rock Springs Districts of the BLM.

In 2011 the BLM began the process of developing a revision to the 1997 GR RMP, known as the Rock Springs RMP Revision ("RS RMP") (BLM 2011). As of December 20, 2024, the Bureau of Land Management (BLM) finalized the Rock Springs Resource Management Plan for the Rock Springs Field Office. The RS RMP is the BLM's plan to manage the 3.6 million acres of Federal lands and 3.7 million acres of minerals in the Rock Springs District. The RS RMP attempts to forecast leasing and development activities over the next 20 years and determine the most appropriate land use. During the RS RMP's development, four land use plans were developed, no action, resource conservation, resource use, and moderate approach. BLM's choice of "resource conservation" has made the RS RMP highly controversial with significant opposition from all mineral owners, operators, and the State of Wyoming. The plan impacts nearly over two million acres of Federal Lands by changing, limiting or eliminating access and uses that were allowed in the past. The Wyoming Governor along with Utah and Wyoming's congressional delegation are pursuing legal and legislative actions to attempt to overturn the RS RPM.

All of Şişecam's mineral leases and facilities are within the Rock Springs District and are affected by the new RS RMP. The RS RMP's impact on Şişecam's operations are not fully understood but could impact the following. The RS RMP upholds the previous restrictions of O&G drilling within the MMTA which will continue to restrict any drilling over the Big Island Mine. New restrictions concerning Sage Grouse and Wild Horses will impact surface operations only and are considered minimal impact to SCW's current operations (Section 17.6). There have been concerns voiced about the availability of Federal Sodium Lease renewals under this plan as lease renewals are not defined and will be administered under the new resource conservation rules.

In the area between the KSLA and MMTA moratorium areas, existing permitted O&G work is allowed, and new work is approved on a case-by-case basis under specific drilling rules. Şişecam Wyoming's leases and license are bounded on the north and east by the KSLA and MMTA boundaries (Figure 3.2). There are three Federal O&G leases dated in the late 1980's that coincide with the Şişecam Sodium leases as well as a recent, 2020, "Area of Interest" Memorandum of Agreement covering most of the Şişecam Sodium Lease Area that is limited to O&G operations. As long as the SSDA O&G moratorium area stays in effect, the current Şişecam Wyoming Federal holdings are protected from concurrent O&G exploration. Şişecam's privately held leases are available for drilling under restrictive O&G drilling rules. Sweetwater Royalties reportedly supports the BLM moratorium and has not allowed drilling in the moratorium area.

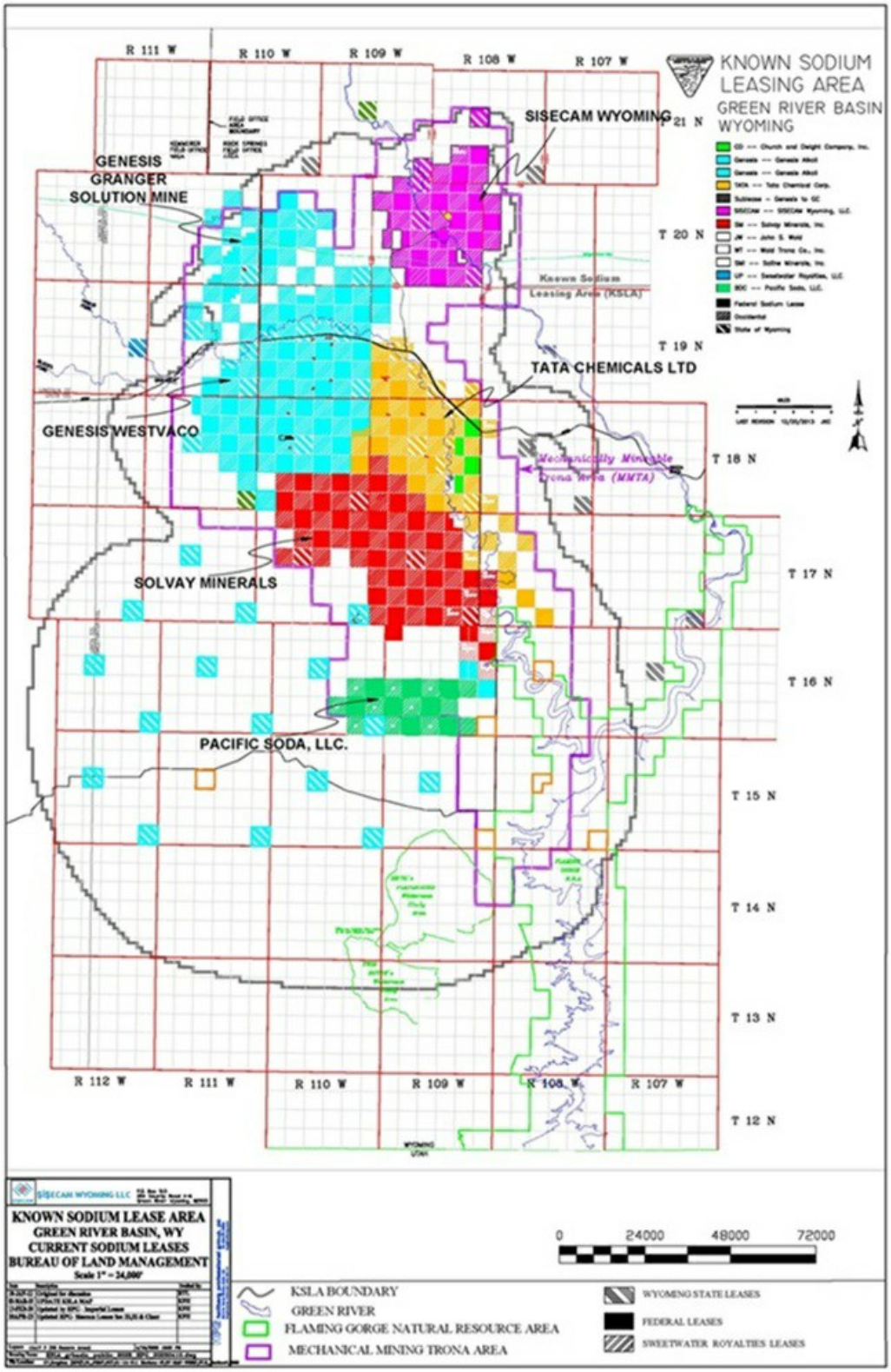
3.2.2 Mineral Leases and License

Şişecam Wyoming holds both private and public mineral leases and license over the Big Island Mine. In addition to the mineral leases and license, Şişecam Wyoming has several other permits with both U.S. federal and Wyoming state agencies that give it the right to mine the Big Island Mine.

Şişecam Wyoming has approximately 23,999 acres of sodium (Trona) under lease made up of approximately 8,094 Federal acres, 2,986 State acres, and 12,919 private acres.

Table 3.1 lists the current sodium leases and the license owned by Şişecam Wyoming and their status.

The location of Şişecam's trona leases are illustrated in Figure 3.2 and Figure 3.3.



(Source US BLM KSLA June-2024– Modified by HPG to include basin lease additions and ownership changes.)

Figure 3.2 KSLA Lease Map

TABLE 3.1
ŞIŞECAM WYOMING SODIUM MINERAL LEASES AND LICENSE
As of December 31, 2024

Mineral Owner	Section	Township North	Range West	Lease or License #	Acreage[1]	Date Acquired	Date Expires	Royalty Rate [2]
WYOMING	16	21	108	0-42570	640	12-Aug-1977	1-Aug-2029	6.0%
	16	20	109	0-25779	640	15-Sep-1969	1-Sep-2029	6.0%
	36	20	109	0-42571	546	1-Oct-1969	1-Aug-2029	6.0%
	36	21	109	0-25971	640	27-Jun-1977	1-Nov-2029	6.0%
	4	20	109	0-26012	519	15-Nov-1969	1-Nov-2029	6.0%
				Wyoming Total	2,986			
UNITED STATES (BLM)	18	20	108	W-0111730	620	31-Oct-1961	1-Dec-2027	6.0%
	12	20	109		535	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	24	20	109		543	31-Oct-1961	1-Dec-2027	6.0%
	26	20	109		480	31-Oct-1961	1-Dec-2027	6.0%
	10	20	109	W-0111731	640	31-Oct-1961	1-Dec-2027	6.0%
	28	21	108		640	1-Nov-1961	1-Dec-2027	6.0%
	32	21	108		640	31-Oct-1961	1-Dec-2027	6.0%
	14	20	109		640	31-Oct-1961	1-Dec-2027	6.0%
	8	20	109	W-079420	640	31-Oct-1961	1-Dec-2027	6.0%
	28	20	109		640	31-Oct-1961	1-Dec-2027	6.0%
	20	20	109		323	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	18	20	109		157	31-Oct-1961	1-Dec-2027	6.0%
	34	20	109		640	1-Jan-2015	1-Dec-2027	6.0%
	2	20	109	W-101824	317	1-Jun-1988	1-Jun-2028	6.0%
	32	20	109	W-190736	160	1-Apr-2022	1-Apr-2042	6.0%
				U.S. Total	8094			
PAL	22	20	109		160	16-Aug-1973	16-Aug-1983[3]	5.0%
				PAL Total	160			
SWEETWATER ROYALTIES, LLC	31	21	108	TR-702	640	18-Jul-1961	18-Jul-2061	8.0%
	33	21	108		640	18-Jul-1961	18-Jul-2061	8.0%
	7	20	109		690	18-Jul-1961	18-Jul-2061	8.0%
	7	20	108		619	18-Jul-1961	18-Jul-2061	8.0%
	19	20	108		621	18-Jul-1961	18-Jul-2061	8.0%
	1	20	109		266	18-Jul-1961	18-Jul-2061	8.0%
	3	20	109		328	18-Jul-1961	18-Jul-2061	8.0%
	5	20	109		519	18-Jul-1961	18-Jul-2061	8.0%
	29	21	108		640	18-Jul-1961	18-Jul-2061	8.0%
	9	20	109		637	18-Jul-1961	18-Jul-2061	8.0%
	11	20	109		643	18-Jul-1961	18-Jul-2061	8.0%
	13	20	109		540	18-Jul-1961	18-Jul-2061	8.0%
	15	20	109		637	18-Jul-1961	18-Jul-2061	8.0%
	17	20	109		640	18-Jul-1961	18-Jul-2061	8.0%
	19	20	109		320	18-Jul-1961	18-Jul-2061	8.0%
	21	20	109		640	18-Jul-1961	18-Jul-2061	8.0%
	23	20	109		640	18-Jul-1961	18-Jul-2061	8.0%
	25	20	109		544	18-Jul-1961	18-Jul-2061	8.0%
	27	20	109		636	18-Jul-1961	18-Jul-2061	8.0%
	33	20	109		640	18-Jul-1961	18-Jul-2061	8.0%
	35	20	109		640	18-Jul-1961	18-Jul-2061	8.0%
	29	20	109		640	18-Jul-1961	18-Jul-2061	8.0%
				Sweetwater Royalties Total	12,759			
				TOTAL ACREAGE	**23,999**			

(1) Acreage is approximate (2) United States (BLM) 2% for 10 Years starting January 1, 2021 (3) For as long as monthly payments are made.

(2) All US BLM Leases have a 2 percent royalty rate for a period of 10 years, as of January 1, 2021, based on Industry-Wide Royalty Reduction Soa Ash and Sodium Bicarbonate issued by the Secretary of the Interior, for all existing and future Federal soda ash or sodium bicarbonate leases.

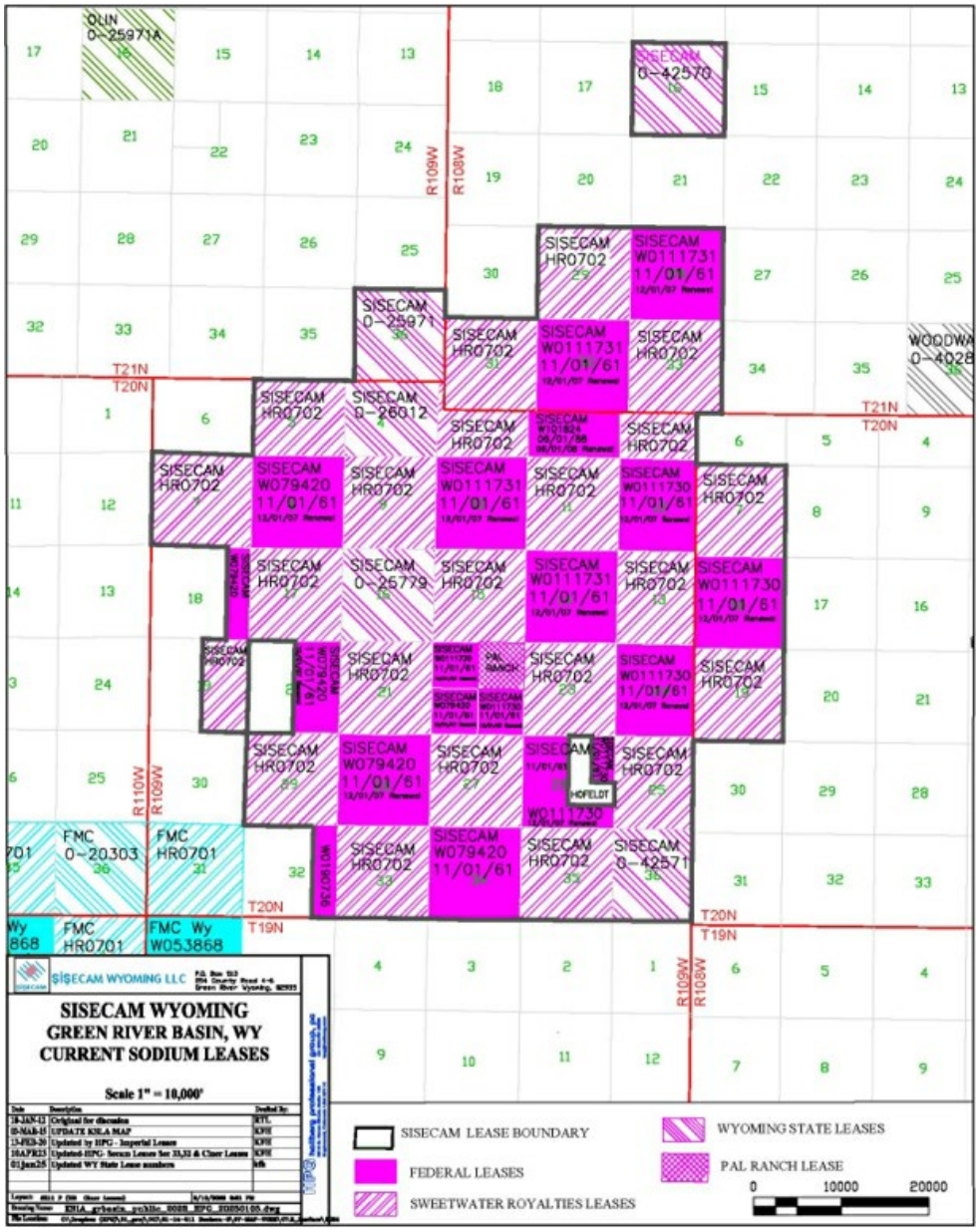


Figure 3.3 **Şişecam Wyoming – Sodium Lease Tenure Location Map**

For the purposes of this study, it has been assumed that all the relevant mineral leases, license, and permits that are in place, that the terms and conditions of all agreements relative to tenure have been met, that there are no encumbrances to the tenures, and they can be renewed into the future for the life of the operations. HPG has conducted a general review of mineral titles and license documents provided by Şişecam. HPG has not verified title or otherwise confirmed the legal status of any of the leases or the license but has relied upon documents provided by Şişecam Wyoming's representatives regarding the current status of the leases and license shown.

All federal leases are renewable on a 10-year or 20-year cycle with the terms and royalty rate adjusted at the time of renewal. By Notice of Industry-Wide Royalty Reduction Soda Ash and Sodium Bicarbonate Leases dated February 8, 2021, the Secretary of the Interior authorized an industry-wide royalty reduction from currently set rates by establishing a 2 percent royalty rate for a period of 10 years, as of January 1, 2021, for all existing and future Federal soda ash or sodium bicarbonate leases.

Wyoming state leases are renewable on a 10-year cycle with the terms and royalty rate adjusted at the time of renewal.

On September 20, 2010, Şişecam Wyoming exercised its right to renew the original Union Pacific (Anadarko/ Sweetwater) license for an additional 50-year period. The current Sweetwater TR-702 license extends to July 18, 2061. There are no provisions in the available documents for extension past this period. On October 12, 2015, Anadarko informed Şişecam's predecessor OCI Wyoming that, per the License Agreement the royalty rate would be raised to 8%. OCI Wyoming and now Şişecam Wyoming disputed that claim, the litigation was settled in favor of Şişecam with the current royalty rate on these leases now 8%. On January 20, 2023, Şişecam amended the TR-702 lease to include the south half of Section 33, T20N R109W, adding approximately 320 acres.

In 2017, the BLM granted Şişecam's request to renew three Federal Sodium leases for their 10-year extension totaling 7,617 acres (W-0111730, W-0111731, and W-079420). On June 1, 2018, BLM renewed Şişecam's Federal lease No. W-101824 of 316.9 acres also for 10 years. On April 12, 2022, Şişecam obtained lease to an additional 160 fringe acres Section 32 T20N R109W (W190736) for a period of 20 years.

Şişecam requested renewal of all five Wyoming State leases that expired in 2019. All five of the leases, 0-42570, 0-25779 0-42571, 0-25971, and 0-26012 were granted renewal for 10 years.

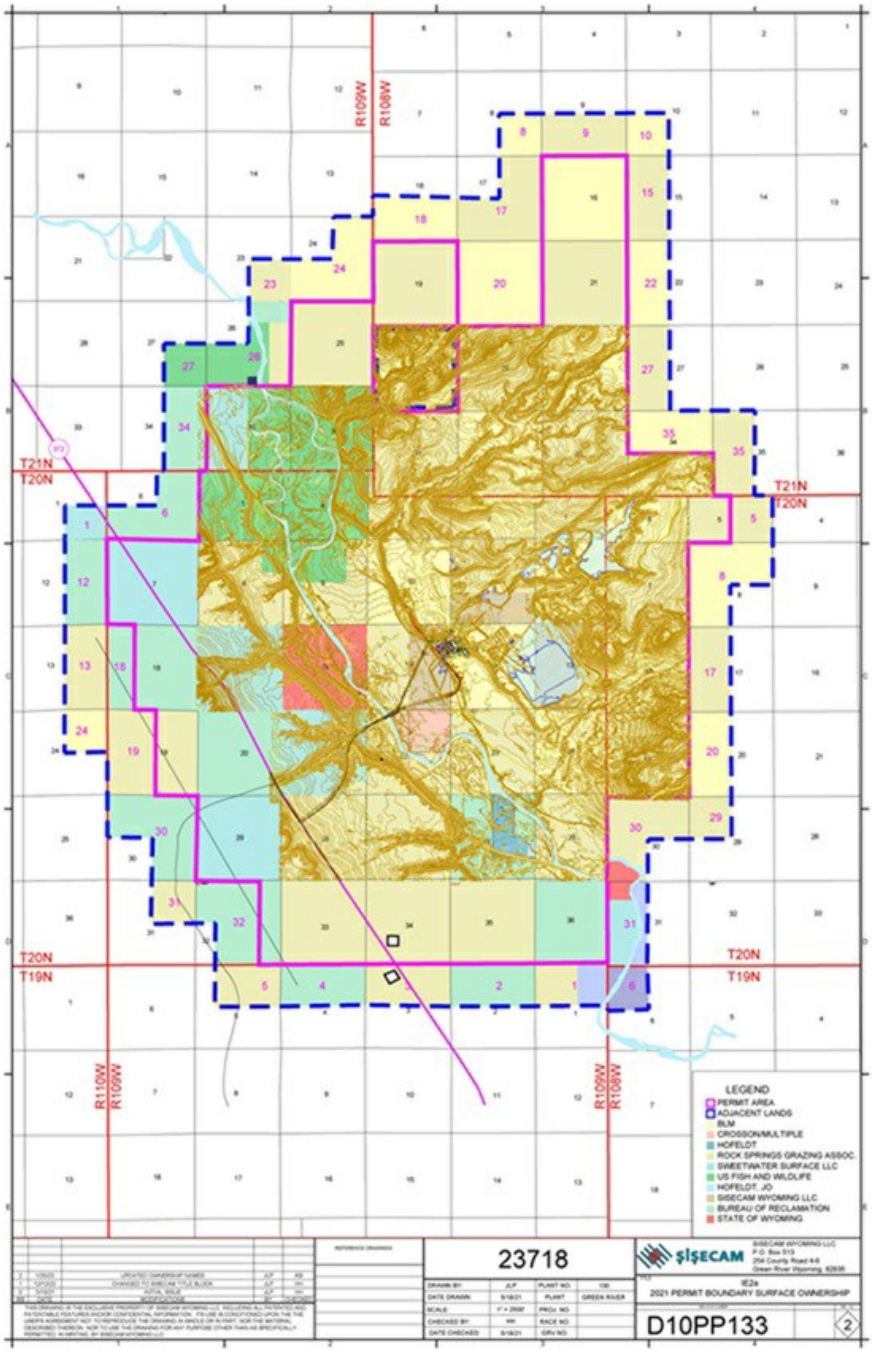
Şişecam still has lease rights to the B. Pal property private lease of 160 acres, "for as long as monthly rental payments are made". Şişecam has reported that they continue to make the payments. Both the Upper Bed 25 and Lower Bed 24 areas of the PAL lease have been mined. The Bed 24 area has been used for TRM paste disposal and the Bed 25 Panels are some of the first two-seam mining test panels. Because we are not considering secondary mining, and this area has been mined it was not considered for this reserve estimate.

Şişecam Wyoming's predecessor, OCI Wyoming, owned another private sodium lease, the Hoefelt lease. This lease expired in 1997, and no parts of those lands are considered for this reserve estimate. The Bed 25 mining area for the Hoefelt property has been completed. The available Bed 24 trona for the Hoefelt property has been excluded from this analysis but might be available if a lease agreement were to be completed with Hoefelt's heirs. This area contains an estimated 2.48 million recoverable trona tons at an estimated 88.9% trona grade. The lease also stipulated a perpetual easement for the workings contained in this lease.

Şişecam Wyoming pays royalties to the State of Wyoming, the U.S. Bureau of Land Management and Sweetwater. The royalties are calculated based upon a percentage of the value of soda ash and related products sold. Şişecam Wyoming pays a production tax to Sweetwater County, and trona severance tax to the State of Wyoming that is calculated based on a formula that utilizes the volume of trona ore mined and the value of the soda ash produced. Şişecam Wyoming has a perpetual right to continue operating under these leases and license as long as it maintains continuous mining operations and intends to continue renewing the leases and license as has been historical practice.

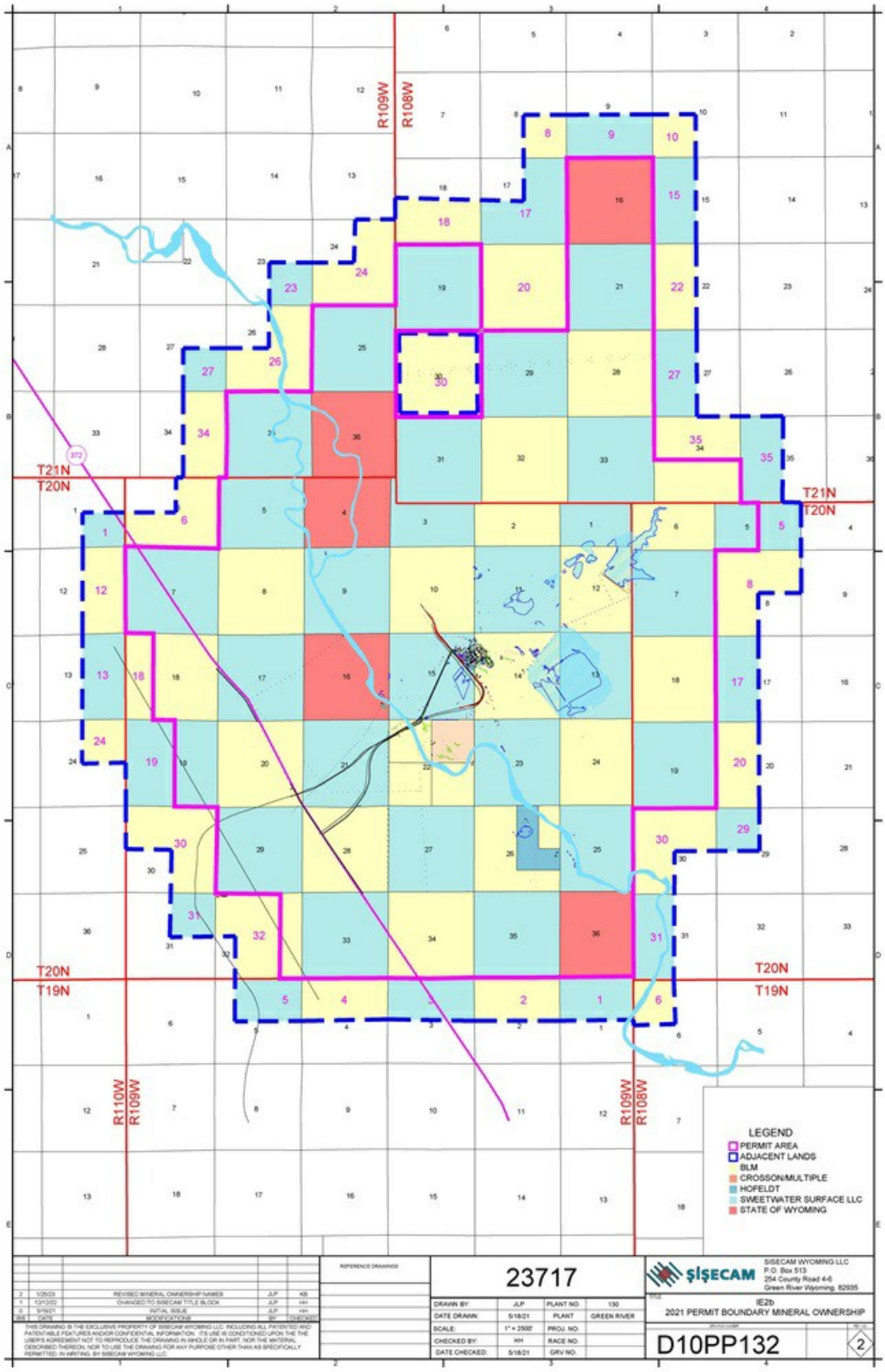
The Şişecam facilities are located on leased and deeded surface rights on T20N R109W Sections 1, 2, 3, 9, 10, 11, 12, 13, 14, and 15; and T20N R108W Sections 5, 6 and 7. The mineral rights and surface estate for Sections 2, 6, 10, 12, and 14 are Federal leases administered by the BLM. Sections 1, 3, 5, 7, 9, 11, and 15, are private lands and are leased from Rock Spring Grazing Association (RSGA) to Şişecam to sink wells and shafts for sodium related mining activities and related pipelines, power and telephone lines, roadways, wells, and all other associated facilities so long as Şişecam has licenses to mine. The Mineral rights for Sections 1, 3, 5,7 9, 11, and 15 are owned by Sweetwater.

Figure 3.4 shows the boundaries of the current mining permit and the surface ownership for the subject property. Figure 3.5 shows the boundaries of the current mining permit and mineral ownership for the Big Island Mine.



Source: Şişecam Wyoming

Figure 3.4 Surface Ownership



Source: Şişecam Wyoming

Figure 3.5 Mineral Ownership

4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 ACCESS

Şişecam Wyoming's mine and refinery are located 23 miles northwest of the town of Green River, Wyoming. The operation is accessible from Interstate 80 (I80), a four-lane divided highway, west to Exit 83, La Barge Road, then north on Wyoming Highway 372 (WY372) 12 miles to the OCI road, County Road 4. Both WY372 and County Road 4 are established paved two-lane highways that are maintained by Sweetwater County and the state of Wyoming Department of Transportation (WDOT).

The Şişecam site is serviced by a dedicated railroad spur line off the main East West Union Pacific rail line. Şişecam's spur line connects to the Union Pacific Main line just east of the FMC/Genesis Westvaco Facilities.

In addition to the onsite railyard, Şişecam utilizes a contract railyard along La Barge Road (Highway 372) which is privately owned and maintained by others. There are five track lines at the facility to assist with switching empty and loaded cars and prepping them for shipment offsite. There is an estimated 18,400-feet of track owned by the Big Island Mine and Refinery.

4.2 CLIMATE

The Şişecam facilities are located in the Green River drainage of the upper Colorado River system. Situated in a high intermountain basin bounded by the Wyoming Range to the West, Uinta Mountains to the south and the Wind River Range to the northeast, mean elevation exceeds 6,000-feet. Climate is dry, cold-temperate-boreal and characterized by limited rainfall (less than 8 inches) with long, cold, dry winters and warm-hot, summers with occasional storm producing flash floods. Evaporation exceeds 36 inches resulting in little excess water, limiting the majority of vegetation to the Green River flood plain. Wind generally blows from a southwesterly direction.

4.3 LOCAL RESOURCES

Green River (pop.11,496, 2023 Census), and Rock Springs Wyoming (pop. 22,954) are the two closest towns to Şişecam, 23 miles and 42 miles respectively. Evanston Wyoming (pop. 11,807) is 111 miles to the west and the major metropolitan area of Salt Lake City, UT (pop. 1,270,000) is 194 miles to the West. Green River and Rock Springs are well established communities with histories dating back to the 1800's as stops along the Union Pacific railroad with coal mining. The area has established oil and gas production, coal mining, major power generation, and five established trona mines that have been in business for 40 to 60 years. As a result, the surrounding communities have well developed industrial support capabilities. Both Green River and Rock Springs have developed school systems with a community college located in Rock Springs that has specific programs for training the technical and mechanical workers needed in the area. The community college has close ties to Wyoming University in Laramie, 200 miles to the east.

The population is stable and well diversified and considered the city of "56 nationalities" according to the Rock Springs Chamber of Commerce. The mines and oil and gas industry have higher than average compensation and benefits resulting in a stable community and workforce.

4.4 INFRASTRUCTURE

The Şişecam Facility has been in operation for over 60 years and the infrastructure is more than adequate and well developed for its purposes. The site infrastructure includes among other things:

- Soda Ash Process facilities;
- Electrical generation and transmission facilities;
- Natural gas pipelines and distribution facilities;
- Water supply and pumping station;
- Water pipelines, treatment, and distribution;
- Process waste tailings facilities;
- Sewage waste and runoff treatment facilities;
- Truck and rail loadout;
- Railyard and rail maintenance facilities
- Mine access shafts. ore hoists, and ventilation fans;
- Mine infrastructure, belt haulage, crushing, and mining equipment; and
- Ample buildings for offices, labs, change-rooms, warehouses, and maintenance shops.

Section 15.0 contains a more detailed discussion of the site infrastructure.

4.5 PHYSIOGRAPHY

Şişecam is located in the semi-arid high plateau region of southwestern Wyoming at elevations between 6,200 and 6,600-feet above mean sea level (MSL). Only about one percent (1%) of the land is barren, but the short growing season, rugged topography, poor soils, and limited availability of precipitation make vegetation rather sparse in both variety and productivity. Over most of the area, vegetation is homogeneous in appearance consisting of about 90 percent brush and shrubs, chiefly sagebrush, saltbush, with greasewood and winter fat in drainage areas. The area has historically been utilized for livestock grazing, wildlife habitat, and recreational hunting. This area provides limited winter grazing for cattle, sheep, and horses. However, stocking rates are low primarily due to sparse vegetation (Soil Conservation Service [SCS]1988).

The Şişecam property is crossed by the Green River which is a primary tributary to the Colorado River and located in the Upper Green Slate Watershed and designated Class 2AB waterway.

Figure 3.4 illustrates the topography of the Şişecam leases along with the surface ownership.

5.0 HISTORY

During the late 1950's into the early 1960's, Stauffer Chemical Company was the second business to commence permitting for a soda ash facility in the Green River Basin. The area of interest was along the banks of the Green River. The permit area is located on the Big Island Bridge USGS Topographic Quadrangle. The Big Island is a predominate geographic feature in the Green River and is currently part of the Seedskadee Wildlife Refuge. From the initial permitting, the property has been known as the Big Island Mine and Refinery.

The former Stauffer Chemical Company initiated Trona exploration in August 1959. With the completion of 26 exploration drill holes by August 1960, the first reserve estimated was calculated; "A total of at least 360 million tons of better than 90 percent trona in beds 8.5 to 14-feet thick was proved up." (Trona Exploration in the Big Island Area, 1960). Estimating the Upper Bed (east of the Green River) contained 170 million tons and the Lower Bed, 190 million tons.

During 1961 minerals leases were obtained from Federal and private landowners, including the Union Pacific Railroad, totaling 33-¼ Sections.

In 1962 Stauffer Chemical opened the Big Island Mine and Refinery in Green River, Wyoming with the purpose of producing all-natural soda ash from mined trona. Two shafts were sunk, and Refinery Units 1 & 2 were constructed to produce dense soda ash. Mining commenced in the Lower Bed 24.

Four (4) supplemental exploration drill holes were completed in 1967 and the acquisition of 2-¼ Sections from the State of Wyoming and private ownership. Unit 3 was constructed to increase soda ash production.

Exploration activity increased substantially in the late 70's and early 80's more than doubling the database with 36 additional drill holes, now totaling 69 borings. Lease activity increased with addition of 4-¼ Sections from Wyoming and private mineral ownerships. Then totaling 39-¾ Sections or approximately 24,737 Acres.

Over the next two decades Stauffer expanded production by adding Unit 4 and Unit 5 processing facilities. Production increased from 400,000 tons of soda ash per year to over 950,000 tons per year.

In 1985, the Big Island Mine and Refinery was acquired by Chesebrough Ponds and changed ownership several times over the next few years, first to Imperial Chemical Industries in 1986 and a year later, to Rhone-Poulenc. Under Rhone-Poulenc continuous miners were introduced and Units 3 and 4 processing facilities were converted from triple effect crystallizers to mechanical vapor recompression.

Additional leases were acquired in 1988 (W-101824) increasing the area to 43-¼Sections or approximately 26,654 Acres.

In 1996, Rhone-Poulenc sold its interest in the soda ash business to OCI Company, LTD, later renamed OCI Chemical Corporation.

OCI added Unit 6, a standalone processing facility, in 1998 and decahydrate mining in 2006 to increase the sites production to over 2.5 million tons per year.

In 1997 the Hoefelt private lease totaling 160 acres expired and was not renewed. In June of 2008 the former Union Pacific Lease TR708, 2,877 acres, was not renewed.

In September of 2013, OCI announced its Initial Public Offering (IPO) on the NYSE under 'OCIR', a master limited partnership. In 2015, Ciner Enterprises Inc., a subsidiary of Ciner Group, acquired OCI Chemical Corporation. The company was renamed Ciner Resources Corporation. In 2021, Ciner Group sold 60% of its US soda ash business to Şişecam Chemicals and the company was renamed to Şişecam Resources LP.

In 2023, Şişecam Resources LP was dissolved and Şişecam Chemicals Wyoming LLC ("SCW LLC") became the direct owner of 51% of Şişecam Wyoming. SCW LLC, the operating partner, controls and operates Şişecam Wyoming with non-operating ownership of 49% by NRP Trona. SCW LLC is 100% owned by Şişecam Chemicals Resources LLC ("Şişecam Chemicals,") which is 100% owned by Şişecam USA Inc. ("Şişecam USA"). Şişecam USA is a direct wholly-owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish Corporation ("Şişecam Parent"), which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi Turkiye Is Bankasi ("Isbank").

In 2022 and 2023, Şişecam Wyoming acquired trona leases on 480 additional acres along the southwest boundary of the current mine. These "fringe" leases include the south half of Section 33 – T20NR109W private and the eastern quarter of Section 32 – T20NR109W US Federal Lease.

As of December 31, 2024, Şişecam Wyoming has approximately 23,999 acres of sodium (Trona) under lease made up of approximately 8,094 Federal acres, 2,986 State acres, and 12,919 private acres (Table 3.1).

Şişecam Parent is an international company with operations in 14 countries on four continents. 'It ranks among the world's top two producers in glassware, and among the top five global producers in glass packaging and flat glass. Şişecam is also one of top three largest producers of soda and a world leader in chromium chemicals.' (Şişecam Website).

With Şişecam as the 'controlling partner' the Big Island Mine and Refinery is now vertically integrated with an end user of their product providing a base load for their plant and strengthening their international sales and logistics.

5.1 PRODUCTION HISTORY

Şişecam Wyoming has a long and consistent production history extending over 60 years. This long history forms the basis for our reporting of the trona reserves and resources. Table 5.1 shows the sites trona and soda ash production for the last six years. The only year of decreased production was 2020 due to the worldwide impact of COVID-19 virus.

TABLE 5.1
ŞIŞECAM HISTORICAL SODA ASH PRODUCTION
BY YEAR

	2019	2020	2021	2022	2023	2024
Trona tons	4,157,009	3,653,830	4,276,837	4,373,724	4,371,284	4,467,168
Soda Ash tons	2,712,187	2,236,850	2,682,203	2,660,172	2,572,441	2,475,813

6.0 GEOLOGICAL SETTINGS, MINERALIZATION, AND DEPOSIT

6.1 GEOLOGIC SETTING

The trona deposits of SW Wyoming are the world's largest occurrence of natural soda ash. The deposit was formed from the evaporation of a shallow lake, Lake Gosiute, that covered SW Wyoming and NE Utah 50-60 million years ago (wyomingmining.org, 2020).

6.2 TRONA DEPOSITION

The trona mineral deposits within the Şişecam Wyoming lease area are correlated with the lacustrine sequences of the Eocene Green River Formation. Trona and other associated evaporates occur within the Upper Wilkins Peak Member.

The lacustrine sequences of the Green River Formation were deposited in a series of lakes. Approximately fifty million years ago, Lake Gosiute (Lake Gosiute, Figure 6.1), fluctuated in areal extent in response to climatic and tectonic events. At its smallest size, during restrictive phases, the lake was very saline and contained large quantities of dissolved solids. When evaporation of the water reached critical levels, dissolved solids precipitated to form trona, shortite, halite, and other saline minerals. Trona formed as a chemical precipitate and required a specific range of weight percent of sodium and carbon dioxide in solution, a specific range of temperatures, and a specific range of relative concentrations of other ions (calcium, magnesium, chlorides, sulfates, etc.) within the water column.

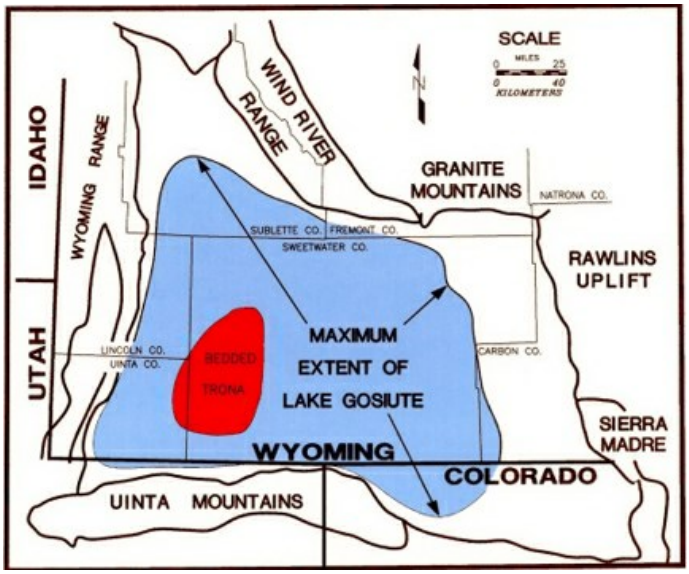


Figure 6.1 Deposition Basin – Lake Gosiute

Sediments eroding from the peripheral mountains created extensive alluvial plains and broad flat pediments. Clastic wedges of the Wasatch and Bridger-Washakie formations intertongue and grade laterally with the lacustrine sequences of the Green River Formation (Figure 6.2).

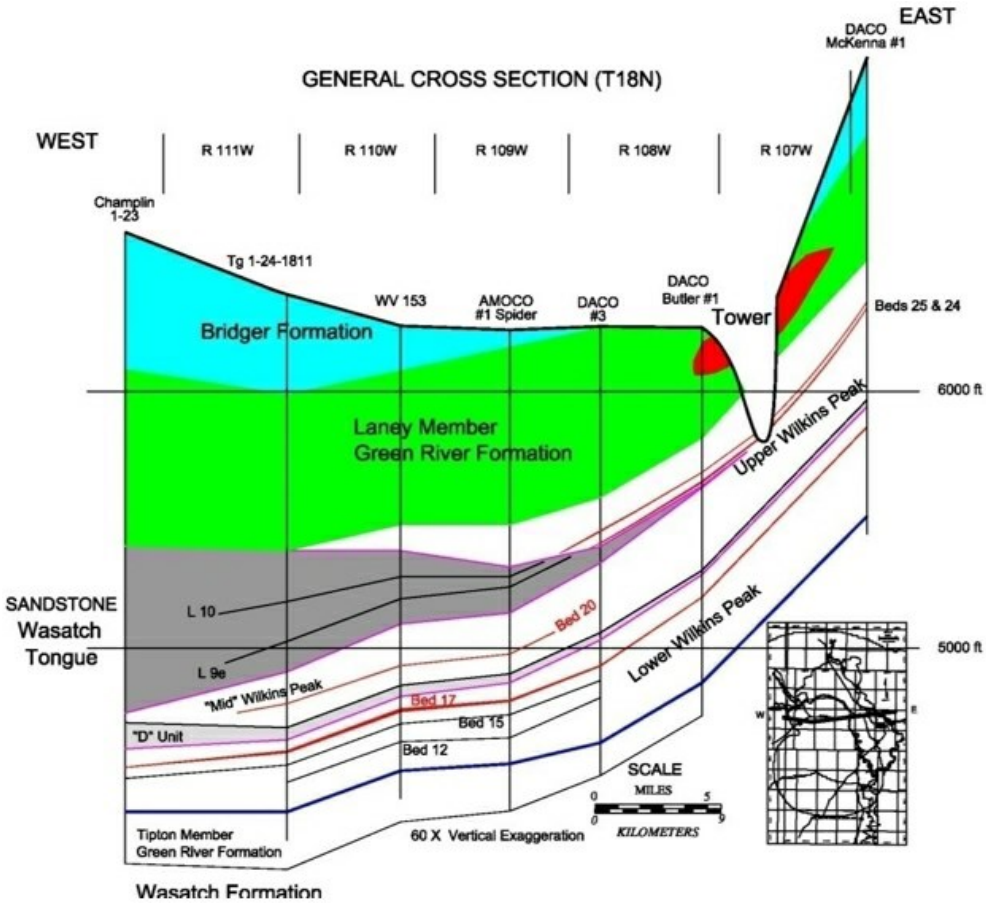


Figure 6.2 Deposition Cross Section

Within the hydrogeographic basin of approximately 77,300 km^2 (48,500 square miles), the greatest expanses of Lake Gosiute and surrounding mudflats occurred during the Tipton and Laney stages. Bradley (1964) estimated the lake expanded to over 24,000 km^2 (15,000 square miles). Total evaporation of Lake Gosiute during the restrictive phases of the Wilkins Peak stage is indicated by the presence of sedimentary structures in the deposit.

6.3 TRONA BEDS OF THE GREEN RIVER BASIN

The US Geological Survey recognizes 25 trona beds of economic importance (at least 1 meter in thickness and 300 km2 in areal extent) within the Green River Basin. Identified in ascending order, the trona beds are numbered 1 through 25 from the oldest (stratigraphically lowest) to the youngest (stratigraphically highest), as shown in Figure 6.3. Şişecam Wyoming has mineable reserves in the shallowest mechanically minable Trona Beds 24 and 25 (800 to 1,100-feet deep). Currently Genesis Alkali, Solvay, and Tata are mining Bed 17 occurring at greater depth. Pacific Soda is focused on the lower trona beds, Bed 1 through Bed 5, utilizing solution mining due to the trona depth.

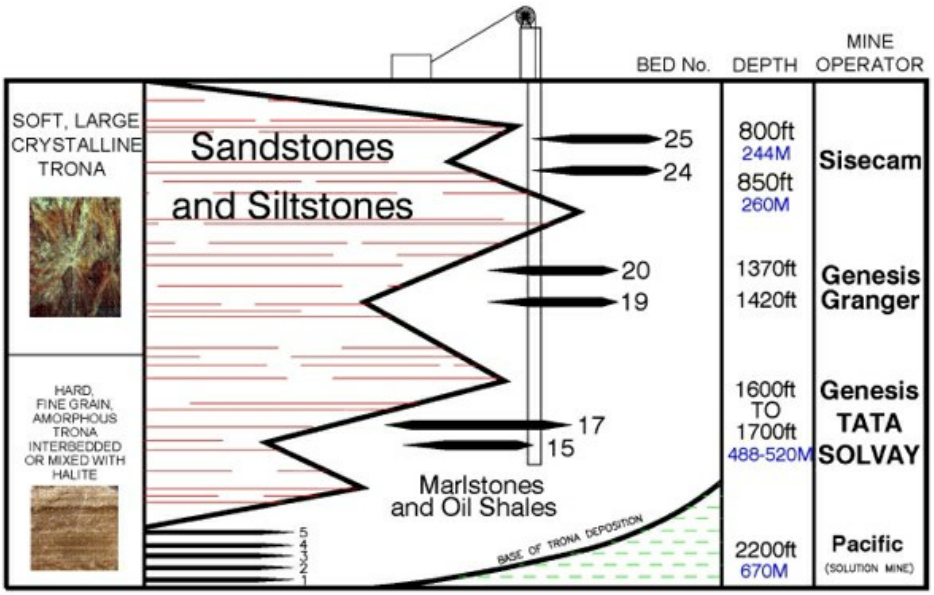


Figure 6.3 Schematic Section Through the Trona Deposits

Trona Bed 1 through 18 of the Lower Wilkins Peak are relatively tabular with a fine grain sugary appearance. Various amounts of halite are present and can become more salt, halite, than trona towards the southwestern portion of the depositional basin. Halite is a significant contaminate in the refining process and reduces recovery and increases production cost. A stable depositional environment is implied by uniformity and minimal variation of the depocenters of Beds 1 through 18.

Trona Beds 19 through 25 are relatively halite free and consist of amber translucent coarse-crystalline blades to coarse granular “sugary” textured masses. Trona Beds 19 through 22 are located in the northwestern corner of the Green River Basin saline depositional basin. Trona Beds 24 and 25, mined by Şişecam Wyoming, are located in the northeastern corner of the Green River Basin.

Figure 6.4 shows the areal extent of the major trona beds in the Green River Basin.

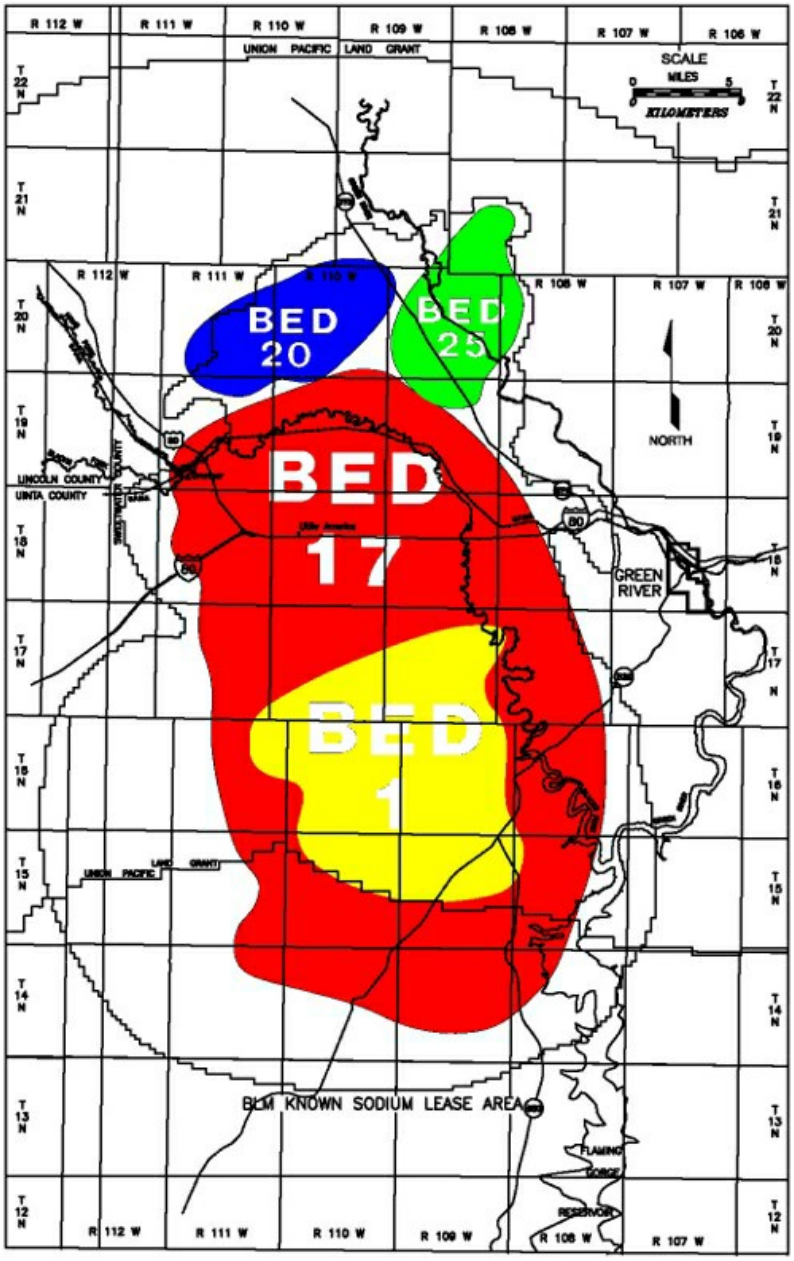


Figure 6.4 Green River Basin Trona Bed Extents

6.4 LOCAL GEOLOGY AND LITHOLOGY

6.4.1 Local Geology

Mineral reserves within the Şişecam Wyoming lease area are confined to Trona Beds 24 and 25. Isotope analysis of a volcanic layer, known as the Big Island Tuff, located between these beds, has dated deposition at approximately 49 million years. Local structural gradient is oriented west/southwest at a grade of approximately 50-feet per mile and was influenced by the structural high of the Rock Springs Uplift to the east. Overburden depths of Beds 24 and 25 increases along the strike of the dip from typically 800-feet to 1,100-feet with increasing surface topography. Figure 6.5 shows a generalized east-west cross section across the Big Island Mine property.

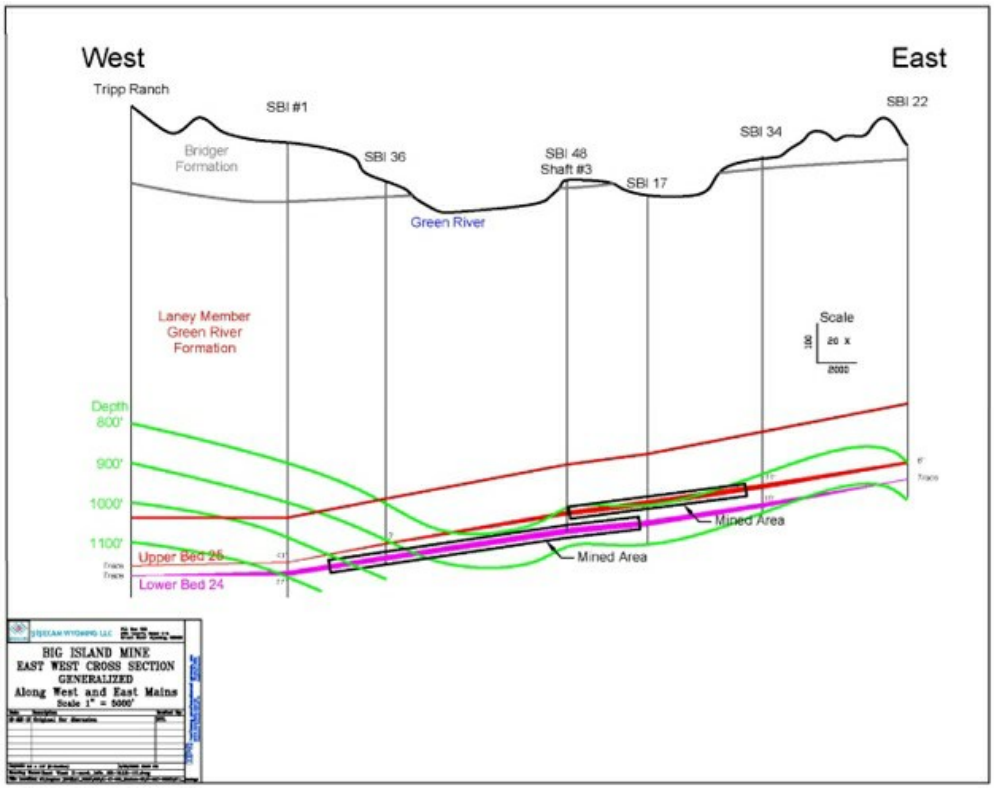


Figure 6.5 Generalized Cross Section – Bed 24 and 25

6.4.2 Trona Bed Lithology

A review of the exploration database and ore characteristics was initiated in 1999, by Korte and others, with greater emphasis on correlating mine observations with available drill core and lithological core descriptions. Mine mapping of trona ore thickness occurred along the perimeter of the mine developments as well as interior portions of the mine where access was available. A database of approximately 500 mine observations was developed. Documentation of this investigation was presented in 2002 with recommendations for continual study from supplemental exploration and mine observations. To date, the mine observations exceed over 4,000 measurements with emphasis on active mine areas. Mine observations in critical areas are on a 100-foot spatial density.

The 1999 investigation identified four distinct lithological horizons (geological facies changes) within each bed that may represent repetitive depositional occurrences. These horizons have been designated Trona 1 through Trona 4, or T1 through T4. The basal unit labeled T1 is composed of very fine grain sugary textured trona forming lenticular pods of varying thickness and is probably post depositional in origin. In the original 1980 database, sometimes the T1 was included, and sometimes it was excluded. T1 unit is not part of the reserve base for this study because it is separated from the mineable horizons by several layers of oil shales and marlstone. Dilution from these non-soluble minerals decreases ore grade to unacceptable levels.

The intermediate T2 through T4 horizons are currently mined by Şişecam Wyoming with the continuous miner fleet. During mining, the T4, and occasionally T2, are omitted. The T2 unit is stratigraphically at the basal contact with the floor shales. T2 is separated from the T3 unit by a thin marker seam of shale. This marker seam assists the miner operator with horizon control. The T4 unit is located at the top of the trona bed and represents the conclusion of deposition. An increase in insoluble materials in the T4 unit can reduce grades in this horizon. The T3 unit is the primary high-grade horizon. Only the T2 through T4 horizons are considered ore in this reserve update. Figure 6.6 illustrates this general lithological section.

The geological depositional and post depositional features, listed above, have been recognized from the mine mapping, and confirmed by several thousand mine observations.

Prior to trona formation, a layer of rich organic marlstone was deposited. This material can be classified as an oil shale but does not have sufficient organics to combust. Initial trona deposition of both beds was precipitated as layers up to 3-feet thick of a finer texture with some organic material giving this layer a darker color, illustrated as T2 Ore Zone on Figure 6.6 lithological section. An interruption of trona deposition is illustrated by the occurrence of a laminated marlstone. The marker seam might represent a brief climate change or a storm event, washing clay material into the lake. Subsequently, the primary trona precipitation followed as illustrated by T3 Ore Zone with purities up to 99%. Closure of trona precipitation is illustrated as T4 Ore Zone and contains greenish-grey marlstone lamination resulting in a decrease in quality. Post-deposition fluid migration from below produced a secondary layer of trona illustrated as T1 Zone. This zone probably was the result of hydrofracturing to floor shales to form lenses of trona varying in thickness from zero to six feet. The T1 unit has a fine sugary grain texture and can contain organics associated with the oil shales. Şişecam Wyoming's mining is focused on a Mineable Ore Zone of T2 through T4 containing an average grade exceeding 89%.

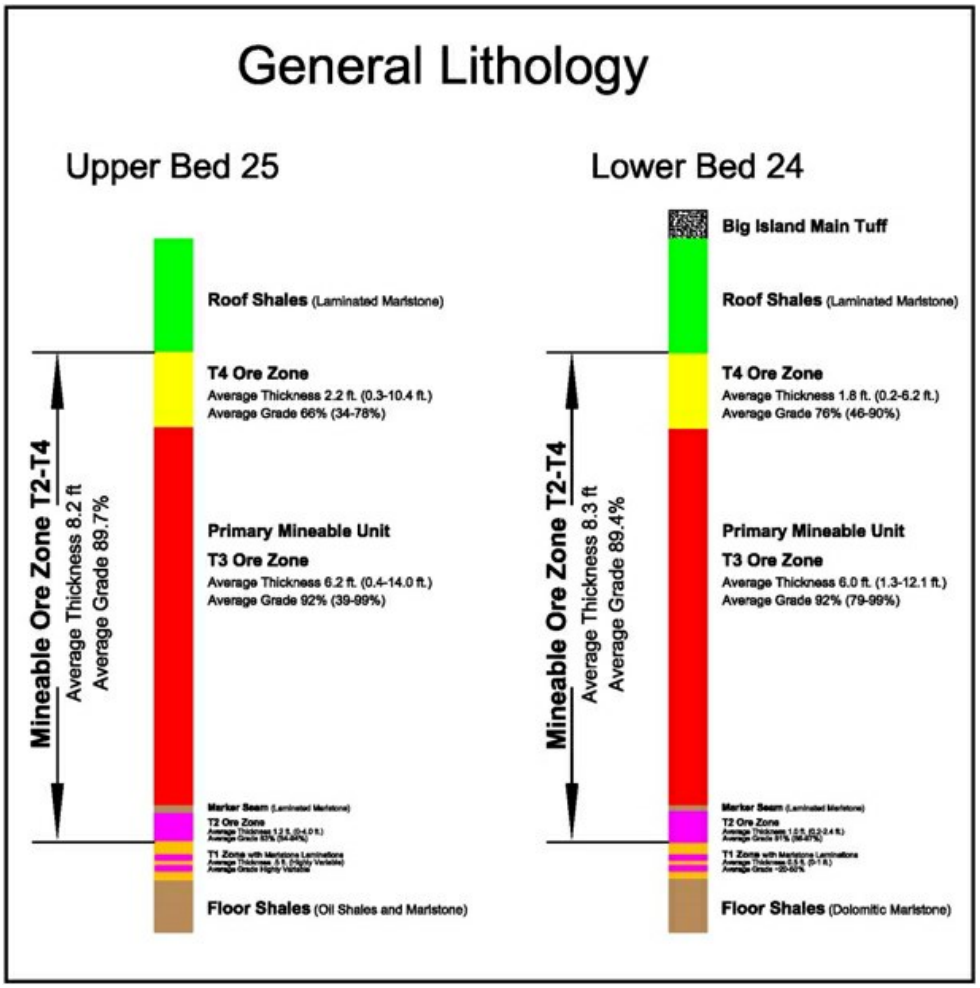


Figure 6.6 Trona Bed 24 & 25 Lithological Section

Interburden between Beds 24 and 25 is composed of laminated dolomitic marlstones with occurrences of volcanic tuff laminations and layers. Within the interburden are zones of organic rich marlstones and numerous occurrences of an associated mineral, shortite (calcium sodium carbonate).

Overburden above Bed 25 is composed of the same material listed above with increasing layers of hard dolomitic cemented detrital silts and fine grain sands. The detrital sediment probably represents storm events.

Other than microscopic material and algal debris within the trona, no fossils have been observed in trona beds.

6.4.3 Sedimentary Structures

Depositional and post-depositional sedimentary structures have been observed in the Şişecam Wyoming Mine and have had some impact on production grades and/or mining. These structures include:

Polygonal, vertically oriented, clay filled features are common, suggesting intense evaporation and desiccation, resulting in the formation of large “mud-cracks” within the deposit. Şişecam Wyoming Bed 25 exhibits these features in greater detail than Bed 24, Figure 6.7.

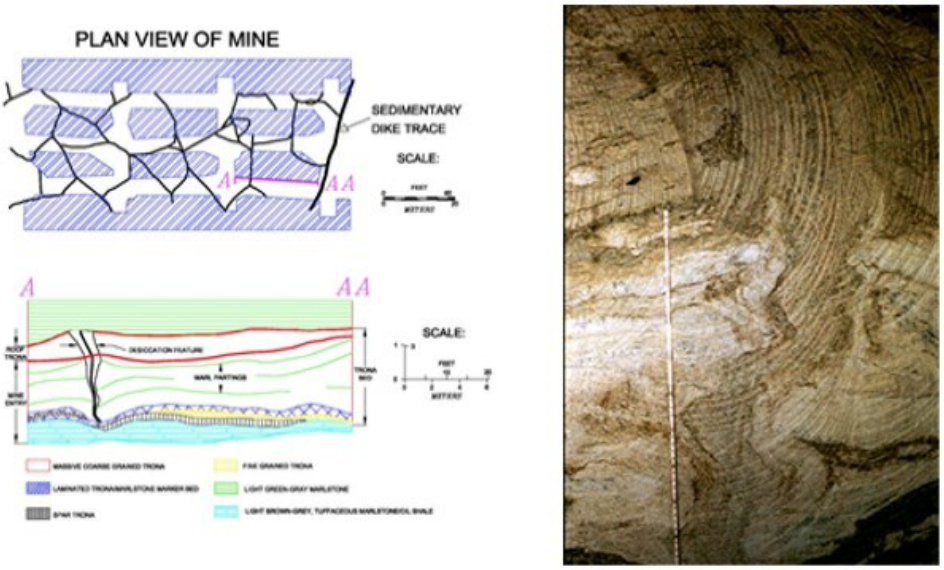


Figure 6.7 Filled Desiccation Crack within Trona Bed

“Blow-outs” occurring in both beds, represent a massive dewatering event from vertical brine movement eroding the trona bed. Results of this movement have been observed to completely obliterate the beds from a 12-foot seam thickness to zero within a 50-foot distance span, Figure 6.8.

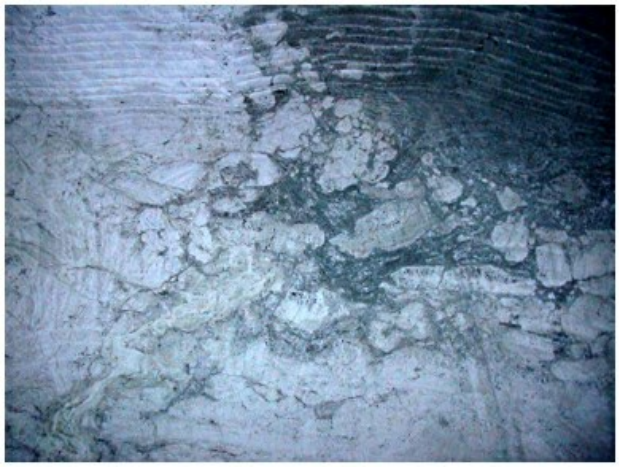


Figure 6.8 Blow-out Feature within Trona Bed

Geological faulting, movement, and fracturing have been observed in Bed 25. The occurrence of locally identified “root-beer” seams is associated with this type of disturbance, Figure 6.9.

Figure 6.9 Geologic Faulting within Trona Bed

Post-depositional dissolution from moisture/groundwater has been observed in the Lower Bed 24. Relatively isolated, the trona bed appears to be dissolved from the top after deposition, resulting in thinning of the bed and an increase in insoluble content in the upper portion of the seam, Figure 6.10.

Figure 6.10 Post Depositional Dissolution within the Trona Bed

Post-depositional soft sediment folding and rolling of the ore bodies (observed in both beds), Figure 6.11.

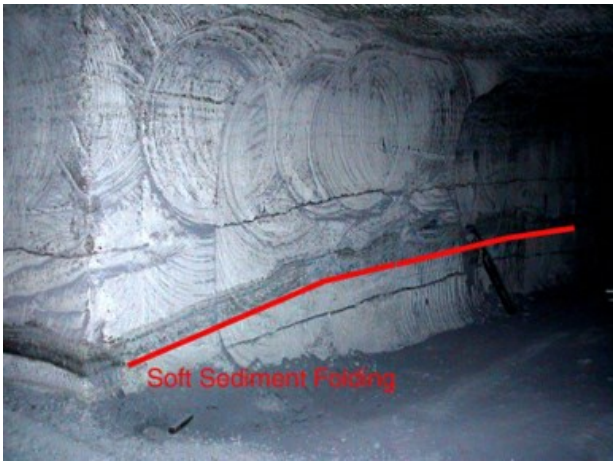


Figure 6.11 Post Depositional Soft Sediment Folding within the Trona Bed

Figure 6.12 Post Depositional Secondary Deposition of "Root Beer" trona

"Root Beer" trona is confined to the eastern half of Trona Bed 25, Figure 6.12. Sedimentary structure of the "root" trona" is perpendicular to the bedding of Bed 25. Crystal orientation implies deposition under compressive force such as depositional sediment weight.

Originally, the trona beds were formed close to sea level but now reside at a mile above sea level. During this transition period, compressional forces squeezed the tabular deposits. Where trona was thick and competent, little impact occurred, but as the ore bodies thin and become less competent, pinching and rolling could occur. Severe seam rolling can result in localized production grade dilution from increased insoluble minerals at the basal contact.

7.0 EXPLORATION

Exploration drilling has been the primary method to delineate trona Beds 24 and 25. The former Stauffer Chemical Company initiated trona exploration in August 1959 and completed 26 exploration drill holes by August 1960. Four supplemental exploration drill holes were completed in 1967 and the acquisition of 2-1/4 Sections from the State of Wyoming and private ownership. Exploration activity increased substantially in the late 1970s and early 1980s more than doubling the database with 39 additional drill holes, bringing the total to 69 borings. Two solution wells were drilling in 1994 bringing the total to 71. The final 10 exploration drill holes were completed from 2000 to 2011. An additional 12 borings were drilled by Phillips Petroleum and Allied Chemical in 1965 and 1978 respectively. These drillings are mostly to the south of Şişecam's current Mining Permit Boundary

Supplementing the surface to bed drilling are bed-to-bed borings that total 55 holes. Thirty-four bed-to-bed holes were drilled in the 1960's to 1979 to support two seam mining. Ten additional bed-to-bed holes were drilled to delineate the Bed 24 northeast resources. In 2022, Şişecam Wyoming drilled eleven bed-to-bed exploration core holes from existing Upper Bed 25 working into the unmined Lower Bed 24 trona seam.

This brought the total number of exploration drill holes by Şişecam to 136 and an additional 12 holes by outside firms for a total of 148 borings.

Enhancing this data set are over 4,000 observations and measurements from the existing mine developments.

In general, the core samplings were collected from each boring and prepared for analysis. Methodology utilized for coring varied through time and has included mud drilling, saturated brine drilling, air-foam drilling, wireline drilling and continuous coring from surface. A limited number of borings were logged with geophysical techniques including gamma, sonic, neutron, caliper, and high-resolution rock mechanics tools.

Only four of the 30 exploration drill cores from the 1959 to 1967 drilling programs have survived. The more recent core from 1975 through 2011 is stored in the mine at a constant climate. Verification of trona thickness and quality has been difficult for the 1975 through 1980 exploration cores due to decomposition and desiccation of the marlstone clays.

No supplemental exploration has been conducted since 2022, and drilling records remain unchanged. Mine observations from Şişecam's 2020 through 2024 mine advance in the northeastern and southern portions of Bed 25 and eastern portions of Bed 24 have been incorporated into this analysis.

Over his years of work on this property Mr. Leigh has documented and verified the location of all surface drill holes outside the plant footprint with handheld GPS.

Since 2019 the only mining in Bed 24 was the extensions of the LB North Mains, and subsequent test panels towards the west, Two-Seam area. Examination of this area did not indicate any requirement to modify the Bed 24 geologic model.

Table 7.1 shows the history of the exploration drilling on the Big Island Mine, Figure 7.1 and Figure 7.2. illustrates the location of the exploration drilling.

TABLE 7.1
BIG ISLAND MINE EXPLORATION DRILLING HISTORY

Surface Exploration Drilling						Internal Mine Bed to Bed Drilling		
SBI Hole Number	Date Drilled	Logged By:	SBI Hole Number	Date Drilled	Logged By:	SBIU Hole Number	Date Drilled	Logged By:
1	8/19/1959	LEM	54	5/18/1979	CAD	SBIU-06	o Date, 1960's	LEM
2	8/27/1959	LEM	55	11/19/1978	CAD	SBIU-07	o Date, 1960's	LEM
3	9/7/1959	LEM	56	7/ /1979	CAD, CJF	SBIU-08	o Date, 1960's	LEM
4	9/17/1959	LEM	57	5/6/1979	CAD	SBIU-09	o Date, 1960's	LEM
5	9/25/1959	LEM	58	9/1/1978	CAD, PMM	SBIU-10	o Date, 1960's	LEM
6	10/4/1959	LEM	59	7/31/1979	CAD, CJF	SBIU-11	o Date, 1960's	LEM
7	10/10/1959	LEM	60	6/23/1979	CAD, CJF	SBIU-12	o Date, 1960's	LEM
8	1959	LEM	61	6/ /1979	CAD, CJF	SBIU-13	8/7/1970	RLP
9	10/25/1959	LEM	62	8/14/1979	CAD, CJF	SBIU-14	12/8/1970	RLP
10	11/2/1959	LEM	63	5/15/1980	CAD	SBIU-15	12/ /1970	RLP
11	11/12/1959	LEM	64	7/31/1980	CAD	SBIU-16	1/17/1974	RLP
12	5/28/1960	LEM	65	6/13/1980	CAD	SBIU-17	1/21/1974	RLP
13	5/30/1960	LEM	66	5/21/1980	CAD	SBIU-18	1/ /1974	RLP
14	6/2/1960	LEM	67	6/26/1980	CAD	SBIU-19	2/5/1974	RLP
15	6/6/1960	LEM	68	8/3/1980	CAD	SBIU-20	2/23/1974	RLP
16	6/10/1960	GLF	69	7/13/1980	CAD	SBIU-21	4/30/1974	RLP
17	6/16/1960	GLF				SBIU-22	3/15/1974	RLP
18	6/26/1960	GLF	Sol. Wells			SBIU-23	5/17/1974	RLP
19	6/26/1960	GLF	70	1994	CAD	SBIU-24	2/2/1976	RLP, CAD
20	7/5/1960	GLF	71	1994	CAD	SBIU-25	2/16/1976	RLP, CAD
21	7/4/1960	GLF				SBIU-26	2/25/1976	RLP, CAD
22	7/8/1960	GLF	OCI			SBIU-28	5/17/1976	RLP, CAD
23	7/13/1960	GLF	72	12/20/2000	RTL	SBIU-29	7/ /1976	RLP, CAD
24	7/11/1960	GLF	73	6/23/2002	RTL	SBIU-30	o Date, 77-79	RLP, CAD
25	7/22/1960	GLF	74	6/30/2002	RTL	SBIU-31	o Date, 77-79	RLP, CAD
26	7/17/1960	GLF	75	7/10/2002	RTL	SBIU-32	o Date, 77-79	RLP, CAD
27	7/28/1967	RLP	76	7/15/2002	RTL	SBIU-33	o Date, 77-79	RLP, CAD
28	10/13/1967	RLP, CJW	77	7/24/2002	RTL	SBIU-34	o Date, 77-79	RLP, CAD
29	10/13/1967	RLP, CJW	78	8/20/2011	RTL			
30	10/28/1967	RLP, CJW	79	8/23/2011	RTL	D02-1	11/4/2002	RTL
31	9/12/1975	RLP	80	9/9/2011	RTL	D02-2	11/7/2002	RTL
32	10/9/1975	RLP	81	9/12/2011	RTL	D02-3	11/11/2002	RTL
33	10/27/1975	RLP	Phillips Petroleum			D02-4	11/14/2002	RTL
34	7/10/1976	RMS	06-T	8/30/1965	GKB	D02-5[1]	11/17/2002	RTL
35	8/27/1976	RMS	07-T	9/13/1965	GKB	D02-6	11/20/2002	RTL
36	8/27/1976	RMS	08-T	9/22/1965	GKB	D02-7	11/21/2002	RTL
37	8/14/1976	RMS	09-T	9/30/1965	GKB	D02-8	12/4/2002	RTL
38	7/26/1976	RMS	11-T	10/6/1965	GKB	D02-9	12/4/2002	RTL
39	9/14/1976	RMS	12-T	10/11/1965	GKB	D02-10	12/9/2002	RTL
40	7/2/1977	DJF	16-T	11/1/1965	GKB			
41	8/5/1977	DJF	17-T	11/4/1965	GKB	D22-01	5/9/2022	AG
42	10/1/1977	CAD	19-T	11/8/1965	GKB	D22-02	5/14/2022	AG
43	10/ /77	CAD	Allied Chemical			D22-03A[2]	5/19/2022	AG
44	9/26/1977	CAD	AC-34	5/17/1978	BH	D22-03B	5/27/2022	AG
45	10/31/1977	CAD	AC-33	1978	BH	D22-04	6/9/2022	AG
46	11/15/1977	CAD	AC-36	1978	BH	D22-05	6/14/2022	AG
47	11/ /1977	CAD	Bed to Bed Holes			D22-06A[2]	6/21/2022	AG
48	5/28/1978	CAD	SBIU-01	o Date, 1960's	LEM	D22-06B	6/22/2022	AG
49	10/10/1977	CAD	SBIU-02	o Date, 1960's	LEM	D22-07	6/27/2022	AG
50	9/7/1978	CAD	SBIU-03	o Date, 1960's	LEM	D22-08	7/1/2022	AG
51	/ /1978	AD, RLP, DJ	SBIU-03A	o Date, 1960's	LEM	D22-09	7/14/2022	AG
52	9/22/1978	CAD, AMM	SBIU-04	o Date, 1960's	LEM	D22-10	7/25/2022	AG
53	5/7/1979	CAD	SBIU-05	o Date, 1960's	LEM	D22-11	7/30/2022	AG

[1] High Core Loss
[2] Drill hole not completed

LEM: L. E. Mannion
RLP: R. L. Parratt
CJW: C.J. Wendt
RMJ: R. M. Smith
CAD: C. A. Dickerson
BH Ben Hohler
GKB GK Brasher
RTL: R. T. Leigh
AG Alpha Geoscience

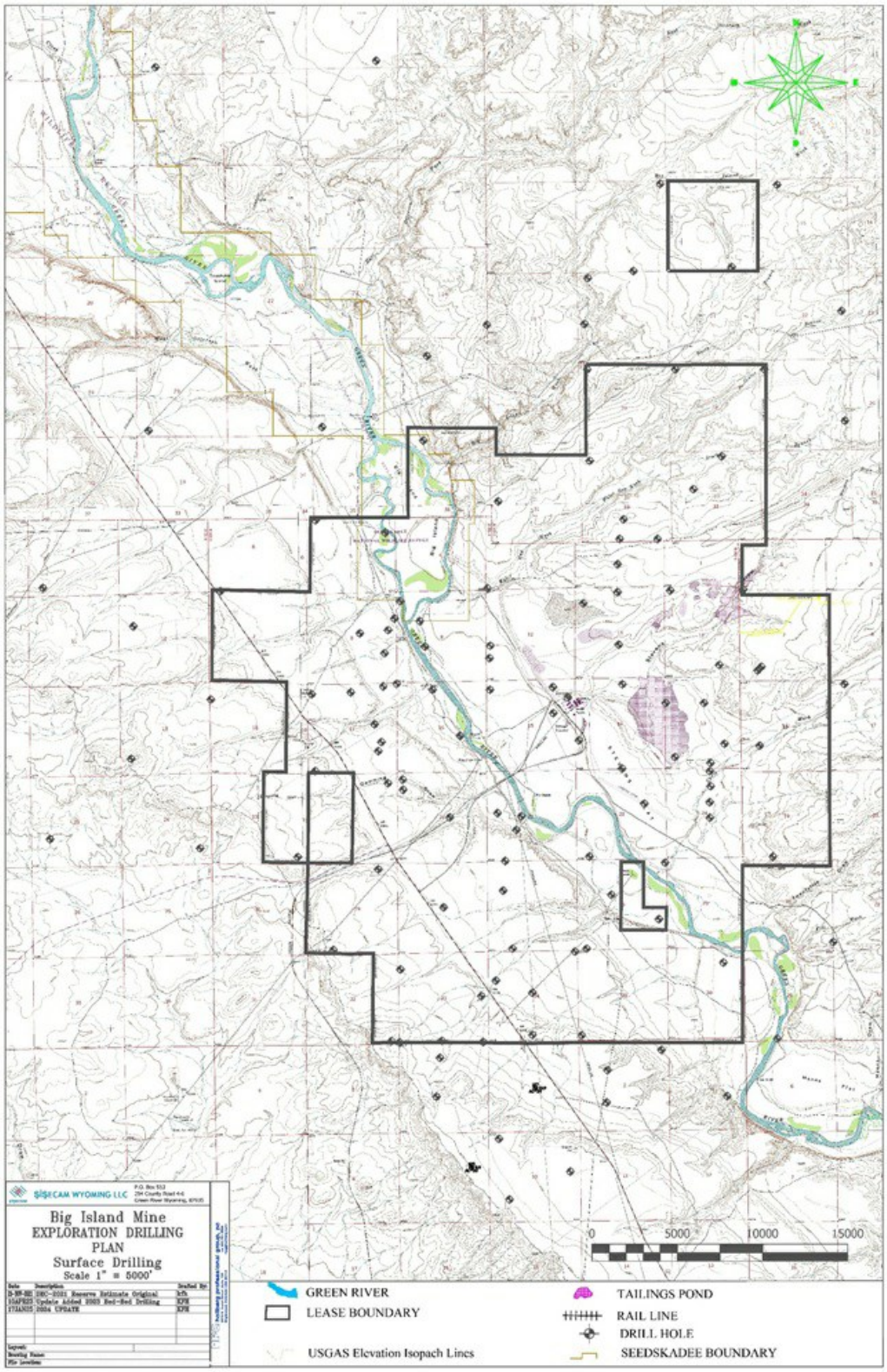


Figure 7.1 Surface Exploration Drilling Locations with Surface Topo

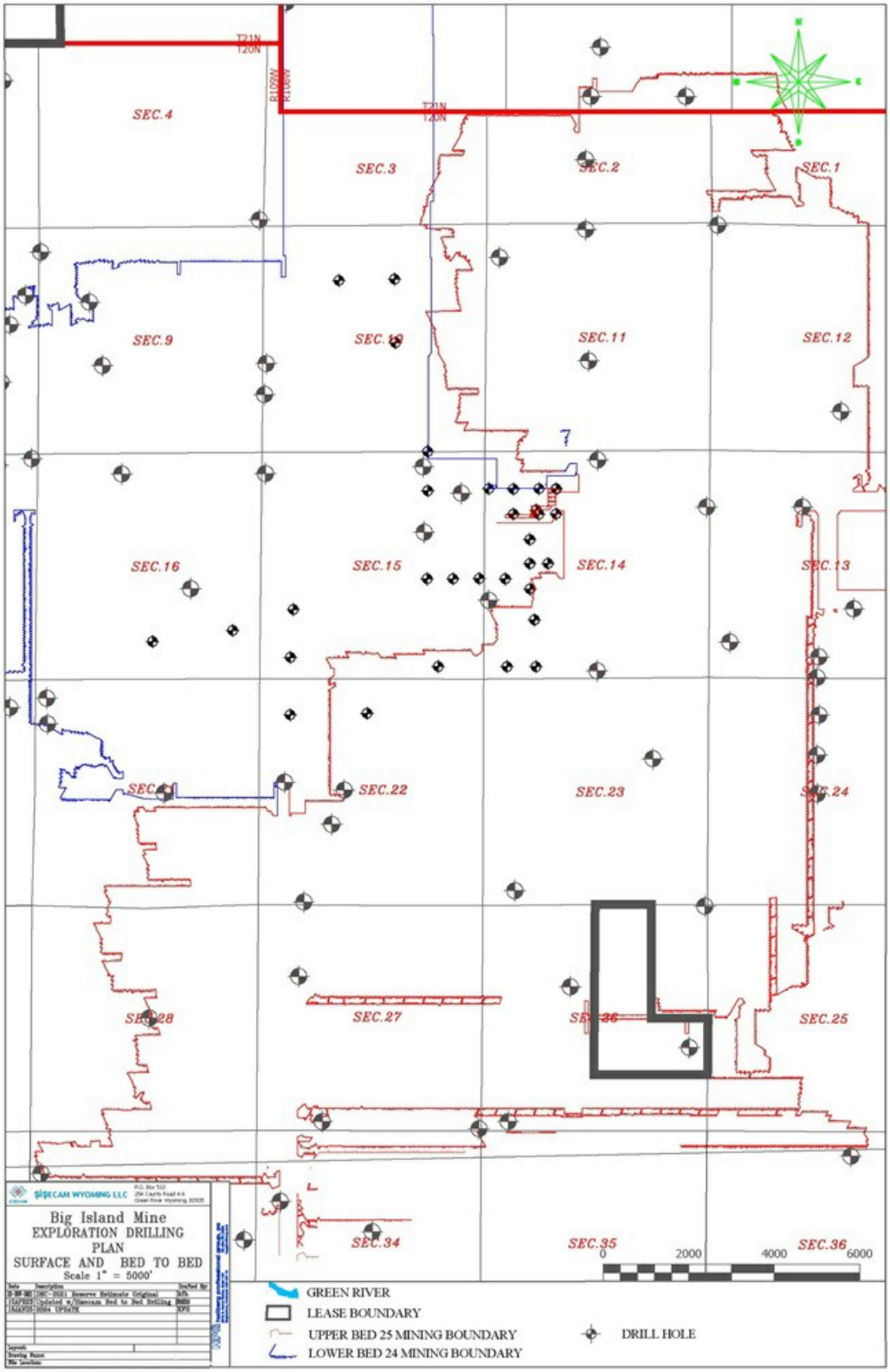


Figure 7.2 Underground Exploration Drilling Locations with Upper and Lower Bed Mining Outlines

8.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY.

For recent exploration drilling the core samples were examined, photographed, and logged in the field then boxed, labeled, and prepared for transportation. Early exploration had minimal documentation on preparation and core logging. More recent exploration campaigns are better documented with photographs of the core prior to boxing.

Standard practice was to split the core samples along the length of the core with half the sample sent to in-mine storage. Sample intervals were generally between six and twelve inches in length. The split sample was then analyzed by the Şişecam plant laboratories. The Şişecam Wyoming laboratory has multiple certifications including ISO 9001-2015 and NSF. The lab has multiple well documented quality control and quality assurance processes which were reviewed during earlier site visits.

Earlier core samples were subjected to external and internal analysis. Analytical methodology evolved over time. Initially, samples were reported for sodium carbonate and sodium bicarbonate content with weight percent trona calculated. The exact procedure for the early analysis is unknown. Analysis of more recent core simulates the existing refinery process:

1. Crushing to 3/8 inch or less;
2. Dried in oven;
3. Dissolved with water;
4. Filter insoluble;
5. Prepare filtrate;
6. Titration with acid;
7. Calculate total alkalinity; and
8. Convert to weight percent trona.

Records from the exploration projects are stored in a locked storage location in Şişecam Wyoming's technical office building at the mine site with the core samples stored in the mine where the stable humidity and temperature helps preserve the samples.

The sample preparation, analysis, quality control, and security procedures used by the Şişecam Wyoming Operations have changed over time to meet evolving industry practices. Practices at the time the information was collected were industry-standard, and frequently were industry-leading practices. In HPG's opinion, the sample preparation, analyses, and security procedures at the mine are acceptable, and are adequate for mineral resource and mineral reserve estimation and mine planning purposes.

9.0 DATA VERIFICATION

9.1 SITE VISITS

In performance of these services and preparation of this review, Mr. Hollberg and Mr. Leigh made site visits to the Big Island Mine on November 7th, 11th, and 13th, 2024.

9.1.1 Mine Visit

On November 11, 2024, Mr. Hollberg examined the underground with John Lewis, Şişecam Wyoming's Engineering Superintendent. Areas examined during this visit included:

- Lower Bed (LB) 24
  - LBNE Mains;
  - LBNE 5W Panel Advance – two-seam mining;
  - LBNE 2W Panel Retreat– two-seam mining;
- Upper Bed (UB) 25
  - UBE Maintenance Shop;
  - UBE P9S;
  - UBSW Panel 11W;
  - UBSW Panel 12E;
  - UBSW Panel 13E; and
  - UBSW BUTTS; and
- Two Hoist Building, Material Hoist Upgrade.

Mr. Leigh visited the mine with John Lewis, Şişecam's Engineering Superintendent, on November 13th examined workings and procured thickness measurements for confirmation of drill hole data. During his visits he assessed the following areas:

- Lower Bed 24
  - LBNE Mains from the LBE Mains to the current Butts;
  - LBNE 5W Panel X-Cut 32 North;
- Upper Bed 25
  - UBE P9S;
  - UBE P8S X-Cut 29 to the end of Panel;
  - UBSW P12E Neck down;
  - UBSW 11W North Subpanel #1;
  - UBSW 11W North Subpanel #2 End of Panel;
  - UBSW Subpanel #12 West;
  - Mr. Hollberg supplemented trona ore thickness and quality observations;
    - UBSW Panel 11W End of Panel;
    - UBSW 11W South Subpanel End of Panel X-Cut 14;
    - UBSW Buttes X-Cut 277;
    - UBSW Panel 13E; and
    - UBSW Panel 12E X-Cut 24 South.

The following are some general observations based on these examinations:

LB Two Seam Mining

The November 2024 examination of the LB two-seam mine workings indicated favorable ground conditions with plus 12-foot thick trona. There was little if any floor heave, corner spalling or roof cutters. Mining was conducted in the LB in proximity to several exploration drill holes. These areas were examined and the reported trona thickness of these exploration drill holes were within one standard deviation of the in-mine observations. No sampling was performed to assess trona grades.

UBE Panel 8S and 9S

Since the 2021 Reserve Report, UBE Panel #8 South was developed to X-Cut 65 west. Increasing frequency of the floor horizon rolling up into the mining horizon with appearance of decreasing ore quality resulted in decreasing production grades and panel termination. Ore thickness variation ranging from 6.5-feet. to 9.9-feet. At X-Cut 50 east, ore quality improved with thickness ranging from 8.5-feet to 11-feet. It is noted that from X-Cut 29 east to the end of the UBE Panel #8 South, there is an increased prevalence of what is locally known as “Root Beer” trona, which is an indication of depositional alteration.

Mining is currently advancing UBE Panel #9 South. At the beltline of X-Cut 37 west, ore disruptions were encountered similar to that encountered near the termination of UBE Panel #10 South as reported in the 2021 Reserve Report. The ore disruptions and “Root Beer” trona occurrences extend at least back to X-Cut 30. The end of the advancing X-Cuts on the west side of UBE Panel #9 South did not exhibit such ore changes as of November 2024.

Figure 9.1 Ore Disruption, UBE Panel 9 South, X-Cut 37, Beltline

Upper Bed Southwest Panel 12 East Neck Down

UBSW P12E neck down is located in close proximity to exploration drill hole SBI 42. SBI 42 core description indicates trona was sampled in a depositional feature locally known as vertical mud seam. This feature results in a reduction of ore quality and the possibility of a bias ore thickness. At the UBSW P12E location, detailed measurements were taken to provide a representative trona grade and thickness for this area of the orebody. This change to the geologic model is not considered material.

Upper Bed Southwest #11 West

UBSW #11 West North Subpanels #1 and #2 were completed since the 2021 Reserve Report. Both Subpanels were concluded with only 17 and 15 X-cuts and terminated as a result of ore changes. Subpanel #1 observations did indicate a decrease in an average ore thickness of less than 9-feet. While Subpanel #2, located to the west of Subpanel #1, indicated some improvement with an average trona thickness of 9.4-feet. with a range between 8.2-feet. to 10.4-feet, the thickness variability resulted in deteriorating production quality.

Upper Bed Southwest Subpanel #12 West
UBSW Subpanel #12 West was terminated at the lease boundary at X-cut 12. Ore quality and thickness remain excellent with thicknesses exceeding 12-feet.

Other Mine Areas and Infrastructure
Pumping records from the LB West water inflow area were examined and continue to show reduction of the water elevation and retreat of the shoreline down dip as the mine dewaters this area at steady pumping rate of around 80 GPM.

9.1.2 Shafts and Hoisting Facilities

On November 11, 2024, Mr. Hollberg toured the mine hoisting facilities with Mr. Lewis. Şişecam has been working to upgrade and modernize its hoisting systems by updating the controls systems, motors, and braking systems. Since the 2021 TRS Şişecam has completed updates to the two production hoists Hoist #2 and Hoist #3 to allow for improved major component spares parts, redundancy, and current control systems that are supported by the manufacturers. Our November visit observed the preparation work for the replacement of the man and material Hoist #1 planned for completion in 2025. This is a needed update to the early 1960's hoist which is well past its service life.

9.1.3 Surface Facilities Site Visit

On November 11, 2024, Mr. Hollberg and Mr. Leigh met with Tyler Schiltz (Environmental Manager), Shannon Larson (QC QA Laboratory Supervisor), Mikail Demir (Technical Services Manager), and Jessica Annala (Accounting Manager) to review environmental compliance, quality control and analysis, financial and capital plans.

Discussions with Mr. Schiltz and Mr. Demir included environmental compliance, the tailings pond system and long-term tailings disposal, tailings dam safety, including dust control. The long-term site wide capital plans were reviewed.

The visit included examination of the Şişecam Wyoming surface processing facilities and tailings ponds with Steve Thompson (Project Specialist – Technical Services) and Don McCallum (Project Specialist – Technical Services). Discussions included plant maintenance, planned capital improvements, the tailings pond system and long-term tailings disposal coarse tailings project.

Surface facilities visited include the following:

- Units No 3 and No 4 filters, evaporators/crystallizers, and dryers;
- Unit 5 Filters, evaporators/crystallizers, and dryers;
- Unit 7 calciner, Verta-mill, dissolver, classifier;

- Unit 6 Standalone processing, crushing, calcining, dissolvers, classifier, filtration, evaporation/crystallization, thickeners, and tailings pumps;
- Tailings pond facilities, Pond 1, 2, 3, and 4.

The age of the facilities, 20 to 50 years, require good maintenance, repair and replacement to maintain consistent production. The visit and discussions confirmed that Şişecam continues to commit resources to maintain the production capacities of their facilities. Şişecam's future maintenance and expansion capital plans indicate a continued commitment to the facilities production capabilities. During the brief visit multiple areas were observed where significant capital expenditure has been expended to maintain and improve production. While HPG's examination was not a comprehensive analysis of each piece of equipment, Şişecam's long history of consistent soda ash production would not be possible without proper maintenance of processing facilities of this age.

Şişecam's Co-Gen facility is a state-of-the-art combined cycle gas turbine that supplies approximately 25 MW of electrical power to the site as well as producing excess steam for the production process and site heating. The gas turbine and heat steam recovery generator are approximately 60-65% efficient and use best available control technology (BACT) for emission control.

Şişecam's tailing facilities are over 60 years old but continue to be maintained and operated. Şişecam has been proactive to complete any required mitigation work identified by their close monitoring as well as frequent examinations by their long-time third-party consultant Barr Engineering. During the visit HPG observed the new tailings facility, Pond 2, which will be the primary storage area for the coarse tailings moving forward. Additional information on the Tailing Facilities is available in Section 17.4.

Şişecam's analytical laboratory contains up to date equipment and analytical capabilities. The lab processes both 'in stream' samples (dry trona and liquor) as well as final soda ash product testing. In previous visits, Ms. Larson walked HPG's representatives through a typical soda ash testing procedure, documentation, and sample retention for the final product. The lab continually sends portions of samples for third party verification of results. The lab is 9001:2015 certified and holds certifications for NSF, 2021 Halal, and Kosher-2021.

Additional information on Şişecam's production facilities can be found in Section 14.0 Processing and Recovery Methods and Section 15.0 Infrastructure.

9.2 GEOLOGIC DATA VERIFICATION

Şişecam Wyoming's available geologic data is well documented and has been vetted over the history of the property. The fact that the property has been in successful operation for over 60 years and has extracted trona from both beds gives confidence in the available geologic information and proposed mining methods.

Data density, or the spatial relationship between drill holes, has become more prevalent in industry classifications. Şişecam Wyoming's drill hole spacing was designed first to establish a resources area. Initially, twenty-seven exploration borings were completed on 1 to 2-mile spacing. Subsequent exploration developed the remaining 121 borings to increase the data density and to assist with mine planning and lease acquisitions. Trona exhibits greater continuity and less spatial variability than coal or metal deposits. There are many examples of evaporite deposits that have been developed on wider drill hole spacing than the recommended standards for other minerals. In comparison, while Şişecam Wyoming's drill hole spacing exceeds these recommendations, the historical record for the Şişecam Wyoming Big Island Mine demonstrates a reasonable correlation between drill hole data and available reserves.

In the above referenced 1999 work (Section 6.4.2), a database was created for each Trona Bed, 24 and 25, located within the Şişecam Wyoming lease area. That database was the basis of this MRE and previous estimates. Şişecam Wyoming provided available drill hole data for all 148 exploration borings including core descriptions, analytical results, available geophysical well logs, and available archived reserve reports. The 1999 review work expressed concern about the data quality of some of the older core analysis. There was concern that some of the reported analysis did not match the core descriptions indicating mislabeling or perhaps the core boxes broke and not properly sorted. The general analysis is considered correct, but some of the geologist logged the holes from the bottom up and others from the bottom down and as such the orientation of the analysis was questioned. For example, SBI-42, analysis appears to be reversed. Where possible the logs were vetted or corrected where definitive information was available. The best supplemental information is documentation of trona thickness observations from the existing mine developments collected over the past 25 years.

The exploration reports were evaluated for accuracy of trona picks for thickness and quality. The drilling database described has been spot checked multiple times over the long history of HPG's work at Şişecam. Additionally, whenever mine workings intersect or approach these drillings the associated workings have been examined to confirm the drilling data. Descriptions of the examinations undertaken for this effort are offered below. In general, exploration information matched published assessments.

A comparison of a trona thickness model based on mine observation points and a model derived from the drill hole data shows a reasonable correlation over the mined areas. In Bed 24, the mine observations averaged 11.7-feet thickness compared to 11.4-feet using the drill hole data over the same area. Bed 25 correlation resulted in similar results, with the mine observations model averaging 11.02-feet, while the drill hole data model averaged 10.7-feet. Example: In Bed 24, two exploration drill holes were recently encountered, D02-01, and SBI-17. In comparison, SBI-17 exploration thickness was 13.5-feet, and mine observations averaged 13.24-feet. Exploration drill hole D02-01 was defined as 10.4-feet and mine observations ranged from 10.0-14.0-feet, averaging 12.43-feet. In Bed 25 no exploration drill holes were encountered. However, ore thickness from mine workings in the vicinity of drill hole SBI-43 are estimated to average 11.2-feet vs a reported drill hole thickness of 11.69-feet. Mine observation points are based on the measured ore thickness at each point and not the total mining height providing a direct comparison to the drill hole data set.

In the 2013 and subsequent reports drill hole D02-05 was removed from the data base because of a high percentage of core loss in the area of the LB trona seam. Of two five-foot core runs over 2-feet of core was not recovered. In 2022 supplemental drilling was completed from the upper bed into Bed 24 greatly improving the confidence of the database. An opportunity exists to continue exploration drilling from the Upper Bed into Bed 24 to improve the data density.

In the 2021 report, the minable thickness of two drill holes were modified based on available mine measurements in the vicinity.

- Drill hole SBI-20, now within the Upper Bed East extension of the modified mains, was modified from 15.1-feet to 11.3-feet based upon nearby mine observations.
- Drill hole SBI-42, near the UBSW Butts extension, was adjusted from 14.3-feet with a grade of 83.9% to 13.87-feet and a grade of 91.5% based on the nearby mining indicating plus 11-feet of ore with good quality in the lower portions of the trona seam. This modification results in the area to the northwest to be classified as resources and reserves.
- As of date, analytical quality information was not completed for drill holes. D22-02, D22-03B, and D22-04, therefore quality information is omitted from the database. Trona thickness information remains.

No other changes were made to the geologic database.

HPG reviewed the recent exploration drilling information and concludes it meets industry standards. Comparison of drilling data with in-mine measurements generally concur with in-mine measurements with anomalies typically explained by localized trona bed disruptions described in Section 6.4. The successful mining of Bed 24 and Bed 25 over the long history of the property gives added validation of the exploration data, analysis and quality control. HPG concludes that Şişecam Wyoming's geologic data, procedures and processes are adequate for mineral resource and mineral reserve estimation and mine planning purposes.

10.0 MINERAL PROCESSING AND TRONA GRADE TESTING

10.1 CONVERSION OF TRONA TO SODA ASH

Trona is a compound of sodium sesquicarbonate with the following formula, $Na_2CO_3.NaHCO_3.2H_2O$. It is the combination of sodium carbonate and sodium bicarbonate. The finished product, soda ash, is sodium carbonate. In very general terms, the conversion of trona into soda ash is the conversion of the sodium bi-carbonate portion of the trona into sodium carbonate and then a purification process to remove the insoluble minerals by dissolution and recrystallization.

There are two primary ways in which sodium carbonate is recovered from the trona ore, the sodium sesquicarbonate process, and the monohydrate process. The main difference between these processes is when the bicarbonate is converted into carbonate. In the sesquicarbonate process, the trona ore is dissolved first and the conversion of the bicarbonate takes place by calcining the purified crystals. The monohydrate process converts the bicarbonate by calcining the dry ore in rotary kilns at temperatures between 150º and 200º C. Şişecam Wyoming uses the monohydrate process. The general formula for this conversion follows:

$$2NaCO_3 \blacklozenge NaHCO_3 \blacklozenge 2H_2O \rightarrow 3Na_2CO_3 + CO_2 + 5H_2O$$

By molecular weight:

$$2(226.03) / 3(105.98) = 452.06 / 317.94 = 1.4218$$

After calcining, the ore is dissolved in water to allow the insoluble minerals to be removed prior to recrystallization.

10.2 PROCESSING FACILITIES

Şişecam Wyoming's refining facility is well established and has been converting dry trona into salable soda ash for over 60 years. Over this period, much of the refining facility has been replaced or upgraded with newer facilities and equipment. Şişecam Wyoming currently is operating five soda ash processing units. Two ore calcining and dissolving units with four soda ash processing plants.

Unit 6 was constructed in 1998 and has its own crushing plant, rotary kiln, dissolvers, crystallizers, and TRM (tailings) pumps. In 2006, OCI Wyoming constructed a large rotary kiln and dissolver, Unit 7, capable of feeding liquor to the older crystallizer Units 3 through 5 and use the existing crushers and TRM facilities. In 2009 the Decahydrate plant was built and mining of the decahydrate crystals in the tailings pond was started as a supplementary liquor feed to the soda ash plants.

A more detailed discussion of the processing facilities is available in Section 14.0.

10.3 TESTING AND ANALYSIS

Şişecam has had an onsite laboratory throughout its history that is used to test and analyze plant feeds (trona), intermediate process streams (liquor) as well as the final product to ensure compliance with Şişecam published standards. The testing and analysis procedures and protocols are well established and have been developed and refined over the 60 years of operation. The laboratory contains up to date equipment and analytical capabilities and holds multiple certifications including ISO-9001:2015 and certifications for NSF, 2024 Halal, and Kosher-2024. The lab is regularly audited by the certification agencies as well as customer audits. Additionally, the Şişecam laboratory does regular blind testing with outside laboratories as part of their standard protocol.

Composite samples of the trona ore are generally tested for insoluble minerals, grade (total alkalinity), moisture and organics. Intermediate liquor testing is used to monitor efficiencies and help in the operation of the plant. Composite sample testing of the final soda ash product is done on every truck or train car shipped. This analysis looks at purity (Sodium Carbonate % and Sodium Oxide %), moisture, density, and any contaminates (sulfate, chloride and insoluble).

In HPG's opinion, the sampling methods, sample preparation, analyses, and security procedures at the mine are acceptable and are adequate for mineral resource and mineral reserve estimation and mine planning purposes.

11.0 MINERAL RESOURCE ESTIMATES

11.1 INTRODUCTION

HPG has organized the available data and information in order to complete this Mineral Reserve Estimate for December 2024 from a variety of sources including:

- Drill Hole data from 81 surface to bed core holes;
- Drill hole data from 57 bed-to-bed core holes;
- Drill Hole data from 12 surface to bed holes drilled by outside firms;
- In-mine measurements and observations; and
- Historical reports.

11.2 GEOLOGICAL AND MINERALIZATION MODELING

Carlson's Advance Mining module, StrataCalc, a supplement to Autodesk's AutoCAD, was utilized to create the geological models. Both programs are standard for the mining industry. Gridding with the triangulation module was used to evaluate the Şişecam Wyoming reserve database which provided the best routine for verification.

Carlson's Advance Mining module and StrataCalc, applies the gridding information within a user defined area (reserve area) and computes statistical parameters from the data set. Average thickness and grade values, area of the defined limits, volumes, and tonnages are posted as a spreadsheet output. Gridding density, contouring methods, volumetric computations, and bulk densities were unchanged from the previous study.

A bulk density of 133 pounds per cubic foot (2.13 g/cc), was applied to convert volumes to tonnage. Several published documents list bulk densities of trona between 2.11 and 2.17 g/cc.

Based on this data Figure 11.1 Upper Bed Isopach and Figure 11.2 Lower Bed 24 Isopachs delineate trona thickness and 75% grade for each bed.

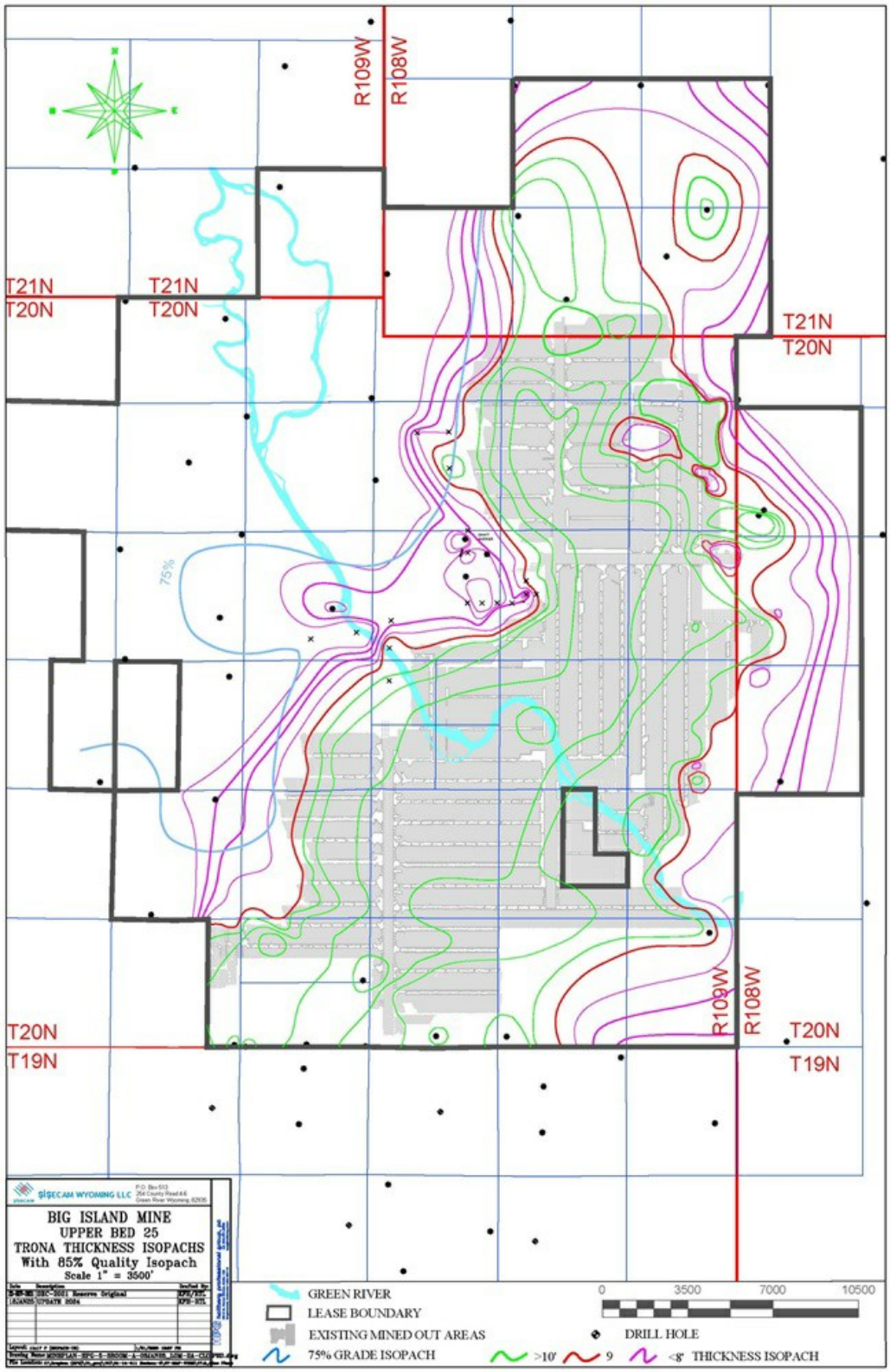


Figure 11.1 Upper Bed 25 Thickness Isopachs

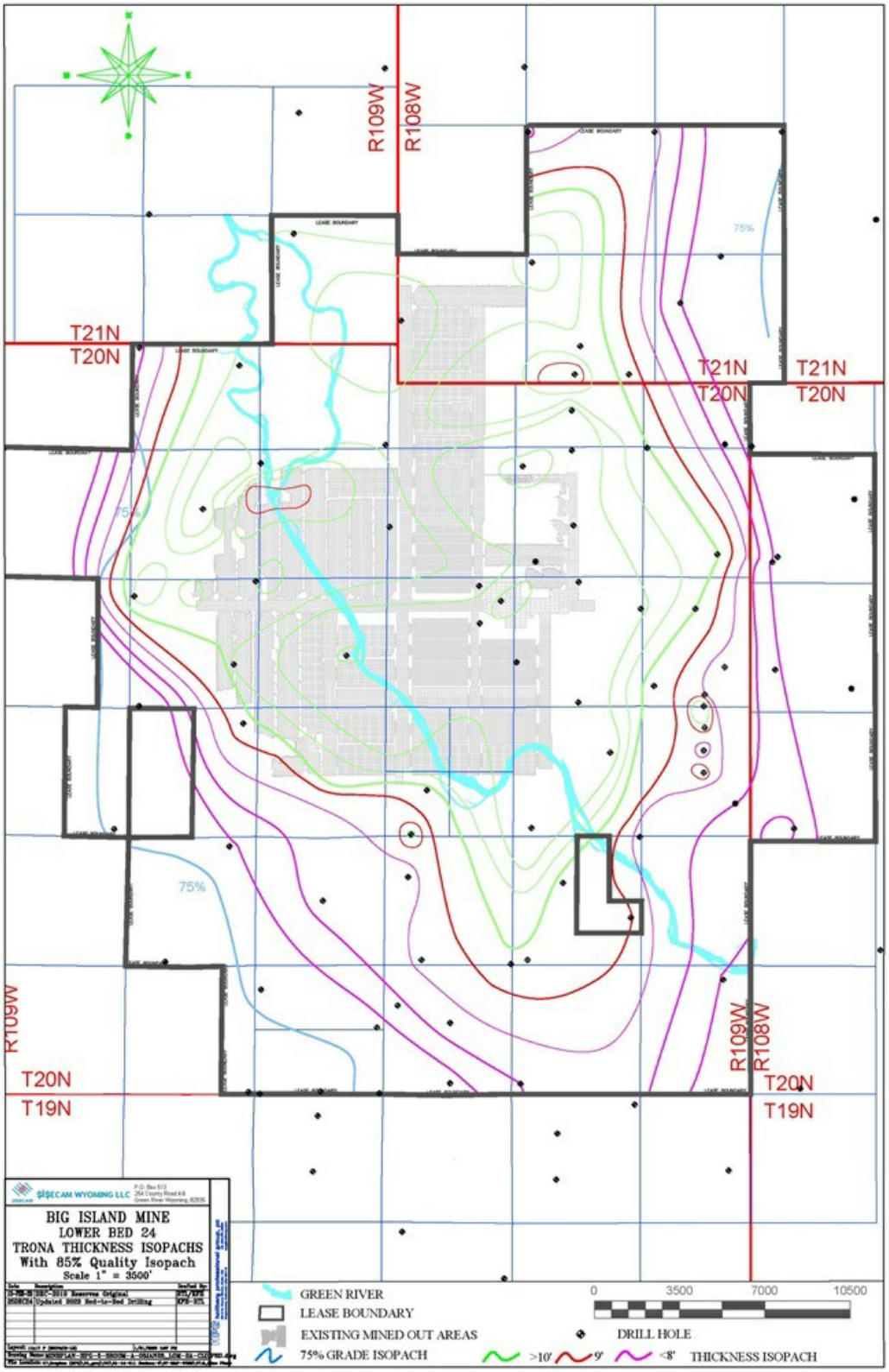


Figure 11.2 Lower Bed 24 Thickness Isopachs

11.3 MINERAL RESOURCE AND RESERVE CLASSIFICATION

The following definitions, which can be found in the Securities and Exchange S-K 1300 rules Subparts 229, 230, 239, and 249, have been used for this resource and reserve estimate.

Mineral resource:

A concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. A mineral resource is a reasonable estimate of mineralization, taking into account relevant factors such as cut-off grade, likely mining dimensions, location, or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

Inferred mineral resource:

That part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project and may not be converted to a mineral reserve.

Indicated mineral resource:

That part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply *modifying factors* in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

Measured mineral resource:

That part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

Modifying factors:

Are the factors that a qualified person must apply to indicated and measured mineral resources and then evaluate in order to establish the economic viability of mineral reserves. A qualified person must apply and evaluate modifying factors to convert measured and indicated mineral resources to proven and probable mineral reserves. These factors include but are not restricted to mining; processing; trona bed thickness, trona grade, infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. The number, type and specific characteristics of the modifying factors applied will necessarily be a function of and depend upon the mineral, mine, property, or project.

Mineral reserve:

An estimate of tonnage and grade or quality of indicated and measured mineral resources that, in the opinion of the qualified person, can be the basis of an economically viable project. More specifically, it is the economically mineable part of a measured or indicated mineral resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted.

Probable mineral reserve:

The economically mineable part of an indicated and, in some cases, a measured mineral resource.

Proven mineral reserve:

The economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.

11.4 MINERAL RESOURCE ESTIMATE - PARAMETERS AND ASSUMPTIONS

In determining the resource parameters and assumptions for the Şişecam property, HPG considered the following circumstances:

- Şişecam's 60-year long history of successfully mining the deposit;
- Projected 40-year mine life and likely change in economics, mining, and processing methods over the life of the property;
- Mining methods of the other trona producers in the area;
- Mining methods of historically successful mining of similar laminar deposits including coal;
- The extensive database of in-mine measurements and drilling data; and
- HPG's knowledge operating and managing other trona mines in the area.

If both mechanical and solution mining is considered, a cutoff grade and thickness is not essential for trona mining in the Green River Basin. Other trona operations in the green river basin and other trona deposits are successfully using solution mining methods in thin and low grade trona areas. Because of Şişecam's proximity to the Green River this resource and reserve estimate does not consider solution mining due to its likely subsidence and impact to this major water source. Therefore, HPG is only considering mechanical mining of the deposit using established systems and methods.

Based on this knowledge and experience the following parameters were used to estimate the in-place trona resources that are considered to have reasonable prospect of economic extraction:

<u>Parameters</u>

- *Cut off* -Minimum 6-feet thick and >75% trona
- *Measured* - 1,320-ft radius from drilling and 1,320-ft from known workings (1/4 mile);
- *Indicated* - 3,960-ft radius from drilling and 3,960-ft from known workings (3/4 mile);
- *Inferred* - 7,920-ft radius from drilling and 7,920-ft from known workings (1/5 miles); and
- A soda ash price of $165 per ton was used to determine the stated trona resources.

Assumptions
Only trona on contiguous leases was considered resource for mechanical mining. Section 16, T21N, R108W was excluded from this estimate because this state lease is isolated from the other contiguous lease blocks. The one-mile isolation makes accessing this for mechanical mining unlikely.

The measured, indicated, and inferred distances are based upon known drilling, in-mine measurements, mining extents and experience with historically successful mine planning based on this information.

The cutoff thickness of six feet is based upon successful mining of similar deposits, to and even below 6-feet in thickness including trona, coal and potash. Additionally, other operations in the trona basin are mining to the 7-foot thickness in areas of their trona resources.

The cutoff grade of greater than 75% trona is based upon successful mining and processing of the lower grade trona Beds 19, 20 and 21 which were considered viable mining prospects by Texas Gulf Soda Ash (TGSA). TGSA operated as a dry mine from 1976 through 2002 mining Bed 20. The TGSA processing facility was designed to handle these lower grade ores and successfully mined and processed these lower grades.

11.5 GRADE ESTIMATION

For the purposes of this study, the minimum grade for the reported in-place resource tonnage is 75%. The Upper Bed 25 drill hole grades analysis range, for thicknesses greater than 6-feet, is 41.21% to 94.18%. All Upper Bed drill hole grades ranged from 38.64% to 98.81%. The Lower Bed 24 drill hole grades analysis range, for thicknesses greater than 6-feet, is 74.74% to 93.77%. All Lower Bed drill hole grades ranged from 74.74% to 94.10%. Based examination of available core and mine observations by previous geologist and others, many of the low-grade drill holes intersected vertical post depositional mud seams and are not considered representative of the overall average grade for the deposit at that particular location. Because of the limited core to definitively confirm this hypothesis, no changes were made to the database other than the three drill holes noted earlier.

Carlson's Advance Mining module, StrataCalc, was used to model the grades for each resource parameter for each trona bed. For the resource inclusive of reserves the following grades were estimated. Lower Bed 24 measured resources compute to have an average grade of 88.6% trona. Lower Bed 24 indicated resources have a computed average grade of 88.0% trona. The Upper Bed 25 computed measured resources grade is 87.6%, while the computed indicated resources grade is 87.3%.

Out-of-seam dilution during production has a significant impact on production grade. Production grade is the quality of the run of mine ("ROM") material sent to the refinery. Production quality is dependent upon the geological consistency of the ore body; the mining equipment used for extraction; and the operators mining skill. Ore body fluctuations are the greatest contributor to quality control issues. In general, with a 10-foot-high entry, 90% seam grade, 6-inches of waste will reduce production grade by 5%. Forecasting seam variability from the existing wide drill hole spacing is not possible. Currently, the best tool to help identify and predict problem areas is consistent mapping of the mine entries as mining advances providing feedback to operators and utilized in the short-term planning processes. When they are encountered, localized geological disturbances of the ore bed negatively impact the ROM grade.

11.6 IN-PLACE MINERAL RESOURCE ESTIMATE

Using the data provided by Şişecam Wyoming, HPG has completed its review of the Big Island Mine and concludes that the Big Island Mine's remaining leased and licensed Measured and Indicated in-place trona Resources ***exclusive of reserves*** as of December 31, 2024, total 153.3 million short tons (MST), of which 99.1 MST remain in the Lower Bed 24 and 54.3 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 74.2 MST and Indicated In-Place Resources calculate as 78.7 MST and no Inferred In-Place Resources. Table 11.1 summarizes the estimated In-Place Trona Resource ***exclusive of the mineral reserves.***

Based on the current study, the Şişecam Wyoming Big remaining leased and licensed Measured and Indicated in-place trona Resources ***inclusive of reserves*** as of December 31, 2024, total 570.8 million short tons (MST), of which 377.9 MST remain in the Lower Bed 24 and 192.9 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 300.1 MST and Indicated In-Place Resources calculate as 270.6 MST and Inferred In-Place Resources are calculated at 0.1 MST. Table 11.2 provides the In-Place Trona Resource ***Inclusive of the mineral reserves.***

Criteria for this analysis are based upon a 6.0-feet minimum ore thickness and 75% minimum seam grade. This Resource evaluation is based upon 93 exploration drill holes, 55 borings from the mine workings, and several thousand available mine observations and measurements. Of the 93 surface exploration drill holes, 28 borings are within the Lower Bed 24 Resource area and 21 borings are within the Upper Bed 25 Resource area. Additionally, this updated report considers the 2022 to 2024 mine advancements. The in-seam ore horizon includes the T2 to T4 zones and excludes the T1 zone as represented in Figure 6.6.

The reference point for the trona resources reporting is insitu inclusive of impurities and insoluble content. The grade is percent trona, sodium sesquicarbonate ($Na_2CO_3.NaHCO_3.2H_2O$), the double salt of sodium carbonate (soda ash) and sodium bicarbonate (baking soda).

Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC ("Şişecam") 51% and by NRP Trona LLC ("NRP Trona") 49%.

Figure 11.3 and Figure 11.4 present the remaining in-place trona showing measured, indicated, and inferred resource areas.

TABLE 11.1
ESTIMATED IN-PLACE TRONA RESOURCES WITHIN BIG ISLAND
EXCLUSIVE OF RESERVES
MINING LICENSE AS OF DECEMBER 31, 2024
BASED ON $165/ TSA

	Measured Resource		Indicated Resource		Measured +Indicated Resources			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	45.4	88.5	53.6	86.6	99.1	87.5	8.6	-	-
Upper Bed 25	29.3	84.9	25.0	86.2	54.3	85.5	7.9	-	-
Total	74.7	87.1	78.7	86.5	153.3	86.8	8.3	-	-

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.

4) Mineral resources are current as of December 31, 2024, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

The Mineral Resource ***exclusive*** of the mineral reserves is that portion of the ore body that has not been extracted because it was outside what is considered the economic limits, has been left in place to support the mine openings or has been sterilized by previous mining and cost-effective access is not considered practical. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

TABLE 11.2
ESTIMATED IN-PLACE TRONA RESOURCES WITHIN BIG ISLAND
INCLUSIVE OF RESERVES
MINING LICENSE AS OF DECEMBER 31, 2024
BASED ON $165/ TSA

	Measured Resource		Indicated Resource		Measured +Indicated Resources			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	186.5	88.6	191.3	88.0	377.9	88.3	9.8	0.10	87.6
Upper Bed 25	113.6	87.6	79.3	87.3	192.9	87.5	9.1	-	-
Total	**300.1**	**88.3**	**270.6**	**88.1**	**570.7**	**88.0**	**9.6**	**0.10**	**87.6**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2024, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

The Mineral Resource ***inclusive*** of the mineral reserves is that portion of the ore body that is considered either economically viable for mining and can be converted to reserves or of economic interest but considered outside the current economic limits.

Mineral resources are not mineral reserves. Mineral reserves are the economically mineable part of a measured or indicated mineral resource based upon application of modifying factors such as costs and revenues associated with the proposed operation and producing the final product in an economic and environmental assessment. Section 11.3 describes these factors. There is no certainty that any mineral resources in this report will ultimately be reclassified as reserves. Please refer to the note regarding forward-looking information at the front of the Report. Section 12.0 describes the estimated recoverable trona reserves.

11.6.1 Resource Estimate Reconciliation

Estimated trona resource exclusive of reserves has decreased from 162.3 MST (December 31, 2021) to 153.3 MST (December 31, 2024). These changes were due to reductions due to geologic model modifications, and barrier pillars protecting new shafts.

Estimated trona resource inclusive of reserves has decreased from 578.9 MST (December 31, 2021) to 570.7 MST (December 31, 2024). These changes were the net result of reductions from mining activities, additions due to lease acquisitions, reductions due to geologic model modifications, information from the 2022 to 2024 mining advance and barrier pillars protecting new shafts.

Table 11.3 and Table 11.4 illustrate the changes in resources between the 2021 and 2024 estimates exclusive and inclusive of reserves.

TABLE 11.3
CHANGE IN ESTIMATED IN PLACE TRONA RESOURCE 2021-2024 WITHIN BIG ISLAND
EXCLUSIVE OF RESERVES
MINING LICENSE AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

	Measured Resource		Indicated Resource		Measured +Indicated Resources			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	0.6	(0.2)	(0.4)	(0.3)	0.2	(0.2)	0.1	0.0	0.0
Upper Bed 25	(0.1)	(0.1)	(9.0)	(1.1)	(9.1)	(0.8)	0.3	0.0	0.0
Total	**0.5**	**(0.2)**	**(9.5)**	**(0.6)**	**(9.0)**	**(0.4)**	**0.2**	**0.0**	**0.0**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

TABLE 11.4
CHANGE IN ESTIMATED IN PLACE TRONA RESOURCE 2021-2024 WITHIN BIG ISLAND
INCLUSIVE OF RESERVES
MINING LICENSE AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

	Measured Resource		Indicated Resource		Measured +Indicated Resources			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	15.1	-0.2	-19.8	-0.3	-4.7	-0.2	0.3	-0.2	-1.2
Upper Bed 25	-6.5	-0.1	2.9	-0.3	-3.6	-0.2	0.5	0.0	0.0
Total	**8.6**	**0.0**	**-16.8**	**0.0**	**-8.2**	**-0.2**	**0.4**	**-0.2**	**-1.2**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

11.7 UNCERTAINTIES (FACTORS) THAT MAY AFFECT THE MINERAL RESOURCE ESTIMATE

Areas of uncertainty that may materially impact the mineral resource estimates include:

- Changes to long-term soda ash price and exchange rate assumptions;
- Changes in local interpretations of trona seam thickness and grade such as sedimentary structures described in Section 6.4.3;
- Changes to geological and grade shape, and geological and grade continuity assumptions;
- Changes to soda ash recovery assumptions;
- Changes to the forecast dilution and mining recovery assumptions;
- Changes to the cut-off values applied to the estimates;
- Variations in geotechnical (including seismicity), hydrogeological and mining method assumptions; and
- Changes to environmental, permitting, and social license assumptions.

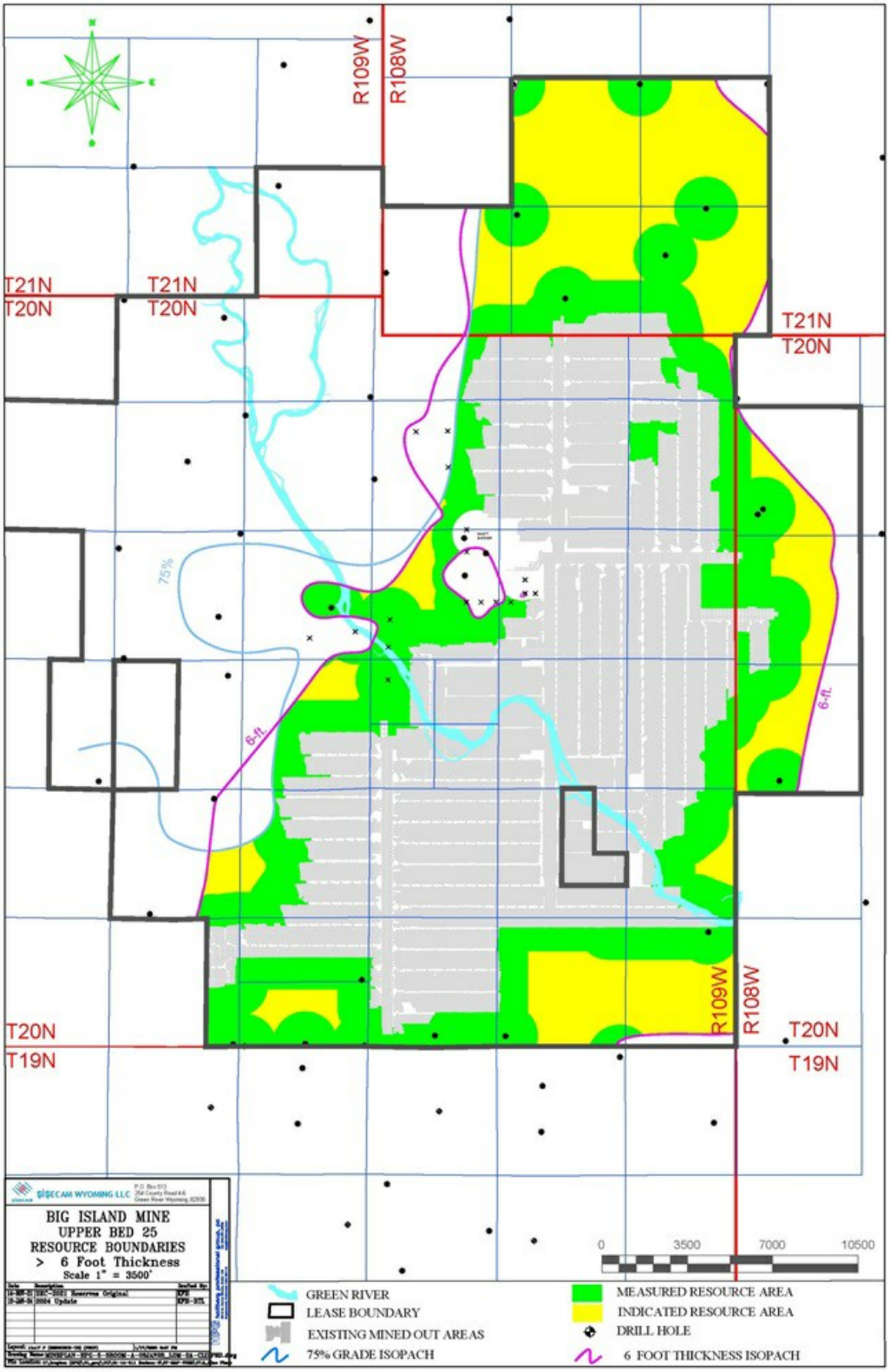


Figure 11.3 Upper Bed 25 Resource Blocks

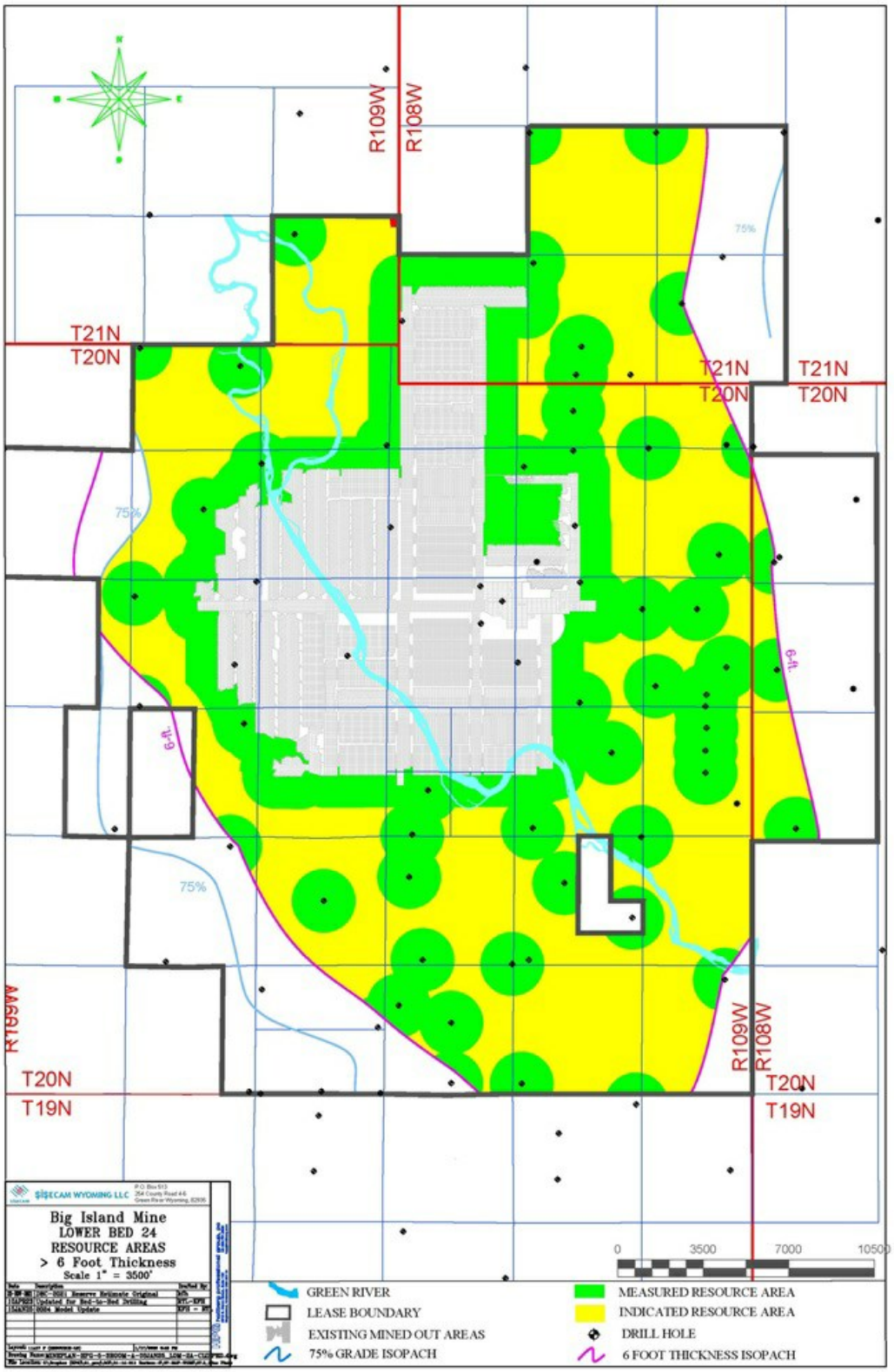


Figure 11.4 Lower Bed 24 Resource Blocks

12.0 MINERAL RESERVE ESTIMATE

No independent feasibility study was prepared in the determination of this reserve estimate. Instead HPG used the plus 60 years of mining and processing history at the Big Island to determine the mining, processing, and economic parameters used for this reserve estimate as described below.

This mineral reserve estimate contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. Investors are cautioned that the estimate is based on a high-level mine plan and certain assumptions which may differ from Şişecam Wyoming's long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. Please be reminded that significant variation of soda ash prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

12.1 LIFE OF MINE PLAN

Şişecam like all mining companies, for lack of a better term "high grades" the mineral deposit where possible. Şişecam utilizes large highly productive continuous miners incorporating on-board roof bolters and a large on-board ventilation fan that require a minimum mining height of 9-feet. The required 9-feet mining height of this equipment limits how far mining may be extended to the edge of the ore body. Additionally, Şişecam's processing facilities have limited ability to handle lower grade ore even if it is over a short period of a few hours. This plant limitation impacts what can be mined when disruptions in the ore body are encountered (Section 6.4.3). The lower grade material can be processed with minimal impact to recovery, but it must be processed at a slower rate which impacts total production. Şişecam has chosen to bypass this material and/or stop mining before the overall seam thickness and associated grade severely impacts the plant. Both of these choices are economic, made by Şişecam to minimize production costs. High grading is common and even standard practice for the mining industry. At some point in the future, Şişecam will have to make modifications, like other operators in the trona basin have done, to facilitate mining of these areas. This reserve estimate forecasts modification of the mining equipment and processing facilities in the future at a point when mining of the thicker trona (>9-feet) has been completed.

To account for this reality, HPG has developed a detailed Life-of-Mine (LOM) plan that in HPG's opinion is a reasonable mining sequence for this deposit over its remaining 40 plus years assuming Şişecam choses to mine as much of the resource as possible. A two-stage mine plan has been developed. The first stage "high-grades" the deposit based upon the current mining equipment and processing plant limitations mining to the 9-foot isopach. This matches the practice employed over the last 20 years and should be viable for another 20 years. Based on this plan, thinner areas (less than 9-feet) or areas where disruptions have been encountered are not mined until later in the property life, assuming reasonable access is available at that time. This results in areas of the deposit that require a change in both mining equipment and processing facilities. The capital expense and changes to the operating costs for these changes have been accounted for in the economic analysis and a detailed mine plan has been developed showing potential access and mining of these areas.

The second stage mining is based upon smaller mining equipment and assumes changes to the dissolver sections of the processing plants. These changes should allow mining to the 7-foot isopach and processing areas of the trona resource where disruptions to the ore body have been and will be encountered as mining progresses towards the edge of the ore body. The 7-foot mining limit was selected based on current economics and practices at similar operations.

This type of two-stage mining is only possible when underground conditions allow access to the bypassed areas long after the first stage of mining was completed. This is true for the Big Island Mine where old mine workings developed 60 years ago are still open, accessible, and currently in use. Additionally, Şişecam has a history of accessing resource blocks from old mine workings. The UBSW slopes were developed in 2005 between old mine workings that had been mined in the 1970's. After 50 years of being mined these areas continue to be the primary access to the UB Southwest reserve blocks.

Carlson Software's Advance Mining module 2021™ was used to calculate tonnages and schedule mine development. Carlson's Advance Mining module applies the geologic bed thickness and grade information from the resource model to a user defined mining sequence with user defined equipment specifications.

Figure 12.1 and Figure 12.2 show a LOM plan for both the Upper and Lower Beds using current panel layouts, extraction rates and mining equipment based on the two-stage mining sequence.

While some effort was made to time the future mine plan over its 40-year plus predicted life, as measured from December 2024, this model should only be considered a generalization of the proposed timing and an illustration of how the deposit could be mined. This LOM incorporated the following assumptions:

- Production of 4.3 million ROM short tons per year starting in 2025;
- 9-foot plus material is mined first then the thinner 9-foot to 7-foot ore is mined;
- Mining limit cut-off of 7-feet and 85% minimum trona grade;
- Eastside of mine – Westside of mine production balance was maintained whenever possible. This exercise indicates that additional work is needed for long-term planning, as the equal east-west split breaks down in the mine plan. This results from the concentration on mining Upper Bed Ore instead of Lower Bed Ore. East west balance of ore into the crusher area is needed because of infrastructure limitations in the crusher area;
- Access to mining areas outside the 9-foot mining limit is provided by access through old workings, new development, or extensions of future mining panels;
- Out-of-seam dilution of 4-inches;
- Minimum entry mining height of 7-feet;
- Maximum mining height of 13.5-feet; and
- Mirror image two-seam panel layouts were used based on current two-seam mining designs.

To calculate the highest expected ROM feed grade optimally sized equipment was assumed and modeled as follows. Out of seam dilution was estimated at 4-inches of rock due to over mining the top or bottom. Additionally, a minimum entry height of 7-feet was assumed, allowing the equipment to cut to the 7-foot thickness isopach. Trona seam thickness varies, and it is predicted that the areas near the 7-foot isopach contain localized trona thickness areas less than 7-feet and even less than 6-feet in places. When seam thickness is less than 7-feet, out-of-seam rock is cut to maintain the 7-foot minimum mining height or entry height. The net out-of-seam dilution is the over/under cut of 4-inches plus any rock cut to maintain an entry height of seven feet.

A maximum equipment mining height of 13.5-feet was assumed which is the current limit of Şişecam's Joy 12HM26 roof bolters. Any trona ore thicker than 13.5-feet is assumed left in place, the historical mining practice using continuous miners at Şişecam. Based on the long history with continuous miners, this study did not consider larger equipment or bench mining to capture the in-place reserves thicker than 13.5-feet.

12.2 MINERAL RESERVE ESTIMATION

In determining the reserve parameters and assumptions HPG considered the following circumstances:

- Şişecam's 60-year long history and economics of mining the deposit and producing soda ash;
  - The 183.3 MST of trona ore produced from these two beds;
- The projected long life of the mine and resulting likely change in economics, mining, and processing methods over its projected 40-year mine life;
- Şişecam's current processing facilities capabilities and projected future changes to these facilities.
- The economics associated with Şişecam's current mining equipment and history of "high grading" the thickest portions of the deposit;
- Şişecam's current mining equipment limitations and required future changes to these systems; and
- HPG's knowledge operating and managing other trona and potash mines.

In determining whether the reserves meet these economic standards, HPG made certain assumptions regarding the remaining life of the Big Island Mine, including, among other things, that:

- The point of reference is run-of-mine ore delivered to the processing facilities;
- The cost of products sold per short ton will remain consistent with Şişecam Wyoming's cost of products sold for the five years ended December 31, 2024;
- The weighted average net sales per short ton FOB plant, $165/ton, based on USGS pricing and historical pricing provided by Şişecam;
- Şişecam Wyoming's mining costs will remain consistent with the five years ended December 31, 2024, until they begin two-seam mining, at which time mining costs for the two-seam mining tonnage could increase by as much as 30%;
- Şişecam Wyoming's processing costs will remain consistent with the five years ended December 31, 2024, and rise in 10-years to account for lower grade material;
- Şişecam Wyoming will maintain annual mining rate of approximately 4.3 million short tons of trona;
- Şişecam Wyoming will process soda ash with a 90% rate of recovery, without accounting for the deca rehydration process;
- The ore to ash ratio for the stated trona reserves is 1.835:1.0 (short tons of trona run-of-mine to short tons of soda ash);
- The run-of-mine ore estimate contains dilution from the mining process;
- Şişecam Wyoming will continue to conduct only conventional mining using the room and pillar method and a non-subsidence mine design;
- Şişecam Wyoming will, in approximately 10 years, make necessary modifications to the processing facilities to allow localized mining of 75% ore grade in areas where the floor seam or insoluble disruptions have moved up into the mining horizon causing mining to be halted early due to processing facility limitations;
- Şişecam Wyoming will, in approximately 20 years, make necessary equipment modifications to operate at a seam height of 7-feet, the current mining limit is 9-feet;
- Şişecam Wyoming has and will continue to have valid leases and license in place with respect to the reserves, and that these leases and license can be renewed for the life of the mine based on their extensive history of renewing leases and license;
- Şişecam Wyoming has and will continue to have the necessary permits to conduct mining operations with respect to the reserves; and
- Şişecam Wyoming will maintain the necessary tailings storage capacity to maintain tailings disposal between the mine and surface placement for the life-of-mine (LOM).

Table 12.1 through Table 12.4 summarizes the estimated recoverable trona from the Big Island Mine based on the LOM. Section 12.2.2 provides additional details and an explanation of the information contained in these tables.

Based on this analysis, Şişecam Wyoming can realistically expect to economically recover 217.7 MST of trona ore at an average grade of 85.6 percent from these reserves as of the end of December 2024. This is made up of 72.8 MST from Bed 25 and 145.0 MST from Bed 24. Proven recoverable tons are calculated as 109.2 MST, of which 39.5 MST remain in the Upper Bed 25 and 69.7 MST remain in the Lower Bed 24. Probable recoverable tons are calculated at 108.5 MST, of which 33.3 MST remain in the Upper Bed 25 and 75.2 MST remain in the Lower Bed 24. This is based on Şişecam continuing to mine using its existing mining methods and extraction rates for the remaining life of the currently controlled reserves. Estimated finished soda ash reserves are 118.0 MST. Numbers have been rounded; totals may not sum due to rounding.

Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned 51% by Şişecam Chemicals LLC and 49% by NRP Trona LLC ("NRP Trona").

TABLE 12.1
RECOVERABLE TRONA RESERVES – BIG ISLAND MINE AND REFINERY
TRONA BEDS 24 AND 25 AS OF DECEMBER 31, 2024
WITHIN THE CONTIGUOUS LEASES AND LICENSE
Based on $165/TSA 1-5

	Proven Mineral Reserves		Probable Mineral Reserves		Total Mineral Reserves	
Bed	Tons (Millions Tons)	Average Grade % Trona	Tons (Millions Tons)	Average Grade % Trona	Tons (Millions Tons)	Average Grade % Trona
Lower Bed 24	69.7	85.9	75.2	85.6	145.0	85.8
Upper Bed 25	39.5	85.6	33.3	84.8	72.8	85.3
Total	**109.2**	**85.8**	**108.5**	**85.3**	**217.7**	**85.6**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

TABLE 12.2
ESTIMATED RECOVERABLE TRONA RESERVES FOR BED 24 & 25
BY CATEGORY AND MINERAL OWNER
AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

RESERVE CATEGORY AND LEASE	TRONA SEAM MINED (Mt)	OUT OF SEAM ROCK (Mt)	TOTAL ROM MINED (Mt)	AVERAGE IN-SEAM GRADE (% TRONA)	TOTAL TRONA (Mt)	TOTAL ROCK (In-seam + out-of-seam) (Mt)	TOTAL ROM Mined (Mt)	AVERAGE ROM FINAL GRADE (% TRONA)	TOTAL SODA ASH (Mt) (90% RECOVERY)
PROVEN (BED 24 & 25)									
Private Leases	53.9	1.8	55.7	88.9	47.9	7.7	55.7	85.9	30.3
US Leases	44.0	1.5	45.6	88.6	38.9	6.7	45.6	85.6	24.6
State Leases	7.8	0.2	8.0	89.2	7.0	1.1	8.0	86.7	4.4
PROVEN Total	105.7	3.5	109.2	88.8	93.8	15.5	109.2	85.8	59.4
PROBABLE (BED 24 & 25)									
Private Leases	53.2	1.9	55.1	88.5	47.1	8.0	55.1	85.3	29.8
US Leases	33.4	1.2	34.6	88.4	29.4	5.2	34.6	85.3	18.6
State Leases	18.2	0.6	18.8	88.8	16.2	2.6	18.8	85.9	10.2
PROBABLE Total	104.8	3.7	108.5	88.5	92.7	15.8	108.5	85.3	58.7
Grand Total	210.5	7.3	217.7	88.6	186.5	31.3	217.7	85.6	118.0

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

TABLE 12.3
ESTIMATED RECOVERABLE TRONA RESERVES FOR BED 24 ONLY
BY CATEGORY AND MINERAL OWNER
AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

RESERVE CATEGORY AND LEASE	TRONA SEAM MINED (Mt)	OUT OF SEAM ROCK (Mt)	TOTAL ROM MINED (Mt)	AVERAGE IN-SEAM GRADE (% TRONA)	TOTAL TRONA (Mt)	TOTAL ROCK (In-seam + out-of-seam) (Mt)	TOTAL ROM Mined (Mt)	AVERAGE ROM FINAL GRADE (% TRONA)	TOTAL SODA ASH (Mt) (90% RECOVERY)
PROVEN (BED 24)									
Private Leases	34.1	1.1	35.2	89.0	30.3	4.8	35.2	86.1	19.2
US Leases	27.4	1.0	28.4	88.5	24.2	4.2	28.4	85.5	15.3
State Leases	6.0	0.2	6.2	89.4	5.4	0.8	6.2	86.9	3.4
PROVEN Total	67.5	2.2	69.7	88.8	59.9	9.8	69.7	85.9	37.9
PROBABLE (BED 24)									
Private Leases	33.4	1.2	34.6	88.8	29.7	5.0	34.6	85.6	18.8
US Leases	23.2	0.9	24.0	88.6	20.5	3.5	24.0	85.4	13.0
State Leases	16.1	0.5	16.6	89.0	14.3	2.2	16.6	86.2	9.1
PROBABLE Total	72.6	2.6	75.2	88.8	64.5	10.7	75.2	85.6	40.8
Grand Total	140.2	4.8	145.0	88.8	124.4	20.5	145.0	85.8	78.8

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned 51% by Şişecam Chemicals LLC and 49% by NRP Trona.

TABLE 12.4
ESTIMATED RECOVERABLE TRONA RESERVES FOR BED 25 ONLY
BY CATEGORY AND MINERAL OWNER
AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

RESERVE CATEGORY AND LEASE	TRONA SEAM MINED (Mt)	OUT OF SEAM ROCK (Mt)	TOTAL ROM MINED (Mt)	AVERAGE IN-SEAM GRADE (% TRONA)	TOTAL TRONA (Mt)	TOTAL ROCK (In-seam + out-of-seam) (Mt)	TOTAL ROM Mined (Mt)	AVERAGE ROM FINAL GRADE (% TRONA)	TOTAL SODA ASH (Mt) (90% RECOVERY)
PROVEN (BED 25)									
Private Leases	19.8	0.7	20.5	88.7	17.6	2.9	20.5	85.6	11.1
US Leases	16.6	0.6	17.2	88.6	14.7	2.5	17.2	85.7	9.3
State Leases	1.8	0.1	1.8	88.1	1.5	0.3	1.8	85.1	1.0
PROVEN Total	38.2	1.3	39.5	88.6	33.8	5.7	39.5	85.6	21.4
PROBABLE (BED 25)									
Private Leases	19.8	0.7	20.5	88.0	17.4	3.1	20.5	84.9	11.0
US Leases	10.2	0.4	10.6	88.0	8.9	1.6	10.6	84.7	5.7
State Leases	2.1	0.1	2.2	87.7	1.9	0.3	2.2	84.1	1.2
PROBABLE Total	32.1	1.1	33.3	88.0	28.2	5.1	33.3	84.8	17.9
Grand Total	70.3	2.5	72.8	88.3	62.0	10.7	72.8	85.3	39.3

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

12.2.1 Reserve Estimate Reconciliation

Recoverable trona reserves have decreased from 220.0 MST (December 31, 2021) to 217.7 MST (December 31, 2024). These changes were the net result of reductions from mining activities, additions due to lease acquisitions, reductions due to geologic model modifications, information from the 2021 to 2024 mining advance and barrier pillars protecting new shafts. Table 12.5 reports the details of these changes and are described below:

- Between December 31, 2021, and December 31, 202024, the Big Island Mine produced and hoisted 13.2 million tons to the surface;
- The addition of new leased acreage of 420 acres added approximately 9.8 million tons to the recoverable reserves;
- Examination and thickness measurements of the Upper Bed Southwest have been accounted for in this estimate and have resulted in an increase in the reserves driven mainly by thicker than predicted trona in the UB Southwest; and
- Based upon industry best practice and Ciner's drawing showing shaft barriers, a 1,000-foot barrier pillar protecting surface facilities and shafts, were accounted for surrounding Shaft 4 and proposed Shaft 5 locations.

TABLE 12.5
RECONCILIATION RESERVE ESTIMATES DEC-2021 TO DEC-2024
AS OF DECEMBER 31, 2024

	Estimated Resource (Mt)	Estimated Reserves or Mined (Mt)	Mineral Reserves (Mt)	Remaining Reserves (Mt)	Percent Change	Notes
Reserves as of December 31, 2021 (TRS)			**220.0**			
Mined 2022		(4.4)		215.6		Reported by Depleation
Mined 2023		(4.3)		211.3		Reported by Depleation
Mined 2024		(4.5)		206.8		
Tonnage from Added Leased Acreage	16.4	9.8		216.7		
Estimated Geologic Model Adjustments		1.0		**217.7**		
Total Mined 2021-2024		13.2				
Reserves as of December 31, 2024 (TRS)			**217.7**		1.03%	

Table 12.6 through Table 12.8 illustrate the change in estimated reserves between 2021 and 2024 by mining bed and lease holder.

TABLE 12.6
CHANGE IN ESTIMATED TRONA RESERVES 2021-2024 FOR BEDS 24 &25
BY CATEGORY AND MINERAL OWNER AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

RESERVE CATEGORY AND LEASE	TRONA SEAM MINED (TONS)	OUT OF SEAM ROCK (TONS)	TOTAL ROM MINED (TONS)	AVERAGE IN-SEAM GRADE (% TRONA)	TOTAL TRONA (TONS)	TOTAL ROCK (In-seam + out-of-seam) (TONS)	TOTAL ROM Mined (TONS)	AVERAGE ROM FINAL GRADE (% TRONA)	TOTAL SODA ASH TONS (90% RECOVERY)
PROVEN (BED 24 & 25)									
Private Leases	6.8	0.2	7.1	0.0	6.3	0.8	7.1	0.0	4.0
US Leases	4.5	0.2	4.7	0.0	4.1	0.6	4.7	0.0	2.6
State Leases	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
PROVEN Total	11.4	0.5	11.8	0.0	10.5	1.4	11.8	0.0	6.6
PROBABLE (BED 24 & 25)									
Private Leases	-4.1	-0.2	-4.3	0.0	-3.7	-0.6	-4.3	0.0	-2.4
US Leases	-9.6	-0.3	-9.9	0.0	-8.5	-1.4	-9.9	0.0	-5.4
State Leases	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
PROBABLE Total	-13.6	-0.5	-14.1	0.0	-12.2	-1.9	-14.1	0.0	-7.7
Grand Total	-2.2	0.0	-2.3	0.0	-1.7	-0.6	-2.3	0.0	-1.1

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

TABLE 12.7
CHANGE IN ESTIMATED TRONA RESERVES 2021-2024 FOR BEDS 24
BY CATEGORY AND MINERAL OWNER AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

RESERVE CATEGORY AND LEASE	TRONA SEAM MINED (TONS)	OUT OF SEAM ROCK (TONS)	TOTAL ROM MINED (TONS)	AVERAGE IN-SEAM GRADE (% TRONA)	TOTAL TRONA (TONS)	TOTAL ROCK (In-seam + out-of-seam) (TONS)	TOTAL ROM Mined (TONS)	AVERAGE ROM FINAL GRADE (% TRONA)	TOTAL SODA ASH TONS (90% RECOVERY)
PROVEN (BED 24)									
Private Leases	2.8	0.1	2.9	0.0	2.5	0.4	2.9	0.0	1.6
US Leases	2.6	0.2	2.8	0.0	2.2	0.6	2.8	0.0	1.4
State Leases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROVEN Total	5.4	0.3	5.7	0.0	4.8	1.0	5.7	0.0	3.0
PROBABLE (BED 24)									
Private Leases	-5.0	-0.2	-5.2	0.0	-4.5	-0.7	-5.2	0.0	-2.8
US Leases	-2.8	-0.1	-2.8	0.0	-2.5	-0.3	-2.8	0.0	-1.6
State Leases	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROBABLE Total	-7.8	-0.3	-8.0	0.0	-7.0	-1.1	-8.0	0.0	-4.4
Grand Total	-2.3	0.0	-2.3	0.0	-2.2	-0.1	-2.3	0.0	-1.4

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

TABLE 12.8
CHANGE IN ESTIMATED TRONA RESERVES 2021-2024 FOR BEDS 25
BY CATEGORY AND MINERAL OWNER AS OF DECEMBER 31, 2024
Based on $165/TSA 1-5

RESERVE CATEGORY AND LEASE	TRONA SEAM MINED (TONS)	OUT OF SEAM ROCK (TONS)	TOTAL ROM MINED (TONS)	AVERAGE IN-SEAM GRADE (% TRONA)	TOTAL TRONA (TONS)	TOTAL ROCK (In-seam + out-of-seam) (TONS)	TOTAL ROM Mined (TONS)	AVERAGE ROM FINAL GRADE (% TRONA)	TOTAL SODA ASH TONS (90% RECOVERY)
PROVEN (BED 25)									
Private Leases	4.0	0.1	4.1	0.0	3.8	0.4	4.1	0.0	2.4
US Leases	1.9	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.2
State Leases	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
PROVEN Total	5.9	0.2	6.1	0.0	5.7	0.4	6.1	0.0	3.6
PROBABLE (BED 25)									
Private Leases	0.9	0.0	0.9	0.0	0.7	0.1	0.9	0.0	0.5
US Leases	-6.8	-0.2	-7.1	0.0	-6.0	-1.0	-7.1	0.0	-3.8
State Leases	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
PROBABLE Total	-5.8	-0.2	-6.1	0.0	-5.2	-0.9	-6.1	0.0	-3.3
Grand Total	0.1	-0.1	0.0	0.0	0.5	-0.5	0.0	0.0	0.3

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2024, using depletion and the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC 51% and by NRP Trona LLC 49%.

12.2.2 Recoverable Trona Table Description

The following descriptions were used in calculating Table 12.2 through Table 12.4 and Table 12.6 through Table 12.8:

Reserve Category and Lease or License –

Reported reserves are broken down into reserve classification, Proven or Probable, and divided by lessor or licensor.

Trona Seam Mined (Short Tons) –

Summarizes the total trona tons mined for each category. Calculated by multiplying the subject area times the estimated bed thickness. The trona seam is made up of pure trona interbedded with other soluble and insoluble minerals.

Out of Seam Rock (Short Tons) –

The out-of-seam rock is a calculation of the tons produced from the inaccuracies of the mining process. The continuous mining machine is not capable of perfectly cutting the trona ore seam. For the purposes of this study 4-inches of out-of-seam, material has been included in the mined material.

Total ROM Mined (Short Tons) –

The total ROM material mined is calculated as follows:

Total ROM Mined = Trona Seam Mined + Out of Seam Rock.

These are the tons that the refinery will process and are the reported recoverable reserves at a given ROM grade.

Average In-Seam Grade (% Trona) –

The average in-seam grade summarizes the average trona grade for the seam over the reported category based upon the geologic model.

Total Trona (Short Tons) –

Total Trona reports the short tons of pure trona for the given category and is calculated as follows:

Total Trona = Trona Seam Mined x Average In-Seam Grade

This is the tonnage of trona ore available for processing into soda ash.

Total Rock (In-seam + Out-of-Seam) (Short Tons) –

Total Rock, in-seam plus out-of-seam reports the total insoluble material in the ROM ore for the given category and is calculated as follows:

Total Rock Tons = Out of Seam Rock Tons + Insoluble Tons within the mined bed

or

Total Rock Tons = Out of Seam Rock Tons + (Trona Seam Mined Tons – Total Trona Mined Tons)

Total ROM Mined (Short Tons) –

This column is a back check to ensure the calculations are accurate and equals:

Total ROM Mined = Total Trona + Total Rock.

Average ROM Final Grade (% Trona) –

Average ROM final grade estimates the final grade, in percent trona, of the material sent to the refinery and is calculated as follows:

Average ROM Final Grade = 1 – (Total Rock / Total ROM Mined /100)

Total Soda Ash Tons (90% Recovery) –

Total Soda Ash Tons reports the estimated soda ash that can be produced over the reported category and is calculated as follows:

*Total Soda Ash Tons = Total Trona Tons / 1.4218 * 0.90.*

The conversion factor for trona to soda ash of 1.4218 is explained in Section 10.1.

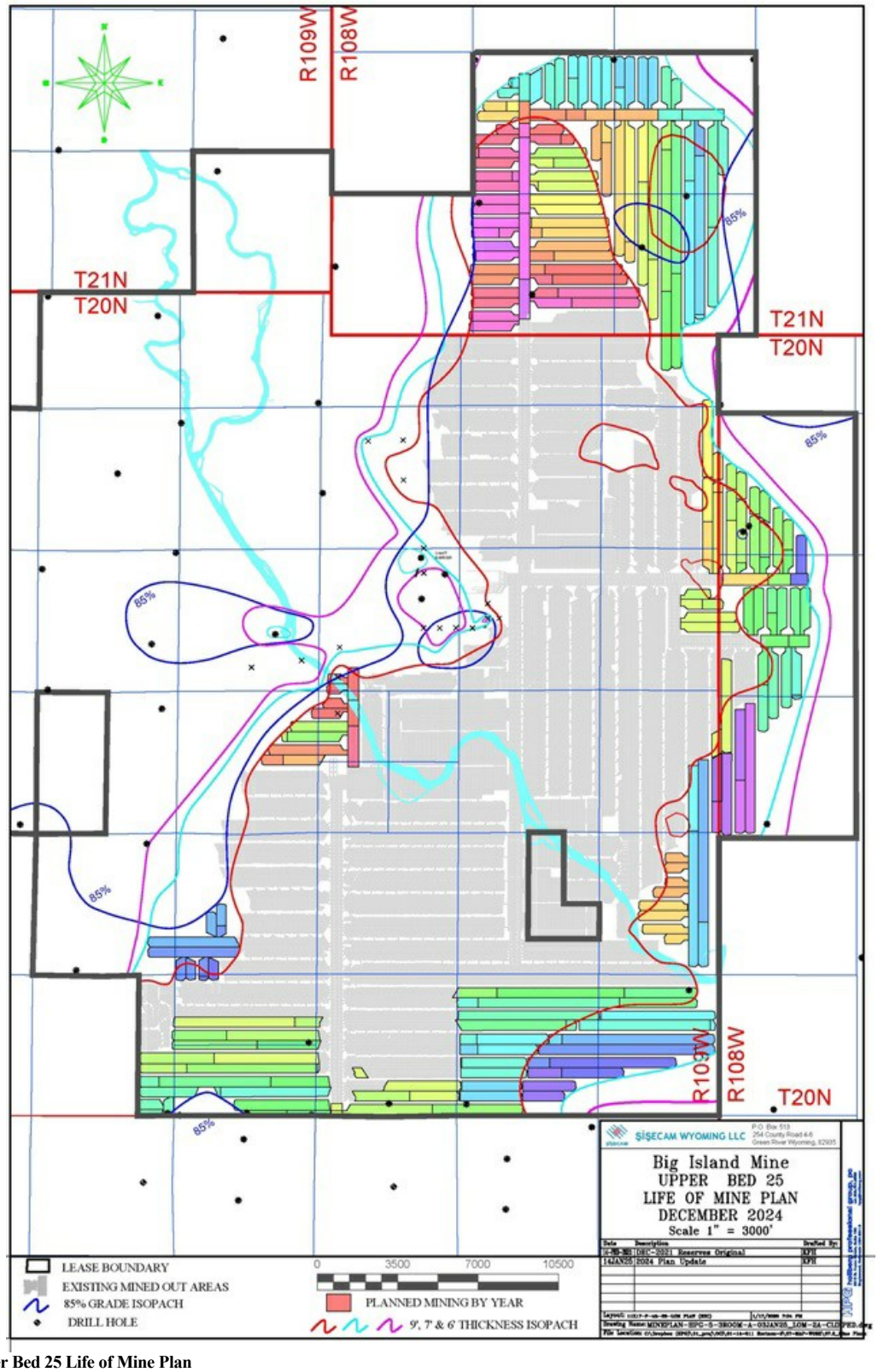


Figure 12.1 Upper Bed 25 Life of Mine Plan

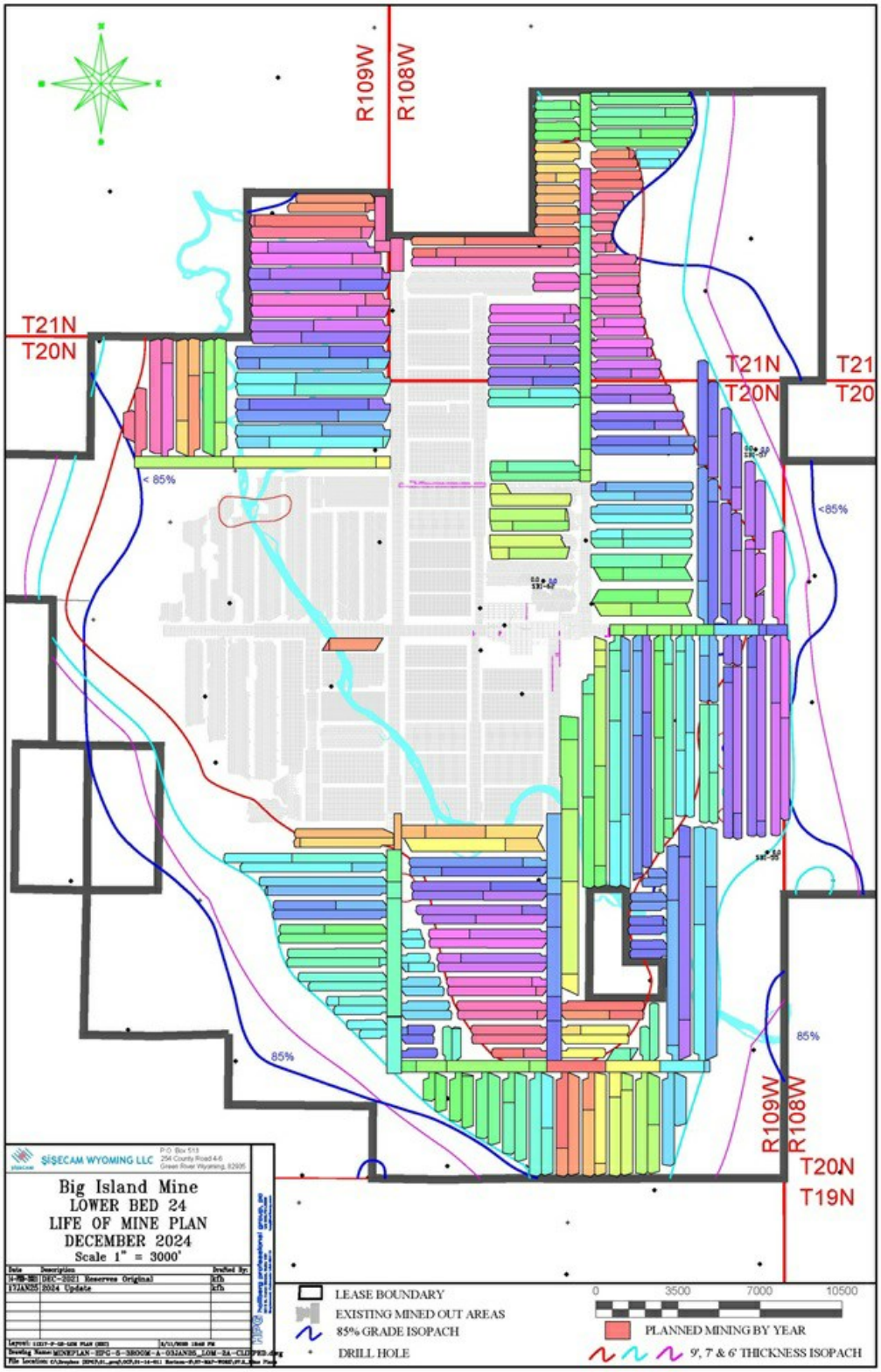


Figure 12.2 Lower Bed 24 Life of Mine Plan

12.3 UNCERTAINTIES (FACTORS) THAT MAY AFFECT THE MINERAL RESERVE ESTIMATE

Areas of uncertainty that may materially impact the mineral reserve estimates include:

- Changes to long-term soda ash price and exchange rate assumptions;
- Changes in local interpretations of trona seam thickness and grade such as sedimentary structures described in Section 6.4.3;
- Changes to geological and grade shape, and geological and grade continuity assumptions;
- Changes to soda ash recovery assumptions;
- Changes to the forecast dilution and mining recovery assumptions;
- Changes to the cut-off values applied to the estimates;
- Variations in geotechnical (including seismicity), hydrogeological and mining method assumptions; and
- Changes to environmental, permitting, and social license assumptions.

12.4 SECONDARY RECOVERY AND HIGH EXTRACTION MINING

Due to non-subsidence limitations, this reserve estimate does not include any trona resources that could be recovered by solution mining or secondary recovery. Şişecam Wyoming has limited ability to implement high extraction mining or secondary solution mining due to the Green River crossing the property.

12.4.1 Non-Subsidence Areas

Non-subsidence areas for the Big Island Mine include but are not limited to, the Green River, Şişecam Wyoming Refining Facility, tailings complex, railroad spurs, gas pipelines, highways, and surface access for return or injection systems.

While subsidence of rivers, roads, rail, and pipelines has been successfully done in the Trona Basin, the degree of subsidence and the features subsided dictate what mitigation efforts are necessary.

Due to its low drainage gradient and the proximity of Seedskadee National Wildlife Area, the Green River flood plain should be considered a non-subsidence area. Unfortunately, LB West seismic activity in combination with water inflow has resulted in subsidence next to a small section of the Green River. The DEQ and LQD have been made aware of this situation, and they have not voiced any concerns at this time. Şişecam has notified other relevant regulatory agencies and interested parties. The area is being monitored closely for any surface changes or impact to the underground mine. Further information on this topic is available in Section 13.2.1.

The Şişecam Wyoming Refining Facility, along with the mine shafts, are also considered non-subsidence areas. The other overlying features, roads, rails, and pipelines can be subsided if the proper mitigating work is complete.

13.0 MINING METHOD

Mining extraction at the Big Island Mine is designed to avoid any surface subsidence due to its proximity to the Green River and multiple natural gas pipelines.

Conventional mining equipment (drill and blast) was used at the Big Island Mine until the mid-1980's, when continuous miners fully replaced that method of ore production. A total of 59.2 MST was recovered conventionally at a 42% to 45% areal extraction rate. Undercutters were used to 'top-cut' the trona seam prior to drilling and blasting. This equipment limited the mining height and tended to leave one to two feet of roof trona, resulting in a volumetric extraction of 35% to 40%. Including barrier pillars between panels, historic conventional extraction averaged in the low 30% range.

The change to continuous miner (CM) panel layouts increased entry widths from 22-feet to 30-feet, and areal extraction increased to an average of 56% with some CM panel extraction rates as high as 68%. Volumetric extraction also increased, as the continuous miners could mine up to 13.5-feet high. It is common for the continuous miners to mine the full seam height leaving little, if any, top or bottom trona. Given full seam height extraction, and with barrier pillars, the historic continuous miner volumetric extraction ranges between 45% and 55%.

The current CM fleet is made up of seven Joy 12HM26 drum miners with integral roof bolting and ventilation fans. These are highly productive machines due to their ability to mine and roof bolt simultaneously. The height of the roof bolters and fan limit the current minimum mining height to 9-feet. When thinner seam areas are encountered, floor or roof rock must be mined for clearance. This out-of-seam material adversely affects the refining process. To maintain feed grade, the current minimum mining limit is 9-feet. For this study, future mining of seam areas below 9-feet is assumed to utilize smaller continuous miners.

For the purpose of this estimate, HPG has assumed Şişecam Wyoming will continue to use this mining method and equipment with some changes to mining height for the LOM.

13.1 TWO SEAM MINING

Portions of the remaining Bed 24 trona are located under previously mined areas in Bed 25. These areas are where 'two-seam mining' is required. Two-seam mining extracts the mineral from both beds. Due to the thin interburden (25 to 40-feet) between Bed 24 and 25 and wide entries mined, mining induced stresses are higher in these areas of two-seam mining, Şişecam Wyoming has conducted significant computer modeling of the rock mechanics and predicted mine entry stability surrounding two-seam mining. Additionally, three test panels and one production panel have been mined in areas where lower extraction conventional mining techniques were employed. These panels were mined successfully and remain accessible and stable for many years after mining.

Since the 2021 TRS, Şişecam has mined over 2.7 million tons from the two-seam area completing two full CM panels, extended the LB North Mains and are developing two additional CM panels. Examination of the area indicated favorable mining conditions consistent with predicted results. These initial panels have been instrumented and will be analyzed and monitored as adjacent panels are developed.

Based on this progress it will be an additional two to four years before Şişecam is able to fully demonstrate the viability of two-seam mining with the current mining equipment. To account for this risk, higher mining costs have been used in the economic analysis and the affect is discussed in Section 19.0. Given the work completed, the existing test panels, and the cost structure at Şişecam Wyoming, it is reasonable to conclude that these areas can be economically mined and therefore are considered reserves in this study.

Approximately 115 MST of Bed 24 recoverable reserves are located in projected two-seam mining areas.

13.2 RESERVE ACCESS

The Big Island Mine is regulated by the Mine Safety and Health Administration ("MSHA") as a metal and non-metal mine. For the purposes of this analysis, it is assumed that MSHA will continue to allow Şişecam Wyoming to mine for the LOM under the metal and non-metal rules.

Four (4) existing surface to ore bed shafts are used to access the trona reserves of Beds 24 and 25. All four shafts terminate below Bed 24, are fully concrete lined, and none have stations in Bed 25. Shaft #1 and Shaft #2 are the original shafts and were installed in 1961. Shaft #1 contains a service hoist for man and material access, is 16-feet in diameter and is used as an intake airway. Shaft #2 is 20-feet in diameter, has a concrete divider wall, and one-half is used as an intake airway while the other half contains a production hoist with 10-ton skips. Shaft #2 has newly installed direct fire natural gas heaters for the intake air. Shaft #3 was constructed in 1981, is 20-feet in diameter, and has a divider wall with half the shaft used as in intake airway heated by steam. The other half contains a production hoist with 10-tons skips. Hoisting capacity is approximately 1,000 tons per hour with the existing systems. The recently completed, 20-foot diameter, Shaft #4 is the main return airway with two 12-ft diameter ventilation fans. The other three shafts provide air intake. Shaft #4 does not have a conveyance but does have a repair deck that can be lifted by a crane.

For the purpose of this estimate, HPG has assumed Şişecam Wyoming will maintain the shafts and hoists for the LOM.

The deposit is accessed from the shafts through existing and new mine entries. Ore transport from the mining face is by belt conveyors to the hoists at the shaft locations. For the purposes of this study, HPG assumed Şişecam Wyoming will continue to advance and maintain all infrastructure needed to access the ore for the LOM.

The Big Island mine is considered a gassy mine because it produces methane gas. The mine is currently ventilated by two newly installed Spendrup 12-ft diameter ventilation fans. Only one fan is needed for operations with the second a full operational spare. Ventilation is approximately 725,000 cubic feet per minute (CFM) of air. Each fan can be upgraded from 1,500 hp to 3,000 hp which would allow airflow to be increased to 1,300,000 CFM which is considered more than adequate for the long-term needs of the mine.

In general, long-term mine roof conditions are excellent. Most of the old workings can still be accessed. Panels mined in the 1960s are still accessible.

13.2.1 Inaccessible Areas

Areas that cannot be accessed are the TRM panels and the LB West Mains and Panel areas.

TRM panels are not accessible, they have been filled with the paste tailings from the refining process and are in the center of the deposit near the shafts.

The LB West Mains area west of X-Cut 223W are inaccessible due to roof falls across the mains that occurred in 2019.

This area was mined in the late 1990s and early 2000s with the last panel mined in 2005. During mining the panels to the north and south of the LB Mains encountered multiple roof falls and required secondary roof support. Roof falls in these panels have continued and increased in magnitude. On July 1st and 2nd 2016, two seismic events of magnitude 3.4 and 3.2 occurred with an epicenter in the vicinity of the Granger solution mine approximately 9-miles to the West of the Big Island Mine (BIM). Concurrent with these events the BIM experienced an air blast along the West Mains past X-Cut 152W blowing down 26 stoppings along with an increase in methane emissions. The USGS did not record any seismic activity in the vicinity of the BIM at this time. The likely cause of the air blast was roof falls in the panels adjacent to these mains. The location of these falls is not known due to lack of access in these old panels. Examination of the mains during this time indicated that they were stable. Additional roof falls likely occurred in these panels as indicated by methane spikes in November 2016, December 2016, June 2017, and February 2018. None of these methane spikes were associated with damage to any ventilation structures.

In February 2017, the area was examined. Ground conditions along the West Mains were considered to be deteriorating, but stable and no water was observed. In early 2018 examinations of the West Mains discovered ponding water covering most of the Lower Bed West workings below the 5310 MSL elevation. Figure 13.1 shows the extent of the flooded area. Chemical analysis of the water indicated that the source was not the Tailing Return to the mine water. Further analysis using radio isotopes indicated the age of the water as pre-nuclear age or fossil water older than 1952. The hydrologist concluded that the source is likely a sandstone unit 50 to 75-feet above Bed 25 that is a known low permeability aquifer and not directly the result of leakage from the Green River.

On February 22, 2019, the USGS recorded multiple seismic events with the epicenters in the mining panels north and south of the LB West mains west of X-Cut 219W. These events resulted in additional damage to ventilation structures in the area as well as a significant spike in methane emissions high enough to warrant shutting down the mine for six days until methane outgassing decreased to safe levels. Standing supports were placed in the LB West Mains at X-Cut 221W to create a break line if the mains became unstable. Monitoring of the area continued, and the water continued to subside. On April 5, 2019, the LB West Mains west of X-Cut 223W fell and caved tight between the floor and roof across the entire set of main entries.

Ground conditions in this area were considered problematic so Şişecam has established a new long-term pumping station located in the Lower Bed Southwest #2 Butts-X-Cut 60 S. Water from the area is pumped into the adjacent TRM sumps and then pumped out of the mine. Current pumping capacity at this location is approximately 200 gpm with the current long term average flow of approximately 80 gpm and 150 million gallons have been pumped to the surface tailings ponds since October of 2020.

Access to remaining LB West reserves located west of the existing mine workings using the LB West Mains is no longer possible without extraordinary effort. This reserve area could be accessed from the LB North Butts by driving mains to the west as shown in the proposed LOM plan accessing the LB Northwest reserve block. Panels could be developed from this new set of mains to the south to access these reserves. There are several risks associated with this area:

- These new panels would be down dip, lower in elevation, than the flooded areas. Mining down dip from flooded workings increases risk;
- The ore in this area has a modulus of elasticity that is half other areas of the BIM. Mining conditions similar to historic panels are likely and will require additional roof support; and
- The historic mined area continues to have roof falls as evidenced by 2019 seismic activity.

HPG does not consider this area to be minable and has removed it from the recoverable trona estimate due to the risks associated with seismicity, water inflow and soft ore. Removal of this area decreased recoverable trona by approximately 10.2 MST.

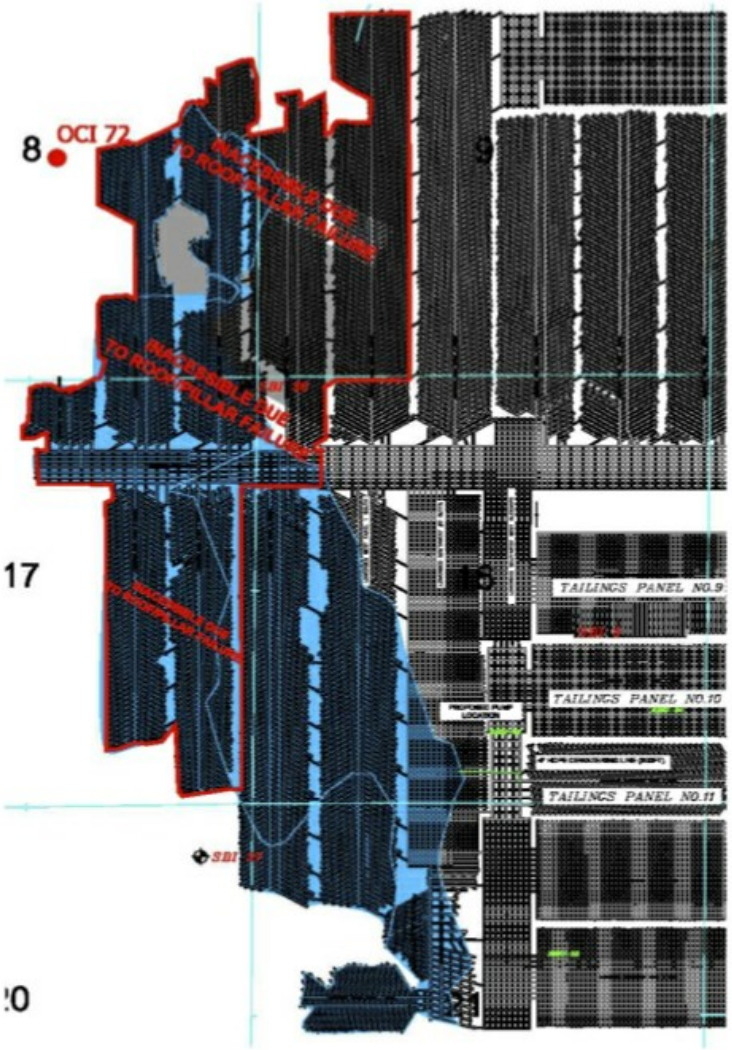


Figure 13.1 Lower Bed 24 Flooded Area
Source: 20220125 Subsidence Potential of Lower Bed West Section at Big Island Mine - RMC Final with Appendix.pdf (after Straub, 2021)

13.2.2 Mining Limit

The assumed 7-foot mining limit and 85% grade limit were selected based on the mining limit that has been successfully employed by the other basin trona mines.

Given the current minimum mining height limit of 9-feet and a reserve limit of 7-feet, there are areas outside the existing mining that are considered reserves but have not been mined based on these limits. In areas where the existing mining limit of 9-feet did not reach to the 7-foot isopach, it has been assumed that future access to these reserves would be through old workings or from newly driven development entries (see Life of Mine Plan Figure 12.1, Figure 12.2 and Section 12.1). For this study, these reserve remnants have been evaluated based on size and access to decide future extraction. Where the remnant was deemed too small or access too expensive, the remnant was excluded from the reserve estimate. As future mining continues, with the current large mining equipment, some loss of portions of the edge of the ore bodies will occur, especially when long production panels are developed. The length of recent production panels, greater than 10,000-feet long, likely precludes rehabilitation in the future to access reserves between the 9-foot and 7-foot isopachs. This estimate assumes that access to the UB Southeast Reserve block will be bypassed in this way, Figure 12.1. For the purposes of this study, these areas were considered on a case-by-case basis assuming Şişecam's typical mining methods and current cost structure.

A two-stage mine plan has been developed. The first stage "high-grades" the deposit based upon the current mining equipment and processing plant limitations mining to the 9-foot isopach. The second stage mining is based upon smaller mining equipment and assumes changes to the dissolver sections of the processing plants. The second stage mines the material between the 9-foot and 7-foot isopachs.

The mining limit, ore thickness and grade, is an economic one. Mining thinner material will be less productive and costlier. Mining costs of reserves between 9-feet and 7-feet thick could increase by 50% to 75%, making the economics of these reserves sensitive to variations in soda ash price.

14.0 PROCESSING AND RECOVERY METHODS

14.1 INTRODUCTION

Şişecam utilizes the monohydrate process to convert raw trona into soda ash in five (5) processing plants. The plants are well established and have a long production history which is illustrated in Table 14.1 below. Unit 6 is an integrated stand-alone plant constructed in 1998, and Unit 7 is a large calcining dissolver constructed in 2006 to feed liquor to Units 3 through 5. All the plants have had significant upgrades over the years to both improve recovery, energy efficiency, and increase soda ash production.

The primary feedstock to these plants is raw mined trona with a minor secondary feed from liquor produced from mining the DECA crystals, sodium carbonate decahydrate, from the evaporation ponds of the tailing disposal areas. The DECA crystals are mined using tracked backhoes, dewatered, and dissolved into liquor for feed into the dissolver circuit. The majority of the available DECA crystals have been mined from the pond systems. For the purposes of this estimate feed from DECA crystals has not been considered because the Pond 1 DECA has been mined out and it will take several years for DECA thick enough to mine to crystalize from the decant liquor.

For operational flexibility and to improve efficiencies there are multiple lines, ties, between the plants to optimize the liquor produced by the dissolver sections. Excess liquor from Unit 6 can be shared with Units 3 through 5 and similarly excess liquor from Unit 7 can be shared with Unit 6.

14.2 MONOHYDRATE PROCESS

Figure 14.2 is a simplified process flow diagram of the monohydrate (Mono) process operated at Şişecam. The Mono process starts with screening and crushing the trona feed to minus 3/8” which is then calcined in a gas fired rotary kiln at approximately 150-200 degrees Celsius converting the raw trona into crude soda ash and insoluble material (shale and marlstones). The conversion of trona (sodium sesquicarbonate) to sodium carbonate improves the dissolution in water so that the insoluble material can be removed by gravity separation using spiral classifiers and counter current thickeners. The overflow liquor from the thickeners is put through multiple stages of filtration to remove insoluble material.

The sodium carbonate is recrystallized from the filtered liquor in forced circulation evaporators heated by mechanical vapor recompression (MVRs). The crystalized dense soda ash is dewatered using pusher centrifuges and dried in gas fired rotary driers, screened, and sent to storage for shipping by truck or rail.

The underflow from the classifiers and thickeners is sent to the TRM paste plant where it is ground and dewatered using deep cone thickeners and pumped as a paste via positive displacement pumps underground into the old mine workings or on the surface into the tailings pond system. Şişecam is in the process of converting to a coarse tails output.

14.3 SODA ASH PROCESSING FACILITIES

Şişecam currently has two ore calcining and dissolving units with four soda ash processing plants. The first two processing plants, Unit 1 and Unit 2 built in 1962 used triple effect evaporators, were taken out of service after being replaced by the integrated Unit 6 plant. Unit 7 calciner and dissolving unit was constructed to replace the front ends for Units 3, 4, and 5. The dissolver units liquor output is interconnected to the multiple evaporator units. Figure 14.1 illustrates the relationships between the units and Figure 14.2 shows a simplified process flow diagram from the mine to the product silos. The details of the existing processing facilities are described in more detail below.

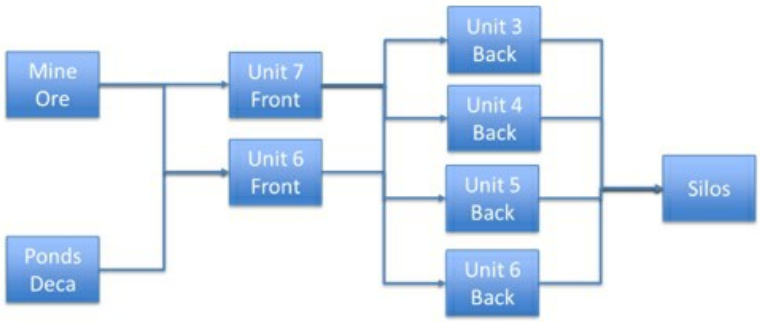


Figure 14.1 Şişecam Processing Facilities

TABLE 14.1
ŞIŞECAM HISTORICAL PRODUCTION

Short Tons		
	Trona Ore	**Soda Ash**
2016	4,050,396	2,654,965
2017	4,001,325	2,625,612
2018	4,018,329	2,569,145
2019	4,157,009	2,712,187
2020	3,653,830	2,236,850
2021	4,276,837	2,682,203
2022	4,373,724	2,660,172
2023	4,371,284	2,572,441
2024	4,467,168	2,475,813

14.3.1 Ore Crushers

Mined ore is crushed in two separate areas. The first is a crusher and screening building upgraded in 1980 that supplies crushed ore to Unit 7 that is then fed to Units 3 through 5. This area has two closed loop crushers. The second is a dedicated single closed loop crusher that was built with Unit 6 and only supplies ore to that unit.

14.3.2 Unit 7

Unit 7 was constructed in 2006 as an alternative energy project to update the dissolver sections of Units 3 through 5. Unit 7 consists of a large rotary calciner, Verti-mill grinder, and classifiers that supply liquor to Units 3 through 5. Originally the rotary calciner could be dual fired by coal or natural gas. The coal burner had low NOx emissions and was BACT at the time of construction. The unit was converted to only natural gas firing in November of 2010 due to economics and ability to increase production on gas.

14.3.3 Unit 3 and 4

Units 3 and 4 were constructed in 1967 and 1972, respectively. Both originally used triple effect evaporators with steam from gas fired boilers in the powerhouse and had their own dedicated calciners and dissolvers. In the 1980's Rhone-Poulenc converted the evaporators to MVRs. Unit 3 has two MVRs for the three evaporator bodies. Unit 4 uses two MVRs in series to drive the first two evaporator bodies (System 1) and two smaller MVR's to drive the third evaporator body (System 2). In 2006 Unit 7 replaced the calciners and dissolver sections. Unit 3 has the ability to produce 450 KTPY of soda ash and Unit 4 can produce 750 KTPY.

14.3.4 Unit 5

Rhone-Poulenc expanded soda ash production between 1977 and 1980 by adding an additional mine production Shaft #3, upgrading the crushing facilities, automating the surface ore stockpile, and constructing the fifth soda ash plant. Unit 5 has one large evaporator body with two heat exchangers driven by one large MVR compressor. Unit 5 is capable of producing 500 KTPY. Unit 5's calciner and dissolver sections were replaced by Unit 7 in 2006.

14.3.5 Unit 6

OCI Chemical expanded soda production in 1998 with the construction of Unit 6, a standalone integrated plant with crushing, calcining, dissolving, filtering, crystalizing, thickeners, and tailings pumps. Current annual production from Unit 6 is nominally 1,000,000 TPY. Unit 6 consists of two large MVR evaporator bodies with two heat exchanges for each.

Unit 6 Tailing TRM is made up of a dedicated rod mill crusher, deep cone thickener, high pressure positive displacement pumps and a dedicated borehole to the mine where a pipeline transports the paste to the underground TRM storage panels. Unit 6 TRM will be converted to a coarse tails output.

14.3.6 Tailings Return to the Mine Plant

The TRM Plant was constructed concurrently with the Unit 6 expansion. Commissioned in 1995, TRM processes the tailings from Units 3 through 5 and produces a thickened paste that is pumped into the old mine workings or to the surface tailings pond facility, where it is dewatered for permanent storage. Originally TRM had its own rod mill grinder and wet screens to produce paste. The Unit 7 Verti-mill has replaced that grinder and TRM now only consists of the deep cone thickener, high-pressure positive displacement pumps, a borehole into the mine and high-pressure piping to the underground storage panels or to the surface tailings pond facility. Şişecam is in the process of converting to a coarse tailings system. More information on tailings disposal is available in Section 17.4.

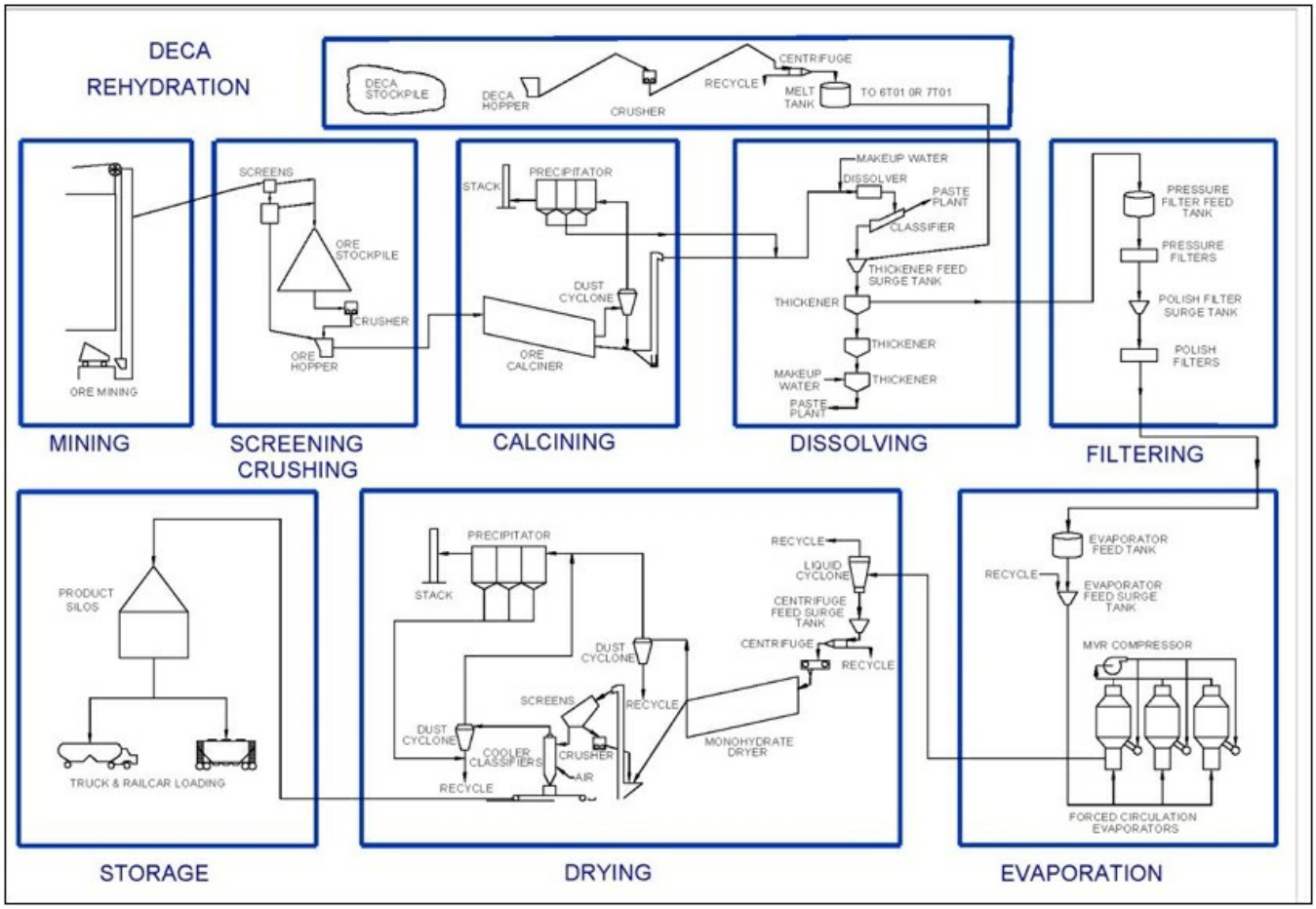


Figure 14.2 **Şişecam Wyoming Simplified Process Flow Diagram**

14.4 DECA MINING AND PROCESSING

DECA mining was started in 2009 by harvesting the DECA crystals from the evaporative areas of the tailings ponds. DECA precipitates during the fall and winter when temperatures drop. DECA mining occurs in the late winter when the pond area is relatively frozen allowing mining with conventional tracked backhoes and rough terrain haul trucks. The DECA is dewatered and hauled to a 1.8-million-ton stockpile next to the DECA processing plant. DECA is stockpiled during the winter and fed into the plant from the stockpile throughout the year. The DECA processing uses a pick breaker feeder to feed a heated and agitated melt tank. The resulting liquor is feed back into the process in the dissolver sections at the thickeners.

Full scale DECA mining ended in late 2024. Only limited DECA production is anticipated in the future. Future DECA production will be periodic and inconsistent and as such was not considered for this estimate.

15.0 INFRASTRUCTURE

15.1 INTRODUCTION

Şişecam Wyoming's mine and refinery are located 23 miles northwest of the town of Green River, Wyoming. Şişecam Wyoming accessible from Interstate 80 west from Green River then north on La Barge Road, Wyoming Highway 37, to the OCI road, 254 County Road 4.

The Şişecam site is serviced by a dedicated railroad spur line off the main East West Union Pacific rail line. The dedicated railroad spur line connects to the Union Pacific Main line just east of the Genesis Westvaco facilities.

The site infrastructure has been developed over the plus 60 years of operation, is established and is adequate for the purposes of producing soda ash. While the infrastructure is showing its age, Şişecam has demonstrated the willingness to update those areas as necessary. Examples of this are the ongoing update of the electrical mechanical control centers (MCC's), the addition of Shaft #4 with new ventilation fans, the electrical updates of the shaft hoisting systems, the new office change house building, as well as many improvements to the processing facilities.

The Şişecam site road access and rail access can be seen in Figure 15.1. An aerial view of the site indicating major infrastructure is shown in Figure 15.2.

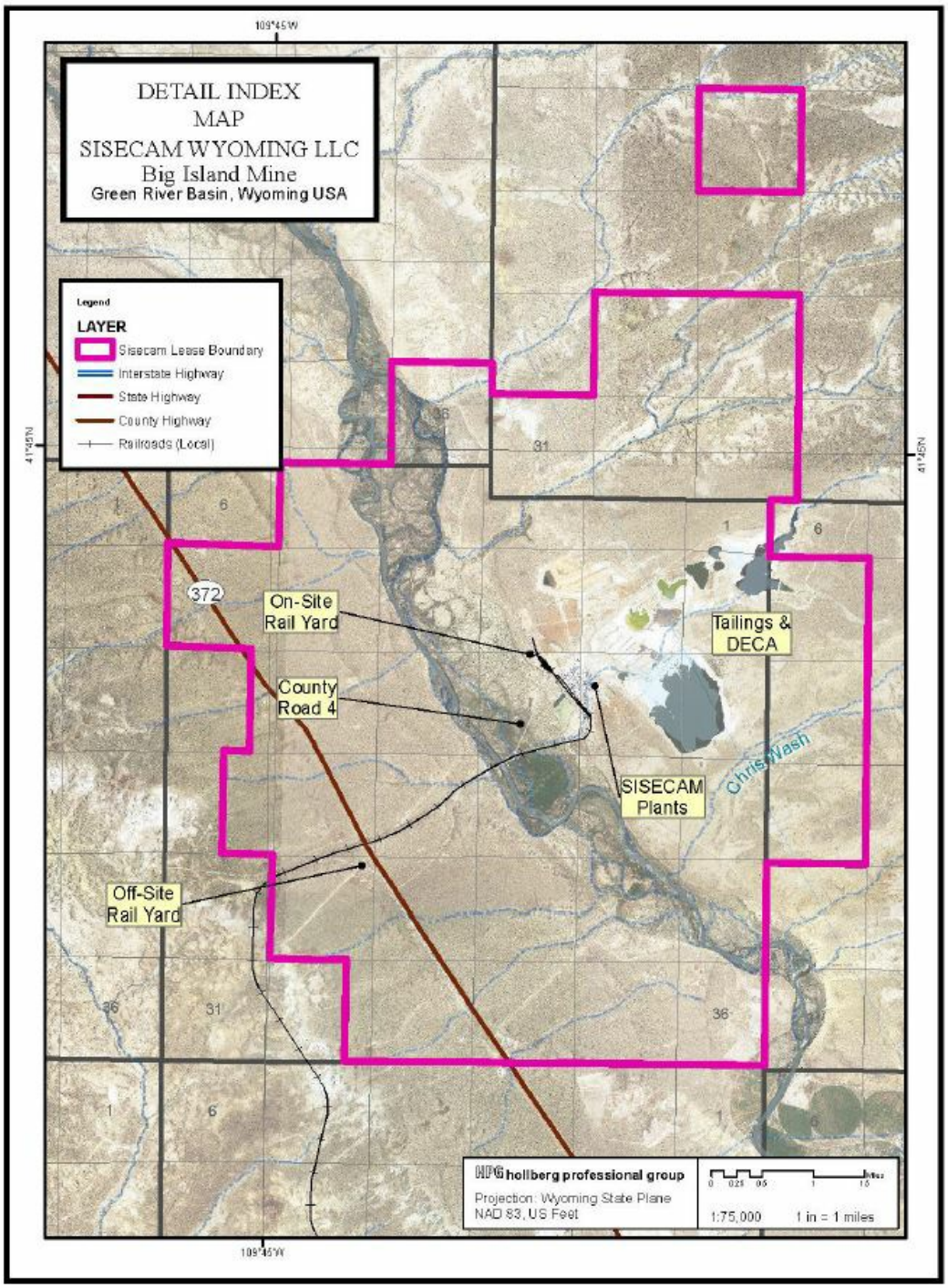


Figure 15.1 **Şişecam Site Access and Rail Infrastructure**

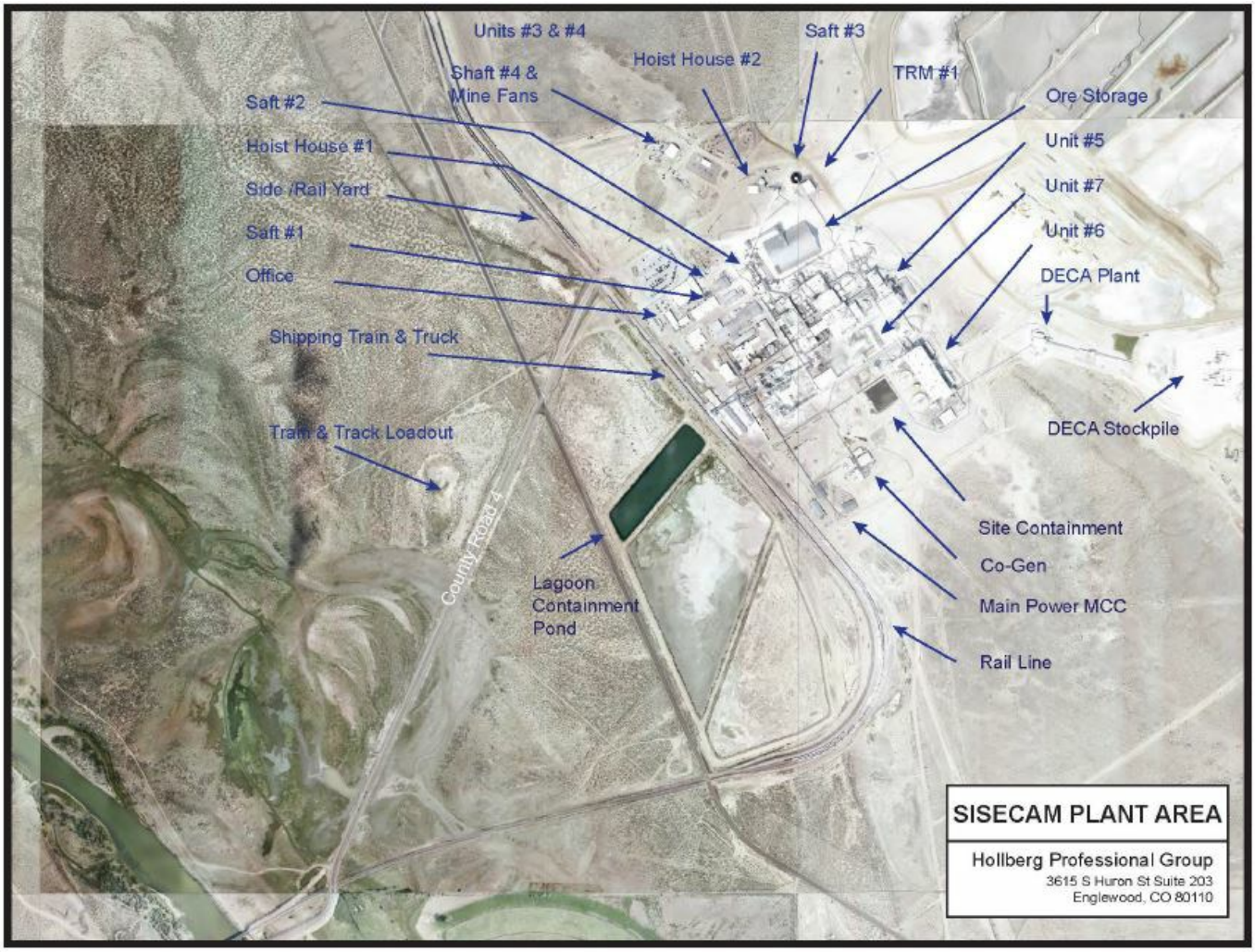


Figure 15.2 **Şişecam Site Infrastructure Aerial View**

15.2 OFFICES, WAREHOUSES

Şişecam has sufficient office and warehouse facilities. There are multiple buildings for offices, change houses, laboratories, control rooms, maintenance shops, safety offices, machine shops and warehouses. Where necessary, for large equipment and motor spares, Şişecam uses vendors offsite warehouses. In 2020 Şişecam completed the construction of a new office and change house facility to eventually replace the 1960's building.

In the mine there are underground offices, underground shops, and an underground warehouse all dedicated to the mine operations.

15.3 MINE

Şişecam is currently operating six trona mining sections, with each made up of a Joy 12HM26 drum miner, two Joy shuttle cars and a feeder breaker. The mine maintains spare production equipment including a spare CM used for utility or to allow major rebuilds, two spare shuttle cars and a spare feeder breaker. Ore is transported from the working faces by 42" belt conveyors which discharge to 48" mainline conveyors. The mine has over 10 miles of conveyor structure and belting installed and has ample spares.

Underground trona ore storage is limited to approximately 700 tons of capacity between the mine and the hoisting systems. This limited surge capacity does impact overall hoisting efficiencies and production capabilities.

Mine ore is crushed underground in the UG Crushing Facilities which includes two McLanahan dual roll crushers.

The mine has four surface to ore bed shafts used for access and ventilation. Shafts #1 and #2 were developed in 1961 with a common hoist house containing the mechanical hoists. Shaft #3 was constructed in 1981 as a production and ventilation shaft. Shaft #3 has a dedicated hoist house (Hoist House #2) and double drum hoist. Shaft #4 was completed in 2021, as a dedicated ventilation shaft. The shafts are inspected weekly and are repaired as required.

Shaft #1 is 16-feet in diameter and serves as the man and material shaft. Shaft #1 is serviced by an early 1960's Vulcan Iron Works Hoist that has been upgraded over the years with updated braking systems and electrics but is nearing its mechanical life. Şişecam is in the process of replacing this hoist with a new system. The preliminary works for this change were observed during the site visit. Shaft #1 is an intake air shaft with steam heaters.

Shaft #2 is 20-feet in diameter and used as a ventilation and production shaft. With the addition of Shaft #4, Shaft #2 has been converted from the main exhaust ventilation shaft to an intake and production. The shaft is now heated by direct fire natural gas burners. Shaft #2 is serviced by a 1961 Nordberg double drum hoist with dual 500 HP DC motors driven by ABB converters. Over the years this hoist has been upgraded with new brake systems, new ring gear and pinions, and control systems. The hoist has 10-ton balanced production skips with the capability of lifting 500 tons per hour of ROM trona.

The #3 Shaft was constructed in 1981 as a ventilation and production shaft. It is 20-feet in diameter and heated by steam heaters. The shaft is serviced by a 1961 Nordberg double drum hoist with recently installed dual 500 HP AC VFD motors driven by ABB controls. Over the years this hoist has been upgraded with new braking systems, motors, and controls. The hoist has 10-ton capacity balanced production skips with the capability of hoisting 500 tons per hour of ROM trona to the surface.

Shaft #4 is 20 feet in diameter with two parallel 12-foot diameter Spendrup fans driven by 1,500 hp direct drive motors that can be upgraded in the future to 3,000 hp. Only one fan is required to ventilate the mine with the second being a spare. Each fan has a peak capacity of 1,300,000 CFM (cubic feet per minute) of air but are currently being operated at 725,000 CFM which is all the mine currently requires. The additional capacity allows for future production increases and expansion of mine workings for the life of the BIM.

15.4 STORAGE

Şişecam has a 100,000-ton covered and automated trona ore stockpile that is used for ore storage between the mine and processing facilities. This system is filled with ROM or screened trona via a belt conveyor tripper and reclaimed by a Thyssenkrupp drag reclaimer. The stockpile has a working storage capacity of less than 40,000 tons which is not adequate to separate mine production from the processing feed. This does impact overall hoisting efficiencies and production capabilities.

As stated earlier there is a 1.8-million-ton DECA stockpile between the Pond #1 stacking area and the Pond #1 evaporation pond which will only be used periodically.

Finished soda ash is stored in seven vertical storage silos totaling 27,300 tons, which is considered adequate for the current production rates.

15.5 PRODUCT SHIPPING & LOADING

Finished dense soda ash is shipped in bulk by rail, (90%) and truck with a smaller portion bagged and shipped by truck. There are dedicated rail and truck loadouts with scales and a warehouse with bagging lines and storage for supper sacks or 50-pound bags. Union Pacific Railroad Company is the sole rail provider. The current contract with Union Pacific expires on December 31, 2025. Over the 60-year history of the property these contracts have been renewed. Given this history HPG considers it a reasonable assumption that Şişecam will continue to receive rail service into the future at similar costs.

Union Pacific is the rail service, but cars can be transferred to other carriers when necessary. There is a small portion of product that is transported by tandem pneumatic trucks from Şişecam to Bonneville, Wyoming where the product is transloaded from truck to the BNSF Railway.

Şişecam has a dedicated rail car fleet. Şişecam does not own any rail cars but leases approximately 2600 cars.

15.5.1 Rail Yards

To accommodate assembly of unit trains Şişecam utilizes a contract railyard along the La Barge Road (Highway 372) which is privately owned and maintained by others. There are five track lines at the facility to assist with switching empty and loaded cars and prepping them for shipment offsite. There is an estimated 18,400-feet of track owned by the Big Island Mine and Refinery

15.6 TAILINGS FACILITIES

Process tailings disposal, made up of shales, mudstones, and process purge, is split between underground mine workings and surface. Underground disposal is placed as thickened slurry into the old lower bed mined out panels. Surface disposal is placed as thickened slurry into a series of tailings ponds that have been maintained over the life of the facility. For the past few years, Unit 6 tailings have been pumped underground and Units 3 through 5 have been pumped to the surface tailings storage. This is about a one-third to two-third split with the majority of the tailings being placed on the surface in the tailings basin.

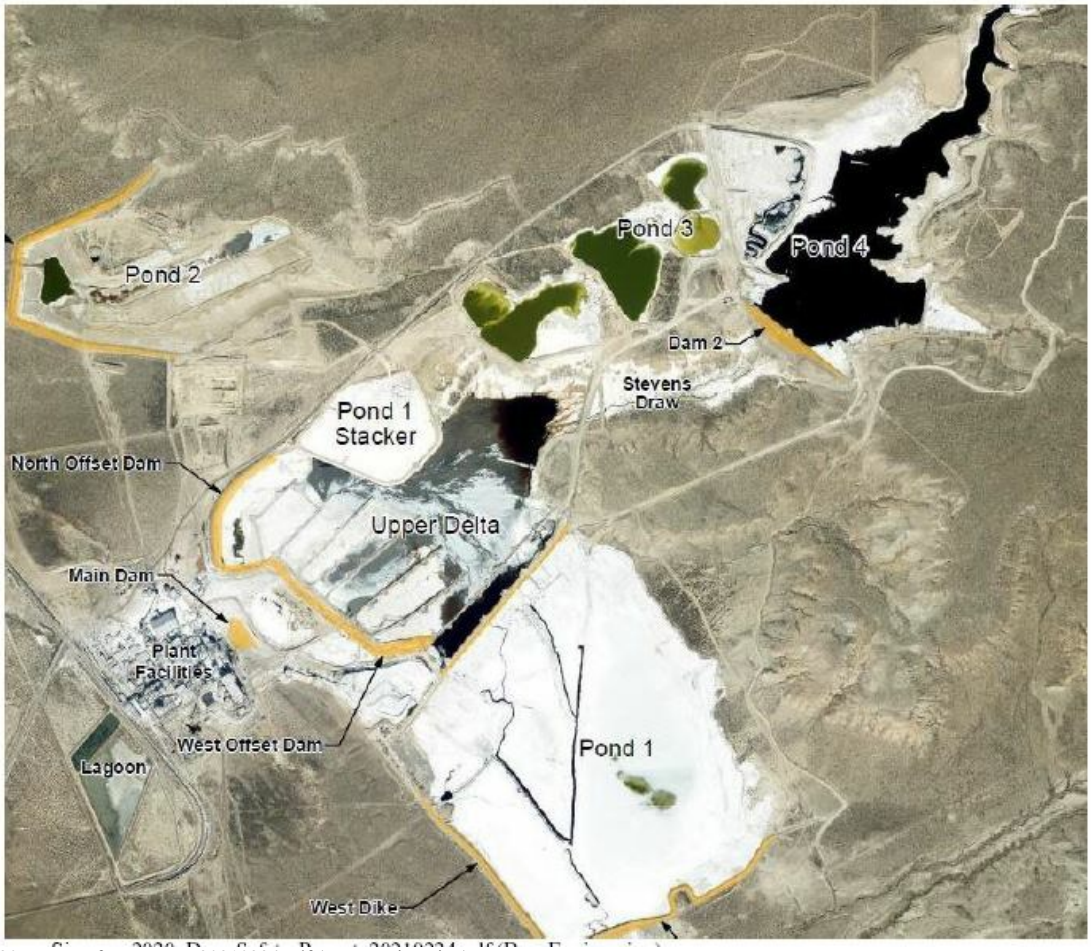
The Şişecam surface tailings facilities are shown in Figure 15.3. The tailings basin facilities have multiple dams and internal dikes. A dam safety review is done annually by a third-party engineering firm. For the purposes of this review, HPG has examined three years of annual Dam Safety Reports completed by Barr Engineering. Barr Engineering has been conducting dam design work and reviews at this site for over 30 years. Barr has also completed an updated dam failure analysis which HPG reviewed.

Surface tailings disposal is currently placed in the Pond 1 Stacker and Upper Delta area where it is allowed to dewater into the Pond 1 evaporation DECA recovery area. Ponds 3 and 4 are used for evaporation and water management to allow for DECA mining.

The recently completed Pond 2, which is a lined tailings pond, was constructed in 2014-2015 and has had minimal use to date. The active pond cells are lined with a geomembrane. Pond 2 will become the primary disposal and stacking area for the coarse tails disposal. In this operating mode, the estimated life of the storage facility with available expansions is over 30 years.

Based on the current surface tailings basin life of over 30 years and available alternative disposal areas and methods HPG considers the assumption that Şişecam Wyoming will maintain adequate tailings disposal storage for the life of the reserves to be reasonable.

Additional information on the surface tailings facilities is available in Section 17.4



Source: Şişecam-2020_Dam-Safety-Report_20210224.pdf (Barr Engineering)
Figure 15.3 Aerial View Tailings Facilities

15.7 UTILITIES

The energy sources and utilities for the Şişecam site include natural gas, electricity, steam, and raw water. Natural gas is used for steam generation, electrical generation, and process heating. Electricity is purchased from Rocky Mountain Power (RMP) and generated with a Co-Gen gas turbine and a backpressure steam turbine. Steam is produced from gas fired boilers and the Co-Gen plant. Water is pumped from the Green River, which crosses the lease area.

15.7.1 Electrical

The site electrical demand is approximately 60-62 megawatts (MW). The primary electrical source is provided by RMP via the RMP Raven Substation located on La Barge Road. The substation is fed by two 230 kV independent high voltage lines that are switched to two independent 34.5 kV power lines to the Şişecam site main MCC. This MCC has an additional 34.5 kV independent feed line.

Şişecam also has in-house co-generation. The oldest is a 12.0 MW backpressure steam turbine driven by either the three conventional gas boilers (H03, H04 & H05) or excess steam from the Co-Gen Plant which was taken out of service in 2024. The second electrical generation source is a recently commissioned combined cycle gas turbine. The Co-Gen facility produces up to 31 MW of electricity and steam for generation and process use.

15.7.2 Natural Gas

Natural gas is supplied to Şişecam by Midstream-Ottco through a supply line with a capacity of approximately 50,000MMBTU/day to the slug catcher with current required usage around half of available supply. From the slug catcher there are two natural gas pipelines. One pipeline feeds the processing plants and powerhouse and the second pipeline services the Co-Gen Plant. The capacity of the original pipeline was sized for when the processing plants were triple effect steam evaporators. Conversion to electrically driven MVR's has reduced the process plant demand, resulting in the main natural gas pipeline being oversized for the current facility. The Co-Gen line was designed for multiple processing units and has capacity for the Co-Gen plant, as well as an additional similarly sized unit.

15.7.3 Steam

Steam is produced by three natural gas heated boilers and the newly constructed Co-Gen gas turbine. The original powerhouse has been in service since 1961 but has had multiple upgrades over the years and is still a viable powerhouse for the foreseeable future. The Co-Gen plant uses a heat recovery steam generator (HRSG) heated by the gas turbine to produce steam that drives the associated backpressure turbine and generator for the combined cycle. The boilers produce 600-pound steam that is lowered via let down stations or backpressure generators to either 150-pound or 35-pound steam for boiler superheaters, processing, and heating.

15.7.4 Water

Raw water for the site is pumped from the Green River filtered for use in the process or treated to potable water standards for internal and sanitary use. Şişecam has adjudicated water rights equal to 7.756 MM (7756K) gallons per day (12.0 cfs) under State Engineer's Office of Wyoming Permit No. P22075D. These rights are more than adequate for the site needs. The average water withdrawal between 2023 and 2024 averaged 77.0 MM gallons per month or 210.8 K gallons per day.

Process water, tailings decant water and steam condensate water are recycled to minimize water usage.

Water for domestic and sanitary use is processed using carbon/sand filters, mixed media pressure filters, and chlorinated to the same standards as municipal water systems. The water is sampled and tested according to municipal water standards regulated by the Environmental Protection Agency. Şişecam has had deviations to these standards of a total organic carbon running annual average (RAA) ratio below 1.00 in 2019, 2020 and 2021. Şişecam made modification and repairs to the systems and reported on August 23, 2021, that the systems were in compliance. There have not been any deviations since.

16.0 MARKET STUDIES

As stated earlier, the economic viability of these reserves is based upon the long profitable history of the Big Island Mine and Refinery producing and selling soda ash. Şişecam has an extensive history of consistent sales with an established customer base, logistics and marketing. Şişecam has multiple contracts for soda ash sales both short and long term.

As part of this evaluation HPG reviewed confidential marketing studies provided by Şişecam. These studies indicate a steady increase in demand for soda ash long into the future. Price fluctuations are forecast based on expected additional new production and/or shutdowns of synthetic plants.

16.1 SODA ASH DEMAND AND PRICING

Soda ash is a basic industrial mineral used in manufacturing for thousands of years. As a basic commodity, soda ash demand is strongly correlated with gross domestic product (GDP). As developing economies grow and industrialize the world demand for soda ash has consistently increased. Historical soda ash demand has increased 2-3% annually with this trend expected to continue well into the future. Significant increase in demand is predicted in India, Africa, South America and China's demand continues to grow. US demand for soda ash is expected to remain constant with little if any growth.

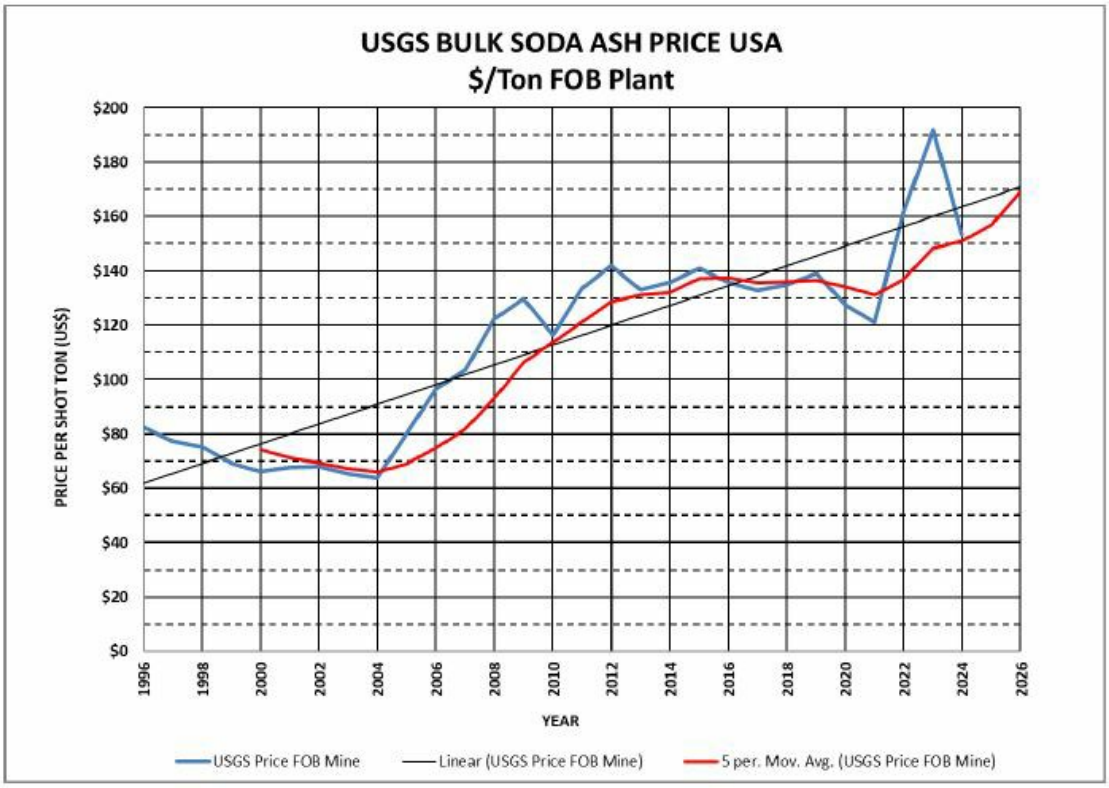
The end uses of soda ash are consistent with growth in solar glass and lithium batteries as lithium carbonate. Historically, glass making was 50% of demand. That has grown to nearly 60% for flat glass, bottled glass and increasingly solar glass. The increase in solar glass is offsetting decreases in bottled glass. Uses for chemicals, soaps, detergents, sodium bicarbonate make up the remaining demand. The projected demand for electric vehicles has created an increasing market for soda ash in the manufacturing of lithium carbonate needed for the batteries. This demand is expected to double in the next ten years. Similarly solar glass has become an important market but is dominated by China.

China dominates the soda ash market as it has become the "manufacturing hub" of the world. Demand in China is governed by domestic soda ash production, China and world GDP growth, and China's government policies. At times China is an importer and other times an exporter. These swings impact world soda ash prices given they consume over 40% of world demand.

Historical soda ash pricing has been controlled by general global economic conditions and by the impact of added or removed production. Both synthetic and natural soda ash manufacturing facilities require significant capital investment with a trend towards larger high production facilities to reduce long-term costs. Proposed new production plants are made up of multiple trains producing 500,000 to 800,000 tons annually with typical new facilities producing 1-3 million tons annually or more.

When new production has come online the relatively large influxes impacts the overall soda ash supply and demand by putting pressure on prices first in the domestic market but also internationally until the consistently increasing soda ash demand catches up. These swings in soda ash price can be seen in Figure 16.1 showing the historical US soda ash price FOB the Green River plants and are typical for an industrial commodity. The overall trend is for steadily increasing soda ash price.

Soda ash prices started declining in 2024 due to China's increased production. The average 2024 USGS price was $153/ton. Historically, as excess supply is absorbed soda ash prices begin to rise as shown by the trendlines in Figure 16.1.



Source: USGS 2025

Figure 16.1 USGS Published Soda Ash Prices $/Ton FOB Plant

16.2 SODA ASH SUPPLY

Multiple soda ash brown field and green field expansion projects have been announced or are currently being constructed. US expansion in the is expected to add 6 to 7 million tons of production by the early 2030's. China has added nearly 6 million tons of new natural soda ash capacity with plans for an additional 3 million tons. This follows the closure of some of China's synthetic plants but is a net increase in the global supply. The result of these additions has been a decrease in soda ash pricing since its high in 2023. This is a recuring theme for global soda ash production with relatively large expansions causing downward pressure on pricing then slowly increasing pricing as the supply is absorbed or high costs plants are closed. The higher cost synthetic producers are impacted the most. Their costs are 50% higher than the natural soda ash producers and eventually low prices have forced closures of these plants. These projected oversupply periods do impact operating rates at the natural soda ash producers. As with all commodities, the low-cost producers survive, with natural soda ash production being the lowest cost.

16.3 MARKETING DISCUSSION

HPG offers the following remarks:

- As a basic industrial mineral, soda ash demand has historically increased 2-3% per year. The rapid increase in industrialization in emerging economies of China, India, Thailand, and Indonesia are expected to continue to drive this demand for the foreseeable future;
- Green River's naturally produced soda ash has a historic cost advantage over synthetically produced soda ash as illustrated by the long history of the Green River Basin production being exported successfully throughout the world to countries with local synthetic soda ash production (i.e., China, Mid-East, and Europe);
- The high cost and environmentally undesirable synthetic soda ash plants will continue to be under pressure by the naturally produced ash and will continue to shut down over time;
- The continued increase in soda ash demand will continue to absorb increases in production with Şişecam's main competition being other US producers; and
- Şişecam, is an end user. As one of the largest glass producers in the world Şişecam is creating a vertically controlled supply chain from raw soda ash to finished glass.

For the purposes of this estimate a 2025 soda ash price of $165/ton FOB plant was assumed. This price is based on USGS pricing as discussed above and is consistent with Sisecam's historical revenues and confidential market studies.

17.0 ENVIRONMENTAL STUDIES, PERMITTING, AND PLANS, NEGOTIATIONS OR AGREEMENTS WITH LOCAL INDIVIDUALS OR GROUPS

17.1 ENVIRONMENTAL STUDIES

Şişecam Wyoming operates a facility located approximately 23 miles north of the City of Green River in Sweetwater County. The facility includes the processing and refinement of Trona ore into Soda Ash, an underground mine (Big Island Mine), ore hoist, mine fans, surface tailings disposal ponds, evaporation ponds, sewer ponds, site containment ponds, and administration and supporting structures.

Access to Şişecam Wyoming is by County Highway 6 from Wyoming Highway 372 and County Highway 4. Union Pacific Railroad provides a rail spur to transport product. Adjoining this spur is a rail holding yard adjacent to WY 372.

Şişecam has maintained current permitting requirements. The most recent Environmental Analysis studies include:

- Tailings Pond 2 rehabilitation and expansion;
- Coarse Tailings disposal and TRM upgrades; and
- Updated Tailings Dam Safety and Dam failure analysis; and
- Air quality testing and permitting.

17.2 CLIMATE

The Şişecam Wyoming facilities are located in the Green River drainage of the upper Colorado River system. Situated in a high intermountain basin bounded by the Wyoming Range to the West, Uinta Mountains to the south and the Wind River Range to the northeast, mean elevation exceeds 6,000-feet. Climate is dry, cold-temperate-boreal and characterized by limited rainfall (less than 8 inches) with long, cold, dry winters and warm-hot, summers with occasional storm producing flash floods. Evaporation exceeds 36 inches resulting in little excess water, limiting the majority of vegetation to the Green River flood plain. Wind generally blows from a southwesterly direction.

17.2.1 Temperature and Precipitation

Climate is classified as semi-arid with little rainfall. The average annual precipitation measured at the monitoring station located in Farson, Wyoming, near this facility is 7.83 inches. Data from 1991 through 2020 show precipitation peaks during May through July, with the heaviest snow months occurring in November into March. The region has relatively cool temperatures. The average annual temperature at the facility is 37.8 degrees F, with average extremes ranging from -4°F to 82°F. On the average, the hottest day occurs in July and August, the coldest in January and February, and the frost-free season lasts approximately 3 to 4 months.

17.2.2 Winds

The Green River basin is subject to strong and gusty winds. During the winter months, strong winds are often accompanied by snow, which produces blizzard conditions and drifting snow.

The frequency and strength of windy conditions greatly affects dispersion and transport of pollutants in the region. Winds from the west and southwest account for 37 percent of the total winds in the area. Prevailing westerly winds are fairly consistent throughout the year. Low humidity and constant wind accelerates evaporation. Evaporation at times is five times greater than precipitation.

17.3 HYDROLOGY

17.3.1 Surface Water

The Green River, a tributary of the Colorado River, flows through the Şişecam Wyoming lease area and is located immediately west of the facilities. Dry peripheral gullies and washes flow through the lease area into the Green River. The intermitted flow regime is mainly the result of snowmelt or high intensity short duration storm events in the summer and are Class 4 surface waters because of hydrologic or natural water quality conditions do not have the potential to support fish (WDEQ 1997). The Green River is under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the State Engineer's Office of Wyoming.

Surface water monitoring, Green River, is performed in accordance with the approved monitoring plan. Şişecam is a non-discharge facility.

17.3.2 Groundwater

Regional groundwater is characterized by shallow and deep resources. An alluvial zone composed of unconsolidated sand and gravel range in depths to 50-feet is associated with the Green River flood plain. Immediately below the alluvium are consolidated sediments of the Bridger Formation and the Laney Member of the Green River Formation. There is a veneer of weathered rock to depths of 60-feet which acts as groundwater flow paths. The consolidated Bridger and Laney contain perched sandstone lenses at various depths that yield limited flows.

In primary source of groundwater at the Şişecam Wyoming facility is seepage from the exiting tailings storage complex. Evaporation concentrates the pond brines resulting in elevated specific conductance found in the groundwater in the surficial fractured bedrock and alluvium beneath the facility. At the present, three groundwater containment pump-back systems (System 1 & 2, System 3, and System 4) intercept groundwater migrating from the tailings complex towards the Green River. Engineering data indicated the pump-back systems also promotes tailings dam safety by lowering fluid levels and therefore reduces uplift pressures on the structures.

Supplementing the groundwater capture through the pump-back system, a continuous grout wall exists on the downstream side of Pond 1 in the West Dike and South Dam. This grout wall was constructed by drilling into the unconsolidated bedrock to depth below weathering. The purpose was twofold: groundwater containment and dam safety.

A Groundwater and Surface Water Monitoring Plan is in effect under the Land Quality Permit. Fluid levels, specific conductance, and general chemistry are measured semi-annually at wells across the site to monitor the extent and migration of seepage from the tailings complex. Quarterly monitoring is performed at critical locations, specifically around Pond 2. Mass flux of total dissolved solids are estimated from measured specific conductance values and water elevations using a site-specific relationship that has been developed over decades of monitoring. These systems are performing as designed and are accepted by the regulatory bodies.

17.4 WASTE AND TAILINGS DISPOSAL

The low to zero toxicity waste generated by the mining and the processing facilities, (mine and process tailings), are deposited into a series of storage impoundments (ponds) or are re-injected as thickened slurries into abandoned area of the mine. Process tailings are made up of shales, mudstones, and process purge are exempt from hazardous waste regulation under Section 3001(b) of the Resource Conservation and Recovery Act (RCRA).

Since 1998 process tailings disposal was split between underground mine workings and on the surface. Underground disposal was placed as thickened slurry into the old lower bed mined out panels. Surface disposal was placed as thickened slurry into a series of tailings ponds that have been maintained over the life of the facility. Şişecam is converting the tailings disposal from a thickened slurry to a coarse tailings disposal which will separate the coarse and fine tailings. The coarse tailings will be stacked in the recently completed lined Pond 2 disposal area and the fine material will be disposed of in the Upper Delta. The separation of coarse tailings will provide an opportunity for stacking utilizing earth moving equipment and extending the life of the current tailings ponds and mine TRM systems. With this change, the life of Pond 2 is estimated to be 30 years, Figure 17.3.

Based on the current surface tailings basin life of over 30 years and available alternative disposal areas and methods HPG considers the assumption that Şişecam Wyoming will maintain adequate tailings disposal storage for the life of the reserves to be reasonable.

17.4.1 Surface Tailings and Evaporative Impoundments

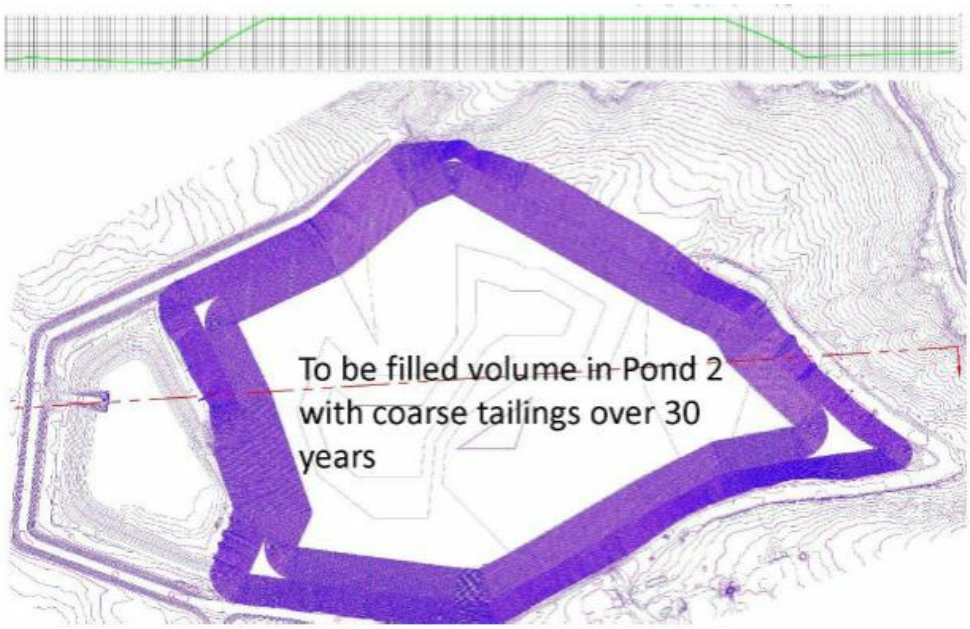
The Şişecam Wyoming tailings facility has four surface evaporation tailings impoundments (ponds) that are located primarily within prehistoric playa lakes. Except for Pond 2, which has a lined membrane, the remaining ponds are unlined.

Historical (pre-1995) mine tailings produced through the refining process of trona were deposited initially into an unlined paleo playa lake identified as Pond 1. Playa at Pond 2 was briefly utilized for tailings disposal and abandoned shortly after initial startup. Pond 4 was established in the drainage into Pond 1 for fluid management. Tailings solids management was engineered as a series of stacker dams within the Pond 4 drainage and identified as Pond 3.

Current tailings management is comprehensive. Pond 1 is split into two portions with the installation of a cross-delta dike, the Upper Delta and DECA recovery areas (Figure 17.1 and Figure 17.2). The Upper Delta is currently the primary disposal area for tailings through a series of containment cells. Because the tailings are distributed as a heavy slurry, brines, and fluids flow down gradient into the lower DECA recovery area of Pond 1. Fluid level in this area is managed by pumping excess to Pond 4. With the conversion to coarse tailings disposal, Pond 2 will be used for coarse tailing disposal. Pond 3 and Pond 4 areas are utilized to enhance evaporation.

Source: Barr- Ciner-2020_Dam-Safety-Report_20210224-signed.pdf
Figure 17.1 Şişecam Tailings Impoundments and Evaporative Ponds

Source: Barr Engineering, 50191095_Upper_Delta_2015_Tailings_Plan_Final.pdf
Figure 17.2 Şişecam Tailings Pond #1



Source: Şişecam

Figure 17.3 Şişecam Tailings Pond #2 Coarse Tailings Dry Stack

17.4.2 Mine Tailings Deposal

Currently a portion of the tailings produced during the refinement of trona ore is disposed through a series of pipelines into the abandoned area of the underground mine. The process is identified as TRM (Tailings Return to Mine) unit permitted under UIC (Underground Injection Control) permit and regulations. With the conversion to coarse tailings disposal, tailings will no longer be disposed of in the underground workings.

17.4.3 Refuge

Şişecam Wyoming maintains a permitted landfill for refuge and trash within their Land Quality Permit.

17.5 VEGETATION

In general, five major vegetation communities have been identified in the lease area: Upland Sagebrush, Rocky Breaks, Saline Flats, Sagebrush Riparian, and River Floodplains. The high semi-arid climate of the area is dominated by upland drought-resistant plants: sagebrush, rabbitbrush, saltbush, small forbes and other limited plants. Confined area of the Green River flood plain contains cottonwoods, willows, shrubs, and grasses which require more moisture.

The Şişecam Wyoming lease area is dominated by upland drought-resistant plants except for the confined area of the Green River flood plain, where more moisture-requiring plants grow.

17.6 WILDLIFE

Wildlife species found in the Şişecam lease area are closely associated with available vegetation and habitat.
Big game (moose, deer, and elk) is frequently found along the Green River, while the uplands contain herds of pronghorn antelope.

Greater sage-grouse mate and nest near the Şişecam lease area and are considered a threatened species. The birds are most often seen from late spring to late fall, especially in the early mornings or late evenings. Şişecam lease area is not within the core sage-grouse management area, nor does it have any defined lek areas within the lease.

Raptors including Golden Eagle, Bald Eagle, Osprey, Turkey Vulture, Prairie Falcon, Hawk, and owl inhabit the area. Lessor birds include dove, woodpecker, crow, raven, magpie, swallow, wren, thrush, starling, warbler, lark, finch, and hummingbird.

Waterfowl includes goose, swan, duck, teal, loon, pelican, heron, Sandhill crane, and gull.

Şişecam Wyoming maintains permits to capture waterfowl that land on the tailings evaporation ponds during migration with US Fish and Wildlife Services and Wyoming Game and Fish Department. The alkaline waters of the ponds reduce the oils in the waterfowl plumage and precipitate salts out in the feathers causing hypothermia and the birds to be too heavy to fly off on their own. The ponds are monitored daily in the fall and any captured birds are cleaned and supported until they can be released on the Green River. Activity is reported annually to the regulatory authorities.

Game fish including trout, salmon, catfish, and bass have been noted in the Green River. Other species of fish, reptiles, amphibians, and insects are common. Table 17.1 lists other mammals in the area.

TABLE 17.1
OTHER MAMMAL SPECIES

Mountain Lion	Red squirrel	Boreal vole
Bobcat	Ground squirrel	Mountain vole
Coyote	House mouse	Sagebrush vole
Badger	Pocket mouse	Beaver
White-tail jackrabbit	Deer mouse	Foxes
Cottontail rabbit	Pack rat	River otter
White-tail prairie dog	Kangaroo rat	Bats
Porcupine	Woodrat	Shrews

17.7 PERMITTING AND ENVIRONMENTAL REPORTING

Şişecam Wyoming permitting, and environmental reporting appear to be current. The primary permit agencies include, Federal and Wyoming State Departments and are listed below in Table 17.2 .

Areas where Şişecam has incurred resolvable challenges with environmental compliance include process emissions, fugitive dust, tailings, pond seepage, site containment, and drinking water TOC. The drinking water TOC problem and site containment overflow were primarily operational in nature and appear to be solved.

Process emissions will continue to be challenged by ever tightening regulations. This will require periodic upgrades of both the natural gas burners as well as the pollution control equipment, precipitators, and baghouses.

Based upon the reports and documentation provided by Şişecam, the tailings pond and associated seepage continues to be controlled and managed successfully. Şişecam has a long history of controlling this issue and through the daily monitoring and annual third-party reviews has shown the necessary efforts to identify issues and manage them into the future. The third-party review recommendations are reportedly being acted upon.

TABLE 17.2
ŞIŞECAM WYOMING OPERATING PERMITS

Agency	Division	Type of Permit/License/Authorization	Permit/Authorization/License Number	Authorization/Approval Date	Expiration Date
State of Wyoming	-	Sodium Leases	25779, 25971, 26012, 42570, 42571	Varies	Varies
Sweetwater County	Construction	Construction Permits	-	Varies	-
Sweetwater County	Planning and Zoning	Zoning Update	-	Varies	-
US Bureau of Land Management	-	Unit 8 Construction Authorization	DOI-BLM-WY-D040-2020-0038-EA	4/9/2021	-
US Bureau of Land Management	-	Right-of-ways	WYW-0136237, WYW-042032	Varies	Varies
US Bureau of Land Management	-	Sodium Leases	WYW079420, WYW101824, WYW0111730, WYW0111731, WYW190736	Vaires	Varies
US Department of Transportation	-	Hazardous Materials Certificate of Registration	061324550185GI	7/1/2024	6/30/2027
US Environmental Protection Agency	Air	ICIS-Air	WY0000005603700001	-	-
US Environmental Protection Agency	Air	Green House Gas (e-GGRT)	GRGRP ID 528326	-	-
US Environmental Protection Agency	Drinking Water	Public Water System	WY5600634	N/A	N/A
US Environmental Protection Agency	SPCC	SPCC Plan	-	8/1/2022	8/1/2027
US Environmental Protection Agency	TSCA	EPA Registry ID for the Toxic Substances Control Act Reporting (TSCA106041)	110007900129	-	-
US Environmental Protection Agency	Waste	Very Small Quantity Generator	WYD083919621	N/A	N/A
US Fish and Wildlife Service	Migratory Birds	Special Purpose - Miscellaneous	MBPER10464891	5/7/2024	3/31/2027
US Nuclear Regulatory Commission	-	License	49-11578-01	7/25/2022	5/31/2025
Wyoming Department of Environmental Quality	Air Quality Division	Title V Operating Permit	P0035186	5/26/2020	5/26/2025
Wyoming Department of Environmental Quality	Air Quality Division	Asbestos Annual Notification	2024022	1/1/2024	12/31/2024
Wyoming Department of Environmental Quality	Land Quality Division	Permit to Mine	257 PT	3/7/1975	N/A
Wyoming Department of Environmental Quality	Water Quality Division	WYPDES General Mineral Mining Except Fuels Stormwater	WYR320025	4/1/2018	3/31/2023 - Under Adminstrative Approval
Wyoming Department of Environmental Quality	Water Quality Division	WYPDES General Large Construction Activities Stormwater	WYR104976	9/11/2020	8/1/2025
Wyoming Department of Environmental Quality	Water Quality Division	Underground Injection Control Class 5B1	5B1-98-1 (Facility WYS037-043)	2/17/1999	N/A
Wyoming Game and Fish Department	-	Chapter 33 Permit	1090	1/1/2024	12/31/2024
Wyoming Game and Fish Department	-	Chapter 10 Permit	412	1/1/2024	12/31/2024
Wyoming Office of Homeland Security	Tier 2	Emergency and Hazardous Chemical Inventory	-	-	-
Wyoming State Engineer's Office	Groundwater	Industrial/Pollution Control Groundwater Wells	P205330.0W, P205326.0W, P89290.0W, P89291.0W, P89292.0W, P119443.0W, P118542.0W, P205327.0W, P107218.0W, P107219.0W, P107219.0W, P107216.0W, P107217.0W, P107221.0W, P205329.0W, P205328.0W, P210412.0W, P210413.0W, P212356.0W, P212375.0W	Varies between 1992 and 2020	Varies between 12/31/2037, 12/31/2056, and 12/31/2082
Wyoming State Engineer's Office	Reservoirs	Sewage, Tailings, and Evaporation Ponds	P10445.0R, P14035.0R, P14373.0R, P7809.0R, P8586.0R, P8587.0R, P8588.0R, P8589.0R, P8590.0R, P9835.0R, P9835R-2	Varies between 1979 and 2015	N/A
Wyoming State Engineer's Office	Water Rights	12.0 CFS from the Green River	P22075.0D	2/1/1960	N/A

17.7.1 Air Quality Permit

Criteria air pollutant concentrations are measured by the State of Wyoming Department of Environmental Quality Air Quality Division and are subject to the Clean Air Act and Wyoming Air Quality Standards and Regulation.

The Şişecam Wyoming refinery is located above the underground mining operation. This plant is operated in accordance with the provisions of W.S. 35-11-203 through W.S. 35-11-212 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations. Air Quality Operating Permits (Permits No. P0024380, P0038440, No. P0035186) require monitoring for a variety of air quality pollutants including particulate matter. These permits were renewed and accepted in 2024.

Particulate matter is the primary pollutant from the surface processing, ore storage, DECA and tailings activities and is an area where Şişecam has exceeded standards. Şişecam has an active consent decree as a settlement of a violation notice received in December of 2021, from Air Quality concerning PM10 monitoring, the No. 2 Crusher Area and Ore Stockpile building. The settlement was reached May 21, 2024, with Şişecam paying a fine of $26,000 and agreeing to modify beltlines, install multimodule baghouses and implement inspections and maintenance plans. Design work for the changes needs to be completed by June 2025 with installation complete within 24 months of obtaining all required permits for the new equipment. Funds have been budgeted, and design work is ongoing.

Current air quality total estimated emissions are located on Table 17.3.

TABLE 17.3
ŞIŞECAM TOTAL FACILITY ESTIMATED EMISSIONS

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter	944
PM_{10} Particulate Matter	1,310
$PM_{2.5}$ Particulate Matter	141
Sulfur Dioxide (SO_2)	8
Nitrogen Oxides (NO_X)	713
Carbon Monoxide (CO)	3,050
Volatile Organic Compounds (VOCs)	580
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	187
GREENHOUSE GAS EMISSIONS (CO_2e)	1,895,021
OTHER REGULATED POLLUTANTS	

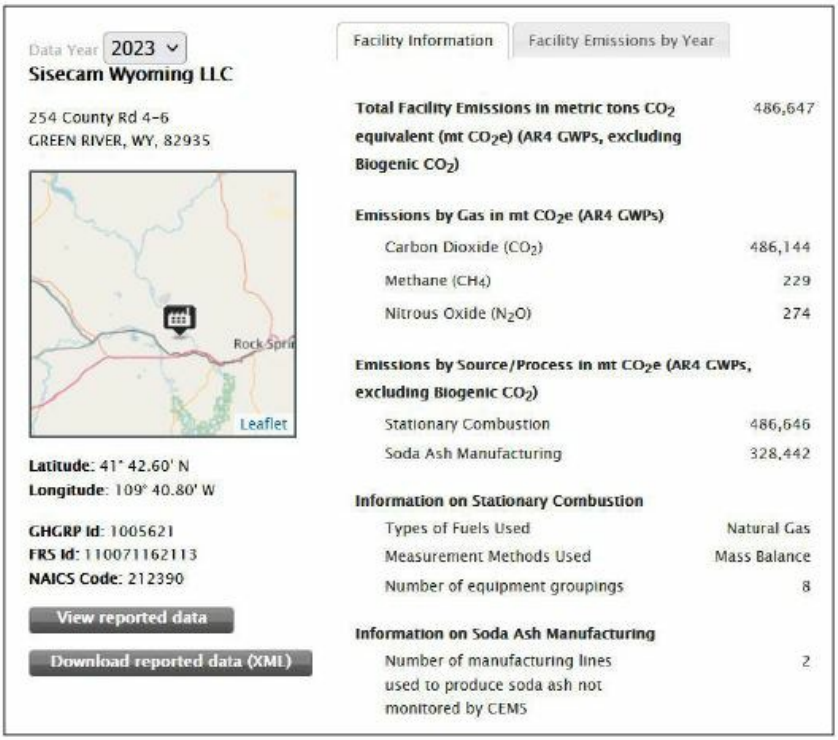
Source: Emission estimates are from the operating permit application and Ch 6, Sec 2 permits P0038440, and represent the authorized equipment configuration. For informational purposes only. These emissions are not to be assumed as permit limits.

US EPA Agency Identification No. for Şişecam Wyoming is GRGRP 528326.

Greenhouse gasses (GHGs) have been raised as a concern due to the greenhouse effect. The greenhouse effect is a theory that certain gases in the atmosphere impede the release of radiation from the earth, trapping heat in the atmosphere like glass in a greenhouse. Major GHGs currently include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (NO_2). Currently, the WDEQ-AQD does not have regulations regarding GHG emissions, although these emissions are regulated indirectly by various other regulations.

In October 2009, the US EPA issued the final mandatory reporting rule for major sources of GHG emissions. The rule requires the reporting of selected GHG emissions, including CO_2, CH_4, NO_2, and some halogenated compounds. USEPA/GHGP reported at the Şişecam Wyoming facility for 2023, 815,700 total metric tons of GHSs, representing approximately 40-50% of the other soda ash produces annual GHG production. Table 17.4 is the 2020 printout of the Şişecam Wyoming GHG inventory for 2024. Table 17.5 shows Sisecam's historical total greenhouse gas emissions totals by year.

TABLE 17.4
2020 ŞIŞECAM TOTAL GREENHOUSE GAS EMISSIONS



Data Year 2023

Sisecam Wyoming LLC

254 County Rd 4-6
GREEN RIVER, WY, 82935

Latitude: 41° 42.60' N
Longitude: 109° 40.80' W

GHGRP Id: 1005621
FRS Id: 110071162113
NAICS Code: 212390

View reported data

Download reported data (XML)

Facility Information | Facility Emissions by Year

Total Facility Emissions in metric tons CO_2 equivalent (mt CO_2e) (AR4 GWPs, excluding Biogenic CO_2)	486,647
Emissions by Gas in mt CO_2e (AR4 GWPs)	
Carbon Dioxide (CO_2)	486,144
Methane (CH_4)	229
Nitrous Oxide (N_2O)	274
Emissions by Source/Process in mt CO_2e (AR4 GWPs, excluding Biogenic CO_2)	
Stationary Combustion	486,646
Soda Ash Manufacturing	328,442
Information on Stationary Combustion	
Types of Fuels Used	Natural Gas
Measurement Methods Used	Mass Balance
Number of equipment groupings	8
Information on Soda Ash Manufacturing	
Number of manufacturing lines used to produce soda ash not monitored by CEMS	2

Source: USEPA/GHGP Facility Details, https://ghgdata.epa.gov/ghgp/service/facilityDetail/2023

TABLE 17.5
ŞIŞECAM TOTAL GREENHOUSE GAS EMISSIONS
BY YEAR 2015-2023 (000 MT)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
703.4	741.4	767.5	752.2	737.7	797.0	813.1	854.1	843.7	815.1

Note: 2011-2012 Type of Fuel was Coal and Natural Gas, 2013-2023 Natural Gas Source: https://ghgdata.epa.gov

17.7.2 Land Quality Permit

Wyoming Department of Environmental Quality Land Quality Division issued Large Mining Permit No. 257. Şişecam annually reports topics including changes in permittee information, quantity of ore mined, mine planning, acres disturbed, new construction, environmental areas, monitoring activities, exploration report, and reclamation report and performance bond estimate.

Supplemental to this document, the US Bureau of Land Management on a five-year basis receives and similar report with more detail on mining activities. The 5-year BLM report is a stipulation of the mineral lease.

17.7.3 Underground Injection Permits

Wyoming Department of Environmental Quality Water Quality Division issues UIC Permit Facility WYS037-043. Reported annually under the 5B1-98-1 General Permit. Şişecam Wyoming tailings has two disposal streams. The primary disposal method is the surface tailings pond. Secondary disposal is tailings injected into abandoned areas of the underground mine. This permit requires annual reporting of a summary of tailings material injected into the mine.

17.7.4 Storm Water Discharge Permit

Wyoming Department of Environmental Quality Water Quality Division authorizes storm water discharge under permit No. WYR320025. This general permit was issued in 2018 and is reviewed on a five-year basis. In June 2020, a major storm event occurred causing erosion and discharge of process water onto previously reclaimed lands. No water was discharged to the Green River. The spill was reported immediately after the event to the Wyoming Department of Environmental Quality Land Quality Division as well as the BLM. After inspection by the LQD office, recommendations were made and completed.

17.7.5 Drinking Water System

US EPA is the lead agency for drinking water standards. Şişecam Wyoming is public water system number WY5600634 and is a non-transient non community public water system.

17.7.6 Sewage Permit

Wyoming State Engineers Office issued P10445.0R in 1996. No modifications have been identified.

17.8 SITE MONITORING

Şişecam Wyoming is generally in compliance with all known environmental permits that require monitoring. Critical monitoring for air quality, groundwater containment, drinking water, and other land quality issues are monitored either continuously or on a scheduled routine basis. Federal agencies including US EPA, Bureau of Land Management, Bureau of Reclamation, US Fish and Wildlife, NRC, and State divisions, Department of Environment Quality, Wyoming Game and Fish, State Engineers Office, and Sweetwater County are involved.

17.9 CLOSURE PLANS AND ESTIMATES

17.9.1 Reclamation Plan

The 1975 Reclamation Plan focuses on three general categories:

- Lands with buildings and structures;
  - All surface buildings and structures are to be removed. Foundations removed and used to fill mine openings;
- Roads, travel ways, railroads, etc.;
  - All roadbeds, travel ways, railroad beds and other like developments to be scarified and seeded with perennial grasses and in accordance with regulatory requirements; and
- Tailings ponds and waste areas;
  - Tailings to be left in place as dry lakes. Berms and dams remain in place. Diversion ditched to be constructed around the tailings facilities. Surface of the “dry lakes” to be stabilized with a “standard asphaltic” material to eliminate windblown contamination. Fencing to be erected and maintained for wildlife protection.

Reclamation plan was intended to return lands to their original usage, grazing, and wildlife habitat, as much as possible. Return affective lands to a condition compatible with the surrounding lands.

17.9.2 Reclamation Bond

The 1975 reclamation cost estimate was $351,000.

1979 WYDEQ/LQD issued a permit to develop an acceptable reclamation for the tailings disposal areas.

1987 WYDEQ/LQD issued a revised permit with a more comprehensive and detailed reclamation plan. Twenty tasks were identified and included post-closure reclamation cost.

2020 WYDEQ/LDQ approved permit 257 with a revised reclamation bond of $36,211,000. The 1987 revision served as a template for the over 50 permit revision requests. The 2023 Annual Report revision places the reclamation bond to an estimated $45,994,689 after construction is completed.

17.10 SOCIAL OR COMMUNITY IMPACTS

The social and community impacts of the Şişecam Wyoming operations are a net positive to the area as shown by the Industrial Siting Council approval for the Unit 8 Expansion Project. The trona operations are one of the largest employers in the area and contribute significantly to the tax base. This is a long and established relationship developed over decades.

18.0 CAPITAL AND OPERATING COSTS

Profitable mining and processing have been conducted for over 60 years at Şişecam Wyoming generally under the same mine design assumptions utilized in this reserve estimate. This long history shows a stable and predictable cost structure and consistent revenue. The only exception was 2020 and 2021 where costs and revenues were lower due to the worldwide COVID-19 slowdown. Despite this historic interruption both years were cash positive with 2021 rebounding to near normal levels. Therefore, HPG considers using historical costs for mining the reserves and producing soda ash a reliable basis to forecast future costs. Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

18.1 OPERATING COSTS

With the information provided in previous reviews and this review HPG has been able to examine the last eight years of actual production costs and revenues. For the basis of determining the economic viability of the reserves stated in Section 12.0, HPG has utilized the last five years of financial data provided by Şişecam. Şişecam provided both audited and unaudited financial information including detailed production cost, capital expenditures and revenues.

Based on this historical information, HPG created a long-range financial forecast model for the Şişecam operations. The model includes fixed and variable costs including processing costs, mining costs, sales, general, administrative, interest expenses, royalties, and taxes.

The following operating cost assumptions and parameters were used for this study:

- Based upon past performance and current economics this study assumes similar operating costs to what has been experienced in the past;
- Constant tax and royalty rates;
- Costs are FOB plant;
- Higher costs for two-seam mining; and
- Increased future processing costs in 10 years to account for lower grade ore.

A summary of cash operating costs for Şişecam Wyoming for the LOM based on the HPG model are provided in Table 18.1.

TABLE 18.1
ŞIŞECAM CASH OPERATING COST LOM
$ millions

	OPERATING YEARS (Year 1 - 2025)					
	1-10	11-20	21-30	31-40	41-50	TOTALS
Cost of Goods Sold						
Variable Costs	$ 906	$ 906	$ 906	$ 906	$ 906	$ 4,532
Fixed Cost	$ 1,279	$ 1,399	$ 1,411	$ 1,517	$ 1,517	$ 7,123
Other Cost	$ 263	$ 263	$ 263	$ 263	$ 263	$ 1,317
Total Operating Costs ($ millions)	$ 2,449	$ 2,569	$ 2,581	$ 2,687	$ 2,687	$ 12,973

18.2 CAPITAL COSTS

Şişecam has historically invested in the Big Island property to improve production and reduce costs. In addition to ongoing maintenance capital Şişecam has made major capital expenditures including construction of Unit 6 and Unit 7, addition of the Co-Generation facility and construction of a new ventilation shaft, upgraded mine ventilation fans and shaft heaters. Past business economics have supported these large capital expenditures, which are part of the normal business operation. Capital cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

Şişecam provided HPG with a five-year capital plan which was reviewed along with capital plans from the 2021 review. Based on this information, Şişecam continues to demonstrate a consistent history of investing in both sustaining capital as well as larger expansion and large capital replacement investments. Based upon past performance and current economics this study assumes similar capital expenditures will be made so that the production facilities will be viable for the LOM with the mine producing 4.3 MST of trona ore per year and producing 2.34 MST of soda ash per year.

The following assumptions and parameters were used for this study:

- Because the operation is currently profitable as configured and is predicted to be profitable into the future, no expansions to the facility were considered;
- It is assumed that the historical sustaining capital continues as a conservative estimate;
- The capital necessary to convert to low seam mining equipment is assumed to occur during the normal equipment replacement cycle for the mining production equipment which is part of sustaining capital;
    - An additional capital expenditure for lower equipment has been assumed when the thicker reserves are nearly mined out in approximately 20 years; and
- The capital necessary to upgrade the dissolver ends of Unit 7 and Unit 6 is predicted to occur in ten years.

A summary of capital costs for Şişecam Wyoming for the LOM based on the HPG model are provided in Table 18.1..

TABLE 18.2
ŞIŞECAM CAPITAL COST ESTIMATE LOM
$ millions

	OPERATING YEARS (Year 1 - 2025)					
	1-10	11-20	21-30	31-40	41-50	TOTALS
CAPEX ($ millions)	$ 325	$ 400	$ 320	$ 300	$ 346	$ 1,691

19.0 ECONOMIC ANALYSIS

19.1 METHODOLOGY USED

As previously noted, HPG considers the plus 60-year history of profitably operating the mine and processing units to be a reasonable basis for forecasting future costs and revenues. HPG reviewed eight years of financial information provided by Şişecam. Şişecam provided both audited and unaudited financial information including detailed production cost, capital expenditures and revenues.

The financial model that supports the mineral reserve declaration is a standalone model that calculates annual cashflows based on scheduled ore production, assumed processing recoveries, soda ash sale prices, projected operating and capital costs. The basis for the economic analysis is the previous five years of actual performance adjusted for expected changes in operating costs and necessary capital expenditures to execute the proposed life of mine (LOM) plan.

Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

Because Şişecam and NRP are structured as a pass through entities for income tax purposes no income taxes were included in the economic analysis. The currency used to document the cashflow is US$ based on constant 2024 dollars.

19.1 FINANCIAL MODEL PARAMETERS

Several core assumptions have been employed in constructing this model. First, the analysis is on a cash cost basis with the assumption that viable economics implies positive cash flow. This is a higher standard than other common economic measures such as earnings before interest, taxes, depreciation, and amortization (EBITA). In general, if an operation has positive cash flow its EBITA is more positive. Because of the conservatism built into this cash flow assumption, a minimum 5% rate of return is assumed for viability.

The economic analysis is reported on a 100% project ownership basis. Şişecam Wyoming is owned by Şişecam Chemicals Wyoming LLC ("Şişecam") 51% and by NRP Trona LLC ("NRP") 49%.

This financial analysis includes the following assumptions:

- Constant soda ash production of 2.343 MTPY;
- Constant dry ore soda ash conversion of 1.835 ore to ash;
    - Constant mine production from 4.3 MTPY;
- Increased mining costs for two-seam mining and low seam mining;
    - Two-seam mining costs 30% higher with two-seam tonnage at 25% of production until 2031 when two-seam tonnage rises to 50% of production;
    - Thin seam mining costs 24% higher in approximately 25 years when the +9-foot ore has been depleted;
- No provision for DECA mining was included;
- Plant configuration remains unchanged until upgrades for lower grade ore implement in 10 years;
- Operating costs are based historical costs seen during operations with increased processing costs in approximately 25 years to account for decreasing grade; and
- Revenue is based on a soda ash price of $165/ton FOB plant. Soda ash price is based on published USGS prices which are consistent with historical Sisecam revenues and studies.

Capital Expenditure Assumptions:

- Capital costs are historical expenditures seen during operations and are projected through the LOM plan with adjustments for estimated future changes including:
  - Plant upgrade in ten years to mitigate slugs of low-grade ore due to floor rolls; and
  - Mining equipment changes to allow mining below 9-feet;

Table 19.1 and Table 19.2 illustrate the expected cash flows for the LOM based upon the above assumptions. The model indicates a 20.9% internal rate of return (IRR) and a positive net present value (NPV) of $1,226 million at a 5% discount rate.

TABLE 19.1
ŞIŞECAM LOM CASHFLOW ANALYSIS

Sisecam Wyoming LLC
Big Island Mine
Dec-24
Cash Flow Forcast with Varriable Mining Cost

	Investment 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
REVENUE																		
Mine Production Trona (000)		4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Ore to Ash		1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Soda Ash Production (000)		2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343
Gross Revenue ($ millions)		$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387
Cost of Goods Sold																		
Total Cash Costs ($ millions)		$ 242	$ 242	$ 242	$ 242	$ 242	$ 242	$ 250	$ 250	$ 250	$ 250	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257
CAPEX ($ millions)		$ 55	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 130	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
Investment/Pre-Tax Operating Profit ($ millions)	-$ 500.0	$ 90	$ 115	$ 115	$ 115	$ 115	$ 115	$ 107	$ 107	$ 107	$ 107	$ 0	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100
		$ 25.0	Coarse Tailings						Upgrade Disolver Front Ends			$ 100.0						
		NPV5	$ 1,225.7	IRR	20.9%													

Sisecam Wyoming LLC
Big Island Mine
Dec-24
Cash Flow Forcast with Varri

	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
REVENUE																	
Mine Production Trona (000)	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Ore to Ash	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Soda Ash Production (000)	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343
Gross Revenue ($ millions)	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387
Cost of Goods Sold																	
Total Cash Costs ($ millions)	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 257	$ 269	$ 269	$ 269	$ 269	$ 269
CAPEX ($ millions)	$ 30	$ 30	$ 30	$ 50	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
Investment/Pre-Tax Operating Profit ($ millions)	$ 100	$ 100	$ 100	$ 80	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 88	$ 88	$ 88	$ 88	$ 88
				$ 20.0	New Minining Equipment												

TABLE 19.2
ŞIŞECAM **LOM CASHFLOW ANALYSIS**
(CONT.).

Sisecam Wyoming LLC
Big Island Mine
Dec-24
Cash Flow Forcast with Varri

	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	TOTALS
REVENUE																	
Mine Production Trona (000)	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	215,000
Ore to Ash	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Soda Ash Production (000)	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	117,166
Gross Revenue ($ millions)	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 387**	**$ 19,332**
Cost of Goods Sold																	
Total Cash Costs ($ millions)	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 269**	**$ 12,973**
CAPEX ($ millions)	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 76	$ 1,691
Invenstment/Pre-Tax Operating Profit ($ millions)	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 88**	**$ 42**	**$ 4,669**
															Mine Closure	**$ 46.0**	

Table 19.1 and Table 19.2 contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. The cashflow is only intended to demonstrate the financial viability of the Project. Investors are cautioned that the above is based on a high-level mine plan and certain assumptions which may differ from Şişecam Wyoming's long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. For example, Table 19.1 and Table 19.2 use the price assumptions stated in the table, including a soda ash commodity price assumption of US$165.00/ton. Please be reminded that significant variation of soda ash prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

19.2 ECONOMIC ANALYSIS SENSITIVITY ANALYSIS

To assess the viability of the Şişecam operation the sensitivity of the operation to changes in soda prices, and operating cost assumptions was tested using a range of 15% above and below the base case values.

Due to the high percentage of fixed costs the economics for large mines and processing facilities the operation is most sensitive to net revenue (soda ash price) and sales volume, followed by variable operating costs, then fixed costs and lastly mining costs.

The sensitivity analysis is shown in Figure 19.1 which illustrates the sensitivity of the 5% NPV to soda ash sales price, production cost, capital cost and two seam mining cost. Soda Ash displays the typical sensitivity of a commodity to pricing which reinforces the importance of being one of the lowest cost producers.

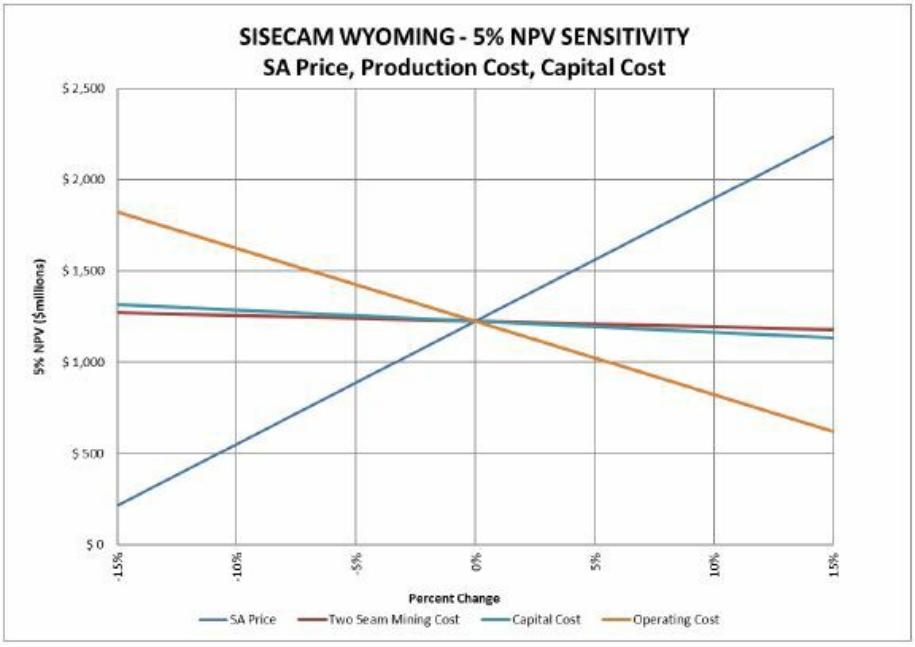


Figure 19.1 5% NPV Sensitivity to Revenue and Production Costs

19.3 ECONOMIC ANALYSIS DISCUSSION

Future mining and refining costs are predicted to increase due to thinning seam thickness and two-seam mining, but the overall impact on costs is not shown to be material with proper mine development sequencing and equipment replacement planning.

Based on this analysis the stated reserves are considered economically extractable.

Şişecam Wyoming faces the following risks to increased costs:

- Two-seam mining's production costs will be higher due to the increased ground support and decreased productivity. An allowance has been included in the cost analysis;
- Ore bed variability and degradation near the margins of the deposit could cause ore grades to decrease which will require some additional processing costs or changes to the processing facilities. Proper short-term planning can determine the best combination of grade and processing costs when mining is near the ore body margins. Continuous miner units can be scheduled to blend some of the ore variability and reduce the impact on the refinery. For the purposes of this analysis the dissolver end of the processing plants is upgraded to handle this ore and processing costs increased to reflect the lower ore grade; and
- External economic drivers are beyond the scope of this study. They include, but are not limited to, labor issues and disputes, increases in royalty rates, change in the supply and demand structure for soda ash, and regulatory and environmental law changes.

20.0 ADJACENT PROPERTIES

The Green River Basin is home to five mining operations, Genesis Westvaco, Genesis Granger, Tata Chemicals, Solvay Chemicals, and Şişecam Wyoming, the subject of this report. Figure 3.2 shows the location of these operations along with their sodium leases.

20.1 GENESIS WESTVACO

Genesis Westvaco was the first trona mine in the basin. The trona bed was discovered in 1938 by oil and gas drilling. Westvaco Chemicals Corporation sunk the first shaft in the basin near there in 1947 to mine Bed 17. The Westvaco operation lies nine miles to the southwest of Şişecam and owns sodium leases adjacent to Şişecam's. In 1948 Food Machinery Corporation (FMC) purchased Westvaco and operated the property continuously until it was sold to Tronox in April of 2015 and then to the current owner Genesis in September of 2017. Since the start, there have been eight shafts developed into Bed 17. Genesis produces dense soda ash from three soda ash plants based on dry trona. Two plants use the Mono process and the third is based on the Sesqui process producing light soda ash. Additionally, Westvaco is a solution mining the old mine workings and processing the resultant liquor in the fourth liquid feed plant based on a decahydrate crystallizer. Genesis also produces bicarbonate and caustic soda. Annual soda ash production exceeds 4.0 MTPY. The operation reported 935 employees and trona production of 4,234,494 tons of trona in 2023.

20.2 GENESIS GRANGER

The Granger mine and processing plant was constructed in 1976 by TexasGulf (TG). The TG mine and refinery is located eleven miles to the west of Şişecam. There are three shafts from the surface to trona Beds 19 and 20. The operation dry mined Bed 20 between 1976 and 2002 then converted to a solution mine in 2005. Elf Aquitaine purchased TexasGulf in 1985 and named the operation TG Soda Ash. The underground mine and processing facility had a production capacity of over 1.2 MTPY. In 1999 the operation was purchased by FMC (now Genesis) and the plant mothballed in 2002. In 2005 the operation restarted using solution liquor from the now flooded mine. Using liquid feed, the plants soda ash capacity was reduced to approximately 400,000 TPY. In 2024 Genesis completed constructing a decahydrate crystallizer front end to the plant which returned the production back to the original nameplate of over 1.2 MTPY.

20.3 TATA CHEMICAL PARTNERS

In 1968 Allied Chemical and General Chemical started a mine in Bed 17 just to the east of the Westvaco Mine. Tata Chemicals purchased the property in 1989. The Tata operation lies 9.5 miles to the southwest of Şişecam. Tata has a production capacity of over 2.5 MTPY produced from dry mined trona and using the mono process in three processing units. The operation reported 547 employees and produced 4,212,389 tons of trona in 2023.

20.4 SOLVAY CHEMICALS

In 1979, Tenneco minerals started the Solvay mine just south of Genesis and Tata also mining Bed 17. The Solvay operation lies fifteen miles to the southwest of Şişecam. In 1992, the Belgium company, Solvay Chemicals purchased the process. Solvay produces soda ash primarily by dry mining but also does some limited solution mining of old workings. The operation reported 462 employees and production of 3,855,573 tons of mined trona in 2023. Soda ash production capacity is over 2.5 MTPY.

21.0 OTHER RELEVANT DATA AND INFORMATION

21.1 WEST END ROOF COLLAPSE AND WATER INFLOW

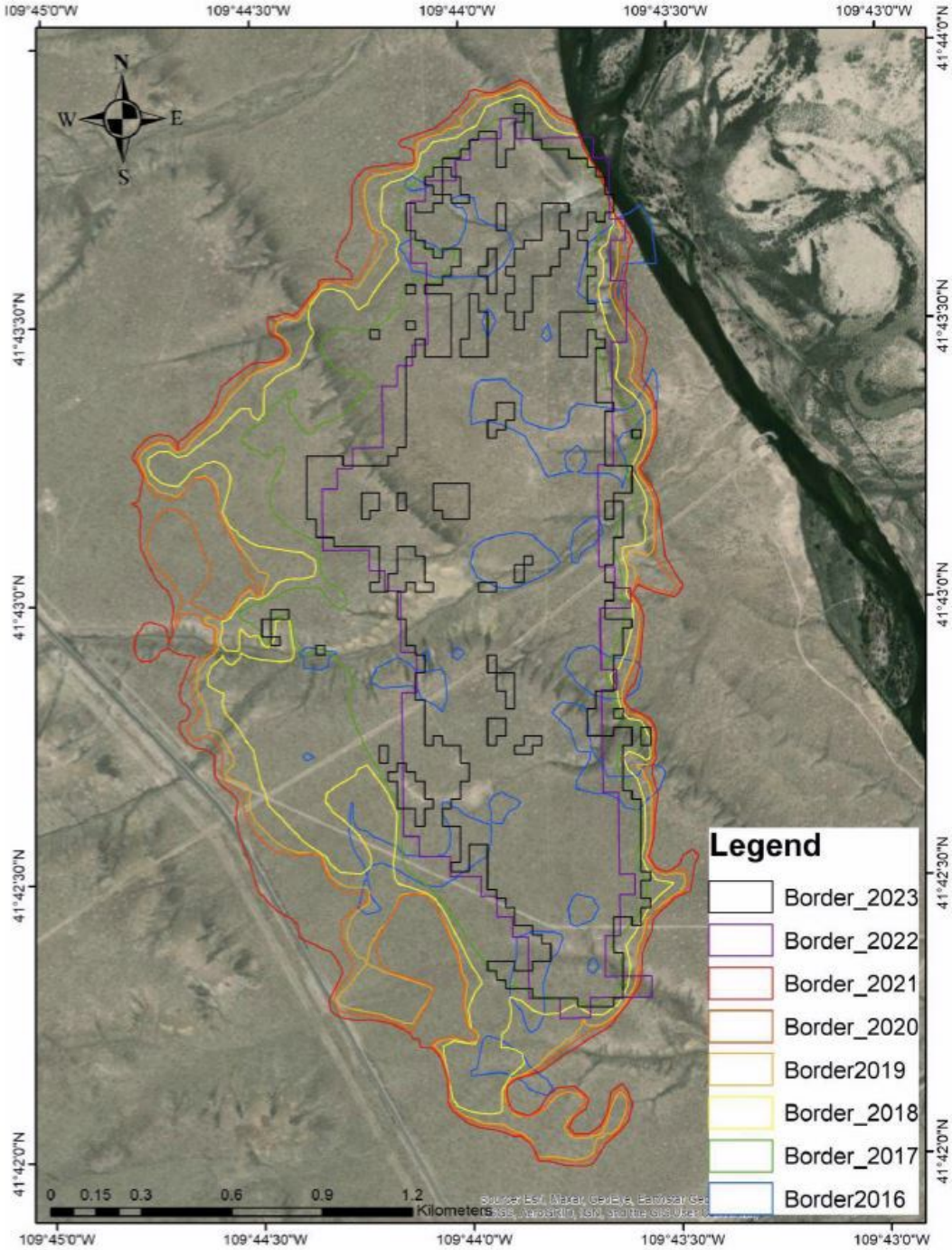
Şişecam provided several recent studies by a hydrologist and geotechnical engineer concerning the Lower Bed West roof collapse and water inflow described in Section 13.2.1. There is a large area of surface subsidence adjacent to the Green River above the LB West underground fall area that is shown in Figure 21.1. The subsidence is likely caused by the roof collapse and failure of the mine pillars in that area. Both reports indicate that the water flow is not from surface waters but from subsurface aquifers based on isotope analysis. Both consultants conclude that due to the depth and multiple aquitards above the mine the probability of a hydraulic connection between the Green River and the mine workings is very low.

The water inflow to the mine ranges from 40 to 140 gpm with the average, in 2024, around 80 gpm. This is a reduction from 2020 which averaged 100 gpm. The water inflow is fresh water which will, over time, dissolve the mine support pillars which are trona. Removal of the support pillars will continue to subside the area. The analysis concludes that at current inflow rates dissolution of all the trona will take 150 years resulting in a very gradual trough-type subsidence basin that is not expected to impact the watershed drainage area. Recent subsidence data shows the subsidence rate to be decreasing. At the current rate of 2 inches of subsidence per year it will take 50 years to reach the expected 8 feet of subsidence. Any large change in flow over an extended period would alter these predictions. Over time the subsidence will impact some of the surface features and infrastructure requiring relatively simple mitigation measures that are well understood.

The likely cause of the seismic event in this area is a large roof fall and pillar failures. Roof falls in the Big Island mine are infrequent but a map of the historic roof falls shows a large cluster of falls in the LB West area. The modulus of elasticity in this area is half of other areas of the mine and likely contributing to the extent of the falls.

The rest of the Big Island Mine with similar geometries remain open, in good condition and have not experienced the large number of roof falls experienced in this area. Other than to increase the size of the barrier pillars there are no plans to modify the mining geometries in other areas of the mine.

As part of the above-mentioned studies extensive subsidence monitoring has been installed over the area, the area is examined regularly, and the inflow water is measured.



Source: Şişecam – Annual Report 2024- 2024.07.15_2023 AR Revised 0.1_Combined_Submittal.pdf

Figure 21.1 West End Subsidence Progression

22.0 INTERPRETATION AND CONCLUSIONS

Approximately 116 MST of the reported recoverable Trona (48%) is dependent upon Şişecam confirming the viability of two-seam mining in the next four years. Most of these tons (approximately 69 MST, 60%) are in areas with thickness over 9-feet.

The November 2024 site visit revealed that since the 2021 report was completed, Şişecam has made significant progress developing the LB North mains and panel entries. Ground conditions were found to be good for the mains entries and production panels confirming the current design. Based on current projections it will be two to four years before Şişecam will verify the viability of two-seam mining. It is possible that two-seam mining may require significant variations from current mining equipment and practices.

Approximately 141 MST of the reported recoverable tonnage is above 9-feet thick and can be mined and processed with the existing equipment, but areas will require ore blending or modification of the processing facilities to handle lower grade ore for short periods. These areas comprise 31 MST of the total reserves. It is anticipated that these plant modifications need to be made within 10-15 years.

The practice of “high grading” the deposit and only mining the thicker material first risks sterilization of the thinner areas if access is lost. Recovery of the reserves less than 9-feet will require changes to the mining and utility equipment, will incur higher mining costs, require access rehabilitation costs and is dependent upon the ability to access these areas through old workings or via extensions of old mains entries as shown in the LOM plan developed for this estimate. As future mining continues, with the current large mining equipment, some loss of portions of the edge of the ore bodies will occur, especially when long production panels are developed. This material makes up 73 MST of the estimated recoverable tonnage. There is some risk that access to these areas 20 years after mining might not be possible.

The roof failure, water inflow and associated subsidence of the Lower Bed West mine area has intrinsic risks to an evaporite mine below a major waterway that must be continuously monitored and evaluated for any changes. These include increased water flow or changes in water type indicating its source could be surface waters. Risks due to high inflow of water can range from higher mining costs to loss of access.

23.0 RECOMMENDATIONS

HPG supports Şişecam's plan to perform additional exploration drilling to improve data density. Additional exploration drilling would result in a higher percentage of the reserve base classified as proven and should better define the trona grades near the drilling locations. Drilling south of the existing lease boundary would help to identify available future reserves and grades. Additionally, it is recommended that Şişecam undertake Bed to Bed drilling from areas in the Upper Bed that overly future LB two-seam mining. Bed to Bed core drilling is significantly less expensive than surface exploration but is limited to two-seam areas.

It is recommended that Şişecam continue to pursue optimization of the refinery facilities to allow efficient processing of the predicted long-term decline in run-of-mine (ROM) trona grades as mining moves to the edges of the ore bodies. A more robust processing facility would allow a more complete recovery of the remaining ore reserves in areas where localized seam rolls and post depositional insoluble infilling have impacted recovery and stopped mining.

It is recommended that Şişecam optimize its ability to blend ore from multiple production areas of the mine to minimize the impact of the lower grade ore from the miners producing from the edge of the deposit or encountering seam rolls. This would also allow improved recovery of the deposit by maintaining a higher average ore grade and minimize sterilization of the thinner or lower grade areas of the deposit.

It is recommended that Şişecam continue close monitoring of the west end water inflows and associated subsidence. HPG would advise more frequent isotope testing of the inflow as well as additional hydrologic studies including source tracing.

24.0 REFERENCES

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24.1 SCANNED FILES LISTING

File/Folder Name	Size
Jefferson_17-DEC-62_Densities_Trona_and_Rock.pdf	323,741
Lee_5-AUG-88_Trona_Reserves_Memo_with_Tables.pdf	2,858,739
Mannion_01-AUG-61__Wyoming Eploration-1960 Progress Report.pdf	3,689,977
Mannion_09-MAY-61_Ore Reserve Calculations.pdf	4,503,326
Mannion_12-MAY-61_Ore_Reserve_Calculations_and_Tables.pdf	7,667,741
Mannion_26-OCT-73_Planning_and_Supplemental_Drilling_Program.pdf	4,825,097
Parratt_17-JUL-73_GR_Trona_Reserves_Trona_District Land Holdings.pdf	1,665,154
Parratt_24-MAR-11_1976_Trona_Development_Drilling.pdf	5,068,341
Wendt_19-DEC-67_Test_Drilling_North_1967_Drilling Program.pdf	3,499,956

24.1 ŞIŞECAM WYOMING DATA SOURCES

Parent Folder	Name
2023	Attachments
	MTI 2-SEAM SITE VISIT REPORT 2023.pdf
	RSI-3362 Final Big Island Mine.pdf
2024	M0138.2202 Lewis 30JAN24 #7.pdf
1-UG MINE MAPS	2025 Budget Mine Plan Fed Royal Red-- 8-1-24 Presentation.dwg
	Lowerbed Mine Map.dwg
	Lowerbed Mine Map_20241004.dwg
	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 -P.-LB-ALLpdf.pdf
	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 p-LB-1.pdf
	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 p-LB-2.pdf
	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 p-LB-3.pdf
	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 p-LB-4.pdf
	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 p-UB-1.pdf
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	MINEPLAN-HPG-5-3ROOM-A-01OCT24_LOM-1B-11X17 -P-UB-ALL.pdf
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	OneDrive_1_1-3-2025.zip
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	Upperbed Mine Map.dwg
	Upperbed Mine Map-2024-10-04.dwg
2021 NOV (Closed)	2021.11.18 Notice of Deficiency.pdf
	2021.12.09 NOV.pdf
	20231017 NOV 612-21 DEQ Closure Document.pdf
2022 Stack Testing	2022 Boiler Tuning Report.pdf
	Sisecam Wyoming LLC BOL004 BOL005 CKD006 CKD009 CKD013 CKD015 November 2022 Stack Test Report.pdf
	Sisecam Wyoming LLC ENG007-HET002 CSH004 CSH005 CSH013 May 2022 Stack Test Report.pdf
	Sisecam Wyoming LLC ENG007-HET002 October 2022 Stack Test Report.pdf
2023 NOV and consent decree	2023-0621_AQD_NOV-Sisecam-Wyoming-LLC-6224-23.pdf
	Consent Decree final.pdf
2023 Stack Testing	2023 Boiler Tuning Report.pdf
	Sisecam Wyoming LLC, BOL004 BOL005 CKD006 CKD009 CKD015, November 2023 Stack Test Report .pdf
	Sisecam Wyoming LLC, CKD013, January 2024 Stack Test Report .pdf
	Sisecam Wyoming LLC, CSH009 CSH019 CKD004 CKD008, September 2023 Stack Test Report.pdf
	Sisecam Wyoming LLC, ENG007-HET002 LUD006 LUD007 CSH021, June 2023 Stack Test Report.pdf
	Sisecam Wyoming LLC, ENG007-HET002, July 2023 Stack Test Report.pdf
2023 Turbine replacement	T250 Notification Letter Final.pdf
	T250 Serial Number Notification Letter Final.pdf
2024 Stack Testing	Sisecam Wyoming LLC, ENG007-HET002 CSH008 CSH018 CSH022, July 2024 Stack Test Report.pdf
	Sisecam Wyoming LLC, ENG007-HET002, August 2024 Stack Test Report.pdf
2-Exploration	D02-5.xls
4-TRONA LEASE UPDATES	Federal
	State (WY)
	Sweetwater
	WYO Lease 26971 2.7.2020.pdf
	WYO Lease 26012. 2.7.2020pdf.pdf
	WYO Lease 42570 - 2019.pdf
	WYW190736 ORIGINAL LEASE.pdf
5-10yr Projection trona & Soda Ash	10 Year Production Plan (Hidayet).xlsx
6-Mineral and Surface Ownership Maps	150.005 Figure 1 IE2a D10PP133 Updated June 2021.pdf
	150.010 Figure 2 IE2b D10PP132 Updated June 2021.pdf
7-LB West Water	Geotech
	Subsidence
	Water
8-2023 Financials	2022 Sisecam Wyoming audited financial statements.pdf
	OneDrive_1_11-12-2024.zip
	Reserve Information Request 8 & 11.xlsx
	Sisecam Wyoming AICPA 2023 FS (AVAILABLE FOR DISTRIBUTION).pdf
	Sisecam Wyoming LLC Audit Report (DT Signature) Final.pdf
	TAX05 - 1024 Royalties, Severance and Production Estimates.xlsx
	TAX05 - 1223 Royalties, Severance and Production Estimates.xlsx
	WY Monthly Results DEC-23 v4..xlsx
	WY Monthly Results OCT-24 v2.xlsx
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	WY Monthly Results DEC-24 v2.xlsx
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a15-Capital Plan 2023, 2024 & 10yr	Capital Budget and Five Year Plan 2024-2029.xlsx

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a17-Tailing Dam Review Reports 2023-2024	2022_Dam_Safety_Inspection_Report_FINAL_signed.pdf
	2023_Dam_Safety_Inspection_Report+Appendices_Final_signed.pdf
a18 Tailing Plan Failure Analysis	2023.05.31_2022 PFMA Report.pdf
a19 DEQ Annual Reports 2022, 2023, 2024	2024.02.20_Final_2022_LQD_Annual_Report_3rdSubmittal.pdf
	2024.07.15_2023 AR Revised 0.1_Combined_Submittal.pdf
a20 TRM to Mine Production Records	2023.01.27_2022 Annual UIC Report.pdf
	2024.01.11_2023 Annual Report_UIC Facility WYS037-043.pdf
a21 TRM Panel, Tailings Pond Plans	Barr Tailings Storage Area Disposal Alternate Study 2-14-23.pdf
	Coarse Tailings Phase 1 Engineering Report_v2.0 (1).pdf
	Şişecam Türkiye- Coarse Tailings Project Presentation.pdf
	SOD Interim Memorandum.pdf
a23-Environmental Violations	2021 NOV (Closed)
	2023 NOV and consent decree
a24-Easments and Property Leases 2023-2024	2024.08.29_Mineral Lease Table.xlsx
	BLM ROW Tracking_Master.xlsx
a25-Air and Water Permits	2023 Turbine replacement
	Title V renewal 2024 (Title five)
a26-Air Quality Testing 2023-2024	2022 Stack Testing
	2023 Stack Testing
	2024 Stack Testing
a27-Mine and Land Permits 2023-2024	List of Permits and Licenses.xlsx
a28-Reclamation and Performance Bonds	0 2024.07_Reclamation Bond Calculation_2023 AR_Rev 0.1.pdf
a29-Ground and Surface Water Monitoring	0 App A Combined_Rev 0.0 & 0.1.pdf
	1 Rivers 2023_Final.pdf
a31-Subsidence Monitoring	Subsidence
a32-Shaft 4 Methane Level History	OneDrive_1_12-17-2024.zip
a34-MSHA Violations 2023-2024	SEC 1300.xlsx
a37-ISO Certificates 2023 & 2024	FM 30272 - 1.pdf
a39-Soda Ash Price-Marketing-Customers	2023_World_Analysis_-_Soda_Ash_-_Report_.pdf
	2024 Global Soda Ash Outlook - Margueritte Morrin.pdf
a40-BLM 5 Year Plan Reports	2023-2027 BLM_Mine_Plan.pdf
a41-BLM Resource Management Plan	WMA comments Jan 14, 2024.pdf
a43-Pending & Active Litigation	Litigation Table (10-31-2024).xlsx
a45-47-Utilities Elec-Gas-Water	~$Reserve Report 2023 2024 updated.xlsx
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	Reserve Report 2023 2024 updated.xlsx
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	Railcar Fleet Info Overview-HPG.xlsx
a49 Quality ISO Certs and Processes	Copy of Lab_nov2022 core samples 2.xlsx
	FM 30272 - 001.pdf
	Halal IFANCA 2024.pdf
	ISO14001 (Environmental Management System) information
	Kosher certification 2024.pdf
	LAB 2014 DETERMINATION OF PERCENT VOLATILE Rev 2.docx
	LAB 2020 ANALYSIS OF DAILY ORE SAMPLES Rev 1.pdf
	LAB 2046 DETERMINATION OF HOT WATER INSOLUBLES IN FINAL PRODUCT Rev 1.docx
	LAB 2052 DETERMINATION OF PERCENT SODIUM CARBONATE IN PRODUCT USING THE METTLER TOLEDO Rev. 1.pdf
	NSF Certificate - 44930 Green River 2022.pdf
a50 Two Seam Reports	Geotech
a51 Examples of previous information provided	01-21-001_SISECAM_2021 Tech Report Summary-FINAL-2_SIGNED_sm.pdf
	2024 Report Notes-Examples of Files provided.pdf
	Capital Budget and Five Year Plan 2023- Post August 2022 Outage.xlsx
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	Attach A4 rooffallCinergrid4mains137.pdf
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	AttachmentD MalekilCGCMMISFinal.pdf
	Cinerreview23reportfinal.pdf
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Geotech	MTI
	RESPEC
ISO14001 (Environmental Management System) info	EMS 759799 - 1.pdf
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	WYO Lease 26012. 2.7.2020pdf.pdf
	WYO Lease 42570 - 2019.pdf
Subsidence	Displacement_Analysis_Sisecam_Wyoming_V.6.3_10.20.2024.pdf
Sweetwater	SisecamLeaseAmend. New Sweetwater Lease 925K.pdf
Title V renewal 2024 (Title five)	3-4-119 (P0038440) - Big Island Completeness Ltr.pdf
	A0015666.pdf
	F000637.pdf
	Renewal App and Follow Up to CO2e Question.msg
Water	2020 LBW Waters Edge.xlsx

25.0 RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT

HPG has reviewed technical data, reports, and studies produced by other consulting firms, as well as information provided by Şişecam Wyoming, and others. This review was conducted on a reasonableness basis, and HPG has noted herein where such provided information engendered questions. Except for the instances in which we have noted questions or made specific comments regarding the nature of the information, HPG considers the information provided by Şişecam Wyoming as being accurate and suitable for use in this Report. Şişecam Wyoming's staff of professional engineers are considered experts in their field and as such HPG has no reason to doubt the authenticity or substance of the information provided.

Marketing Information - HPG has relied on Şişecam Wyoming representations concerning marketing information and soda ash pricing trends. HPG's reliance on such information and representations applies to Section 11.0, 12.0,16.0, 18.0, 19.0 and the relevant portions of Section 1.0 in this Report.

Legal Matters - HPG has conducted a general review of mineral titles and license documents provided by Şişecam Wyoming. HPG has not verified title or otherwise confirmed the legal status of any of the leases or the license but has relied upon documents and information provided by Şişecam Wyoming's representatives regarding the current status of the leases and license shown. HPG's reliance on such information and representations applies to Section 3.2 and to the relevant portions of Section 1.0 in this Report.

Legal Matters – HPG has relied on Şişecam Wyoming representations concerning any outstanding active adverse legal or liability issues including statutory and regulatory interpretations. HPG's reliance on such information and representations applies to Section 3.2, 17.0 and to the relevant portions of Section 1.0 in this Report.

Governmental Factors – HPG has relied on Şişecam Wyoming representations and information concerning governmental factors relating to taxation, royalties, monitoring requirements and frequency, bonding requirements, violations, and fines. HPG's reliance on such information and representations applies to Section 9.0, 11.0, 12.0, 17.0, 18.0, 19.0 and to the relevant portions of Section 1.0 in this Report.

Environmental Matters - HPG has relied on Şişecam Wyoming representations and documentation regarding environmental permitting and compliance. HPG's reliance on such information and representations applies to Section 17.0 and to the relevant portions of Section 1.0 in this Report.

Environmental Matters – HPG has relied on Şişecam Wyoming representations and documentation concerning surface tailings placement and impoundment structures. HPG's reliance on such information and representations applies to Sections 15.0, 17.0 and to the relevant portions of Section 1.0 in this Report.

Environmental Matters - HPG has relied on Şişecam Wyoming representations and documentation concerning the subsidence and water inflow over the western edge of the mine. HPG's reliance on this information and representations applies to Sections 9.0, 11.0, 12.0, 21.0, and to the relevant portions of Section 1.0 in this Report.

26.0 PROJECT TEAM CVS

Mr. Kurt Hollberg has over 35 years of experience in the mining industry, including 17 years in operations management and technical services. He has an in-depth understanding and experience with operational and capital budgeting and procurement. His experience encompasses green field feasibility studies through mine rehabilitation and re-opening. He is experienced in project management and construction. His international experience includes work in Colombia, Africa, Spain, and the Middle East doing feasibility studies on coal, potash, and phosphate properties and as the lender's technical advisors for world-class phosphate and aluminum projects. He has served as the technical advisor to the adjuster on numerous large mine insurance claims. He has advised and audited underground and surface safety and health programs for the DOE. He has extensive geotechnical experience related to mining and is well versed in mining systems and mine infrastructure design including solution mining. He is familiar with statistical testing techniques for process improvement. Using statistical techniques, he helped increase continuous miner productivity by 20% with minimal capital expenditure. Mr. Hollberg holds a B.A. degree in Economics from Colorado College and a BS in Mining Engineering with a minor in Civil Engineering from the Colorado School of Mines. He is a registered Professional Engineer in Colorado, Wyoming, Utah, and Nevada.

Mr. Richard Terry Leigh has over 40 years of experience in the mining industry, including management and technical services. He has extensive experience in mineral exploration and mineral estimation. He is knowledgeable in the use of computers for mineral estimation and geostatistics. Mr. Leigh has spent the past 30 years working in the Green River Basin Trona mines as a geologist and hydrologist and in environmental services, technical services, and mine management. Mr. Leigh has been highly active in the professional certification of geologists. He has served on the Wyoming Board of Professional Geologists, Wyoming Geological Survey Board, ASBOG, National Association of States Boards of Geology, and as a member of the Council of Examiners for PG certification. Mr. Leigh has published numerous papers on Wyoming geology and trona deposition. He has published several papers on tailing disposal and ground water remediation. Mr. Leigh holds a BS degree and MS degree in earth sciences from the State University of New York. Mr. Leigh is an AIPG Certified Professional Geologist and a Licensed Professional Geologist (PG) in Wyoming.

Exhibit 99.1

Sisecam Wyoming LLC

(A Majority-Owned Subsidiary of Sisecam Chemicals Wyoming LLC)
Financial Statements as of December 31, 2024 and 2023 and for the Years Ended December 31, 2024, 2023, and 2022, and Reports of Independent Registered Public Accounting Firms

SISECAM WYOMING LLC
(A Majority-Owned Subsidiary of Sisecam Chemicals Wyoming LLC)

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Report of Independent Registered Public Accounting Firm

To the Board of Managers and Members of Sisecam Wyoming LLC

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Sisecam Wyoming LLC (the "Company") as of December 31, 2024, and the related statements of operations and comprehensive income, of members' equity and of cash flows for the year then ended, including the related notes (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, 2024, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

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 audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 of these financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit 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 audit 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 audit provides a reasonable basis for our opinion.

Critical Audit Matters

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 (i) relates to accounts or disclosures that are material to the financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition – Sales to Others

As described in Note 2 to the financial statements, the Company's sales to others was $578 million for the year ended December 31, 2024. The Company's revenues are recognized at a point-in-time when control of goods transfers to the customer. The time at which delivery and transfer of title, and therefore control, occurs ranges from the point in time when the product leaves the Company's facilities to agreed upon delivery points. Agreed upon delivery points at which control of the product transfers includes points where product reaches the port of loading, a vessel, or other agreed location, thereby rendering the performance obligation fulfilled. Management recognizes revenue as the amount of consideration expected to be received in exchange for transferring promised goods to customers.

The principal consideration for our determination that performing procedures relating to revenue recognition for sales to others is a critical audit matter is a high degree of auditor effort in performing procedures related to the Company's revenue recognition for sales to others.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the financial statements. These procedures included, among others, (i) testing revenue recognized for a sample of revenue transactions by obtaining and inspecting source documents such as customer contracts, purchase orders, invoices, proof of shipment or delivery, and subsequent cash receipts; and (ii) confirming a sample of outstanding customer invoice balances as of December 31, 2024 and, for confirmations not returned, obtaining and inspecting source documents, such as customer contracts, purchase orders, invoices, proof of shipment or delivery, and subsequent cash receipts.

/s/ PricewaterhouseCoopers LLP
Charlotte, North Carolina
February 28, 2025

We have served as the Company's auditor since 2024.

Report of Independent Registered Public Accounting Firm

Board of Managers and Members of
Sisecam Wyoming LLC
Atlanta, Georgia

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Sisecam Wyoming LLC (the "Company") as of December 31, 2023, the related statements of operations and comprehensive income, members' equity, and cash flows for the years ended December 31, 2023 and 2022, and the related notes (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 at December 31, 2023, and the results of its operations and its cash flows for the years ended December 31, 2023 and 2022, in conformity with accounting principles generally accepted in the United States of America.

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 Public Company Accounting Oversight Board (United States) ("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 and in accordance with auditing standards generally accepted in the United States of America. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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.

/s/ BDO USA, P.C.

We served as the Company's auditor from 2022 to 2024.

Charlotte, North Carolina

March 7, 2024

SISECAM WYOMING LLC
(A Majority Owned Subsidiary of Sisecam Chemicals Wyoming LLC)

BALANCE SHEETS
AS OF DECEMBER 31, 2024 AND 2023
(In thousands of dollars)

	2024	2023
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 19,282	$ 6,476
Accounts receivable, net	121,035	150,526
Accounts receivable-affiliates	61,055	55,171
Inventory	43,221	37,538
Other current assets	3,344	4,043
Total current assets	247,937	253,754
PROPERTY, PLANT, AND EQUIPMENT, NET	246,054	255,796
OTHER NON-CURRENT ASSETS	31,417	28,335
TOTAL ASSETS	$ 525,408	$ 537,885
LIABILITIES AND MEMBERS' EQUITY		
CURRENT LIABILITIES:		
Current portion of long-term debt	$ 9,259	$ 9,030
Accounts payable	27,133	27,531
Due to affiliates	5,031	4,882
Accrued expenses	36,712	50,410
Total current liabilities	78,135	91,853
LONG-TERM DEBT	134,888	104,147
OTHER NON-CURRENT LIABILITIES	15,540	15,386
Total liabilities	228,563	211,386
COMMITMENTS AND CONTINGENCIES (See Note 12)		
MEMBERS' EQUITY:		
Members' equity — Sisecam Chemicals Wyoming LLC	153,426	170,062
Members' equity — NRP Trona LLC	147,413	163,394
Accumulated other comprehensive loss	(3,994)	(6,957)
Total members' equity	296,845	326,499
TOTAL LIABILITIES AND MEMBERS' EQUITY	$ 525,408	$ 537,885

See notes to financial statements.

SISECAM WYOMING LLC
(A Majority Owned Subsidiary of Sisecam Chemicals Wyoming LLC)

STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2024, 2023 AND 2022
(In thousands of dollars)

	2024	2023	2022
SALES – OTHERS	$ 578,106	$ 771,340	$ 720,120
SALES - AFFILIATES	—	2,250	—
Total net sales	578,106	773,590	720,120
COST OF PRODUCTS SOLD	498,270	580,318	542,409
COST OF PRODUCTS SOLD - AFFILIATES	3,016	5,343	15,136
Total cost of products sold	501,286	585,661	557,545
GROSS PROFIT	76,820	187,929	162,575
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES - AFFILIATES	20,387	20,753	19,261
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES - OTHERS	2,558	2,600	5,377
OPERATING INCOME	53,875	164,576	137,937
OTHER INCOME (EXPENSE):			
Interest income	629	1,382	—
Interest expense	(7,847)	(6,335)	(5,752)
Other expense, net	(127)	(74)	(120)
Total other expense, net	(7,345)	(5,027)	(5,872)
NET INCOME	46,530	159,549	132,065
Other comprehensive income/(loss) on derivative financial instruments	2,963	(44,570)	31,644
COMPREHENSIVE INCOME	$ 49,493	$ 114,979	$ 163,709

See notes to financial statements.

SISECAM WYOMING LLC

(A Majority Owned Subsidiary of Sisecam Chemicals Wyoming LLC)

STATEMENTS OF MEMBERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2024, 2023 AND 2022
(In thousands of dollars)

	Sisecam Chemicals Wyoming LLC	NRP Trona LLC	Accumulated Other Comprehensive (Loss) Income	Total Members' Equity
Balance at January 1, 2022	**$ 152,809**	**$ 146,817**	**$ 5,969**	**$ 305,595**
Allocation of net income	67,353	64,712	—	132,065
Capital distribution to members	(46,665)	(44,835)	—	(91,500)
Other comprehensive income	—	—	31,644	31,644
Balance at December 31, 2022	**$ 173,497**	**$ 166,694**	**$ 37,613**	**$ 377,804**
Allocation of net income	81,370	78,179	—	159,549
Capital distribution to members	(84,805)	(81,479)	—	(166,284)
Other comprehensive loss	—	—	(44,570)	(44,570)
Balance at December 31, 2023	**$ 170,062**	**$ 163,394**	**$ (6,957)**	**$ 326,499**
Allocation of net income	23,730	22,800	—	46,530
Capital distribution to members	(40,366)	(38,781)	—	(79,147)
Other comprehensive income	—	—	2,963	2,963
Balance at December 31, 2024	**$ 153,426**	**$ 147,413**	**$ (3,994)**	**$ 296,845**

See notes to financial statements.

SISECAM WYOMING LLC
(A Majority Owned Subsidiary of Sisecam Chemicals Wyoming LLC)
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2024, 2023 AND 2022
(In thousands of dollars)

	2024	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 46,530	$ 159,549	$ 132,065
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization	29,483	31,038	27,598
Loss on disposal of assets, net	141	885	4,085
Other non-cash items	477	316	690
(Increase) decrease in:			
Accounts receivable - affiliates	(5,884)	(1,247)	(4,407)
Accounts receivable, net	29,490	20,318	(53,958)
Inventory	(8,237)	9,048	(18,428)
Other current and non-current assets	295	(94)	(43)
Increase (decrease) in:			
Accounts payable	(6)	(9,006)	15,203
Accrued expenses and other liabilities	(11,318)	(9,135)	19,920
Due to affiliates	148	(1,179)	3,933
Net cash provided by operating activities	81,119	200,493	126,658
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital expenditures	(20,104)	(25,055)	(28,264)
Net cash used in investing activities	(20,104)	(25,055)	(28,264)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Borrowings on revolving credit facility	157,000	197,000	158,000
Repayments on revolving credit facility	(117,000)	(212,000)	(136,000)
Repayments on other long-term debt	(9,062)	(8,843)	(8,630)
Cash distribution to members	(79,147)	(166,284)	(91,500)
Net cash used in financing activities	(48,209)	(190,127)	(78,130)
NET CHANGE IN CASH AND CASH EQUIVALENTS	12,806	(14,689)	20,264
CASH AND CASH EQUIVALENTS:			
Beginning of year	6,476	21,165	901
End of year	$ 19,282	$ 6,476	$ 21,165
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Interest paid during the year	$ 7,580	$ 6,115	$ 5,113
SUPPLEMENTAL DISCLOSURES OF NONCASH INVESTING ACTIVITIES:			
Capital expenditures on account	$ 2,498	$ 2,240	$ 2,772

See notes to financial statements.

1. Organizational Structure

A 51% membership interest in Sisecam Wyoming LLC (the "Company," "we," "us," or "our,") is owned by Sisecam Chemicals Wyoming LLC (“SCW LLC"). NRP Trona LLC, a wholly owned subsidiary of Natural Resource Partners L.P. ("NRP") owns a 49% membership interest in the Company. SCW LLC is 100% owned by Sisecam Chemicals Resources LLC ("Sisecam Chemicals,") which is owned by Sisecam USA Inc. (“Sisecam USA”). In December 2024, Sisecam USA Inc. purchased Ciner Enterprises Inc.’s (“Ciner Enterprise”) then 40% ownership of Sisecam Chemicals and became the sole owner. Sisecam USA is a direct wholly-owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish Corporation ("Şişecam Parent"), which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi ("Isbank"). Şişecam Parent is a global company operating in soda ash, chromium chemicals, flat glass, auto glass, glassware glass packaging and glass fiber sectors. Şişecam Parent was founded over 88 years ago, is based in Turkey and is one of the largest industrial publicly-listed companies on the Istanbul exchange. With production facilities in several continents and in several countries, Sisecam Parent is one of the largest glass and chemicals producers in the world.

2. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

The Company is in the business of mining trona ore to produce soda ash. All of the Company soda ash is currently sold to various domestic and international customers. Sisecam Chemicals is the exclusive sales agent for the Company. Sisecam Chemicals has leveraged the distributor network established by Sisecam Parent while independently reviewing current and potential distribution partners to optimize the Company’s reach into each market.

A summary of the significant accounting policies is as follows:

Basis of Presentation - The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates - The preparation of financial statements, in accordance with accounting principles generally accepted in the United States of America, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue Recognition - The Company’s revenues are recognized upon satisfaction of the Company’s performance obligations, that is, delivery and transfer of title to the product to the Company’s customers as discussed below. Additionally, the Company has made an accounting policy election to account for shipping and handling activities as fulfillment costs. The Company’s revenue is derived from the sale of soda ash, which is the Company’s sole product.

Performance Obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. At contract inception, the Company assesses the goods promised in contracts with customers and identifies distinct performance obligations for each promise to transfer goods. To identify the performance obligations, the Company considers all goods promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. From its analysis, the Company determined that the sale of soda ash is currently its only performance obligation. Many of the Company's customer volume commitments are short-term and the Company's performance obligations for the sale of soda ash are generally limited to an individual purchase order.

- ***When performance obligations are satisfied.*** Revenue is recognized at a point-in-time when control of goods transfers to the customer.

- ***Transfer of Goods.*** The Company uses standard shipping terms across each customer agreement with very few exceptions. Control transfer occurs at the point at which the customer has the ability to direct the use of and obtain substantially all remaining benefits from the asset. The time at which delivery and transfer of title, and therefore control, occurs ranges from the point when the product leaves the Company's facilities to agreed upon delivery points. Agreed upon delivery points at which control of the product transfers includes points where product reaches the port of loading, a vessel, or other agreed location, thereby rendering the Company's performance obligation fulfilled.

- ***Payment Terms.*** The Company's payment terms vary by the type and location of the customers. The term between invoicing and when payment is due is not significant and consistent with typical terms in the industry.

- ***Variable Consideration.*** The Company recognizes revenue as the amount of consideration that it expects to receive in exchange for transferring promised goods to customers. The Company does not adjust the transaction price for the effects of a significant financing component, as the time period between control transfer of goods and expected payment is one year or less. At the time of sale, the Company estimates provisions for different forms of variable consideration (discounts, rebates, and pricing adjustments) based on historical experience, current conditions and contractual obligations, as applicable. The estimated transaction price is typically not subject to significant reversals. The Company adjusts these estimates when the most likely amount of consideration it expects to receive changes, although these changes are typically immaterial.

- ***Returns, Refunds and Warranties.*** In the normal course of business, the Company does not accept returns, nor does it typically provide customers with the right to a refund.

- ***Freight.*** In accordance with FASB Accounting Standard Codification, Revenue from Contracts with Customers (Topic 606) ("ASC 606"), the Company made a policy election to treat freight and related costs that occur after control of the related good transfers to the customer as fulfillment activities instead of separate performance obligations. Therefore, freight is recognized as part of the cost of products sold at the point in which control of soda ash has transferred to the customer.

Revenue Disaggregation. In accordance with ASC 606-10-50, the Company disaggregates revenue from contracts with customers into geographical regions. The Company determined that disaggregating revenue into these categories achieved the disclosure objectives to depict how the nature, timing, amount and uncertainty of revenue and cash flows are affected by economic factors. Refer to Note 14, "Revenue" for revenue disaggregated into geographical regions.

Revenue Contract Balances. The timing of revenue recognition, billings and cash collections results in billed receivables, unbilled receivables (contract assets), and customer advances and deposits (contract liabilities).

- ***Contract Assets.*** At the point of transfer of control of product, the Company has an unconditional right to payment generally that is only dependent on the passage of time. In general, customers are billed and a receivable is recorded at the point in which transfer of control has taken place. These billed receivables are reported as "Accounts Receivable, net" on the Balance Sheets as of December 31, 2024 and December 31, 2023. There were no contract assets as of December 31, 2024 and December 31, 2023.

- ***Contract Liabilities.*** There may be situations where customers are required to prepay a portion of the transaction price. In such instances, a contract liability will be recorded. There were $100 and no contract liabilities as of December 31, 2024 and December 31, 2023, respectively.

Freight Costs - The Company includes freight costs billed to customers for shipments administered by the Company in gross sales. The related freight costs incurred by the Company are included in the cost of products sold.

Cash and Cash Equivalents - The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Cash equivalents consist primarily of interest bearing deposit accounts.

*Accounts Re*ceivable – The Company determines expected credit losses for recorded receivables based on information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount.

Inventory - Inventory is carried at the lower of cost or net realizable value. Cost is determined using standard cost, which approximates the first-in, first-out basis for raw material and finished goods inventory and the weighted average cost method for stores inventory. Costs include raw materials, direct labor and manufacturing overhead. Net realizable value is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.

- Raw material inventory includes material, chemicals and natural resources being used in the mining and refining process.

- Finished goods inventory is the finished product soda ash.

- Stores inventory includes parts, materials and operating supplies which are typically consumed in the production of soda ash and currently available for future use. If the inventory has been purchased within the preceding twelve months, it is classified as current assets and remainder is classified as non-current assets.

*Property, Plant, and Equipme*nt - Property, plant, and equipment are stated at cost less accumulated depreciation. Depreciation is computed over the estimated useful lives of depreciable assets, using the straight-line method. The estimated useful lives applied to depreciable assets are as follows:

	Useful Lives
Land improvements	10-30 years
Depletable land	15 - 60 years
Buildings and building improvements	10-30 years
Computer hardware	3-5 years
Machinery and equipment	5-20 years

The Company's policy is to evaluate property, plant, and equipment for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. An indicator of potential impairment would include situations when the estimated future undiscounted cash flows are less than the carrying value. The amount of any impairment then recognized would be calculated as the difference between estimated fair value and the carrying value of the asset.

Derivative Instruments and Hedging Activities - The Company may enter into derivative contracts from time to time to manage exposure to the risk of exchange rate changes on its foreign currency transactions, the risk of changes in natural gas prices, and the risk of the variability in interest rates on borrowings. Gains and losses on derivative contracts qualifying for hedge accounting are reported as a component of the underlying transactions. The Company follows hedge accounting for its hedging activities. All derivative instruments are recorded on the balance sheet at their fair values. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. The Company designates its derivatives based upon criteria established for hedge accounting under generally accepted accounting principles. For a derivative designated as a fair value hedge, the gain or loss is recognized in earnings in the period of change together with the offsetting gain or loss on the hedged item attributed to the risk being hedged. For a derivative designated as a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported as a component of accumulated other comprehensive income (loss) and subsequently reclassified into earnings when the hedged exposure affects earnings. Upon reclassification into earnings, the cash flow hedge is also reflected in the statement of cash flows as a part of the changes in accrued derivatives fair value. For derivatives not designated as hedges, the gain or loss is reported in earnings in the period of change. When the Company has natural gas physical forward contracts, they are accounted for under the normal purchases and normal sales scope exception. See Note 15, "*Fair Value Measurements*," for additional information.

*Income T*ax - The Company is organized as a pass-through entity for federal income tax purposes and therefore is not subject to federal or certain state income taxes. As a result, the Company's members are responsible for income taxes based on their respective share of taxable income. Net income for financial statement purposes may differ significantly from taxable income reportable to members as a result of differences between the tax basis and financial reporting basis of assets and liabilities and the taxable income allocation requirements under the membership agreement.

Reclamation Costs - The Company is obligated to return the land beneath its refinery and tailings ponds to its natural condition upon completion of operations and is required to return the land beneath its rail yard to its natural condition upon termination of the various lease agreements. The Company accounts for asset retirement obligations in accordance with Accounting Standard Codification 410, *Asset Retirement and Environmental Obligations*.

The Company accounts for its land reclamation liability as an asset retirement obligation, which requires that obligations associated with the retirement of a tangible long-lived asset be recorded as a liability when those obligations are incurred, with the amount of the liability initially measured at fair value. These estimates are inflated based on the assumed timing of the obligation payments and discounted using the Company's credit adjusted discount rate at the time. The Company reviews the assumptions and estimates of these costs periodically or if it becomes aware of material changes to these obligations. Upon initially recognizing a liability for an asset retirement obligation, an entity must capitalize the cost by recognizing an increase in the carrying amount of the related long-lived asset. Over time, the liability is accreted to its present value each period, and the capitalized cost is depreciated over the estimated useful life of the related asset. Upon settlement of the liability, an entity either settles the obligation for its recorded amount or incurs a gain or loss upon settlement.

Fair Value of Financial Instruments - The following methods and assumptions were used to estimate the fair values of each class of financial instruments:

The Company measures certain financial and non-financial assets and liabilities at fair value on a recurring basis. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. Fair value disclosures are reflected in a three-level hierarchy, maximizing the use of observable inputs and minimizing the use of unobservable inputs.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Fair value accounting requires that these financial assets and liabilities be classified into one of the following three categories:

- Level 1-inputs to the valuation methodology are quoted prices (unadjusted) for an identical asset or liability in an active market.
- Level 2-inputs to the valuation methodology include quoted prices for a similar asset or liability in an active market or model-derived valuations in which all significant inputs are observable for substantially the full term of the asset or liability.
- Level 3-inputs to the valuation methodology are unobservable and significant to the fair value measurement of the asset or liability.

Financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable, accrued expenses, derivative financial instruments and long-term debt. The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximate their fair value because of the nature of such instruments. The Company's long-term debt and derivative financial instruments are measured at their fair values with Level 2 inputs based on quoted market values for similar but not identical financial instruments.

Subsequent Events - The Company has evaluated all subsequent events through February 28, 2025, the date the financial statements were available to be issued. See Note 16, "Subsequent Events," for additional information.

Recently Issued and Adopted Accounting Standards –

In November 2024, the FASB issued Accounting Standard Updates ("ASU") 2024-03, *Income Statement – Reporting Comprehensive Income – Expense Disaggregation Disclosure (Subtopic 220-40): Disaggregation of Income Statement Expenses* ("ASU 2024-03"), to require tabular disclosures disaggregating certain types of expense presented on the income statement within continuing operations, as well as disclosures about selling expenses. This standard is effective for annual reporting beginning after December 15, 2026 and interim reporting beginning after December 15, 2027. The Company is currently evaluating ASU 2024-03 and the impact to the Company's financial statements.

3. ACCOUNTS RECEIVABLE, NET

Trade receivables, net and other receivables balances at January 1, 2023 were $162,957 and $7,886, respectively. Accounts receivable, net consisted of the following at December 31:

	2024	2023
Trade receivables, net	$ 113,617	$ 141,898
Other receivables	7,418	8,628
Total	$ 121,035	$ 150,526

4. INVENTORY

Inventory consisted of the following at December 31:

	2024	2023
Raw materials	$ 13,092	$ 13,262
Finished goods	14,134	12,651
Stores inventory, current	15,995	11,625
Total	$ 43,221	$ 37,538

5. PROPERTY, PLANT, AND EQUIPMENT, NET

Property, plant, and equipment, net consisted of the following at December 31:

	2024	2023
Land and land improvements	$ 192	$ 192
Depletable land	4,031	4,031
Buildings and building improvements	171,070	169,036
Computer hardware	3,233	2,737
Machinery and equipment	761,811	748,702
Total	940,337	924,698
Less accumulated depreciation, depletion and amortization	(727,661)	(703,479)
Total net book value	212,676	221,219
Construction in progress	33,378	34,577
Property, plant, and equipment, net	$ 246,054	$ 255,796

Depreciation, depletion and amortization expense on property, plant, and equipment was $28,132, $29,811, and $26,414 for the years ended December 31, 2024, 2023 and 2022, respectively.

6. OTHER NON-CURRENT ASSETS

Other non-current assets consisted of the following at December 31:

	2024	2023
Stores inventory, non-current	$ 25,061	$ 22,318
Internal-use software, net of accumulated amortization	5,446	4,817
Other	910	1,200
Total	$ 31,417	$ 28,335

During the years ended December 31, 2024, 2023 and 2022, in accordance with ASC 350-40, Internal Use Software, the Company capitalized $1,633, $22, and $38, respectively, of certain internal use software development costs. Software development activities generally consist of three stages (i) the research and planning stage, (ii) the application and infrastructure development stage, and (iii) the post-implementation stage. Costs incurred in the planning and post-implementation stages of software development, or other maintenance and development expenses that do not meet the qualification for capitalization are expensed as incurred. Costs incurred in the application and infrastructure development stage, including significant enhancements and upgrades, are capitalized. These software development costs are amortized on a straight-line basis over the estimated useful life of five to ten years under depreciation and amortization expense which is included in the cost of products sold financial statement line item of the statements of operations and comprehensive income. During the years ended December 31, 2024, 2023 and 2022, the Company amortized internal use software development costs of $1,004, $873, and $862, respectively. At December 31, 2024 and 2023 internal-use software gross cost was $10,173 and $8,540, respectively and accumulated amortization was $4,727 and $3,723, respectively. Amortization for these current internal use software development costs in future years are expected to be $1,043 in 2025, $968 in 2026, $909 in 2027, $907 in 2028 and $839 in total thereafter.

7. ACCRUED EXPENSES

Accrued expenses consisted of the following at December 31:

	2024	2023
Accrued capital expenditures	$ 2,218	$ 1,593
Accrued employee compensation & benefits	10,150	10,749
Accrued energy costs	5,267	7,073
Accrued royalty costs	2,242	7,424
Accrued other taxes	4,277	5,195
Accrued derivatives fair value	3,962	7,541
Received not invoiced accruals	3,636	7,640
Other accruals	4,960	3,195
Total	$ 36,712	$ 50,410

8. DEBT

Long-term debt consisted of the following at December 31:

	2024	2023
Sisecam Wyoming Equipment Financing Arrangement Security Note Number 001 with maturity date of March 26, 2028, fixed interest rate of 2.479%	$ 15,125	$ 18,358
Sisecam Wyoming Equipment Financing Arrangement Security Note Number 002 with maturity date of December 17, 2026, fixed interest rate of 2.4207%	12,022	17,819
Sisecam Wyoming Credit Facility, secured principal expiring on October 28, 2026, variable interest rate as a weighted average rate of 6.20% at December 31, 2024	117,000	77,000
Total debt	144,147	113,177
Less current portion of long-term debt	9,259	9,030
Total long-term debt	$ 134,888	$ 104,147

Aggregate maturities required on long-term debt at December 31, 2024 are due in future years as follows:

2025	$ 9,285
2026	126,514
2027	3,517
2028	4,893
Total	$ 144,209

Sisecam Wyoming Equipment Financing Arrangement

Master Loan and Security Agreement:

- Sisecam Wyoming LLC entered into an equipment financing arrangement ("Sisecam Wyoming Equipment Financing Arrangement") with Banc of America Leasing & Capital, LLC on March 26, 2020. This arrangement was structured through a master loan and security agreement alongside an equipment security note ("Note Number 001"), aimed at financing equipment for a natural gas-fired turbine co-generation facility. The agreement encompasses various equipment notes under a master framework, granting the lender a security interest in the equipment. The key terms of the initial secured note include an execution date of March 25, 2020, with an initial principal amount of $30,000 and a maturity date of March 26, 2028. Repayment is structured over 96 monthly installments starting on April 26, 2020, with the first 95 installments approximately $307 each, followed by a final installment of $4,307. Prepayment is permitted after one year, although additional charges apply depending on the prepayment date and the outstanding principal.

- Subsequently, a second secured note ("Note Number 002") was executed on December 17, 2021, with an initial principal amount of $29,000 and a maturity date of December 17, 2026. Repayment terms involve 60 monthly installments of approximately $514 each, beginning January 17, 2022. Prepayment terms are similar to Note Number 001, requiring the simultaneous payoff of both notes upon early repayment.

- In terms of amendments and covenants, on October 28, 2021, certain covenants were revised to align with the Sisecam Wyoming Credit Facility, particularly concerning financial metrics and ratios. Furthermore, an amendment on December 17, 2021, stipulated that Note Number 001 must be paid off simultaneously if Note Number 002 is prepaid. The financing arrangement also involves a continuing security interest in the equipment and related collateral granted to the lender. As of December 31, 2024, the outstanding balance was $15,187, or $15,125 net of financing costs, with an effective interest rate of 2.718%. The company was in compliance with all applicable covenants as of that date. Events of default under this arrangement include customary triggers such as payment defaults, significant mergers or control changes, cross defaults on certain indebtedness, and insolvency proceedings, with remedies that may include acceleration of debt maturity and asset possession.

Sisecam Wyoming Credit Facility

On October 28, 2021, the Company entered into a new $225,000 senior secured revolving credit facility (the "Sisecam Wyoming Credit Facility") with each of the lenders listed on the respective signature pages thereof and Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer. The Sisecam Wyoming Credit Facility matures on October 28, 2026.

The Sisecam Wyoming Credit Facility provides, among other things:

- a sublimit up to $40,000 for the issuance of standby letters of credit and a sublimit up to $20,000 for swingline loans;
- an accordion feature that enables the Company to increase the revolving borrowings under the Sisecam Wyoming Credit Facility by up to an additional $250,000 (subject to certain conditions);
- in addition to the aforementioned revolving borrowings, an ability to incur up to $225,000 of additional term loan facility indebtedness to finance the Company's capacity expansion capital expenditures; (subject to certain conditions);
- a pledge by the Company of substantially all of the Company's assets (subject to certain exceptions), including: (i) all present and future shares of any subsidiaries of the Company (whether now existing or hereafter created) and (ii) all personal property of the Company (subject to certain conditions);
- contains various covenants and restrictive provisions that limit (subject to certain exceptions) the Company's ability to: (i) incur certain liens or permit them to exist; (ii) incur or guarantee additional indebtedness; (iii) make certain investments and acquisitions related to the Company's operations in Wyoming); (iv) merge or consolidate with another company; (v) transfer, sell or otherwise dispose of assets, (vi) make distributions; (vii) change the nature of the Company's business; and (viii) enter into certain transactions with affiliates;
- a requirement to maintain a quarterly consolidated leverage ratio of not more than 3.25:1:00; provided, however, subject to certain conditions, the Company shall have the ability to increase the maximum consolidated leverage ratio to 3.75:1.00 for a year while the Company is undertaking capacity expansion capital expenditures;
- a requirement to maintain a quarterly consolidated interest coverage ratio of not less than 3.00:1.00; and
- customary events of default including (i) failure to make payments required under the Sisecam Wyoming Credit Facility, (ii) events of default resulting from failure to comply with covenants and financial ratios, (iii) the occurrence of a voluntary change of control, as a result of which the Company is directly or indirectly controlled by persons or entities not currently directly or indirectly controlling the Company, (iv) the institution of insolvency or similar proceedings against the Company, and (v) the occurrence of a cross default under any other material indebtedness the Company may have. Upon the occurrence of an event of default, in their discretion, the Sisecam Wyoming Credit Facility lenders may exercise certain remedies, including, among others, accelerating the maturity of any outstanding loans, accrued and unpaid interest and all other amounts owing and payable such that all amounts thereunder will become immediately due and payable, and if not timely paid upon such acceleration, to charge the Company a default rate of interest on all amounts outstanding under the Sisecam Wyoming Credit Facility. However, upon the occurrence of an involuntary change of control of the Company, and after the passage of time as specified in the Sisecam Wyoming Credit Facility, the Company's debt thereunder would be accelerated.

In addition, loans under the Sisecam Wyoming Credit Facility (other than any swingline loans) will bear interest at the highest of (a) the federal funds rate plus 1/2 of 1%, (b) the rate of interest in effect for such day as publicly announced from time to time by Bank of America as its "prime rate", (c) Term Secured Overnight Financing Rate ("SOFR") plus 1.10%, or (d) 1.00%.

The unused portion of the Sisecam Wyoming Credit Facility is subject to a per annum commitment fee and the applicable margin of the interest rate under the Sisecam Wyoming Credit Facility will be determined as follows:

Pricing Tier	Leverage Ratio	Incremental applicable interest margin	Commitment Fee
1	< 1.25:1.0	0.50 %	0.23 %
2	≥ 1.25:1.0 but < 1.75:1.0	0.75 %	0.25 %
3	≥ 1.75:1.0 but < 2.25:1.0	1.00 %	0.28 %
4	≥ 2.25:1.0 but < 3.00:1.0	1.25 %	0.30 %
5	≥ 3.00:1.0 but < 3.50:1.0	1.50 %	0.33 %
6	≥ 3.50:1.0	1.75 %	0.35 %

The Sisecam Wyoming Credit Facility requires the Company to maintain a quarterly consolidated leverage ratio of not more than 3.25:1:00; provided, however, subject to certain conditions, the Company shall have the ability to increase the maximum consolidated leverage ratio to 3.75:1.00 for a year while the Company is undertaking capacity expansion capital expenditures. The Sisecam Wyoming Credit Facility permits the consolidated interest coverage ratio as of the end of any fiscal quarter of the Company to be less than 3.00:1.00.

The carrying value of the Sisecam Wyoming Credit Facility approximates the fair value as the rate is variable and its key terms are similar to indebtedness with similar amounts, durations and credit risks. The fair value of the Sisecam Wyoming Equipment Financing Arrangement was $26,088 versus a carrying value of $27,147 at December 31, 2024. The fair value of the Sisecam Wyoming Equipment Financing Arrangement was $34,662 versus a carrying value of $36,177 at December 31, 2023.

Management is not aware of any current circumstances that have occurred and are likely to occur that would result in an event of default under the Sisecam Wyoming Credit Facility or Sisecam Wyoming Equipment Financing Arrangement at December 31, 2024 or in the next twelve months.

9. OTHER NON-CURRENT LIABILITIES

Other non-current liabilities consisted of the following at December 31:

	2024	2023
Asset retirement obligations	$ 9,396	$ 8,901
Derivative instruments and hedges, fair value and other liabilities	292	17
Accrued non-income tax related taxes	5,852	6,468
Total	$ 15,540	$ 15,386

Details of the asset retirement obligations reserve shown above are as follows:

	Total
Asset retirement obligations reserve at January 1, 2022	$ 7,993
Accretion expense	441
Asset retirement obligations reserve at December 31, 2022	8,434
Accretion expense	467
Asset retirement obligations reserve at December 31, 2023	8,901
Accretion expense	495
Asset retirement obligations reserve at December 31, 2024	$ 9,396

At December 31, 2024 and 2023 the undiscounted asset retirement obligations were approximately $51,136 and $44,745, respectively.

The asset retirement obligations for the company relate to two primary areas: the refinery and tailing ponds, and a rail yard. For the refinery and tailing ponds, the obligation was initially calculated in 1996 based on an 80-year mine life and estimated future restoration costs, using a discount rate of approximately 6%. The obligation for the rail yard involves restoring the land to its natural state after a 30-year lease, with the liability discounted at a 4% rate. In both cases, the liabilities are gradually increased over the assets' estimated useful lives to cover the total restoration costs, with corresponding charges recorded as part of the cost of products sold.

10. EMPLOYEE BENEFIT PLANS

The Company participates in various benefit plans offered and administered by Sisecam Chemicals and is allocated its portions of the annual costs related thereto. The specific plans are as follows:

Retirement Plans - Benefits provided under the retirement plans for salaried employees and hourly employees (the "Retirement Plans") are based upon years of service and average compensation for the highest 60 consecutive months of the employee's last 120 months of service, as defined. The Retirement Plans cover substantially all full-time employees hired before May 1, 2001. Sisecam Chemicals' Retirement Plans had a net liability balance of $1,292 and $20,951 at December 31, 2024 and December 31, 2023, respectively. Sisecam Chemicals' current funding policy is to contribute an amount within the range of the minimum required and the maximum tax-deductible contribution. The Company's allocated portion of the Retirement Plans' net periodic pension cost (benefit) for the years ended December 31, 2024, 2023 and 2022 was $(2,165), $478 and $(3,705), respectively.

Savings Plan - The 401(k) retirement plan (the "401(k) Plan") covers all eligible hourly and salaried employees. Eligibility is limited to all domestic residents and any foreign expatriates who are in the United States indefinitely. The 401(k) Plan permits employees to contribute specified percentages of their compensation, while the Company makes contributions based upon specified percentages of employee contributions. Participants hired on or subsequent to May 1, 2001, will receive an additional contribution from the Company based on a percentage of the participant's base pay. The Company's contributions made to the 401(k) Plan for the years ended December 31, 2024, 2023, and 2022 were $4,034, $3,999, and $3,604, respectively.

Postretirement Benefits - Most of the Company's employees hired before January 2, 2017 are eligible for postretirement benefits other than pensions if they reach age 58 while still employed with at least 10 years of service.

The postretirement benefits are accounted for by Sisecam Chemicals on an accrual basis over an employee's period of service. The postretirement plan, excluding pensions, is not funded, and Sisecam Chemicals has the right to modify or terminate the plan. The post-retirement plan had a net unfunded liability of $5,774 and $6,783 on December 31, 2024 and December 31, 2023, respectively.

The Company's allocated portion of postretirement cost for the years ended December 31, 2024, 2023, and 2022, was $395, $437, and $713, respectively.

11. ACCUMULATED OTHER COMPREHENSIVE (LOSS)/INCOME

Accumulated other comprehensive (loss)/income as of December 31, 2024, 2023, and 2022 consisted of the following:

	Interest Rate Swap Contracts	Financial Gas Swap Contracts	Total
BALANCE at January 1, 2022	$ (366)	$ 6,335	$ 5,969
Other comprehensive income before reclassification	1,249	44,215	45,464
Amounts reclassified from accumulated other comprehensive income/(loss)	262	(14,082)	(13,820)
Net current-period other comprehensive income	1,511	30,133	31,644
BALANCE at December 31, 2022	$ 1,145	$ 36,468	$ 37,613
Other comprehensive income/(loss) before reclassification	112	(8,155)	(8,043)
Amounts reclassified from accumulated other comprehensive loss	(942)	(35,585)	(36,527)
Net current-period other comprehensive (loss)	(830)	(43,740)	(44,570)
BALANCE at December 31, 2023	$ 315	$ (7,272)	$ (6,957)
Other comprehensive income/(loss) before reclassification	47	(9,383)	(9,336)
Amounts reclassified from accumulated other comprehensive (loss)/income	(362)	12,661	12,299
Net current-period other comprehensive (loss)/income	(315)	3,278	2,963
BALANCE at December 31, 2024	$ —	$ (3,994)	$ (3,994)

The components of other comprehensive income/(loss), that have been reclassified out of accumulated other comprehensive income/loss consisted of the following:

	2024	2023	2022	Affected Line Items on the Statements of Operations and Comprehensive Income
Details about other comprehensive income/(loss) components:				
Gains/(losses) on cash flow hedges:				
Interest rate swap contracts	$ (362)	$ (942)	$ 262	Interest expense
Financial gas swap contracts	12,661	(35,585)	(14,082)	Cost of products sold
Total reclassifications for the period	$ 12,299	$ (36,527)	$ (13,820)	

12. COMMITMENTS AND CONTINGENCIES

Lease and License Commitments

The Company leases and licenses mineral rights from the U.S. Bureau of Land Management, the state of Wyoming, Sweetwater Royalties, LLC, a subsidiary of Sweetwater Trona OpCo LLC and the successor in interest to the license to the Rock Springs Royalty Company, LLC ("RSRC"), an affiliate of Occidental Petroleum Corporation (formerly an affiliate of Anadarko Petroleum Corporation), and other private parties which provide for royalties based upon production volume. The Company has a perpetual right of first refusal with respect to these leases and license and intends to continue renewing the leases and license as has been its practice.

The Company assists the majority of its domestic customers in arranging their freight services. Sisecam Chemicals enters into contracts with one railroad company for the majority of the domestic rail freight services that the Company receives and the related freight and logistics costs are allocated to the Company. For the years ended December 31, 2024 and 2023, the Company shipped over 90% of its soda ash to customers initially via a single rail line owned and controlled by the railroad company. If Sisecam Chemicals does not ship at least a significant portion of its soda ash production on the railroad company's rail line during a twelve-month period, it must pay the railroad company a shortfall payment under the terms of the Company's transportation agreement. During the years ended December 31, 2024 and 2023, Sisecam Chemicals incurred no shortfall payments and does not expect to make any such payments in the future. Sisecam Chemicals current agreement with the railroad company expires on December 31, 2025 upon which Sisecam Chemicals expects it will extend or enter into a new agreement.

As of December 31, 2024, the total minimum contractual rental commitments under the Company's various operating leases, including renewal periods is approximately $1,275 with the amount due in any of the next five years being immaterial.

Sisecam Chemicals typically enters into operating lease contracts with various lessors for rail cars to transport product to customer locations and warehouses. Rail car leases under these contractual commitments range for periods from one to ten years. Sisecam Chemicals' obligation related to these rail car leases are $15,292 in 2025, $14,062 in 2026, $10,820 in 2027, $6,302 in 2028 and $2,312 thereafter. Total lease expense allocated to the Company from Sisecam Chemicals was approximately $16,202, $17,113, and $10,996 for the years ended December 31, 2024, 2023 and 2022, respectively and is recorded in cost of products sold.

Purchase Commitments – The Company has financial gas swap contracts to mitigate volatility in the price of natural gas. As of December 31, 2024, these contracts' aggregate notional value totaled approximately $39,421 for the purchase of a portion of the Company's natural gas requirements for the following year. The Company has a separate contract through 2031 for the transportation of natural gas with an average minimum annual cost of approximately $1,500 per year.

Legal and Environmental Matters- From time to time the Company is party to various claims and legal proceedings related to its business. Although the outcome of these proceedings cannot be predicted with certainty, management does not currently expect any such legal proceedings the Company may be involved in from time to time to have a material effect on its business, financial condition and results of operations. The Company cannot predict the nature of any future claims or proceedings, nor the ultimate size or outcome of any such claims and legal proceedings and whether any damages resulting from them will be covered by insurance.

Mine Permit Bonding Commitment – The Company's operations are subject to oversight by the Land Quality Division of Wyoming Department of Environmental Quality ("WDEQ"). The Company's principal mine permit issued by the Land Quality Division, requires the Company to provide financial assurances for its reclamation obligations for the estimated future cost to reclaim the area of its processing facility, surface pond complex and on-site sanitary landfill. The Company provides such assurances through a third-party surety bond (the "Surety Bond"). The Surety Bond amount was $45,955 and $41,814 on December 31, 2024 and 2023, respectively.

13. AGREEMENTS AND TRANSACTIONS WITH AFFILIATES

Agreements and transactions with affiliates have a significant impact on the Company's financial statements because prior to December 2024, the Company was a subsidiary and investee within two different global group structures. After December 2024, as a result of Sisecam USA buy out of Ciner Enterprises' ownership of Sisecam Chemicals, the Company is no longer a part of Ciner Enterprises and its related global group structure. Agreements directly between the Company and other affiliates, or indirectly between affiliates that the Company does not control, can have a significant impact on recorded amounts or disclosures in the Company's financial statements, including any commitments and contingencies between the Company and affiliates, or potentially, third parties.

Sales-affiliates are sales that aligned with the Company's foreign market penetration and logistics cost strategies. Cost of goods sold-affiliates primarily consists of logistic services.

Selling, general and administrative expenses also include amounts charged to the Company by its affiliates principally consisting of salaries, benefits, office supplies, professional fees, travel, rent and other costs of certain assets used by the Company. Sisecam Chemicals provides the Company with certain corporate, selling, marketing and general and administrative services, in return for which the Company has agreed to pay Sisecam Chemicals an annual management fee and reimburse Sisecam Chemicals for certain third-party costs incurred in connection with providing such services. In addition, under the limited liability company agreement governing the Company, it reimburses Sisecam Chemicals for employees who operate Sisecam Chemical's assets and for support provided to the Company.

These transactions with affiliates do not necessarily represent arm's length transactions and may not represent all costs if the Company operated on a standalone basis.

The total selling, general and administrative costs charged to the Company by affiliates for the years ended December 31, 2024, 2023 and 2022 were as follows:

	2024	2023	2022
Sisecam Chemicals	$ 20,387	$ 20,753	$ 19,016
Other	—	—	245
Total selling, general and administrative expenses - affiliates	$ 20,387	$ 20,753	$ 19,261

As of December 31, 2024 and 2023, the Company had due from/to with affiliates as follows:

	2024		2023	
	Accounts receivable - affiliates	Due to affiliates	Accounts receivable - affiliates	Due to affiliates
Sisecam Chemicals(1)	$ 61,055	$ 3,856	$ 53,759	$ 2,881
Other	—	1,175	1,412	2,001
Total	$ 61,055	$ 5,031	$ 55,171	$ 4,882

(1)Accounts receivable from Sisecam Chemicals is primarily related to the timing of funding for the pension and postretirement plans offered and administered by Sisecam Chemicals.

14. REVENUE

The Company's operations are similar in geography, nature of products, and type of customers. The Company earns substantially all of its revenue through the sale of soda ash mined at a single location.

The net sales by geographic area for the years ended December 31, 2024, 2023 and 2022 were as follows:

	2024	2023	2022
Domestic	$ 265,285	$ 345,647	$ 304,994
International	312,821	427,943	415,126
Total net sales	$ 578,106	$ 773,590	$ 720,120

The Company had one customer for the year ended December 31, 2024, that individually represented over 10% of net sales and no customers for the year ended December 31, 2023, that individually represented over 10% of net sales. Revenue from this customer was $72,164 for the year ended December 31,2024. The Company had two customers on December 31, 2024 whose outstanding balance individually represented over 10% of accounts receivable with a balance of $36,728 and two customers whose outstanding balance individually represented over 10% of accounts receivable with combined accounts receivable balance of $39,788 at December 31, 2023.

15. FAIR VALUE MEASUREMENTS

Financial instruments consist primarily of cash, accounts receivable, accounts payable, accrued expenses, derivative financial instruments and long-term debt. The carrying amounts of cash, accounts receivable, accounts payable and accrued expenses approximate their fair values because of the nature of such instruments. Our long-term debt and derivative financial instruments are measured at their fair value based on quoted market values for similar but not identical financial instruments.

Derivative Financial Instruments

The Company, from time to time, may enter into interest rate swap contracts designated as cash flow hedges to mitigate its exposure to potential interest rate increase. As of December 31, 2024, the Company did not have any outstanding interest rate swap contracts. As of December 31, 2023, the Company had one interest rate swap with a notional value of $12,500, which matured in 2024.

The Company periodically enters into financial gas swap contracts, designated as cash flow hedges, to mitigate volatility in the price of natural gas related to a portion of the natural gas that the Company consumes in its operations. These contracts generally have various maturities through 2026. These contracts had an aggregate notional value of $39,421 and $22,778 on December 31, 2024 and December 31, 2023, respectively.

The following table presents the fair value of derivative assets and liabilities and the respective balance sheet locations as of:

	Assets				Liabilities			
	December 31, 2024		December 31, 2023		December 31, 2024		December 31, 2023	
(in thousands)	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives designated as hedges:								
Interest rate swap contracts - current	Other current assets	$ —	Other current assets	$ 315	Accrued Expenses	$ —	Accrued Expenses	$ —
Financial gas swap contracts - current	Other current assets	123	Other current assets	269	Accrued Expenses	3,962	Accrued Expenses	7,541
Interest rate swap contracts - non-current	Other non-current assets	—	Other non-current assets	—	Other non-current liabilities	—	Other non-current liabilities	—
Financial gas swap contracts - non-current	Other non-current assets	83	Other Non-current assets	—	Other non-current liabilities	238	Other non-current liabilities	—
Total derivatives designated as hedging instruments		$ 206		$ 584		$ 4,200		$ 7,541

16. SUBSEQUENT EVENTS

Cash Distribution

On February 4, 2025, the members of the board of managers of Sisecam Wyoming LLC, approved a cash distribution to the members of Sisecam Wyoming LLC in the aggregate amount of $6,000. This distribution was paid in February 2025.

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Unitholder Information

Partnership Headquarters
1415 Louisiana Street,
Suite 3325
Houston, TX 77002
(713) 751-7507

Regional Office
Mineral Rights
175 Irwin Road
Huntington, WV 25705

Investor Relations
Tiffany Sammis
1415 Louisiana Street,
Suite 3325
Houston, TX 77002
(713) 751-7515
email: info@nrplp.com

Stock Exchange
Our units are listed on the
New York Stock Exchange
under the symbol NRP

Independent Auditors
Ernst & Young LLP
5 Houston Center
1401 McKinney, Suite 2400
Houston, TX 77010

Transfer Agent and Registrar
Equiniti Trust Company, LLC
55 Challenger Road
Ridgefield Park, NJ 07660
Website: www.equiniti.com
Email: helpast@equiniti.com
(800) 937-5449

Website
www.nrplp.com

Information regarding Natural Resource Partners L.P. is located on the partnership's website. On the site is operational and financial information as well as all SEC filings and our corporate governance documents, including our Code of Business Conduct and Ethics, our Corporate Governance Guidelines, and Board of Directors' Audit Committee Charter and Compensation Committee Charter. Requests for copies of the annual report or other data may be made through the website or by contacting Investor Relations. These requests will be provided free of charge.

Contact NRP Board
We have established procedures for contacting the non-management members of the NRP Board of Directors. To communicate any concerns or issues to the Board of Directors, please direct any correspondence to:

Chairman of the CNG Committee
NRP Board of Directors
1415 Louisiana Street, Suite 3325
Houston, TX 77002
888-252-2396

Schedule K-1 and Schedule K-3
Unitholders receive Schedule K-1 packages that summarize their allocated share of the partnership's reportable tax items for the calendar year. Generally, these K-1s are available on NRP's website no later than mid-March. A limited number of unitholders (primarily foreign unitholders, unitholders computing a foreign tax credit on their tax return and certain corporate and/or partnership unitholders) may need the detailed information disclosed on Schedule K-3 for their specific reporting requirements, which are generally available on NRP's website no later than June. Unitholders should refer questions regarding their Schedule K-1 and Schedule K-3 to the following:

Natural Resource Partners L.P.
Tax Package Support
P.O. Box 139031
Dallas, TX 75313
Toll Free: 1-888-334-7102

Forward-Looking Statements
Statements included in this annual report may constitute forward-looking statements. In addition, we and our representatives may from time to time make other oral or written statements which are also forward-looking statements.

Such forward-looking statements include, among other things, statements regarding: future distributions on our common units; our business strategy; our liquidity and access to capital and financing sources; our financial strategy; prices of and demand for coal, trona and soda ash, and other natural resources; estimated revenues, expenses and results of operations; projected production levels by our lessees; Sisecam Wyoming LLC's ("Sisecam Wyoming's") trona mining and soda ash refinery operations; distributions from our soda ash joint venture; the impact of governmental policies, laws and regulations, as well as regulatory and legal proceedings involving us, and of scheduled or potential regulatory or legal changes; and global and U.S. economic conditions.

These forward-looking statements speak only as of the date hereof and are made based upon management's current plans, expectations, estimates, assumptions, and beliefs concerning future events impacting us and therefore involve a number of risks and uncertainties. We caution that forward-looking statements are not guarantees and that actual results could differ materially from those expressed or implied in the forward-looking statements.

You should not put undue reliance on any forward-looking statements. Please read "Item 1A. Risk Factors" of the Form 10-K for important factors that could cause our actual results of operations or our actual financial condition to differ.

Natural Resource Partners L.P.
1415 Louisiana Street
Suite 3325
Houston, Texas 77002
www.nrplp.com

NRP

2024

Annual Report