

**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, 2021

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: **001-36204**



ENERGY FUELS INC.

(Exact Name of Registrant as Specified in Its Charter)

Ontario, **Canada**
(State or other jurisdiction of incorporation or organization)

98-1067994

(I.R.S. Employer Identification No.)

225 Union Blvd., Suite 600
Lakewood, Colorado
(Address of principal executive offices)

80228

(Zip Code)

(303) 974-2140

(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 Shares, no par value	UUUU EFR	NYSE American Toronto Stock Exchange

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

None

(Title of Class)

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

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

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

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

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

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

Emerging Growth Company

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

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

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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: \$886.2 million.

The number of common shares of the Registrant outstanding as of March 10, 2022 was 156,707,285.

ENERGY FUELS INC.
FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2021
TABLE OF CONTENTS

SUBPARTS		
	ITEM I: CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS AND RISK FACTOR SUMMARY	3
	ITEM II: CAUTIONARY NOTE TO INVESTORS CONCERNING DISCLOSURE OF MINERAL RESOURCES AND RESERVES	7
	ITEM III: GLOSSARY OF TECHNICAL TERMS	10
	ITEM IV: GLOSSARY OF REGULATORY AGENCIES AND EXCHANGES	12
PART I		
	ITEM 1. DESCRIPTION OF BUSINESS	13
	ITEM 1A. RISK FACTORS	33
	ITEM 1B. UNRESOLVED STAFF COMMENTS	52
	ITEM 2. DESCRIPTION OF PROPERTIES	53
	ITEM 2A. OVERVIEW	54
	ITEM 2B. SUMMARY OF MINERAL RESERVES AND RESOURCES	56
	ITEM 2C. THE NICHOLS RANCH PROJECT	59
	ITEM 2D. THE ALTA MESA PROJECT	72
	ITEM 2E. THE WHITE MESA MILL	81
	ITEM 2F. THE PINYON PLAIN PROJECT	87
	ITEM 2G. THE ROCA HONDA PROJECT	93
	ITEM 2H. THE SHEEP MOUNTAIN PROJECT	100
	ITEM 2I. THE BULLFROG PROJECT	108
	ITEM 2J. THE LA SAL PROJECT	113
	ITEM 2K. NON-MATERIAL MINERAL PROPERTIES	124
	ITEM 3. LEGAL PROCEEDINGS	128
	ITEM 4. MINE SAFETY DISCLOSURE	129
PART II		
	ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	130
	ITEM 6. [RESERVED]	133
	ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	134
	ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	147
	ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	149
	ITEM 8A. REPORTS OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	150
	ITEM 8B. CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)	153
	ITEM 8C. CONSOLIDATED BALANCE SHEETS	154
	ITEM 8D. CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY	155
	ITEM 8E. CONSOLIDATED STATEMENTS OF CASH FLOWS	157
	ITEM 8F. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE THREE YEARS ENDED DECEMBER 31, 2021	159
	ITEM 8F(1). THE COMPANY AND DESCRIPTION OF BUSINESS	159
	ITEM 8F(2). BASIS OF PRESENTATION	159
	ITEM 8F(3). SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES	159
	ITEM 8F(4). MARKETABLE SECURITIES	165

ITEM 8F(5). RECEIVABLES	166
ITEM 8F(6). INVENTORIES	166
ITEM 8F(7). INVESTMENTS ACCOUNTED FOR AT FAIR VALUE	166
ITEM 8F(8). PROPERTY, PLANT AND EQUIPMENT AND MINERAL PROPERTIES	167
ITEM 8F(9). IMPAIRMENTS	169
ITEM 8F(10). ASSET RETIREMENT OBLIGATIONS AND RESTRICTED CASH	169
ITEM 8F(11). LOANS AND BORROWINGS	170
ITEM 8F(12). CAPITAL STOCK	170
ITEM 8F(13). BASIC AND DILUTED INCOME (LOSS) PER COMMON SHARE	171
ITEM 8F(14). SHARE-BASED PAYMENTS	172
ITEM 8F(15). LEASES	176
ITEM 8F(16). INCOME TAXES	177
ITEM 8F(17). SUPPLEMENTAL FINANCIAL INFORMATION	179
ITEM 8F(18). COMMITMENTS AND CONTINGENCIES	180
ITEM 8F(19). FAIR VALUE ACCOUNTING	182
ITEM 8F(20). REVENUE RECOGNITION AND CONTRACTS WITH CUSTOMERS	183
ITEM 8F(21). RELATED PARTY TRANSACTIONS	183
ITEM 8F(22). SUBSEQUENT EVENTS	184
ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	184
ITEM 9A. CONTROLS AND PROCEDURES	184
ITEM 9B. OTHER INFORMATION	185
PART III	
ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	186
ITEM 11. EXECUTIVE COMPENSATION	186
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	186
ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE	186
ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES	186
PART IV	
ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	186
ITEM 16. FORM 10-K SUMMARY	189
SIGNATURES	190

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS AND RISK FACTOR SUMMARY

This Annual Report and the exhibits attached hereto (the “**Annual Report**”) contain “forward-looking statements” within the meaning of applicable United States (“U.S.”) and Canadian securities laws, which may include, but are not limited to, statements with respect to Energy Fuels Inc.’s (the “**Company**” or “**Energy Fuels**”): anticipated results and progress of our operations in future periods, planned exploration, if warranted, development of our properties, plans related to our business, including our rare earth element (“**REE**”) initiatives, and other matters that may occur in the future, any expectation related to the proposed establishment of a uranium reserve for the United States (the “**U.S. Uranium Reserve**”) pursuant to the COVID-Relief and Omnibus Spending Bill (See Part I, Item 1, “*Proposed Establishment of a U.S. Uranium Reserve*,” below), any expectation related to any additional or future recommendations of the United States Nuclear Fuel Working Group (the “**U.S. Nuclear Fuel Working Group**” or “**Working Group**”), any plans we may have with regard to REE production, any plans we may have with respect to the recovery of radioisotopes for use in the production of medical isotope therapeutics, any plans we may have to evaluate the ramp-up of production at any of our properties, and the expected costs of production of any properties that may be ramped up. These statements relate to analyses and other information that are based on forecasts of future results, estimates of amounts not yet determinable and assumptions of management.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, schedules, assumptions, future events, or performance (often, but not always, using words or phrases such as “expects” or “does not expect,” “is expected,” “is likely,” “budgets,” “scheduled,” “forecasts,” “intends,” “anticipates” or “does not anticipate,” “continues,” “plans,” “estimates,” or “believes,” and similar expressions or variations of such words and phrases or statements stating that certain actions, events or results “may,” “could,” “would,” “might,” or “will” be taken, occur or be achieved) are not statements of historical fact and may be forward-looking statements.

Forward-looking statements are based on the opinions and estimates of management as of the date such statements are made. We believe that the expectations reflected in these forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct, and such forward-looking statements included in, or incorporated by reference into, this Annual Report should not be unduly relied upon. This information speaks only as of the date of this Annual Report.

Readers are cautioned that it would be unreasonable to rely on any such forward-looking statements and information as creating any legal rights, and that the statements and information are not guarantees and may involve known and unknown risks and uncertainties, and that actual results are likely to differ (and may differ materially) and objectives and strategies may differ or change from those expressed or implied in the forward-looking statements or information as a result of various factors. Such risks and uncertainties include global economic risks such as the occurrence of a pandemic, risks associated with our ramp-up to commercial production of REE carbonate (“**RE Carbonate**”), risks associated with the potential recovery of radioisotopes for use in the production of medical isotope therapeutics, and risks generally encountered in the exploration, development, operation, and closure of mineral properties and processing and recovery facilities, as well as risks related to the proposed establishment of a U.S. Uranium Reserve and risks related to any additional or future recommendations of the U.S. Nuclear Fuel Working Group not benefiting us in any material way. Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements, including, without limitation the following risks (the “**Risk Factor Summary**”):

- global economic risks, including the occurrence of unforeseen or catastrophic events, such as the emergence of a pandemic or other widespread health emergency (or concerns related thereto), which could create economic and financial disruptions and require us to reduce or cease operations at some or all of our facilities for an indeterminate period of time, and which could have a material impact on our business, operations, personnel and financial condition;
- risks associated with Mineral Reserve and Mineral Resource estimates, including the risk of errors in assumptions or methodologies;
- risks associated with changes to applicable Mineral Reserve and Mineral Resource estimates disclosure rules and regulations;
- risks associated with estimating mineral extraction and recovery, forecasting future price levels necessary to support mineral extraction and recovery, and our ability to increase mineral extraction and recovery in response to any increases in commodity prices or other market conditions;
- uncertainties and liabilities inherent to conventional mineral extraction and recovery and/or *in situ* recovery (“**ISR**”);
- risks associated with our ramp-up to commercial production of RE Carbonate and potentially other REE and REE-related value-added processes and facilities, at our White Mesa Mill (the “**White Mesa Mill**” or the “**Mill**”) in Utah or elsewhere including the risk: that we may not be able to produce RE Carbonate that meets commercial specifications at commercial levels or at all, or at acceptable cost levels; of not being able to secure adequate supplies of uranium and REE bearing ores in the future at satisfactory costs to us; of not being able to increase our sources of uranium and REE bearing ores to meet future planned production goals; of not being able to sell the RE Carbonate we produce at acceptable prices to us; of not being able to successfully construct and operate an REE separation facility, and potentially other downstream REE activities, including metal-making and alloying, in the future, which are currently being evaluated; of legal and regulatory challenges and delays; and the risk of technological or market changes that could impact the REE industry or our competitive position;
- risks associated with the establishment of a U.S. Uranium Reserve, being subject to appropriation by the U.S. Congress, and details of implementation of the U.S. Uranium Reserve;
- risks associated with any additional recommendations of the U.S. Nuclear Fuel Working Group not benefiting us;
- risks associated with the change in administration, or its lack of support of mining, uranium mining, nuclear energy or other aspects of our business, including not supporting the proposed establishment of a U.S. Uranium Reserve included in the COVID-Relief and Omnibus Spending Bill passed by the U.S. Congress in December 2020;
- geological, technical and processing problems, including unanticipated metallurgical difficulties, less than expected recoveries, ground control problems, process upsets, and equipment malfunctions;
- risks associated with the depletion of existing Mineral Resources through mining or extraction, without replacement with comparable Mineral Resources;
- risks associated with identifying and obtaining adequate quantities of other uranium-bearing materials not derived from conventional material and sourced by third parties (“**Alternate Feed Materials**”) and other feed sources required for the operation of our Mill;
- risks associated with labor costs, labor disturbances, and unavailability of skilled labor;
- risks associated with the availability and/or fluctuations in the costs of raw materials and consumables used in our production processes;
- risks and costs associated with environmental compliance and permitting, including those created by changes in environmental legislation and regulation, and delays in obtaining permits and licenses that could impact expected mineral extraction and recovery levels and costs;
- actions taken by regulatory authorities with respect to mineral extraction and recovery activities;
- risks associated with our dependence on third parties in the provision of transportation and other critical services;
- risks associated with our ability to obtain, extend or renew land tenure, including mineral leases and surface use agreements, on favorable terms or at all;
- risks associated with our ability to negotiate access rights on certain properties on favorable terms or at all;
- risks associated with potential information security incidents, including cybersecurity breaches;
- risks that we may compromise or lose our proprietary technology or intellectual property in certain circumstances, which could result in a loss in our competitive position and/or the value of our intangible assets;
- risks associated with us potentially not being able to successfully develop, attract and retain qualified management personnel in the future, given that the number of individuals with significant experience in the uranium, vanadium, REE and radioisotope industries is relatively small;
- the adequacy of our insurance coverage;
- uncertainty as to reclamation and decommissioning liabilities;
- the ability of our bonding companies to require increases in the collateral required to secure reclamation obligations;
- the potential for, and outcome of, litigation and other legal proceedings, including potential injunctions pending the outcome of such litigation and proceedings;
- our ability to meet our obligations to our creditors;
- our ability to access credit facilities on favorable terms;
- risks associated with our relationships with our business and joint venture partners;
- failure to obtain industry partner, government, and other third-party consents and approvals, when required;

- competition for, among other things, capital, mineral properties, and skilled personnel;
- failure to complete and integrate proposed acquisitions, or incorrect assessment of the value of completed acquisitions;
- risks posed by fluctuations in share price levels, exchange rates and interest rates, and general economic conditions;
- risks inherent in our and industry analysts' forecasts or predictions of future uranium, vanadium, copper and REE price levels, including the prices for RE Carbonates, REE oxides, REE metals and REE metal alloys;
- market prices of uranium, vanadium, copper and REEs, which are cyclical and subject to substantial price fluctuations;
- risks associated with our uranium sales, if any, being required to be made at spot prices, unless we are able to enter into new long-term contracts at satisfactory prices in the future;
- risks associated with our vanadium sales, if any, generally being required to be made at spot prices;
- risks associated with our proposed RE Carbonate sales, if any, being tied in whole or in part to REE spot prices;
- failure to obtain suitable uranium sales terms at satisfactory prices in the future, including spot and term sale contracts;
- failure to obtain suitable vanadium sales terms at satisfactory prices in the future;
- failure to obtain suitable copper or REE sales terms at satisfactory prices in the future;
- risks associated with any expectation that we will be successful in helping the U.S. Environmental Protection Agency ("EPA") and Navajo Nation address the clean-up of historic abandoned uranium mines;
- risks associated with asset impairment as a result of market conditions;
- risks associated with lack of access to markets and the ability to access capital;
- the market price of our securities;
- public resistance to nuclear energy or uranium extraction and recovery;
- governmental resistance to nuclear energy or uranium extraction or recovery;
- risks associated with inaccurate or nonobjective media coverage of our activities and the impact such coverage may have on the public, the market for our securities, government relations, permitting activities and legal challenges, as well as the costs to us of responding to such coverage;
- risks associated with potential impacts of public perceptions on our commercial relations;
- uranium industry competition, international trade restrictions and the impacts on world commodity prices of foreign state subsidized production;
- risks associated with foreign governmental actions, policies, laws, rules and regulations, and foreign state subsidized enterprises, with respect to REE production and sales, which could impact REE prices available to us and impact our access to global and domestic markets for the supply of REE-bearing ores and the sale of RE Carbonate and other REE products and services to world and domestic markets;
- risks associated with our involvement in industry petitions for trade remedies and the extension of the Russian Suspension Agreement, including the costs of pursuing such remedies and the potential for negative responses or repercussions from various interest groups, consumers of uranium, and participants in other phases of the nuclear fuel cycle, both domestically and abroad;
- risks associated with governmental actions, policies, laws, rules and regulations with respect to nuclear energy or uranium extraction and recovery;
- risks related to potentially higher than expected costs related to any of our projects or facilities; risks related to our ability to recover copper from our Pinyon Plain uranium project mineralized materials;
- risks related to stock price, volume volatility and recent market events;
- risks related to our ability to maintain our listing on the NYSE American and the Toronto Stock Exchange ("TSX");
- risks related to our ability to maintain our inclusion in various stock indices;
- risks related to dilution of currently outstanding shares from additional share issuances, depletion of assets, etc.;
- risks related to our securities, including securities regulations, and our lack of dividends;
- risks related to our issuance of additional common shares under our At-the-Market ("ATM") program or otherwise to provide adequate liquidity in depressed commodity market circumstances;
- risks related to acquisition and integration issues, or related to defects in title to our mineral properties;
- risks related to our method of accounting for equity investments in other companies could result in material changes to our financial results that are not fully within our control;
- risks related to any material weakness that may be identified in our internal controls over financial reporting. If we are unable to implement/maintain effective internal controls over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, negatively affecting the market price of our common stock;
- risks of amendment to mining laws, including the imposition of any royalties on minerals extracted from federal lands, the designation of national monuments, mineral withdrawals or similar actions, which could adversely impact our affected properties or our ability to operate our affected properties; and
- risks related to our potential recovery of radioisotopes at the Mill for use in the development and production of emerging cancer treatment therapeutics, including any expectation that: such potential recovery will be feasible or that the radioisotopes will be able to be sold on a commercial basis; all required licenses, permits and regulatory approvals will be obtained on a timely basis or at all; the cancer treatment therapeutics will receive all approvals and will be commercially successful; and the risk of technological or market changes that could impact the TAT industry or our competitive advantage.

Such statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, the following assumptions: that there is no material deterioration in general business and economic conditions; that there is no unanticipated fluctuation of interest rates and foreign exchange rates; that the supply and demand for, deliveries of, and the level and volatility of prices of uranium, vanadium, REEs and our other primary metals, radioisotopes and minerals develop as expected; that uranium, vanadium and REE prices required to reach, sustain or increase expected or forecasted production levels are realized as expected; that our proposed RE Carbonate production or any other REE activities, our proposed radioisotope program, or other potential production activities will be technically or commercially successful; that we receive regulatory and governmental approvals for our development projects and other operations on a timely basis; that we are able to operate our mineral properties and processing facilities as expected; that we are able to implement new process technologies and operations as expected; that existing licenses and permits are renewed as required; that we are able to obtain financing for our development projects on reasonable terms; that we are able to procure mining equipment and operating supplies in sufficient quantities and on a timely basis; that engineering and construction timetables and capital costs for our development and expansion projects and restarting projects on standby are not incorrectly estimated or affected by unforeseen circumstances; that costs of closure of various operations are accurately estimated; that there are no unanticipated changes in collateral requirements for surety bonds; that there are no unanticipated changes to market competition; that our Mineral Reserve and Mineral Resource estimates are within reasonable bounds of accuracy (including with respect to size, grade and recoverability) and that the geological, operational and price assumptions on which these are based are reasonable; that environmental and other administrative and legal proceedings or disputes are satisfactorily resolved; that there are no significant changes to regulatory programs and requirements that would materially increase regulatory compliance costs, bonding costs or licensing/permitting requirements; and that we maintain ongoing relations with our employees and with our business and joint venture partners.

This list is not exhaustive of the factors that may affect our forward-looking statements. Some of the important risks and uncertainties that could affect forward-looking statements are described further under the section headings: Item 1. *Description of the Business*; Item 1A. *Risk Factors*; and Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* of this Annual Report. Although we have attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated, or expected. We caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made. Except as required by law, we disclaim any obligation to subsequently revise any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. Statements relating to "Mineral Reserves" or "Mineral Resources" are deemed to be forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the Mineral Reserves and Mineral Resources described may be profitably extracted in the future.

We qualify all forward-looking statements contained in this Annual Report by the foregoing cautionary statements.

CAUTIONARY NOTE TO INVESTORS CONCERNING DISCLOSURE OF MINERAL RESOURCES AND RESERVES

We are a U.S. Domestic Issuer for United States Securities and Exchange Commission (“SEC”) purposes, most of our shareholders are U.S. residents, we are required to report our financial results under U.S. Generally Accepted Accounting Principles (“U.S. GAAP”) and our primary trading market is the NYSE American. However, because we are incorporated in Ontario, Canada and also listed on the TSX, this Annual Report also contains or incorporates by reference certain disclosure that satisfies the additional requirements of Canadian securities laws that differ from the requirements of U.S. securities laws.

On October 31, 2018, the SEC adopted the Modernization of Property Disclosures for Mining Registrants (the “New Rule”), introducing significant changes to the existing mining disclosure framework to better align it with international industry and regulatory practice, including Canadian National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* (“NI 43-101”), a rule developed by the Canadian Securities Administrators (the “CSA”) that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. The New Rule was codified as 17 CFR Subpart 220.1300 and 229.601(b)(96) (collectively, “S-K 1300”) and replaced SEC Industry Guide 7. Pursuant to the New Rule, issuers are required to comply with S-K 1300 as of their annual reports for the first fiscal year beginning on or after January 1, 2021, and earlier in certain circumstances.

As such, all mineral estimates constituting mining operations that are material to our business or financial condition included in this Annual Report for the year ended December 31, 2021, and in the documents incorporated by reference herein, have been prepared in accordance with both S-K 1300 and NI 43-101 and are supported by pre-feasibility studies and/or initial assessments prepared in accordance with both the requirements of S-K 1300 and NI 43-101. S-K 1300 and NI 43-101 both provide for the disclosure of: (i) “Inferred Mineral Resources,” which investors should understand have the lowest level of geological confidence of all mineral resources and thus may not be considered when assessing the economic viability of a mining project and may not be converted to a Mineral Reserve; (ii) “Indicated Mineral Resources,” which investors should understand have a lower level of confidence than that of a “Measured Mineral Resource” and thus may be converted only to a “Probable Mineral Reserve”; and (iii) “Measured Mineral Resources,” which investors should understand have sufficient geological certainty to be converted to a “Proven Mineral Reserve” or to a “Probable Mineral Reserve.” **Investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into Mineral Reserves as defined by S-K 1300 or NI 43-101. Investors are cautioned not to assume that all or any part of an Inferred Mineral Resource exists or is economically or legally mineable, or that an Inferred Mineral Resource will ever be upgraded to a higher category.**

All mineral disclosure reported in this Form 10-K has been prepared in accordance with the definitions of both S-K 1300 and NI 43-101.

S-K 1300 Definitions:

- **Development Stage Issuer:** is an issuer that is engaged in the preparation of mineral reserves for extraction on at least one material property.
- **Development Stage Property:** is a property that has mineral reserves disclosed, pursuant to S-K 1300, but no material extraction.
- **Exploration Stage Issuer:** is an issuer that has no material property with Mineral Reserves disclosed.
- **Exploration Stage Property:** is a property that has no mineral reserves disclosed.
- **Feasibility Study:** is a comprehensive technical and economic study of the selected development option for a mineral project, which includes detailed assessments of all applicable modifying factors, as defined in S-K 1300, together with any other relevant operational factors, and detailed financial analyses that are necessary to demonstrate, at the time of reporting, that extraction is economically viable. The results of the study may serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project.
 - (1) A feasibility study is more comprehensive, and with a higher degree of accuracy, than a pre-feasibility study. It must contain mining, infrastructure, and process designs completed with sufficient rigor to serve as the basis for an investment decision or to support project financing.
 - (2) The confidence level in the results of a feasibility study is higher than the confidence level in the results of a pre-feasibility study. Terms such as full, final, comprehensive, bankable, or definitive feasibility study are equivalent to a feasibility study.
- **Indicated Mineral Resource:** is 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.

- **Inferred Mineral Resource:** is 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.
- **Initial Assessment:** is a preliminary technical and economic study of the economic potential of all or parts of mineralization to support the disclosure of mineral resources. The initial assessment must be prepared by a qualified person and must include appropriate assessments of reasonably assumed technical and economic factors, together with any other relevant operational factors, that are necessary to demonstrate at the time of reporting that there are reasonable prospects for economic extraction. An initial assessment is required for disclosure of mineral resources but cannot be used as the basis for disclosure of mineral reserves.
- **Measured Mineral Resource:** is 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.
- **Mineral Reserve:** is 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.
- **Mineral Resource:** is 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.
- **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.
- **Preliminary Feasibility Study (or Pre-Feasibility Study):** is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a qualified person has determined (in the case of underground mining) a preferred mining method, or (in the case of surface mining) a pit configuration, and in all cases has determined an effective method of mineral processing and an effective plan to sell the product.
 - (1) A pre-feasibility study includes a financial analysis based on reasonable assumptions, based on appropriate testing, about the modifying factors and the evaluation of any other relevant factors that are sufficient for a qualified person to determine if all or part of the indicated and measured mineral resources may be converted to mineral reserves at the time of reporting. The financial analysis must have the level of detail necessary to demonstrate, at the time of reporting, that extraction is economically viable.
 - (2) A pre-feasibility study is less comprehensive and results in a lower confidence level than a feasibility study. A pre-feasibility study is more comprehensive and results in a higher confidence level than an initial assessment.
- **Preliminary Market Study:** is a study that is sufficiently rigorous and comprehensive to determine and support the existence of a readily accessible market for the mineral. It must, at a minimum, include product specifications based on preliminary geologic and metallurgical testing, supply and demand forecasts, historical prices for the preceding five or more years, estimated long term prices, evaluation of competitors (including products and estimates of production volumes, sales, and prices), customer evaluation of product specifications, and market entry strategies. The study must

provide justification for all assumptions. It can, however, be less rigorous and comprehensive than a final market study, which is required for a full feasibility study.

- **Probable Mineral Reserve:** is the economically mineable part of an indicated and, in some cases, a measured mineral resource.
- **Proven Mineral Reserve:** is the economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.
- **Qualified Person:** is an individual who is:
 - (1) a mineral industry professional with at least five years of relevant experience in the type of mineralization and type of deposit under consideration and in the specific type of activity that person is undertaking on behalf of the registrant; and
 - (2) an eligible member or licensee in good standing of a recognized professional organization at the time the technical report is prepared. For an organization to be a recognized professional organization, it must:
 - (i) be either:
 - (A) an organization recognized within the mining industry as a reputable professional association; or
 - (B) a board authorized by U.S. federal, state or foreign statute to regulate professionals in the mining, geoscience or related field;
 - (ii) admit eligible members primarily on the basis of their academic qualifications and experience;
 - (iii) establish and require compliance with professional standards of competence and ethics;
 - (iv) require or encourage continuing professional development;
 - (v) have and apply disciplinary powers, including the power to suspend or expel a member regardless of where the member practices or resides; and
 - (vi) provide a public list of members in good standing.

CIM and NI 43-101 Definitions:

- **Feasibility Study:** A “feasibility study” is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable modifying factors, together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a pre-feasibility study.
- **Indicated Mineral Resource:** An “indicated mineral resource” is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An indicated mineral resource has a lower level of confidence than that applied to a measured mineral resource and may only be converted to a probable mineral reserve.
- **Inferred Mineral Resource:** An “inferred mineral resource” is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply, but not verify, geological and grade or quality continuity. An inferred mineral resource has a lower level of confidence than that applied to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to “indicated mineral resources” with continued exploration.
- **Measured Mineral Resource:** A “measured mineral resource” is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling, and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A measured mineral resource has a higher level of confidence than that applied to either an indicated mineral resource or an inferred mineral resource. It may be converted to a proven mineral reserve or to a probable mineral reserve.
- **Mineral Reserve:** A “mineral reserve” is the economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined or is extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which mineral reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a mineral reserve must be demonstrated by a pre-feasibility study or feasibility study.

- **Mineral Resource:** A “mineral resource” is a concentration or occurrence of solid 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 eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.
- **Modifying Factors:** “Modifying factors” are considerations used to convert mineral resources to mineral reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and governmental factors.
- **PEA:** A Preliminary Economic Assessment performed in accordance with NI 43-101. A Preliminary Economic Assessment is a study, other than a pre-feasibility study or feasibility study, which includes an economic analysis of the potential viability of mineral resources.
- **Pre-Feasibility Study:** A “pre-feasibility study” is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the modifying factors and the evaluation of any other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the mineral resource may be converted to a mineral reserve at the time of reporting. A pre-feasibility study is at a lower confidence level than a feasibility study.
- **Probable Mineral Reserve:** A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.
- **Proven Mineral Reserve:** A Proven Mineral Reserve is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.
- **Qualified Person:** means an individual who
 - (a) is an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, relating to mineral exploration or mining;
 - (b) has at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice;
 - (c) has experience relevant to the subject matter of the mineral project and the technical report;
 - (d) is in good standing with a professional association; and
 - (e) in the case of a professional association in a foreign jurisdiction, has a membership designation that
 - (i) requires attainment of a position of responsibility in their profession that requires the exercise of independent judgment; and
 - (ii) requires
 - A. a favorable confidential peer evaluation of the individual’s character, professional judgement, experience, and ethical fitness; or
 - B. a recommendation for membership by at least two peers, and demonstrated prominence or expertise in the field of mineral exploration or mining.

GLOSSARY OF TECHNICAL TERMS

The following defined technical terms are used in this Annual Report:

- **% U₃O₈ Eq:** equivalent uranium grade calculated by combining uranium content and copper content by taking into account commodity price and recovery factors.
- **APP:** An Aquifer Protection Permit, issued by ADEQ (see “Glossary of Regulatory Agencies and Exchanges” below).
- **Assay:** The testing of a metal or ore to determine its ingredients and quality.
- **Breccia:** A rock in which angular fragments are surrounded by a mass of fine-grained materials.
- **CAP:** A Corrective Action Plan.
- **Copper:** A red-brown metal, the chemical element of atomic number 29.
- **Cut-off grade:** The grade (i.e., the concentration of metal or mineral in rock) that determines the destination of the material during mining. For purposes of establishing “prospects of economic extraction,” the cut-off grade is the grade that distinguishes material deemed to have no economic value (it will not be mined in underground mining or if mined in surface mining, its destination will be the waste dump) from material deemed to have economic value (its ultimate

destination during mining will be the processing facility). Other terms used in similar fashion as cut-off grade include net smelter return, pay limit, and break-even stripping ratio.

- **EA:** Environmental Assessment prepared under NEPA for a mineral project.
- **EIS:** Environmental Impact Statement prepared under NEPA for a mineral project.
- **eU₃O₈:** This term refers to equivalent U₃O₈ grade derived by gamma logging of drill holes.
- **Extraction:** The process of physically extracting mineralized material from the ground. Exploration continues during the extraction process and, in many cases, mineralized material is expanded during the life of the extraction activities as the exploration potential of the deposit is realized.
- **FONSI:** Finding of No Significant Impact under NEPA, as defined below, for a mineral project.
- **Formation:** A distinct layer of sedimentary or volcanic rock of similar composition.
- **Grade:** Quantity or percentage of metal per unit weight of host rock.
- **GWDP:** A groundwater discharge permit, issuable by UDEQ.
- **Host Rock:** The rock containing a mineral or an ore body.
- **In-situ recovery or ISR:** The recovery, by chemical means, of the uranium component of a deposit without the physical extraction of uranium-bearing material from the ground. ISR utilizes injection of appropriate oxidizing chemicals into a uranium-bearing sandstone deposit by injection wells, with the uranium-bearing solution being removed by extraction wells; also referred to as “solution mining.”
- **Mineral:** A naturally formed chemical element or compound having a definite chemical composition and, usually, a characteristic crystal form.
- **Mineralization:** A natural occurrence, in rocks or soil, of one or more metal yielding minerals.
- **Mineralized material:** Material that contains mineralization (e.g., uranium, vanadium and/or copper) and that is not included in an SEC Reserve as it does not meet all of the criteria for adequate demonstration of economic or legal extraction.
- **Monazite:** a phosphate mineral with a chemical composition of (Ce,La,Nd,Th)PO₄. It is a naturally occurring uranium- and rare earth-bearing mineral.
- **NEPA:** The United States National Environmental Policy Act of 1969, as amended.
- **NOI:** A Notice of Intent, filed by Energy Fuels to a regulatory agency as a part of a licensing or permitting action related to a mineral project.
- **Open Pit:** Surface mineral extraction in which the mineralized material is extracted from a pit or quarry.
- **Ore:** Mineral-bearing rock that can be mined, processed and concentrated profitably under current or immediately foreseeable economic conditions. A company may only refer to reserves (as that term is defined in S-K 1300) as “ore.”
- **Ore body:** A mostly solid and fairly continuous mass of in-ground mineralization estimated to be economically mineable.
- **Outcrop:** That part of a geologic formation or structure that appears at the surface of the Earth.
- **PO:** Plan of Operations for a mineral project prepared in accordance with applicable United States Bureau of Land Management or United States Forest Service regulations.
- **Rare Earth Elements or REEs:** a group of seventeen metallic elements consisting of the fifteen lanthanide elements along with scandium and yttrium.
- **Reclamation:** The process by which lands disturbed as a result of mineral extraction activities are modified to support beneficial land use. Reclamation activity may include the removal of buildings, equipment, machinery, and other physical remnants of mining activities, closure of tailings storage facilities, leach pads, and other features, and contouring, covering and re-vegetation of waste rock, and other disturbed areas.
- **RoD or Record of Decision:** The final approval issued by a public land management agency for a PO.

- **Uranium:** a heavy, naturally radioactive, metallic element of atomic number 92. Uranium in its pure form is a heavy metal. Its two principal isotopes are U-238 and U-235, of which U-235 is the necessary component for the nuclear fuel cycle. However, “uranium” used in this Annual Report refers to triuranium octoxide, also called “ U_3O_8 ” and the primary component of “yellowcake,” and is produced from uranium deposits. It is the most actively traded uranium-related commodity.
- **Uranium concentrate:** a yellowish to yellow-brownish powder obtained from the chemical processing of uranium-bearing material. Uranium concentrate typically contains 70% to 90% U_3O_8 by weight. Uranium concentrate is also referred to as “yellowcake.”
- **V_2O_5 :** Vanadium pentoxide, or the form of vanadium typically produced at the White Mesa Mill, also called “black flake.”
- **Yellowcake:** Another name for Uranium Concentrate (U_3O_8).

GLOSSARY OF REGULATORY AGENCIES AND EXCHANGES

- **ADEQ:** The Arizona Department of Environmental Quality.
- **BLM:** The U.S. Bureau of Land Management, an agency of the United States Department of the Interior.
- **CRA:** The Canada Revenue Agency, of the Government of Canada.
- **DOC:** The U.S. Department of Commerce, an executive department of the federal government.
- **DOE:** The U.S. Department of Energy, a cabinet-level department of the United States Government.
- **DOI:** The U.S. Department of Interior, a federal executive department of the United States Government.
- **DWQ:** The Utah Division of Water Quality.
- **EIA:** The U.S. Energy Information Administration, a principal agency of the U.S. Federal Statistical System.
- **EPA:** The U.S. Environmental Protection Agency, an independent agency of the United States government.
- **MSHA:** The Mine Safety and Health Administration, an agency of the U.S. Department of Labor.
- **NRC:** The Nuclear Regulatory Commission, an independent agency of the United States government.
- **NYSE American:** The NYSE American stock exchange, a stock exchange based in New York, New York.
- **OSC:** The Ontario Securities Commission.
- **OSHA:** The Occupational Safety and Health Administration, an agency of the United States Department of Labor.
- **SEC:** The U.S. Securities and Exchange Commission, an independent agency of the United States federal government.
- **TCEQ:** The Texas Commission on Environmental Quality.
- **TSX:** The Toronto Stock Exchange, a stock exchange located in Toronto, Ontario, Canada.
- **UDAQ:** The Utah Division of Air Quality.
- **UDEQ:** The Utah Department of Environmental Quality.
- **UDOGM:** The Utah Division of Oil, Gas and Mining.
- **USACE:** The U.S. Army Corps of Engineers, an agency of the U.S. Department of Defense.
- **USFS:** The U.S. Forest Service, an agency of the United States Department of Agriculture.
- **USFW:** The U.S. Fish and Wildlife Service, an agency of the U.S. Department of the Interior.
- **WDEQ:** The Wyoming Department of Environmental Quality.
- **WDEQ-AQD:** The Air Quality Division of the WDEQ.
- **WDEQ-LQD:** The Land Quality Division of the WDEQ.
- **WDEQ-WQD:** The Water Quality Division of the WDEQ.
- **WSEO:** The Wyoming State Engineer’s Office

PART I

ITEM 1. DESCRIPTION OF BUSINESS

General Development of the Business

Corporate Structure

Energy Fuels Inc. (the “**Company**” or “**Energy Fuels**”) is an Ontario corporation with its corporate offices located in Lakewood, Colorado (a city in the Denver metropolitan area). It was incorporated on June 24, 1987 in the Province of Alberta under the name “368408 Alberta Inc.” In October 1987, 368408 Alberta Inc. changed its name to “Trevco Oil & Gas Ltd.” In May 1990, Trevco Oil & Gas Ltd. changed its name to “Trev Corp.” In August 1994, Trev Corp. changed its name to “Orogrande Resources Inc.” In April 2001, Orogrande Resources Inc. changed its name to “Volcanic Metals Exploration Inc.” On September 2, 2005, the Company was continued under the *Business Corporations Act* (Ontario). On March 26, 2006, Volcanic Metals Exploration Inc. acquired 100% of the outstanding shares of “Energy Fuels Resources Corporation.” On May 26, 2006, Volcanic Metals Exploration Inc. changed its name to “Energy Fuels Inc.” On November 5, 2013, the Company amended its Articles to consolidate its issued and outstanding, freely tradable Common Shares of the Company (the “**Common Shares**”) on the basis of one post-consolidation Common Share for every 50 pre-consolidation Common Shares (the “**Consolidation**”).

All of the Company’s assets, management and employees are located in the western United States. The Company’s assets, which include uranium, vanadium and REE extraction, recovery, permitting, evaluation and exploration assets, are held directly and indirectly, as the case may be, by the Company’s wholly owned subsidiaries Energy Fuels Holdings Corp. (“**EF Holdings**”) and Strathmore Minerals Corp. (“**Strathmore**”). All of the Company’s employees are employed by its subsidiary Energy Fuels Resources (USA) Inc. (“**EFUSA**”), a wholly owned subsidiary of EF Holdings, which also serves as operator of all of the Company’s properties. A diagram depicting the organizational structure of the Company and its active subsidiaries, including the name, U.S. state or Canadian province of incorporation, and proportion of ownership interest of each, is included as Exhibit 21.1 to this Annual Report. Energy Fuels also owns a number of inactive subsidiaries which have no material assets or liabilities and do not engage in any material business activities.

Each of the Company’s subsidiaries has its principal place of business and corporate office at 225 Union Blvd., Suite 600, Lakewood, Colorado 80228, USA, though additional support offices are located at the White Mesa Mill (the “**Mill**”) and ISR facilities. The registered office of EFUSA and principal place of business for the Company is at 225 Union Blvd., Suite 600, Lakewood, Colorado 80228, USA, and the registered office of the Company is located at 82 Richmond Street East, Suite 308 Toronto, Ontario, M5C 1P1, Canada. The Company’s website address is www.energyfuels.com.

The primary trading market for Energy Fuels’ Common Shares is the NYSE American under the trading symbol “UUUU,” and the Company’s Common Shares are also listed on the Toronto Stock Exchange (“**TSX**”) under the trading symbol “**EFR**.” Energy Fuels is a U.S. domestic issuer for SEC reporting purposes and, in addition, is a reporting issuer in all of the Canadian provinces other than in Quebec. Options on Energy Fuels’ Common Shares are traded on The Chicago Board Options Exchange. The Designated Primary Market Maker for the options is Group One Trading, LP. Citadel Securities is the Company’s Market Maker on the NYSE American.

In addition, as of December 31, 2021 the Company holds 9,439,857 shares of Virginia Energy Resources Inc. (TSXV:VUI; OTCQX:VEGYF) representing an approximate 14.8% equity interest in that company, and 13,735,186 shares of Consolidated Uranium Inc. (TSXV: CUR; OTCQB: CURUF) (“**CUR**”, f/k/a International Consolidated Uranium Inc.) representing an approximate 19.1% equity interest in the company.

Business Overview

Energy Fuels is engaged in conventional and *in situ* recovery (“**ISR**”) uranium extraction and recovery, along with the exploration, permitting, and evaluation of uranium properties in the United States. The Company also extracts and recovers vanadium from certain of its uranium projects, as market conditions warrant. In 2021, the Company commenced its ramp-up to commercial production of rare earth element (“**REE**”) carbonate (“**RE Carbonate**”), another byproduct of the uranium recovery process, and is evaluating the potential to recover isotopes from its existing process streams needed for emerging targeted alpha therapy (“**TAT**”) cancer therapeutics.

The Company's Mill, located near Blanding, San Juan County, Utah, is the only conventional uranium, vanadium and REE recovery facility operating in the U.S., having a licensed capacity of over 8 million pounds of U₃O₈ per year. In addition to uranium, the Mill can recover vanadium as a co-product of mineralized material produced from certain of its projects in Colorado and Utah and from solutions in its tailings impoundment system, as market conditions warrant. The Mill is also currently producing RE Carbonate from various uranium- and REE-bearing ores acquired from third parties and is actively

engaged in discussions to secure its own sources of monazite sands or other REE deposits in furtherance of a fully integrated U.S.-based REE supply chain. In addition, Energy Fuels recovers uranium from other uranium-bearing materials not derived from conventional material, referred to as “Alternate Feed Materials,” at its Mill, thereby recycling materials back into the market that would otherwise be lost to direct disposal.

With its uranium, vanadium, REE and potentially radioisotope production, the Mill is quickly becoming a critical minerals hub for the U.S. Uranium, which is the fuel for carbon-free, emission-free baseload nuclear power, is one of the cleanest forms of energy in the world. The REEs we are now producing are used for the manufacture of permanent magnets for electric vehicles, wind turbines and other clean energy and modern technologies, and the radioisotopes we are evaluating for recovery from our REE and uranium processing streams have the potential to provide the isotopes needed for emerging TAT cancer-fighting therapeutics. The very heart of our business – uranium and rare-earth production and recycling – helps us play a big part in addressing global climate change, reducing air pollution, and making the world a cleaner and healthier place.

In terms of conventional mining, the Company owns uranium and uranium/vanadium properties and projects in various stages of exploration, permitting, and evaluation, as well as fully permitted uranium and uranium/vanadium projects on standby.

Energy Fuels also owns the Nichols Ranch Uranium Recovery Facility in Wyoming (the “**Nichols Ranch Project**”), which is a fully permitted uranium ISR facility with a licensed capacity of 2 million pounds of U₃O₈ per year, and the Alta Mesa Project in Texas (the “**Alta Mesa Project**”), which is also a fully permitted ISR uranium production facility with a licensed capacity of 1.5 million pounds of U₃O₈ per year, both of which are currently on standby.

ISR Operations

The Company conducts its ISR activities through (i) its Nichols Ranch Project in northeast Wyoming, which it acquired in June 2015 through its acquisition of Uranerz Energy Corporation (“**Uranerz**”), and (ii) its Alta Mesa Project in south Texas, which the Company acquired in June 2016 through its acquisition of Mesteña Uranium, LLC (“**Mesteña**”), which is now named EFR Alta Mesa LLC (“**EFR Alta Mesa**”).

The Nichols Ranch Project includes: (i) a licensed and operating ISR processing facility (the “**Nichols Ranch Plant**”); (ii) licensed and operating ISR wellfields (the “**Nichols Ranch Wellfields**”); (iii) additional licensed ISR wellfields planned for future production (the “**Jane Dough Property**”), and; (iv) a licensed satellite ISR uranium project (the “**Hank Project**”), which will include an ISR satellite processing plant (the “**Hank Satellite Plant**”) that, when constructed, will produce loaded-resin, and associated planned wellfields (the “**Hank Property**”). See “*The Nichols Ranch ISR Project*” under Item 2 below. Also through the acquisition of Uranerz, the Company acquired the West North Butte property (the “**West North Butte Property**”) and the North Rolling Pin property (the “**North Rolling Pin Property**”), as well as the Arkose Mining Venture (the “**Arkose Mining Venture**”), which is a joint venture of Wyoming ISR properties held 81% by Energy Fuels.

The Nichols Ranch Project is an ISR facility currently on standby that recovers uranium through a series of injection and recovery wells. Using groundwater fortified with oxygen and sodium bicarbonate, uranium is dissolved within a deposit. The uranium-bearing groundwater is then collected in a series of recovery wells and pumped to the Nichols Ranch Plant where the uranium is extracted from the water. The Nichols Ranch Plant creates a yellowcake slurry that is transported by truck to the White Mesa Mill, where it is dried and packaged into drums that are shipped to uranium conversion facilities.

Construction of the Nichols Ranch Plant, other than the elution, drying and packaging circuits, was completed in 2013, and it commenced uranium recovery activities in the second quarter of 2014. In September of 2015, the Company commenced construction of an elution circuit at the Nichols Ranch Plant, which was completed and began operations in February 2016. The Nichols Ranch Project was placed on standby in 2020. As a result, the Company recovered *de minimis* pounds of U₃O₈ from the Project in 2021 and expects to recover *de minimis* quantities of U₃O₈ in 2022. Nichols Ranch is expected to be able to ramp back up to commercial production levels with limited required capital within approximately twelve months of a production decision. See Part II, Item 7 “*Outlook: ISR Activities*.”

The Alta Mesa Project is a fully licensed, permitted and constructed ISR processing facility that has an operating capacity of 1.5 million pounds of uranium per year and comprises a total of 195,501 contiguous acres of land. The Alta Mesa Project is currently on standby and ready to resume production, as market conditions warrant. It is expected to be able to reach commercial production levels with limited required capital within approximately twelve months of a production decision. See “*The Alta Mesa Project*” under Part I, Item 2 below.

Conventional Operations

The Company conducts its conventional uranium, REE, vanadium and potential medical isotope extraction and recovery activities through the Mill, which is the only operating conventional uranium, REE and vanadium processing facility in the



United States. The Mill located near Blanding, San Juan County, Utah, is centrally located such that it can be fed by a number of the Company's uranium and uranium/vanadium projects in Colorado, Utah, Arizona and New Mexico, as well as by ore purchases or toll milling arrangements with third parties in the region, as market conditions warrant.

The Mill is licensed to process 2,000 tons of ore per day. It is primarily a uranium recovery facility but can also recover REEs and vanadium. The Mill is also evaluating the potential to recover certain radioisotopes from its existing process streams that can be used for medical purposes. In addition, the Mill can recycle other uranium-bearing materials not derived from conventional ore, known as Alternate Feed Materials, for the recovery of uranium, alone or in combination with other metals. In this regard, the Company is currently evaluating a number of potential Alternate Feed Materials for the recovery of REEs in addition to uranium.

The Mill has historically operated on a campaign basis, whereby mineral processing occurs as mill feed, contract requirements, as market conditions warrant. Over the years, the Company's own, and third-party owned, conventional uranium properties in Utah, Colorado, Arizona and New Mexico have been both active and on standby in response to changing market conditions. From 2007 through 2014, running on a campaign basis, the Mill recovered on average over 1 million pounds of U₃O₈ per year from conventional sources, including its La Sal Project, Daneros Project, and Tony M property in Utah (the latter two of which were sold in 2021, see Part I, Item 1 "*Development of the Business — Major Transactions over the Past Five Years*"); its Arizona 1 Project and Pinenut Project (which is currently almost fully reclaimed) in Arizona; and Alternate Feed Materials. During 2016, the Mill recovered a total of 680,000 pounds of U₃O₈, of which 433,000 pounds were recovered from conventional materials from the Company's Pinenut Project and 248,000 pounds from processing Alternate Feed Materials. During 2017, the Mill recovered 310,000 pounds of U₃O₈ from processing tailings pond solutions and 1,000,000 pounds from processing Alternate Feed Materials, of which a total of 360,000 pounds were for the Company's account and 950,000 pounds were for the account of third parties. During 2018, the Mill recovered 215,719 pounds of U₃O₈ from processing tailings pond solutions and 561,628 pounds from processing Alternate Feed Materials, of which a total of 82,709 pounds were for the Company's account and 448,919 pounds were for the account of third parties under a tolling arrangement. In late 2018, the Mill shifted to producing vanadium from tailings pond solutions and, during 2019, 1,807,732 pounds of V₂O₅ were produced from tailings pond solutions for the Company's own account, and no uranium was produced at the Mill. During 2020, the Company recovered approximately 190,500 pounds of U₃O₈ at the Mill from in-circuit uranium inventories extracted from the previous year's vanadium pond-return campaign, and from Alternate Feed Materials, as well as approximately 67,000 pounds of V₂O₅ from in-process solutions from the 2019 vanadium pond-return campaign. During 2021, the Company began ramping up production of RE Carbonate, while recovering *de minimis* quantities of uranium and vanadium. See Part II, Item 7 "*Outlook: Conventional Extraction and Recovery Activities*."

During 2021, the Company recovered *de minimis* quantities of U₃O₈ at the Mill. The Company is also ramping up its commercial production of a mixed RE Carbonate, having so far produced approximately 200 tons of mixed RE Carbonate at the Mill, which it sold to REE separation facilities outside of the U.S. in 2021. To the extent not sold, the Company expects to stockpile mixed RE Carbonate at the Mill for future separation and other downstream REE processing at the Mill or elsewhere. See Part II, Item 7 "*Outlook: Rare Earth Sales*."

During 2022, the Company expects to recover 100,000 to 120,000 pounds of U₃O₈ and 300 to 450 tonnes of total rare earth oxide ("TREO") at the Mill. Part II, Item 7 "*Outlook: Overview: Extraction and Recovery Activities Overview*."

In addition, the Company currently has approximately 691,000 pounds of finished U₃O₈ inventory held at the Mill and the conversion facilities owned by ConverDyn and Cameco, along with another 355,000 pounds of U₃O₈ contained in stockpiled Alternate Feed Material and mineralized material inventory that can be recovered in the future for the proposed U.S. Uranium Reserve or as general market conditions warrant. In addition, there remains an estimated 1.0 to 3 million pounds of solubilized recoverable V₂O₅ inventory remaining in the Mill's tailings facility awaiting future recovery, as market conditions may warrant. See Part II, Item 7 "*Outlook: Conventional Extraction and Recovery Activities*."

The Company continues to receive and process Alternate Feed Materials at the Mill, as well as low-grade mineralized material from the cleanup of a conventional mine in northwest New Mexico. At the Company's permitted Pinyon Plain Project, standby and environmental compliance activities continued during 2021, including activities to replace the Company's existing General Permits with an Individual Permit, as issued by the Arizona Department of Environmental Quality ("ADEQ"). The timing to extract and process mineralized material from the Pinyon Plain Project will be based on market conditions, available financing, and sales requirements. The Company's Pinenut Project, where mineral extraction activities occurred until September 2015, has been depleted and is now almost fully reclaimed, with clean closure pending the Company's submittal of a Clean Closure Report to ADEQ, which is expected to occur in 2022. The Company also pursued a small-scale test mining campaign targeting vanadium at its La Sal Complex in 2018 and early 2019, along with rehabilitation of existing mine workings, which ceased in

early 2020. All the Company's other conventional properties and projects are currently in the permitting process or on standby pending improvements in market conditions.

The Company also owns the Sheep Mountain Project (the “**Sheep Mountain Project**”), which is a conventional uranium extraction project located in Wyoming. Due to its distance from the Mill, the Sheep Mountain Project is not expected to be a source of feed material for the Mill. The Sheep Mountain Project consists of permitted open pit and underground extraction components (the “**Sheep Mountain Extraction Operation**”) and a planned processing facility to process extracted mineralized material (the “**Sheep Mountain Processing Operation**”), which has not yet been permitted.

The Company's principal conventional properties include the following:

- the Mill, a 2,000 ton per day uranium, vanadium and REE processing facility located near Blanding, Utah, held through the Company's subsidiary EFR White Mesa LLC. See “*The White Mesa Mill*” under Part I, Item 2;
- the Pinyon Plain Project, which is a fully permitted uranium project with all surface facilities and a shaft in place (see “*The Pinyon Plain Project*” under Part I, Item 2);
- the Wate project (the “**Wate Project**”), which is a uranium deposit in the permitting stage; the Arizona 1 project (the “**Arizona 1 Project**”), which is a fully permitted uranium project on standby; and the EZ properties (“**EZ Properties**”), which are uranium deposits in the exploration and evaluation stage. All the Company's Arizona Strip properties are held by the Company's subsidiary EFR Arizona Strip LLC, with the exception of the Wate Project, which is held by the Company's subsidiary Wate Mining Company LLC. See “*Non-Material Mineral Properties – Other Conventional Projects – Arizona Strip*” under Part I, Item 2;
- the Roca Honda Uranium Project (the “**Roca Honda Project**”), which is located near the town of Grants, New Mexico, held by the Company's subsidiaries Strathmore Resources (US), Ltd. and Roca Honda Resources LLC. See “*The Roca Honda Project*” under Part I, Item 2;
- the Sheep Mountain Project, which is a uranium project located near Jeffrey City, Wyoming, including permitted open pit and underground components held by the Company's subsidiary Energy Fuels Wyoming Inc. See “*The Sheep Mountain Project*” under Part I, Item 2;
- the Bullfrog Project (the “**Bullfrog Project**”), which is located in south central Utah near the town of Ticaboo, and which is held by the Company's subsidiary EFR Henry Mountains LLC. See “*Bullfrog Project*” under Part I, Item 2;
- the La Sal complex of uranium and uranium/vanadium projects (the “**La Sal Project**”) (see “*The La Sal Project*” under Part I, Item 2) and the Whirlwind uranium/vanadium project (the “**Whirlwind Project**”), both of which are located near the Colorado/Utah border (the “**Colorado Plateau**”) and, in addition to nearby exploration properties, are held by the Company's subsidiary EFR Colorado Plateau LLC. See “*Non-Material Mineral Properties – Other Conventional Projects – Colorado Plateau*” under Part I, Item 2; and
- a number of non-core uranium properties, which are held in various of the Company's subsidiaries. See “*Non-Material Mineral Properties*” under Part I, Item 2.

See also Part I, Item 1. “*Development of the Business: Major Transactions over the Past Five Years*” for a description of the Company's recent sale of certain of its non-core conventional uranium mining assets to CUR.

Mineral Exploration

Energy Fuels holds a number of exploration properties in the Colorado Plateau, Arizona Strip, and Powder River Basin Districts. Energy Fuels conducted intermittent exploration drilling on numerous projects in the period from February 2007 through December 2013. Several of those projects have been abandoned or sold. No further exploration drilling has been performed at these properties since 2013. See “*Non-Material Mineral Properties*” under Part I, Item 2 below.

The Company's Rare Earth Elements Business

On April 13, 2020, the Company announced its entry into the REE sector by embarking on a program to evaluate the production of REEs and uranium at the Mill from uranium and REE-bearing mineralized materials, thereby taking a step towards bringing the REE supply chain back to the U.S.

REEs are a group of 17 chemical elements (the 15 elements in the lanthanum series, plus yttrium and scandium) that have a variety of industrial, energy, and defense uses, including advanced permanent magnets for electric vehicles and wind turbines, communications technology, clean energy production, consumer electronics, defense systems, lasers and numerous other applications. See “*The Rare Earth Element Market*” below.

On November 3, 2020, the Company announced it had produced a mixed RE Carbonate on a pilot scale at the Mill, using existing Mill infrastructure and technologies, along with the contained uranium, from a sample of monazite sands from a North American source. Monazite sands are a valuable natural uranium ore and also one of the highest-grade REE minerals in the world. The RE Carbonate is an intermediate product which is sent to an REE separation facility for separation into individual REE oxides, which is the next step in producing usable REE products. See “*The Rare Earth Element Market*” below.

On December 14, 2020, the Company announced it had entered into a three-year supply agreement with The Chemours Company (NYSE:CC) (“**Chemours**”) to acquire natural monazite sands from Chemours’ Offerman Mineral Sand Plant in Georgia for processing at the Mill for the production of a marketable mixed RE Carbonate, as well as for the recovery of the contained uranium, representing an important step toward re-establishing a fully integrated U.S. REE supply chain.

On March 1, 2021, the Company announced an agreement in principle with Neo Performance Materials Inc. (“**Neo**”) under which the Company will process monazite sands into a mixed RE Carbonate at the Mill for use as feed material for Neo’s rare earth separations facility in Sillamäe, Estonia (“**Silmet**”), thereby creating a new REE production initiative spanning European and North American critical material supply chains. Neo will then process the RE Carbonate into separated REE materials for use in REE permanent magnets and other rare earth-based advanced materials. Silmet has been separating REEs into commercial value-added products for more than 50 years. In addition to supplying RE Carbonate to Neo, Energy Fuels also announced it is evaluating the potential to develop its own separation capabilities at the Mill, or nearby, and possibly adding metals, alloys, and REE permanent magnets manufacturing capabilities. As a first step, the Company hired the French firm, Carester SAS (“**Carester**”), a leading global consultant in the production of separated REE products, to produce a scoping study, including capital and operating costs needed for full commercial scale REE separations capability at the Mill, which would be the next important step towards fully integrating a U.S. REE supply chain in the coming years, in addition to continuing to supply RE Carbonate to European markets over the long-term. Based on the results of the scoping work, the Company is evaluating installing a full separation circuit at the Mill to produce both “light” and “heavy” separated REE oxides in the coming years, subject to successful licensing, financing, and commissioning and continued strong market conditions, and has hired Carester to support these REE separation initiatives.

During Q1-2022, the Company began commercially separating La and Ce from its RE Carbonate on a small scale using an existing solvent extraction circuit at the Mill. This represents the first commercial level REE separation to occur in the U.S. in many years. The Company has been performing laboratory-scale REE separations for the last several months on a 24/7 basis, successfully executing the La, Ce, and NdPr separations at high-purities and with excellent recoveries.

On April 21, 2021, the Company announced the execution of a non-binding memorandum of understanding (“**MOU**”) for the supply of natural monazite sands from IperionX Limited (“**IperionX**”) (formerly, Hyperion Metals Limited) Titan Project in Tennessee, if and when the project is developed and mined. IperionX’s Titan Project covers a large area of heavy mineral sands properties in Tennessee prospective for titanium, zircon, Monazite and other valuable minerals such as high-grade silica sand and other refractory minerals.

On April 23, 2021, the Company announced that the U.S. Department of Energy (“**DOE**”) Office of Fossil Energy and National Energy Technology Laboratory had exercised their option to award Energy Fuels, working with a team from Penn State University, an additional \$1.75 million to complete a feasibility study on the production of REE products from natural coal-based resources, as well as from other materials such as REE-containing ores like the natural monazite sands the Company is currently processing at the Mill. This award follows the DOE providing Energy Fuels a \$150,000 contract in 2020 for the successful completion of a conceptual design for the same initiative, resulting in a total award to Energy Fuels of \$1.9 million. The feasibility study is intended to support a cost estimate for the production of individually separated rare earth oxides and rare earth metals and alloys from coal-based resources or other resources, including monazite, within the U.S., with a focus on REEs for the production of commodity and defense-related products.

On July 7, 2021, the Company announced that the first container (approximately 20 tonnes of product) of an expected 15 containers of mixed RE Carbonate had been successfully produced by Energy Fuels at the Mill and was *en route* to Neo’s Silmet rare earth separations facility in Estonia. During 2021, the Company delivered approximately 270 tonnes of mixed RE Carbonate to Neo’s Silmet facility for separation into individual REE oxides, and expects to deliver approximately 650 to 1,000 tonnes of RE Carbonate to Silmet in 2022. See Part II, Item 7 “*Outlook: Update on Rare Earth Element Initiative*.” This commercial-scale production of RE Carbonate by Energy Fuels from a U.S. mined rare earth resource positions Energy Fuels as the only company in North America that currently produces a Monazite-derived, enhanced REE material. The physical delivery of this product also represents the launch of a new, environmentally responsible REE supply chain that allows for source validation and tracking from mining through to final end-use applications for manufacturers in North America, Europe, Japan, and other nations.

On December 15, 2021, the Company announced the execution of an MOU with Nanoscale Powders LLC (“NSP”) for the development of a novel technology for the potential production of REE metals, subject to the finalization of definitive agreements. Producing REE metals and alloys is a key step in a fully integrated REE supply chain, after commercial production of separated REE oxides and before the manufacture of neodymium iron boron (“NdFeB”) magnets used in electric vehicles, wind generation and other clean energy and advanced technologies. The production of REE metals utilizing this technology would involve feeding anhydrous REE chloride materials, which are free of water, into a molten sodium bath. A rapid reaction takes place between the molten sodium and the REE chlorides. The process is highly exothermic, releasing energy, so the molten sodium acts to control the rate of the reaction. The reaction products are REE metal and sodium chloride, commonly known as salt. The Company believes the NSP sodium reduction of REE metals has several advantages over the industry standard REE metal making method, which utilizes electrolytic reduction of REE oxides in molten lithium fluoride/REE fluoride baths. First, the NSP process does not have any associated air emissions, and therefore presents a significant improvement over the current technology, which emits carbofluoromethane (CF₄) gas, which is a powerful greenhouse gas emitter. Second, it does not consume graphite crucible materials and is expected to utilize significantly less energy and labor. Finally, the NSP process requires anhydrous chloride feeds, which we believe can be generated directly from rich liquor streams coming from the Mill's planned REE separations circuit. This could eliminate the need for oxalate precipitation and calcination of materials destined for REE metal making. As a result of these factors, the Company believes operating costs could potentially be significantly less than conventional REE metal-making methods.

See also “*The Rare Earth Element Market*,” below, for further details on the REE market and Part II, Item 7. “*Rare Earth Sales*” and “*Update on Rare Earth Element Initiative*” for further details on the above-referenced REE developments.

The Company’s mixed RE Carbonate production from monazite sand ores utilizes only a very small amount of the Mill’s ore production capacity. The Company has a goal to increase production in the future to approximately 15,000 tons or more of monazite sands per year. For comparison, the Mill is licensed and designed to process 2,000 tons of ore per day on average, or 720,000 tons of ore per year. Therefore, 15,000 tons would represent approximately 2% of its capacity. If the Company is successful in securing 15,000 tons of ore similar to the Chemours monazite, the Company would be able to produce approximately 50% of current U.S. REE demand in a mixed RE Carbonate. Furthermore, since monazite is typically comprised of approximately 55% recoverable uranium and REEs, the total volume of the resulting waste is significantly lower than for most other Mill feeds. The Company currently has 1.5 million tons of existing capacity in its fully constructed 1,000-year design tailings impoundments. Therefore, the annual waste streams from monazite ore processing are expected to represent less than 1% of existing tailings capacity.

Because the Company is obtaining monazite from Chemours’ existing mining facilities in Georgia, U.S. and utilizing its existing Mill, it has been able to avoid the significant time and cost required to license and develop new facilities. In addition, since the monazite sands are currently being separated from other mineral sands in Georgia and elsewhere, the Company will only incur the cost to acquire the monazite, thereby avoiding mining costs and associated risks. If the Company proceeds to develop REE separation and other capabilities at the Mill or elsewhere, additional capital expenditure would be required for those activities.

There are a number of risks inherent to the Company’s REE activities. See “*Item 1A. Risk Factors*” under Item 1A, below.

The Company’s Strategic Alliance for the Development of Radioisotopes for Medical Therapeutics

On July 28, 2021, the Company announced the execution of a Strategic Alliance Agreement with RadTran, a technology development company focused on closing critical gaps in the procurement of medical isotopes for TAT cancer therapeutics and other applications.

TAT is an in-development method of targeted radionuclide therapy of various cancers. It employs radioactive substances which undergo alpha decay to treat diseased tissue at close proximity. It has the potential to provide highly targeted treatment, especially to microscopic tumor cells. As in diagnostic nuclear medicine, appropriate alpha-emitting radionuclides can be chemically bound to a targeting biomolecule, such as a peptide, which carries the combined radiopharmaceutical to a specific treatment point (the cancerous cells). During the last decade, radiolabeled peptides that bind to different receptors on the tumors have been investigated as potential therapeutic agents both in the preclinical and clinical settings. Peptides, such as octreotide, alpha-melanocyte-stimulating hormone analogues, arginine-glycine-aspartic acid-containing peptides, bombesin derivatives, and others may all be feasible for use with alpha-emitters.

The primary advantage of alpha particle emitters over other types of radioactive sources is their very high linear energy transfer and relative biological effectiveness. By comparison, beta particle emitters such as yttrium-90 can travel considerable distances beyond the immediate tissue before depositing their energy, thereby causing damage to surrounding healthy tissues, while alpha

particles deposit their energy in 70–100 µm long tracks, thereby causing significantly less harm to surrounding healthy tissues. Further, alpha particles are more likely than other types of radiation to cause double-strand breaks to DNA molecules, which is one of several effective causes of cell death. In other words, the high level of radiobiological effectiveness of alpha particles, in comparison with beta emissions, requires fewer particle tracks to induce cell death.

Though many alpha emitters exist, useful isotopes need to have sufficient energy to cause damage to cancer cells, while at the same time have a half-life that is long enough to provide a therapeutic dose without remaining long enough to damage surrounding healthy tissue. Clinically effective alpha particle-emitting isotopes for cancer therapy should therefore have a short half-life, which will limit long-term radiation exposure and allow for the production, preparation, and administration of these isotopes for clinical use and application. Radium 223 dichloride is the first-in-class, commercially available targeted alpha therapy approved for the treatment of patients with metastatic castration-resistant prostate cancer with bone metastases. Given the established overall survival benefit conferred by radium 223 for patients with metastatic castration-resistant prostate cancer, several other targeted alpha therapies are being investigated in clinical trials across many tumor types.

Under its strategic alliance with RadTran, the Company is evaluating the feasibility of recovering Th-232 and Ra-226 from its existing RE Carbonate and uranium process streams at the Mill and, together with RadTran, is evaluating the feasibility of recovering Ra-228 from the Th-232 and Th-228 from the Ra-228 and concentrating Ra-226 to commercial specifications at the Mill using RadTran technologies. Recovered Ra-228, Th-228 and Ra-226 would then be sold to pharmaceutical companies and others to produce Pb-212, Ac-225, Bi-213, Ra-224 and Ra-223, which are the leading medically attractive TAT isotopes for the treatment of cancer at this time. Existing supplies of these isotopes for TAT applications are in short supply, and methods of production are costly and currently cannot be scaled to meet the demand created as new drugs are developed and approved. This is a major roadblock in the research and development of new TAT drugs as pharmaceutical companies wait for scalable and affordable production technologies to become available. Under this initiative, the Company has the potential to recover valuable isotopes from its existing process streams, therefore recycling back into the market material that would otherwise be lost to disposal for use in treating cancer.

Activities being undertaken by the Company at this time include evaluations of the technical feasibility of recovering Th-232, Ra-228 and Th-228 from the Mill's RE Carbonate process streams, and Ra-226 from the Mill's uranium process streams; the permitting and licensing required to separate and recover Th-232, Ra-228, Th-228 and Ra-226 at the Mill; and the commercial feasibility of this project.

There are a number of risks inherent to the Company's isotope activities. See "*Item 1A. Risk Factors*" under Item 1A, below.

San Juan County Clean Energy Foundation

On September 16, 2021, the Company announced its establishment of the San Juan County Clean Energy Foundation (the "**Foundation**"), a fund specifically designed to contribute to the communities surrounding the Mill in Southeastern, Utah. Energy Fuels deposited an initial \$1 million into the Foundation at the time of formation and anticipates providing ongoing annual funding equal to 1% of the Mill's future revenues, providing funding to support local priorities. The Foundation will focus on supporting education, the environment, health/wellness, and local economic development in the City of Blanding, San Juan County, the White Mesa Ute Community, the Navajo Nation and other area communities.

Development of the Business: Major Transactions over the Past Five Years

Over the past five years, the Company has completed the following major transactions:

On October 27, 2021 (the "**Closing Date**"), CUR and the Company jointly announced the closing of a transaction (the "**CUR Sale**") whereby CUR acquired a portfolio of Energy Fuels' non-core conventional uranium projects located in Utah and Colorado, including the Daneros mine, the Tony M mine (formerly a part of the Bullfrog Project), the Rim mine, the Sage Plain project (formerly a part of the La Sal Project), and several DOE leases located in Colorado, in exchange for the following consideration:

- \$2,000,000 in cash on the Closing Date;
- the issuance of 11,860,101 Common Shares of CUR, constituting 19.9% of the issued and outstanding Common Shares of CUR immediately after the Closing Date, at a price per share equal to the closing price of the Common Shares of CUR on the TSX Venture Exchange on the last trading day immediately prior to issuance;
- an additional CDN\$3,000,000 in cash payable on or before the 18-month anniversary of the Closing Date;
- an additional CDN\$3,000,000 in cash payable on or before the 36-month anniversary of the Closing Date; and
- the commitment to make production payments on a per-project basis totaling CDN\$5,000,000 as set forth pursuant to individual production payment agreements executed on the Closing Date.

As a part of the CUR Sale, the parties entered into a number of mine operating agreements pursuant to which the Company will act, through EFUSA, as operator to the sale projects and pending Daneros mine litigation (see Part II, Item 8, Note 18) “*Commitments and Contingencies*,” below) in accordance with a program and budget negotiated annually by the parties, in exchange for which the Company will receive reimbursement for all direct costs in addition to an overhead allocation and management fee.

These non-core conventional uranium project assets met held-for-sale criteria, but as these assets had no carrying value, there were only asset retirement obligations of \$0.27 million separately presented for the year ended December 31, 2021.

In August 2018, the Company acquired royalties on the Nichols Ranch Project, along with royalties on several operating, standby and advanced-stage ISR projects in Wyoming owned and operated by Power Resources, Inc., a wholly-owned subsidiary of Cameco Corporation.

In May 2018, the Company sold its non-core Reno Creek Property to Uranium Energy Corp.

2021 Corporate Developments

On March 1, 2021, the Company and Neo announced a new rare earth production initiative spanning European and North American critical material supply chains. Under an agreement in principle signed on March 1, 2021 by the companies' respective affiliates, subject to completion of definitive agreements, Energy Fuels will process natural monazite sands into an RE Carbonate beginning in March or April 2021 and ship a portion of that production to Silmet. Neo will then process the RE Carbonate into separated REE materials for use in REE permanent magnets and other REE-based advanced materials. The Company also announced that, in addition to supplying RE Carbonate to Neo, Energy Fuels is evaluating the potential to develop U.S. separation capabilities at the Mill, or nearby, as it works to increase its monazite sand supplies, thereby fully integrating a U.S. REE supply chain in the coming years, in addition to supplying RE Carbonate to European markets. See “*The Company’s Rare Earth Elements Business*,” above.

Effective March 18, 2021, the Company filed a new base shelf registration statement on Form S-3 with the SEC allowing the Company to issue Common Shares, warrants, subscription receipts, preferred shares, debt securities, or any combination of such securities as units, in amounts, and at prices, and on terms to be determined based on market conditions at the time of sale, and as set forth in an accompanying prospectus supplement, for an aggregate offering amount of up to US\$300 million during the 36-month period that the statement remains effective. On March 16, 2021, the Company received a receipt for a corresponding base shelf prospectus in Canada for an aggregate offering amount in Canada of up to US\$300 million.

On April 9, 2021, the Company filed a prospectus supplement to its effective U.S. registration statement on Form S-3 in connection with its Controlled Equity OfferingSM Sales Agreement with Cantor Fitzgerald & Co., H.C. Wainwright & Co., LLC and Roth Capital Partners, LLC, dated May 6, 2019. Pursuant to the ATM prospectus supplement, the Company is permitted, at its discretion from time to time, to sell up to an additional \$33.5 million of Common Shares under its ATM program, with sales only being made on the NYSE American at then-prevailing market prices, or any other existing trading market of the common shares in the United States.

On April 21, 2021, the Company announced the execution of a non-binding MOU for the supply of natural monazite sands from IperionX’s Titan Project in Tennessee, if and when the project is developed and mined. IperionX’s Titan Project covers a large area of heavy mineral sands properties in Tennessee prospective for titanium, zircon, Monazite and other valuable minerals such as high-grade silica sand and other refractory minerals. See “*The Company’s Rare Earth Elements Business*,” above.

On April 23, 2021, the Company announced that the DOE Office of Fossil Energy and National Energy Technology Laboratory had exercised their option to award Energy Fuels, working with a team from Penn State University, an additional \$1.75 million to complete a feasibility study on the production of REE products from natural coal-based resources, as well as from other materials such as REE-containing ores like the natural monazite sands the Company is currently processing at the Mill. This award follows the DOE providing Energy Fuels a \$150,000 contract in 2020 for the successful completion of a conceptual design for the same initiative, resulting in a total award to Energy Fuels of \$1.9 million. See “*The Company’s Rare Earth Elements Business*,” above.

On April 27, 2021, the Company announced it had engaged Carester to prepare a scoping study for the development of a solvent extraction REE separation circuit at the Mill. Based in Lyon, France, Carester is a leading global consultant in the production of separated REE products, with expertise in designing, constructing, operating and optimizing REE production

facilities globally. Carester was engaged to support Energy Fuels' planned development of full commercial scale REE separation capabilities at the Mill, utilizing the Mill's existing equipment and infrastructure to the extent applicable, to create a continuous, integrated and optimized rare earth production sequence. Carester's scoping work included an evaluation of the Mill's current monazite leaching process, preparation of an REE separation flow sheet, capital and operating expense estimates, incorporation of new technologies where applicable, and recommendations on equipment vendors. Based on the results of the scoping work, the Company is evaluating installing a full separation circuit at the Mill to produce both "light" and "heavy" separated REE oxides in the coming years, subject to successful licensing, financing, and commissioning and continued strong market conditions, and has hired Carester to support these REE separation initiatives. See "*The Company's Rare Earth Elements Business*," above.

On June 7, 2021, the Company filed a prospectus supplement to its effective U.S. registration statement on Form S-3 in connection with its Controlled Equity OfferingSM Sales Agreement with Cantor Fitzgerald & Co., H.C. Wainwright & Co., LLC and Roth Capital Partners, LLC, dated May 6, 2019. Pursuant to the ATM prospectus supplement, the Company is permitted, at its discretion from time to time, to sell up to an additional \$50 million of Common Shares under its ATM program, with sales only being made on the NYSE American at then-prevailing market prices, or any other existing trading market of the common shares in the United States.

On July 7, 2021, the Company announced that the first container (approximately 20 tonnes of product) of an expected 15 containers of mixed RE Carbonate had been successfully produced by Energy Fuels at the Mill and was *en route* to Neo's Silmet REE separations facility in Estonia. This commercial-scale production of RE Carbonate by Energy Fuels from a U.S. mined REE resource positioned Energy Fuels as the only company in North America that currently produces a Monazite-derived, enhanced REE material. The physical delivery of this product also represented the launch of a new, environmentally responsible REE supply chain that allows for source validation and tracking from mining through to final end-use applications for manufacturers in North America, Europe, Japan, and other nations. See "*The Company's Rare Earth Elements Business*," above.

On July 29, 2021, the Company announced the execution of a Strategic Alliance Agreement with RadTran, LLC to evaluate the recovery of thorium, and potentially radium, from the Company's existing RE Carbonate and uranium process streams for use in the production of medical isotopes for emerging TAT cancer therapeutics. This initiative complements the Company's existing uranium and RE Carbonate businesses, as it investigates the potential recovery of isotopes in existing process streams at the Mill for medical purposes. RadTran is a Denver, Colorado-based technology development company focused on closing critical gaps in the procurement of medical isotopes for these applications. See "*The Company's Strategic Alliance for the Development of Radioisotopes for Medical Therapeutics*," above.

On September 16, 2021, the Company announced its establishment of its new Foundation, a fund specifically designed to contribute to the communities surrounding the Mill in Southeastern, Utah by providing funding to support local priorities. The Foundation will focus on supporting education, the environment, health/wellness, and local economic development in the City of Blanding, San Juan County, the White Mesa Ute Community, the Navajo Nation and other area communities. See "*San Juan County Clean Energy Foundation*," above.

On October 27, 2021, CUR and the Company jointly announced the closing of a transaction whereby CUR acquired a portfolio of Energy Fuels' non-core conventional uranium projects located in Utah and Colorado, including the Daneros mine, the Tony M mine (formerly a part of the Bullfrog Project), the Rim mine, the Sage Plain project, and several DOE leases located in Colorado, in consideration for a 19.9% share ownership interest in CUR and other consideration. See "*Development of the Business: Major Transactions over the Past Five Years*," above.

On December 15, 2021, the Company announced the execution of an MOU with NSP for the development of a novel technology for the potential production of REE metals, subject to the finalization of definitive agreements. We believe this technology, which was initially developed by NSP, and will be advanced by the Company and NSP working together, has the potential to revolutionize the rare earth metal making industry by reducing costs of production, reducing energy consumption, and significantly reducing greenhouse gas emissions. Producing REE metals and alloys is a key step in a fully integrated REE supply chain, after production of separated REE oxides and before the manufacture of NdFeB magnets used in electric vehicles, wind generation and other clean energy and advanced technologies. See "*The Company's Rare Earth Elements Business*," above.

2022 Corporate Developments

On January 3, 2022, the Company filed a prospectus supplement to its effective U.S. registration statement on Form S-3 in connection with its Controlled Equity OfferingSM Sales Agreement with Cantor Fitzgerald & Co., H.C. Wainwright & Co., LLC

and Roth Capital Partners, LLC, dated May 6, 2019. Pursuant to the ATM prospectus supplement, the Company is permitted, at its discretion from time to time, to sell up to an additional \$50 million of Common Shares under its ATM program, with sales only being made on the NYSE American at then-prevailing market prices, or any other existing trading market of the common shares in the United States.

On January 25, 2022, the Company's Board of Directors appointed Ms. Ivy V. Estabrooke to serve as a director of the Company. Dr. Estabrooke is currently the Vice President of Operations and Corporate Affairs at IDbyDNA Inc., a venture backed commercial stage biotech company. She has led innovative research and development programs in both the public and private sectors delivering technology solutions for national security and public health challenges. Prior roles include as a technical program manager for the US Department of the Navy, the executive director of the State of Utah's technology based economic development agency and science advisor to the Governor of Utah. She earned her doctorate in neuroscience at Georgetown University in 2005, received a master's degree in national resource strategy from the National Defense University in 2013 and a bachelor's degree in biological sciences from Smith College in 1998. She serves on the board of the Girl Scouts of Utah and a member of the Utah District Export Council.

On the same date, the Board approved the appointment of two new officers to the Company: the appointment of then-current Staff Attorney Julia C. Hoffmeier to Corporate Counsel & Assistant Corporate Secretary; and the appointment of then-current Controller Sarai C. Luksch to Chief Accounting Officer & Controller. All such appointments were effective as of the date the appointments were made.

Company Strategy

Energy Fuels intends to continue to strengthen its position as a leading uranium extraction and recovery company in the United States, supporting that goal through uranium recovery, Alternate Feed Materials processing, third-party processing, and potential land clean-up work. The Company's strategy is to maintain and increase its ability to increase uranium production in improved market conditions through the Mill (currently operating), the Nichols Ranch and Alta Mesa ISR Projects (both currently on standby), a large uranium resource base, and existing conventional projects on standby, under construction, and/or in permitting. In addition, the Company produces vanadium along with uranium from certain of its properties, as market conditions warrant, from its large vanadium resource base. In 2022, the Company expects to continue ramping up its commercial production of RE Carbonate, along with uranium from monazite sands, Alternate Feed Materials and other ores. See "*The Company's Rare Earth Elements Business*," above. The Company will also continue to evaluate the potential for recovering certain radioisotopes from its existing process streams for use in making medical isotopes for emerging cancer treatment therapies. See "*The Company's Strategic Alliance for the Development of Radioisotopes for Medical Therapeutics*," above.

As a result of the foregoing, we intend to engage in the following activities:

- in response to improving uranium market conditions and the procurement of new long-term sales commitments, the Company intends to evaluate activities aimed towards increasing uranium production at all or some of our production facilities, including the currently operating Mill, as well as the Nichols Ranch ISR Facility, Alta Mesa ISR Project, La Sal Project, Whirlwind Project and the Pinyon Plain Project, all of which are currently on standby, as market conditions may warrant;
- continue to pursue U.S. government support for U.S. uranium production, including support for the establishment of a U.S. Uranium Reserve or other remedies;
- continue the Company's ongoing efforts to develop a fully integrated U.S. REE supply chain, including its initiatives for: the production of RE Carbonate from monazite sands sourced from third-party sources; the potential acquisition of additional sources of monazite sands; the evaluation, permitting, and potential construction of an onsite REE separation facility at the Company's Mill site; and the advancement of new technologies for the production of REE metals (see "*The Company's Rare Earth Elements Business*," above);
- continue: Alternate Feed Material processing, as well as pursue additional Alternate Feed Materials (including potential REE-bearing Alternate Feed Materials); third-party processing and other sources of feed for the Mill (including potential material generated from abandoned uranium mine ("AUM") and other land cleanup work); and, when market conditions warrant, pursue the recovery of uranium and/or vanadium dissolved in the Mill's tailings pond solutions;

- continue to carry out engineering, procurement and construction management activities at the Pinyon Plain Project in 2022, and maintain the property on standby until uranium prices improve or suitable long-term sales contracts can be procured;
- continue to maintain standby projects and facilities (including the Pinyon Plain Project, the Nichols Ranch Project, the Alta Mesa Project, the La Sal Project and the Whirlwind Project) in a state of readiness for the purpose of restarting mining activities, as market conditions may warrant. With the exception of the Whirlwind Project, which is expected to undertake rehabilitation work on the decline during spring/summer 2022, all of the Company's conventional projects are expected to remain on standby until market conditions improve, or are in the evaluation or permitting process;
- continue permitting activities for the Roca Honda Project through the end of 2022; and
- continue to evaluate the potential for recovering certain radioisotopes from its existing process streams for use in making medical isotopes for emerging cancer treatment therapies.

Uranium Sales

As a result of weak uranium market conditions that previously existed until mid-2021, both ISR and conventional uranium recovery have been maintained at reduced levels until such time as market conditions improve sufficiently. However, recent market improvements, along with the improved prospect of procuring new long-term sales commitments, have improved the outlook for future profitable production.

As of the date of this Annual Report, the Company has not entered into any uranium sales commitments for 2022, but is actively engaged in pursuing selective long-term uranium sales contracts. 2022 uranium production is expected to be added to existing inventories or sold on the spot market, if suitable pricing is available. Energy Fuels' significant uranium inventory provides the Company with financial flexibility, and the Company believes its existing inventories and new production may be worth significantly more in the future as a result of improving market conditions, government support for domestic uranium production, and/or future sales commitments. However, if suitable uranium price increases are observed in 2022, or if cash needs arise, the Company may elect to complete some discretionary uranium sales in 2022. The Company is also actively engaged in pursuing selective long-term uranium sales contracts.

Overview of Uranium Market

The primary use of uranium is to fuel nuclear power plants for the generation of carbon- and emission-free electricity.

According to the World Nuclear Association (“**WNA**”), as of February 2022, there were 437 operable nuclear reactors world-wide, which required approximately 162 million pounds of U₃O₈ fuel annually at full operation. Worldwide, there are currently 58 new reactors under construction with an additional 96 reactors on order or in the planning stage and 325 having been proposed.

According to data from TradeTech LLC (“**TradeTech**”), the world continues to require more uranium than it produces from primary extraction. The gap between demand and primary supply is filled by stockpiled inventories and secondary supplies.

According to the WNA, the United States currently has 93 operating reactors, two reactors under construction, and another 21 reactors on order, planned or proposed. According to the Nuclear Energy Institute (“**NEI**”), in 2020 the United States produced approximately 19.7% of its electricity from nuclear technology, while achieving an average capacity factor of 92.5%, leading all other carbon-free sources by a wide margin. According to the U.S. Energy Information Administration (“**EIA**”), U.S. utilities purchased approximately 48.9 million pounds of U₃O₈ in 2020. However, in 2020, the U.S. uranium production figures were withheld due to confidentiality concerns, which the Company believes are the result of low production figures.

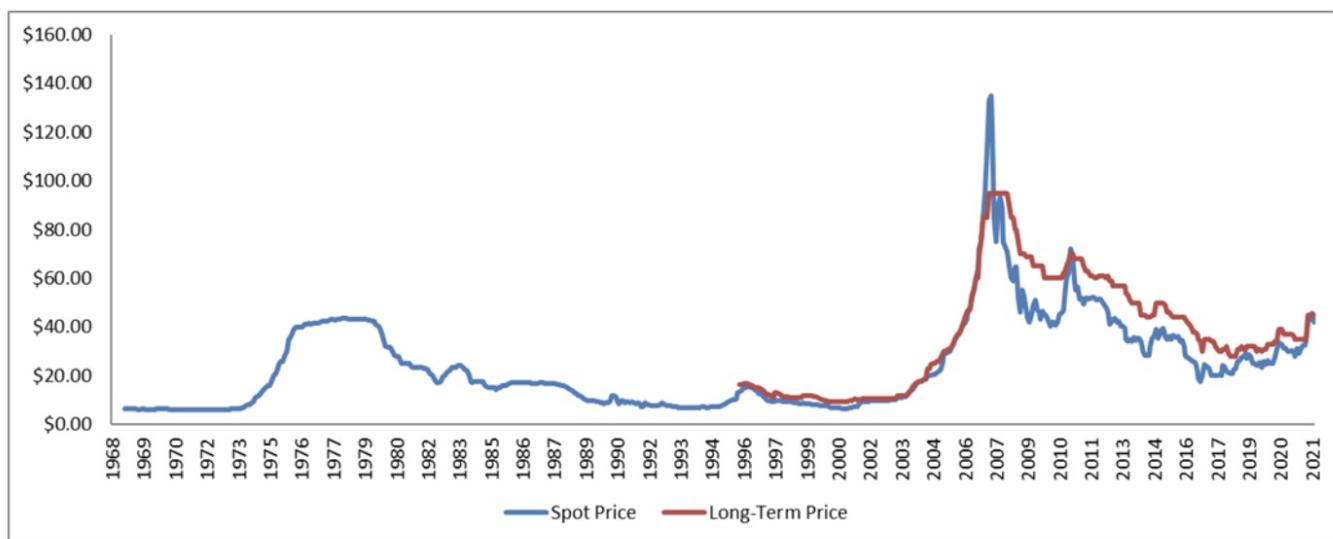
In 2021, investor interest in the uranium and nuclear sectors grew substantially, which the company believes was driven by global efforts to reduce carbon emissions. The European Union (“**EU**”) included nuclear in its taxonomy on a transitional basis, by adopting a Complementary Delegated Act recognizing the importance of nuclear energy in achieving decarbonization (WNA, February 2, 2022). In the U.S., the Bipartisan Infrastructure Law includes a \$6 billion civil nuclear credit program to support the continued operation of U.S. nuclear reactors (U.S. Department of Energy, February 11, 2022). China continues to lead the world in nuclear construction with 31 units added to their grid since the beginning of 2015 (WNA). China is planning to increase nuclear capacity to 70 gigawatts-electric (“**GWe**”) by 2025 from their previous goal of 58 GWe in 2020 (WNA; IEA, April 27, 2021), and construct 150 new reactors in the next 15 years (Bloomberg, November 2, 2021).

Uranium is not traded on an open market or organized commodity exchange, although the CME Group provides financially-settled uranium futures contracts. Typically, buyers and sellers negotiate transactions privately, either directly or through brokers and intermediaries. Spot uranium transactions typically involve deliveries that occur immediately and up to 12 months in the future. Term uranium transactions typically involve deliveries that occur more than 12 months in the future, with long-term transactions involving delivery terms of at least three years. Uranium prices, both spot and term, are primarily published by two independent market consulting firms, TradeTech and UxC, LLC (“UxC”), on a weekly and monthly basis, along with daily price indicators. Other brokers, including Uranium Markets LLC, Evolution Markets Inc. and Numerco Ltd., also publish daily average uranium prices.

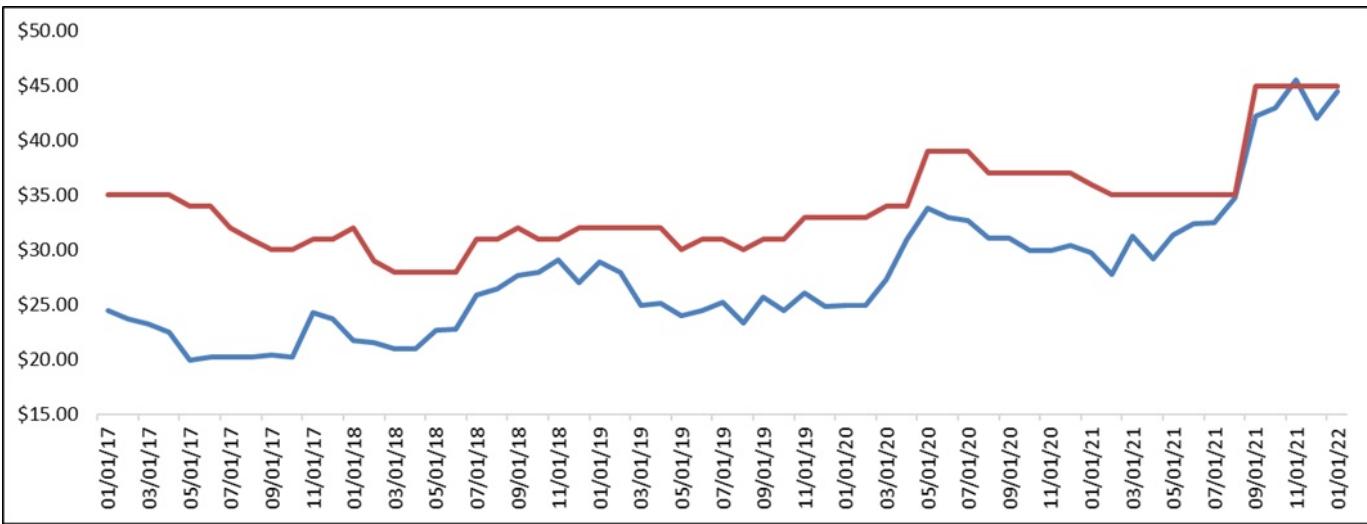
The spot and term prices of uranium are influenced by a number of global factors. For example, both the spot and term prices of uranium were negatively impacted by the accident at the Fukushima Daiichi Nuclear Plant in March 2011. The events at Fukushima created heightened concerns regarding the safety of nuclear plants and led to both temporary and permanent closures of nuclear plants around the world. The Fukushima incident has created downward pressure on uranium prices over the past nine years, which is still being felt today. In contrast, China is pursuing an aggressive nuclear program, with 53 units now operating, 18 new units under construction, 35 units which are planned, and 168 units that have been proposed, according to January 2022 WNA data. It remains to be seen whether Russia’s attack on the Ukraine will result in the United States and other western countries desiring to rely less on Russian uranium, conversion and enrichment services thereby increasing the demand for non-Russian sources of uranium and conversion and enrichment services, which could benefit the U.S. uranium mining industry. In addition, Ukraine has fifteen operating nuclear power plants (World Nuclear Association). The March 3, 2022 attack on the Zaporizhzhia Nuclear Power Plant by Russian forces raised concerns about a nuclear incident similar to the Fukushima accident, or more generally about the security of nuclear power plants in war zones, which could result in downward pressure on uranium prices.

Historically, most nuclear utilities have sought to purchase a portion of their uranium needs through mid- and long-term supply contracts, while other portions are bought on the spot market. According to EIA data, in 2020, U.S. utilities purchased 24% of their uranium on the spot market with the remaining 76% purchased under mid- and long-term contracts; through 2030, U.S. utilities have approximately 187.5 million pounds of unfilled uranium requirements (EIA, Uranium Marketing Annual Report, 2020). Buyers seek to balance the security of supply with the opportunity to take advantage of lower prices. For this reason, both buyers and sellers track current spot and term prices for uranium carefully, make considered projections as to future prices, and negotiate with one another on transactions which each deems favorable to their respective interests.

The graph, below, shows the monthly spot (blue line) and long-term (red line) uranium price from August 1969 up to February 2022 as reported by TradeTech (not adjusted for inflation):



To give a more recent perspective over the last five years, the graph below shows the monthly spot (blue line) and long-term (red line) uranium price from February 2017 up to February 2022 as reported by TradeTech (not adjusted for inflation):



According to monthly price data from TradeTech, uranium prices during 2021 were up \$11.60, or 38% for the year. Monthly spot prices began the year at \$30.40 per pound of U₃O₈ on December 31, 2020 and ended the year at \$42.00 per pound, reaching a high of \$45.50 per pound for the month of November 2021 and a low of \$27.75 per pound in February 2021. According to Trade Tech, the spot price was \$58.50 per pound on March 11, 2022. TradeTech price data also indicated that long-term U₃O₈ prices began 2021 at \$37.00 per pound and ended 2021 at \$45.00 per pound. The high long-term price for 2021 was \$45.00 per pound for the months of September through December 2021, and the low long-term price was \$35.00 per pound for the months of February through August 2021. The long-term price at February 28, 2022 was \$45.25 per pound.

Uranium Market Outlook and Uranium Marketing Strategy

World demand for clean, carbon-free, reliable, and affordable baseload electricity is growing. As a result of the expected growth of nuclear energy and the depletion of existing uranium mines and inventories, the Company believes the long-term fundamentals of the uranium industry remain positive. Despite the significant increase in uranium prices during 2021, the Company continues to believe that prices must rise to higher levels to support the new primary production that will be required to meet the increasing demand. We expect to see as more nuclear units constructed around the world, while primary mine production drops due to depletion of resources, reduced production and low prices. According to TradeTech, world uranium requirements continue to exceed primary mine production, with the gap being bridged by secondary supplies and excess uranium inventories in various forms that have already been mined. However, a large portion of global uranium production is state-owned and state-subsidized, and therefore not subject to normal market fundamentals. It is for this reason that the Company supports the creation of the proposed U.S. Uranium Reserve to ensure the U.S. has sufficient uranium mining capacity to meet national security and energy security needs. The Company estimates that, for 2020, well less than 1% of U.S. reactor demand was met by new production from U.S. uranium mines. The Company has believed for several years that market forces will cause uranium prices, and long-term contracting levels in particular, to return to levels that are sufficient to incentivize new mine production. However, it is the Company's belief that secondary supplies, inventories, and non-free market forces have delayed this recovery, though the Company has recently observed more interest in long-term contracts from utilities.

The Company believes prices likely hit a bottom in 2016, and the lows of 2016 have not been repeated since. During 2021, the COVID-19 pandemic continued to cause disruptions to uranium supply. In addition, 2021 saw significant increases in both spot and term prices, primarily due in part to increased demand primarily from traders, financial entities and intermediaries, including the launch of the Sprott Physical Uranium Trust ("SPUT") in July 2021 (TradeTech, NMR, July 23, 2021). In mid-August, SPUT announced the launch of an at-the-market ("ATM") offering program to issue up to \$300 million of units of the trust for the purpose of acquiring and holding physical uranium (TradeTech, NMR, August 20, 2021). In September, SPUT announced that it had increased the size of its ATM offering program to \$1.3 billion (TradeTech, NMR, September 10, 2021). During Q4-2021, the spot uranium price traded mostly in the low- to mid-\$40s per pound, and according to TradeTech, "[w]hile the market has largely been dominated by the Sprott Physical Uranium Trust since its launch in August, buying by the fund has been lower in recent weeks in the wake of growing concerns over COVID-19 and inflation, as well as the general downturn in global financial markets." (TradeTech, NMR, December 17, 2021). Indeed, December volume pulled back to 3.3 million pounds versus 8.9 million pounds in November. (TradeTech, NMR, December 31, 2021). Nonetheless, 2021 was a record year with over 95 million pounds having traded on the spot market for the year. (TradeTech, NMR, December 31, 2021).

The Company believes that certain uranium supply and demand fundamentals continue to point to higher prices in the future, including significant production cuts and increased demand from utilities, financial entities, traders, and producers. However, the Company also believes that while uranium market conditions have improved significantly in 2021, they still remain vulnerable primarily as a result of excess uranium supplies caused by large quantities of secondary uranium supplies, excess inventories, and non-market activities of state-owned enterprises. The Company also believes utilities, traders and financial entities are taking a “wait-and-see” approach to determine whether the significant price increases observed in 2021 are sustainable. As mentioned above, it remains to be seen whether Russia’s attack on the Ukraine will result in the United States and other western countries desiring to rely less on Russian uranium, conversion and enrichment services thereby increasing the demand for non-Russian sources of uranium and conversion and enrichment services, which could benefit the U.S. uranium mining industry. In addition, Ukraine has fifteen operating nuclear power plants (World Nuclear Association). The March 3, 2022 attack on the Zaporizhzhia Nuclear Power Plant by Russian forces raised concerns about a nuclear incident similar to the Fukushima accident, or more generally about the security of nuclear power plants in war zones, which could result in downward pressure on uranium prices.

The Company’s marketing strategy is to seek a base of earnings and cash flow through sales of a portion of its uranium into term contracts, to the extent such contracts are available at satisfactory prices, which has not been the case until recently. To gain exposure to increasing uranium prices, the Company seeks to sell a portion of its planned uranium extraction into contracts with market-related formulas, if available at satisfactory prices, and through future spot and term sales. Further exposure to increasing uranium prices can be generated through the Company’s ability to bring additional uranium extraction online in the future in response to increasing prices, which can be sold on a market-related or fixed basis at then prevailing prices.

The Company did not complete any material uranium sales in 2021, at its election, but is now actively engaged in pursuing selective long-term uranium sales contracts. It has maintained its uranium inventory for future sales in anticipation of higher uranium prices in the future and/or deliveries into term contracts.

While the Company does not currently forecast the need to complete any spot sales in 2022 for cash generation purposes, uranium inventories, along with expected uranium production in 2022, are expected to provide the Company with the flexibility to complete spot sales in 2022 in response to improved market conditions, should the Company desire to do so.

The Rare Earth Element Market

REEs are a group of 17 chemical elements (the 15 elements in the lanthanum series, plus yttrium and scandium) that are used in a variety of clean energy and advanced technologies, including wind turbines, electric vehicles (“EVs”), cell phones, computers, flat panel displays, advanced optics, catalysts, medicine, and national defense applications. Monazite, the source of REEs currently utilized by the Company, also contains significant recoverable quantities of uranium, which fuels the production of carbon-free electricity using nuclear technology. According to industry analyst Roskill, most demand for REE’s is in the form of separated REEs, “as most end-use applications require only one or two separated rare earth compounds or products.” (Roskill, Rare Earths, Outlook to 2030, 20th Edition). The main uses for REEs include: (i) battery alloys; (ii) catalysts; (iii) ceramics, pigments and glazes; (iv) glass polishing powders and additives; (v) metallurgy and alloys; (vi) permanent magnets; (vii) phosphors; and (viii) others (Adamas Intelligence). By volume, REEs used for permanent magnets (neodymium (Nd), praseodymium (Pr), dysprosium (Dy), and terbium (Tb)) and catalysts (cerium (Ce) and lanthanum (La)) comprised 60% of total consumption, yet over 90% of the value consumed.

Typical natural monazite sands from the southeast U.S. average about 55% TREO and 0.20% uranium, which is the typical grade of uranium found in uranium mines that have historically fed the Mill. Of the 55% TREO typically found in the monazite sands, the neodymium and praseodymium (“NdPr”) comprise approximately 22% of the TREO. NdPr are among the most valuable of the REEs, as they are the key ingredient in the manufacture of high-strength permanent magnets which are essential to the lightweight and powerful motors required in EVs and permanent magnet wind turbines used for renewable energy generation, as well as in an array of other modern technologies, including mobile devices and defense applications. Monazite also contains higher concentrations of “heavy” rare earths, including dysprosium (Dy) and terbium (Tb) used in permanent magnets, relative to other common REE ores. The Company is currently primarily focused on NdPr and, to a lesser extent, La, Ce and Sm.

The REE supply chain starts at the mine. REEs are mined both as a primary target, like the Mountain Pass REE mine in California, and as a byproduct, which is the case for Chemours’ Offerman Mineral Sand Plant, where the natural monazite sands are physically separated from the other mined sands mined. Mining creates an ore, which in the case of the Chemours material is the natural monazite sands that are physically separated from the other mined mineral sands. The ore will then go through a process of cracking and cleaning at the Mill that may include acids or caustic solutions, elevated temperature, and pressure to recover the uranium and free the REEs from the mineral matrix. After removal of the uranium and other

radionuclides, which will be sold into the commercial nuclear fuel cycle for the creation of carbon-free nuclear energy, this solution is cleaned of any remaining deleterious elements (including remaining radioactive elements) and made into an RE Carbonate, which is a form acceptable as a solvent extraction (“SX”) feedstock for REE separation. SX facilities then use solvents and a series of mixer-settlers for the separation of the REEs in the RE Carbonate from each other and to create the desired purified REE products (often as oxides) for the market or particular end user. Separated REE products are typically sold to various markets, depending on the use. Separated REE products can be made into REE metals and metal-alloys, which are used for magnets and other applications. At this time, the Mill is producing an RE Carbonate, a portion of which has been sold to Neo, and which is expected to be sold, potentially, to other third-party SX separation facilities for separation into individual separated REE products. The Mill is evaluating the potential to perform SX REE separation, and potentially other downstream REE activities, including metal-making and alloying, in the future at the Mill or elsewhere in the U.S.

REEs are commercially transacted in a number of forms and purities. Therefore, there is no single price for REEs collectively, but numerous prices for various REE compounds and materials. The primary value that the Company expects to generate in the short-to medium-term will come from NdPr, Ce, and La, as the price the Company receives from the sale of its RE Carbonate is tied to the prices of those REE oxides. In addition, the Company expects to produce separated REE oxides in the future. According to data from Asian Metal, NdPr Oxide (Pr_6O_{11} 25%; Nd_2O_3 75%) mid-point prices in China rose approximately 111% during the year from \$402 RMB/kg (about \$63.61/kg) to \$850 RMB/kg (about \$134.50/kg). The price for NdPr Oxide at February 28, 2022 was \$1,047 RMB/kg (about \$165.66/kg). Mid-point Ce Oxide (99.9%) rose about 26% during the year from \$2.15/kg to \$2.65/kg. The current price for Ce Oxide is \$2.65/kg (Asian Metal). Mid-point La Oxide (99.9%) prices fell about 5% during the quarter from \$1.50/kg to \$1.43/kg. The current price for La Oxide is \$1.43/kg (Asian Metal).

The REE market is dominated by China, which produces 83% of refined REE products with other Asia Pacific operations providing an additional 15%. According to WoodMacKenzie (formerly Roskill), “Prices for rare earths in the years to come will follow different trajectories based on their involvement with the magnet industry.” WoodMacKenzie forecasts that prices for magnet elements, including neodymium (Nd) and praseodymium (Pr), will remain elevated through 2050, supporting new primary and secondary supply. Prices for elements used as additives or fillers in magnets, namely terbium (Tb) and dysprosium (Dy), will see “short-term price support followed by a steady decline as supply availability improves.” Prices for other non-magnet elements, including cerium (Ce) and lanthanum (La), will remain stable at roughly the cost of production. Adamas Intelligence projects that global demand for magnet REE oxides to increase by five-fold between 2020 and 2030.

While China consumes the most REEs in its manufacturing industries, much of it is consumed in the manufacture of end-use goods for export and by non-Chinese companies operating within China. REE separation facilities are additionally located in Vietnam, India, as well as Silmet in Estonia, and use a variety of feedstocks and sources, with small-scale or experimental operational facilities located elsewhere (Russia included). The REE industry was primarily based on material extracted from monazites from 1891-1965, and monazites continued to provide substantial material through the late 1990s. The subsequent decline in monazite production stemmed from increased environmental concerns related to handling radioactivity and the resulting waste, with facilities struggling to adequately address the ore’s uranium and thorium content and stringent licensing requirements. The Mill, however, is licensed to process uranium and thorium-bearing materials and does not face those issues.

More recently, China began importing monazite and recovering its uranium as a feed source for the nuclear industry, while concurrently producing RE Carbonate as a feed source for the REE industry. The Company sees its commercial production of RE Carbonate as the first step in an effort to restore the REE supply chain in the U.S., where one currently does not exist. Multiple potential domestic sources of mined mineral sands, including monazites, exist in North America and are potential feedstocks for the Mill; in addition, there is one producer of REEs from hard rock mining in California, which currently ships its material to Asia. On a global level, there is a potential to acquire natural monazite sands from the following locations: Australia, South Africa, Madagascar, New Zealand, the Philippines, Indonesia, Brazil, Malaysia, Thailand, India, Russia, and others.

As demand for clean energy technologies and other advanced technologies, increases in the coming years, the Company expects demand and prices for REEs to increase. Increases in supply sources for REEs are expected in conjunction with anticipated rising REE prices.

The Vanadium Market

Vanadium is a metallic element that, when converted into ferrovanadium (“FeV”) (an alloy of vanadium and iron), is used primarily as an additive to strengthen and harden steel and make it anti-corrosive. According to market consultant FastMarkets, over 90% of FeV is used in the steel industry. In addition, vanadium is used in the aerospace and chemical industries, and continues to see interest in energy storage technologies, including vanadium redox flow batteries. China is the largest global producer of vanadium, with additional production coming from Russia, South Africa, and Brazil (Roskill). During 2021, the

mid-point price of vanadium pentoxide (V_2O_5) in Europe rose 62%, from \$5.40 per pound to \$8.75 per pound. As of March 11, 2022, the price of vanadium pentoxide was \$12.25 per pound. Vanadium prices were relatively flat near the end of the 2021 year, but with FastMarkets reporting that producers had been sold out of V_2O_5 and were looking to buy extra material (FastMarkets, December 17, 2021, “*Cobalt prices steady in thin trading, ...*”). As a result of such increase in demand, by January 2022, vanadium prices began to rise with “offers increasing for the second consecutive week amid material tightness.” (FastMarkets, January 28, 2022, “*Demand revival boosts EU soda ash price...*”). Since January, prices have continued to rise, “even prior to the invasion [of Ukraine by Russia] due to fears surrounding possible sanctions against Russia ... [t]his resulted in end-users in the steel industry, as well as traders, avoiding material with Russian origins and starting to build ‘safety stocks.’” FastMarkets, March 8, 2022, *European FeV prices continue to rise, so too the risk of ferro-niobium ‘switch’: sources*). However, as vanadium prices rise, there is a risk of substitution, as “ferro-niobium can be used interchangeably to meet the required tensile strength in some steel products.” (Ibid).

As a result of strengthening Vanadium markets, the Company sold 5,000 pounds of FeV in 2021 at a weighted average price of \$14.74 per pound. The Company expects to continue to sell vanadium from its inventory into rising markets if they continue, failing which the Company plans to maintain its vanadium inventory for future sales at opportune times. The Company currently has an estimated 1.0 to 3 million pounds of V_2O_5 in its tailings solutions which are available for future recovery, as market conditions warrant.

Competition

The uranium industry is highly competitive. The Company competes with mining and exploration companies for uranium sales, the acquisition of uranium mineral properties, and the procurement of equipment, materials and personnel necessary to explore, develop, and extract uranium from such properties. There is competition for a limited number of uranium acquisition opportunities, including competition with other companies having substantially greater financial resources, staff and facilities than the Company. As a result, the Company may encounter challenges in acquiring attractive properties, and exploring and advancing properties currently in the Company’s portfolio. In addition, Energy Fuels competes with other uranium recovery companies, along with traders, brokers, financial institutions, converters, enrichers, and other market actors, including some that are state-owned and state-subsidized, for uranium sales. Due to the Company’s limited capital and personnel and the relative size of its operations, the Company may be at a competitive disadvantage compared to some other companies with regard to exploration and, if warranted, development of mining properties and securing uranium sales. The Company believes that competition for acquiring mineral prospects and completing uranium sales will continue to be intense in the future.

The availability of funds for exploration, evaluation, permitting and construction of uranium projects is limited, and the Company may find it difficult to compete on an international scale with larger and more established uranium exploration and production companies for capital. The Company’s inability to continue exploration, advancement, and the acquisition of new properties due to lack of funding could have a material adverse effect on the Company’s future operations and financial position.

However, the Company believes it has a competitive advantage over its peers in the U.S. domestic uranium space to the extent it has diversified business opportunities, including its ability to produce vanadium as market conditions may warrant, its ability to recycle uranium through its Alternate Feed Materials processing business, its ability to recover RE Carbonate, along with uranium, from monazite sand ores and its potential ability to recover certain radioisotopes for use in TAT medical therapeutics.

Government Regulation

The Company’s properties and facilities are subject to extensive laws and regulations which are overseen and enforced by multiple federal, state and local authorities. These laws govern exploration, construction, extraction, recovery, processing, exports, various taxes, labor standards, occupational health and safety, waste disposal, protection and remediation of the environment, protection of endangered and protected species, toxic and hazardous substances, and other matters. Uranium minerals exploration, extraction, recovery, and processing are also subject to risks and liabilities associated with the perceived potential for impacts to the environment and disposal of waste products occurring as a result of such activities.

Compliance with these laws and regulations may impose substantial costs on the Company and may subject the Company to significant potential liabilities. Changes in these regulations could require the Company to expend significant resources to comply with new laws or regulations or changes to current requirements and could have a material adverse effect on the Company’s business operations. However, compliance with government regulations generally, including but not limited to environmental regulations, is an integral part of the Company’s day-to-day business and impacts virtually all of the Company’s capital expenditure and operating decisions at its facilities, as the Company’s facilities and operations must comply with this extensive array of environmental, health and safety laws and regulations. The costs of compliance with these laws and regulations are therefore well understood and assumed by the Company in all of its capital budgeting decisions, project analyses and cost and earnings projections. As all of the Company’s competitors in the uranium mining industry in the U.S. face the

same or similar regulatory requirements, the Company does not believe its need to comply with this extensive array of laws and regulations materially affects the Company's competitive position within the U.S. uranium mining industry.

Environmental Regulations

Exploration, development, and extraction activities are subject to environmental regulations which may prevent or delay the continuance of our activities. In general, our exploration, evaluation, and extraction activities are subject to federal and state laws and regulations relating to environmental quality and pollution control. Such laws and regulations increase the costs of these activities and may prevent or delay the commencement or continuance of a given operation. Specifically, we are subject to legislation regarding emissions into the environment, water discharges, and storage and disposition of hazardous wastes. In addition, legislation has been enacted which requires facility sites to be reclaimed in accordance with such legislation. Compliance with these laws and regulations has not had a material effect on our operations or financial condition to date.

Uranium milling in the U.S. is primarily regulated by the United States Nuclear Regulatory Commission (the “**NRC**”) pursuant to the *Atomic Energy Act of 1954*, as amended. Its primary function is to ensure the protection of employees, the public, and the environment from radioactive materials, and it also regulates most aspects of the uranium recovery process. The NRC regulations pertaining to uranium recovery facilities are codified in Title 10 of the Code of Federal Regulations.

On August 16, 2004, the State of Utah became an Agreement State for the regulation of uranium mills. This means that the primary regulator for the Mill is now the State of Utah Department of Environmental Quality (“**UDEQ**”) rather than the NRC. At that time, the Mill’s NRC Source Material License was transferred to the State of Utah and became Radioactive Materials License Number UT 1900479 (the “**Radioactive Materials License**”), which was renewed in January 2018 as Amendment #8 (Renewal), then reissued as a Revised Renewal on February 16, 2018, by UDEQ’s Division of Waste Management and Radiation Control (“**DWMRC**”). The Radioactive Materials License is up for renewal in February 2028. The State of Utah incorporates, through its own regulations or by reference, all aspects of Title 10 pertaining to uranium recovery facilities. When the State of Utah became an Agreement State, it required that a Groundwater Discharge Permit (“**GWDP**”) be put in place for the Mill. The GWDP is required for all similar facilities in the State of Utah, and specifically tailors the implementation of the state groundwater regulations to the Mill site. The State of Utah requires that every operating uranium mill have a GWDP, regardless of whether the facility discharges to groundwater. The GWDP for the Mill was finalized and implemented in March 2005, then renewed in January 2018. The GWDP is up for renewal in January 2023. The Mill also maintains a permit approval for air emissions with the UDEQ, Division of Air Quality.

Conventional uranium extraction is subject to regulation by a number of agencies including: (1) local county and municipal government agencies; (2) the applicable state divisions responsible for mining and protecting the environment within Utah, Colorado, Arizona, New Mexico, Texas and Wyoming; (3) the Bureau of Land Management (the “**BLM**”) and the United States Forest Service (the “**USFS**”) on public lands under their jurisdiction; (4) the U.S. Mine Safety and Health Administration (“**MSHA**”); (5) the United States Environmental Protection Agency (the “**EPA**”) for radon emissions from underground mines; and (6) other federal agencies, including without limitation the U.S. Fish and Wildlife Service (“**USFW**”), U.S. Army Corps of Engineers (“**USACE**”) and the DOE, where certain conditions exist. In addition, a uranium processing facility at the Sheep Mountain Project, if and when constructed, will be subject to regulation under the State of Wyoming, as an NRC Agreement State, as a uranium processing facility and for permanent disposal of the resulting tailings.

The provisions of the Atomic Energy Act and its regulations that are applicable to uranium milling also apply to our ISR facilities in Wyoming and Texas. The Nichols Ranch Project and the Alta Mesa Project each have a Source Material License. The Nichols Ranch Source Material License was originally issued by the NRC; however, the State of Wyoming became an NRC Agreement State on September 30, 2018 and the Wyoming Department of Environmental Quality (“**WDEQ**”) - Land Quality Division (“**WDEQ-LQD**”) subsequently assumed all management and oversight functions. The Nichols Ranch Source Material License was issued most recently by the NRC on March 22, 2017 as Amendment No. 5, which is currently in timely renewal with WDEQ-LQD. Texas, an NRC Agreement State since 1963, issued the Alta Mesa Radioactive Material License through its Texas Commission on Environmental Quality (“**TCEQ**”). The Alta Mesa Radioactive Material License was originally issued in October 2002 and has been amended 18 times, with the most recent being on June 17, 2021. The Alta Mesa Radioactive Material License is currently in timely renewal. ISR facilities are also regulated by the State of Wyoming and State of Texas, respectively, and the EPA under the Clean Water Act, the Clean Air Act and the Resource Conservation and Recovery Act. In addition, ISR wellfields require an Underground Injection Control (“**UIC**”) Permit under the Safe Drinking Water Act, as administered by the State and/or EPA. ISR operations are subject to regulations by the U.S. Occupational, Safety and Health Administration (“**OSHA**”), rather than MSHA.

Because monazite sands are a naturally occurring uranium ore, which also contains REEs, it is processed at the Mill under its existing Radioactive Materials License, GWDP and other permits as a uranium ore, and the resulting RE Carbonate is also recovered under those existing licenses and permits. The Company is evaluating whether any additional licenses or permits or

amendments to existing licenses or permits may be required for the potential construction and operation of an REE separation circuit at the Mill.

It is expected that the potential recovery and concentration of Th-232, Ra-228, Th-228 and Ra-226 will require additional licensing by DWMRC at the Mill.

Reclamation bonds or the equivalent have been posted for each of the Company's material properties that have structures or facilities. Energy Fuels is required to have export licenses issued by the NRC for its uranium exports, unless otherwise permissible pursuant to the Mill's existing Radioactive Materials License due to the nature of the material in question. Such licenses are obtained by the Company as required.

Land Tenure

The Company's land holdings are held either by leases from the fee simple owners (private parties or the State) or unpatented mining claims located on property owned and managed by the U.S. Federal Government. Annual fees must be paid to maintain unpatented mining claims, but work expenditures are not required. Holders of unpatented mining claims are generally granted surface access to conduct mineral exploration and extraction activities. However, additional permits and plans are generally required prior to conducting exploration or mining activities on such claims.

On July 9, 2009, BLM issued a Notice of Proposed Withdrawal ("2009 Notice") under which it proposed that a total of approximately one million acres of public lands around the Grand Canyon National Park be withdrawn from location and entry under the Mining Law of 1872 (the "Mining Law"), subject to valid existing rights. In the 2009 Notice, BLM stated that the purpose of the withdrawal, if determined to be appropriate, would be to protect the Grand Canyon watershed from any adverse effects of locatable hardrock mineral exploration and mining. The 2009 Notice segregated the lands from location and entry under the mining laws for up to two years to allow time for various studies and analyses, including appropriate National Environmental Policy Act ("NEPA") analysis. In order to allow more time for BLM to complete its NEPA analysis, the U.S. Department of the Interior (the "DOI") published Public Land Order 7773 on June 21, 2011, which effected a six-month emergency withdrawal of the area. The emergency withdrawal prevented the lands from being open to location and entry under the Mining Law upon expiration of the two-year segregation while the DOI completed the decision-making process on the proposed withdrawal. The emergency withdrawal was effective from July 21, 2011 to January 20, 2012. During the two-year segregation and six-month emergency withdrawal, the BLM, along with its cooperating agencies, completed various studies and analyses of resources in the withdrawal area, including an Environmental Impact Statement ("EIS") under NEPA. These studies and analyses were undertaken to provide the basis for the final decision regarding whether to proceed with the proposed withdrawal or to select an alternative action. Based on this analysis, on January 9, 2012, the DOI announced its final decision to withdraw from location and entry under the Mining Law, subject to valid existing rights, the total of approximately one million acres of lands originally proposed in the 2009 Notice (the "Withdrawn Lands"), for a 20-year period. Lawsuits challenging this decision were filed by various industry groups and interested parties. In addition, legislation has been proposed in both the U.S. House of Representatives and U.S. Senate, which would make the withdrawal permanent, subject to preexisting rights. The Company will continue to track the progress of this legislation.

As a result of the 2009 withdrawal from location and entry, no new mining claims may be staked on the Withdrawn Lands and no new Plans of Operations may be approved, other than Plans of Operations on mining claims that were valid at the time of withdrawal and that remain valid at the time of plan approval. Case law indicates that a miner establishes valid Congressionally provided rights under the Mining Law through certain unilateral acts, and that such acts are presumptively recognized as valid claims in which the holder has valid existing rights unless and until the DOI or U.S. Federal Courts declare otherwise. However, the BLM and USFS, each at their discretion, may perform a mineral examination and Mineral Report, which involves an economic evaluation of a project, in order to reflect an agency's belief about certain mining claims that may be used in support of a future mining claim contest on the validity of existing rights. All the Company's properties located on the Arizona Strip, with the exception of its Wate property and certain exploration properties held by the Company's subsidiary, Arizona Strip Partners LLC, are located within the Withdrawn Lands. A mineral examination on the Company's EZ Project will need to be completed by BLM, in conjunction with its review of the Company's proposed Plan of Operations for that project. Mineral examinations were not required for the Company's Arizona 1 and Pinenut projects, which had previously approved Plans of Operations and were previously active. Although the Company's Pinyon Plain Project also has an approved Plan of Operations, and a mineral examination is not required, the USFS voluntarily performed a mineral examination on that project in 2012 in order to clarify the agency's own position on the underlying claims and concluded that the Pinyon Plain Project's claims constituted valid existing rights ("VERs"). The USFS also concluded that no additional approvals were required on the Pinyon Plain Project that would trigger any further NEPA analysis as a major federal action.

The Company believes that all its material projects within the Withdrawn Lands are on valid mining claims that will each withstand a mineral examination. However, market conditions may postpone or prevent the performance of mineral

examinations on certain properties and, if a mineral examination is performed on a property, there can be no guarantee that the mineral examination would not result in one or more of the Company's mining claims being deemed invalid and/or that ongoing litigation challenging the validity of a VER determination would not result in the overturn of such determination, either of which could prevent a project from proceeding.

Former President Obama additionally designated the Bears Ears National Monument by executive order in December of 2016, which comprised 1.35 million acres of land in San Juan County, Utah. The designated land included a portion of County Road 258, which the Company formerly relied on for access to its formerly owned Daneros Project (for which it now acts as Operator on behalf of CUR, see Part I, Item 1 "*Development of the Business – Major Transactions over the Past Five Years*"), and a property boundary that abutted the boundary of the Mill and encompassed two water sampling sites the Company monitors for the Mill. In December 2017, former President Trump issued a Proclamation that amended former President Obama's 2016 Proclamation and reduced the monument to two parcels encompassing a total of 201,876 acres, releasing 1.15 million acres. That Proclamation was later challenged in Federal Court. On December 23, 2017, the Company issued a press release reiterating its past and present support of Bears Ears National Monument, and clarifying that the Company sought only minor adjustments to the original boundaries of the monument to prevent the boundary from directly abutting some of its existing operations, which were very minor adjustments, insignificant compared to the original size of the monument and not a reflection of former President Trump's nearly 85% reduction. Then, on October 8, 2021, President Biden issued a new proclamation restoring the original borders of Bears Ears National Monument, which consists "of those lands reserved as part of the Bears Ears National Monument as of December 3, 2017, and the approximately 11,200 acres added by Proclamation 9681, encompassing approximately 1.36 million acres." In doing so, all such lands and interests contained within the monument were "appropriated and withdrawn from all forms of entry, location, selection, sale, or other disposition under the public land laws or laws applicable to the USFS, from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument" (see "*A Proclamation on Bears Ears National Monument*," dated October 8, 2021). As a result, it is possible that the Mill could become subject to additional requirements, restrictions and costs if the reversion to the original designation is upheld in Court, pending any legal challenges by the State of Utah or otherwise.

Environmental and Social Efforts and Impacts

Uranium is the fuel for carbon-free, emission-free baseload nuclear power and is a key factor in successfully combating global climate change. In addition to producing uranium from our mines, we recycle other companies' uranium-bearing tailings or wastes (Alternate Feed Materials) at the Mill for the extraction of uranium that would otherwise have been permanently disposed of, thereby reducing the need for new mining by maximizing extraction of existing sources and limiting the number of constituents ultimately disposed of. We also recover previously disposed of uranium and vanadium by recycling the Mill's tailings solutions. Furthermore, our production of a commercially salable RE Carbonate through the recycling of natural monazite sands, which have historically been considered wastes due to their radioactive content, allows us to provide a crucial link in a commercially viable U.S. REE supply chain for use in key green energy technologies, such as solar panels, wind turbines, and electric and hybrid car batteries. In addition, our program for the potential recovery of radioisotopes for use in the production of TAT therapeutics for cancer treatments involves recycling the Mill's existing process streams for the recovery of valuable radioisotopes that have traditionally been considered wastes and have been permanently disposed of.

Through these operations and initiatives, we remain diligent in our efforts to ensure our operations minimize any impacts to public health, safety and the environment, including any impacts to water, air, wildlife, soil, cultural resources, the occupational health and safety of our workers and any impacts to members of the public. Our Environment, Health, Safety and Sustainability ("EHSS") Committee has been delegated authority by the Board to monitor and guide the Company in developing and implementing its core EHSS principles, including maintaining radiation exposures not only within regulatory limits but as low as reasonably achievable ("ALARA") through an extensive internal audit program, as well as authority for monitoring programs to identify and mitigate risks in ensuring the highest standards of environmental protection and human health and safety across the Company's operations. The EHSS Committee also monitors the Company's sustainability programs, including its efforts to pro-actively evaluate its programs and activities to ensure they meet the Company's sustainability goals and objectives. Our Sustainability Report is available on the Company's website at www.energyfuels.com.

Our operations are located primarily in rural and underserved areas and support the local economies, not only through the taxes we pay to local authorities and the salaries and wages we pay to our employees and to numerous third-party contractors, such as transportation companies, equipment rental companies, equipment vendors and service providers, but also indirectly through the "multiplier effect" to the communities as a whole. That is, the money we pay directly to our employees, contractors vendors and providers is spent by them in the communities, thereby providing income to local businesses and wages and salaries to employees and owners of those business, who in turn spend their income, salaries and wages on other businesses in the

community. Indeed, as the largest private employer in San Juan County, Utah, the Mill is a very significant factor in the local economy.

In furtherance of our sustainability objectives, the Company recently established the San Juan County Clean Energy Foundation, a fund specifically designed to contribute to the communities surrounding the Mill in Southeastern, Utah by providing funding to support local priorities. The Foundation will focus on supporting education, the environment, health/wellness, and local economic development in the City of Blanding, San Juan County, the White Mesa Ute Community, the Navajo Nation and other area communities. See "*San Juan County Clean Energy Foundation*."

Employees

As of the date of this Annual Report, the Company and its subsidiaries have approximately 103 full-time employees, all of whom are employed through the Company's wholly owned, indirectly held subsidiary Energy Fuels Resources (USA) Inc. We operate in established mining areas where we have found sufficient available personnel for our business plans.

Energy Fuels is an equal opportunity employer and is committed to making employment decisions based on valid job requirements, without regard to race, color, national origin, gender, religion, age, sex, sexual orientation, gender identity, disability, veteran status or any other legally protected status. The Company also provides reasonable accommodation for qualified individuals with known disabilities and employees whose work requirements interfere with a religious belief unless doing so would result in an undue hardship to the Company or cause a direct threat to health or safety.

Available Information

Detailed information about us is or will be contained in our annual reports on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements on Schedules 14A and other reports, and amendments to those reports, that we file with or furnish to the SEC and, for Canadian purposes, the Ontario Securities Commission ("OSC"). The Company is a U.S. Domestic Issuer for SEC purposes, most of its shareholders are U.S. residents, the Company is required to report its financial results under U.S. GAAP and its primary trading market is the NYSE American. However, prior to January 1, 2016, we were a foreign private issuer subject to limited periodic disclosure and current reporting requirements of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"), so we did not file Forms 10-K or 10-Q prior to January 2016. All such Forms 10-K, 10-Q and 8-K, including any amendments to such reports, filed after January 1, 2016 are available free of charge on our website, www.energyfuels.com, as soon as reasonably practicable after we electronically file such reports with or furnish such reports to the SEC. However, our website and any contents thereof should not be considered to be incorporated by reference into this document. In addition, all public filings, including Insider Reports, of the Company can be found on the SEC's Electronic Data Gathering, Analysis, and Retrieval ("EDGAR") platform, and on the OSC's System for Electronic Document Analysis and Retrieval ("SEDAR") and System of Electronic Disclosure by Insiders ("SEDI"). We will furnish copies of such reports free of charge upon written request to our Investor Relations department. You can contact our Investor Relations department at:

Energy Fuels Inc.
225 Union Blvd., Suite 600
Lakewood, Colorado, 80228
Tel: 303.974.2140
Fax: 303.974.2141
Toll Free: 1.888.864.2125
E-mail: investorinfo@energyfuels.com

Additionally, our Articles of Incorporation and By-laws, Charters of the Audit, Compensation, Governance & Nominating, and EHSS Committees, Sustainability Report, and the majority of our Company policies, are available on our website. We will furnish copies of such information free of charge upon written request to our Investor Relations department.

ITEM 1A. RISK FACTORS

The following information pertains to the outlook and conditions currently known to Energy Fuels that could have a material impact on the financial condition of Energy Fuels. Other factors may arise in the future that are currently not foreseen by management of Energy Fuels that may present additional risks in the future, including risks which the Company currently feels are immaterial. Current and prospective security holders of Energy Fuels should carefully consider these risk factors.

Our failure to successfully address any of the risks and uncertainties described below could have a material adverse effect on our business, financial condition and/or results of operations, and the trading price of our Common Shares may fluctuate widely. We cannot assure you that we will successfully or fully address these risks or other unknown risks that may affect our business.

Risks Related to our Industry

We are subject to the risks normally encountered by companies in the mineral extraction industry.

We are subject to the risks normally encountered by companies in the mineral extraction industry, such as:

- the discovery of unusual, or unexpected geological formations;
- accidental fires, floods, earthquakes, volcanic eruptions, and other natural disasters;
- unplanned power outages and water shortages;
- controlling water and other similar mining hazards;
- operating labor disruptions and labor disputes;
- the ability to obtain suitable or adequate machinery, equipment, or labor;
- our liability for potential pollution or other hazards; and
- other known and unknown risks involved in the conduct of exploration, development, and operation of mines, extraction and recovery facilities, and mills, along with the market for uranium and vanadium.

The development of mineral properties is affected by many factors, including, but not limited to: the cost of operations; variations in the grade of mineralized material; fluctuations in metal markets; costs of extraction and processing equipment; availability of equipment and labor; labor costs and possible labor strikes; government regulations, including without limitation, regulations relating to taxes, royalties, allowable extraction or production, importing and exporting of minerals; foreign exchange; employment; worker safety; transportation; and environmental protection.

Our results of operations are significantly affected by the market price of uranium, vanadium and rare earth elements, which are cyclical and subject to substantial price fluctuations.

Our earnings and operating cash flow are and will be particularly sensitive to the long- and short-term changes in the market price of uranium, vanadium and REEs. Among other factors, these prices also affect the value of our resources, reserves, and inventories, as well as the market price of our Common Shares.

Market prices are affected by numerous factors beyond our control. With respect to uranium, such factors include, among others: demand for nuclear power; political and economic conditions in uranium producing and consuming countries; public and political response to a nuclear incident or fear of a nuclear incident; reprocessing of used reactor fuel, the re-enrichment of depleted uranium tails and the enricher practice of underfeeding; sales of excess civilian and military inventories (including from the dismantling of nuclear weapons; the premature decommissioning of nuclear power plants; and from the build-up of Japanese utility uranium inventories as a result of the Fukushima incident) by governments and industry participants; uranium supply, including the supply from other secondary sources; production levels and costs of production, and government actions such as, potentially, those planned in President Biden's 2022 fiscal budget and those taken pursuant to the 2021 Omnibus Spending Bill that appropriates funding for the proposed U.S. Uranium Reserve. With respect to vanadium, such factors include, among others: demand for steel; the potential for vanadium to be used in advanced battery technologies; political and economic conditions in vanadium producing and consuming countries; world production levels; and costs of production. With respect to REEs, such factors include, among others: demand for REEs; political and economic conditions in REE producing and consuming countries; REE-bearing ore supply from secondary sources; international interest in the purchase of RE Carbonate, absent a U.S.-based separation facility; public and political response to REE initiatives at the Mill; governmental investment in domestic REE infrastructure; world production levels; costs of production; risks associated with foreign governmental actions, policies, laws, rules and regulations, and foreign state subsidized enterprises, with respect to REE production and sales, which could impact REE prices available to the Company and impact our access to world and domestic markets for the supply of REE-bearing ores and the sale of RE Carbonate and other REE products and services to world and domestic markets; and other government actions, including licensing and import requirements.

Other factors relating to the price of uranium, vanadium and REEs include: levels of supply and demand for a broad range of industrial products; substitution of new or different products in critical applications for our existing products; expectations with

respect to the rate of inflation; the relative strength of the U.S. dollar and of certain other currencies; interest rates; global or regional political or economic crises; regional and global economic conditions; and sales of uranium, vanadium and RE Carbonate by holders in response to such factors. If prices are below our cash costs of extraction or recovery and remain at such levels for any sustained period, we may determine that it is not economically feasible to continue commercial extraction, recovery or processing at any or all of our projects or other facilities and may also be required to look for alternatives other than cash flow to maintain our liquidity until prices recover. Our expected levels of uranium recovery and business activity are dependent on our expectation and the industry's expectations of uranium, vanadium and REE prices, which may not be realized or may change. In the event we conclude that a significant deterioration in expected future uranium prices has occurred, we will assess whether an impairment allowance is necessary which, if required, could be material.

The recent fluctuations in the price of many commodities is an example of a situation over which we have no control, and which could materially adversely affect us in a manner for which we may not be able to compensate. There can be no assurance that the price of any minerals recovered from or processed at our properties will be such that any deposits can be operated at a profit.

Our profitability is directly related to the market price of uranium, vanadium and REEs recovered. We may, from time to time, undertake commodity and currency hedging programs, with the intention of maintaining adequate cash flows and profitability to contribute to the long-term viability of the business. We anticipate selling forward in the ordinary course of business if, and when, we have sufficient assets and recovery to support forward sale arrangements, and forward sale arrangements are available on suitable terms. There are, however, risks associated with forward sale programs. If we do not have sufficient recovered product to meet our forward sale commitments, we may have to buy or borrow (for later delivery back from recovered product) sufficient product in the spot market to deliver under the forward sales contracts, possibly at higher prices than provided for in the forward sales contracts, or potentially default on such deliveries. In addition, under forward contracts, we may be forced to sell at prices that are lower than the prices that may be available on the spot market when such deliveries are completed. Although we may employ various pricing mechanisms within our sales contracts to manage our exposure to price fluctuations, there can be no assurance that such mechanisms will be successful. There can also be no assurance that we will be able to enter into term contracts for future sales of uranium, vanadium or RE Carbonate at prices or in quantities that would allow us to successfully manage our exposure to price fluctuations.

The majority of our properties do not contain Mineral Reserves under S-K 1300 and NI 43-101, and many of the Company's properties, projects, and facilities are not economic at today's commodity prices.

Only one of our properties – Sheep Mountain – contains Mineral Reserves under SEC S-K 1300 and NI 43-101 (see “*Cautionary Note to Investors Concerning Disclosure of Mineral Reserve and Mineral Resource Estimates*”). At current uranium and vanadium prices, many of our properties, projects, and facilities are not economic for uranium or vanadium extraction, recovery, or processing. At our Pinyon Plain Project, we are currently evaluating the possibility of recovering copper as a byproduct along with uranium and the impact of any recovered copper on the economics of that project at current uranium prices. We intend to continue to hold, and in certain cases advance, a number of those properties, projects, and facilities in anticipation of possible future increases in the prices of uranium and/or vanadium, as the case may be. However, there can be no assurance that uranium and/or vanadium prices will ever, or within a reasonable time period, increase to the levels required to advance those properties or, in the case of projects or facilities on standby, to resume exploration, extraction, recovery, or processing activities at those projects or facilities. Similarly, there can be no assurance that the value of any copper recovered as a byproduct at the Pinyon Plain Project will be sufficient to advance that project without increases in the price of uranium and/or copper. We continue to hold such properties, projects, and facilities because we believe that uranium and/or vanadium prices are likely to rise to such levels within a reasonable time period and that the Company could potentially be able to demonstrate a significant copper credit at the Pinyon Plain Project, and the ability to maintain scalability as commodity prices increase is a key component of our business strategy. However, as there is a cost associated with holding and in some cases maintaining on standby such properties, projects, or facilities, we continuously evaluate, on a case-by-case basis, such costs against the prospects for price increases, and may from time to time sell, drop or reclaim any such properties, projects, or facilities.

Exploration, development, extraction, mining, recovery and milling of minerals, and the transportation and handling of the products recovered, are subject to extensive federal, state and local laws and regulations.

These regulations govern, among other things; acquisition of the property or mineral interests; maintenance of claims; tenure; expropriation; prospecting; exploration; development; construction; extraction and mining; recovery, processing, milling and production; price controls; exports; imports; taxes and royalties; labor standards; occupational health; waste disposal; toxic substances; water use; land use; Native American consultations and accommodations; environmental protection and remediation; endangered and protected species; mine, mill and other facility decommissioning and reclamation; mine safety; transportation safety and emergency response; and other matters. Compliance with such laws and regulations has increased the costs of exploring, drilling, developing, constructing, operating and closing of our mines, mills, plants and other extraction,

recovery and processing facilities. It is possible that, in the future, the costs, delays and other effects associated with such laws and regulations may impact our decision as to whether to operate existing mines or facilities, or, with respect to exploration, development or construction properties, whether to proceed with exploration, development or construction, or that such laws and regulations may result in our incurring significant costs to remediate or decommission properties that do not comply with applicable environmental standards at such time. We expend significant financial and managerial resources to comply with such laws and regulations. We anticipate continuing to do so as the historic trend toward stricter government regulation may continue. There can be no assurance that future changes in applicable laws and regulations will not adversely affect our activities, operations or financial condition. New laws and regulations, amendments to existing laws and regulations or more stringent implementation of existing laws and regulations, including through stricter license and permit conditions, could have a material adverse impact on us, increase costs, cause a reduction in levels of, or suspension of, extraction or recovery and/or delay or prevent the construction or development of new mineral extraction properties.

Mineral extraction is subject to potential risks and liabilities associated with impacts to the environment and the disposal of waste products occurring as a result of mineral exploration, extraction, mining, milling, recovery and production. Environmental liability may result from mining or mineral extraction activities conducted by others prior to our ownership of a property. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions. These actions may result in orders issued by regulatory or judicial authorities causing activities or operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Companies engaged in uranium exploration operations may be required to compensate others who suffer loss or damage by reason of such activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations. Should we be unable to fully fund the cost of remedying an environmental problem, the Company might be required to suspend activities or operations, declare bankruptcy, or enter into interim compliance measures pending completion of the required remedy, which could have a material adverse effect on the Company. To the extent that we are subject to uninsured environmental liabilities, the payment of such liabilities would reduce otherwise available earnings and could have a material adverse effect on us. In addition, we do not have coverage for environmental losses generally or for certain other risks as such coverage cannot be purchased at a commercially reasonable cost. Compliance with applicable environmental laws and regulations requires significant expenditures and increases mine and facility, construction, development and operating costs.

While the very heart of our business – uranium production, which is the fuel for carbon-free, emission-free baseload nuclear power – and our recycling programs, help address global climate change and reduce air pollution, the world's focus on addressing climate change will require the Company to continue to conduct all of its operations in a manner that minimizes the use of resources, including the unnecessary use of energy resources, in order to continue to minimize air emissions at our facilities, which can also increase mine and facility, construction, development and operating costs. Regulatory and environmental standards may also change over time to address global climate change, which could further increase these costs.

With the recent change in administration, there is a risk that the new administration will not support mining, uranium mining, nuclear energy or other aspects of our business, including: not supporting the proposed establishment of a U.S. Uranium Reserve included in the COVID-Relief and Omnibus Spending Bill passed by the U.S. Congress in December 2020, or any or all of the other recommendations of the U.S. Nuclear Fuel Working Group; and limiting, restricting or preventing the use of public lands for mining and other activities.

Worldwide demand for uranium is directly tied to the demand for electricity produced by the nuclear power industry, which is also subject to extensive government regulation and policies. The development of mineral properties and related facilities is contingent upon governmental approvals that are complex and time consuming to obtain and which, depending upon the location of the project, involve multiple governmental agencies. The duration and success of such approvals are subject to many variables outside of our control. Any significant delays in obtaining or renewing such permits or licenses in the future could have a material adverse effect on us. In addition, the international marketing of uranium is subject to governmental policies and certain trade restrictions, such as those imposed by the suspension agreement between the United States and Russia. Changes in these policies and restrictions may adversely impact our business.

Public acceptance of nuclear energy and competition from other energy sources is unknown.

Growth of the uranium and nuclear industry will depend upon continued and increased acceptance of nuclear technology as an economic means of generating electricity. Because of unique political, technological and environmental factors that affect the nuclear industry, including the risk of a nuclear incident and fears of nuclear incidents in the event of terrorism, wars or insurrection, the industry is subject to public opinion risks that could have an adverse impact on the demand for nuclear power and increase the regulation of the nuclear power industry. Nuclear energy competes with other sources of energy, including oil, natural gas, coal, hydro-electricity and renewable energy sources. These other energy sources are to some extent interchangeable with nuclear energy, particularly over the longer term. Sustained lower prices of oil, natural gas, coal and

hydroelectricity may result in lower demand for uranium concentrates. Increased government regulation and technical requirements may make nuclear uneconomic, resulting in lower demand for uranium concentrates. Technical advancements and government subsidies in renewable and other alternate forms of energy, such as wind and solar power, could make these forms of energy more commercially viable and put additional pressure on the demand for uranium concentrates.

Unfavorable media coverage of mining or nuclear energy could negatively affect our business.

The Company is subject to media coverage relating to mining and the production of uranium and other forms of nuclear energy, as well as the production of RE Carbonate and the extraction and concentration of radioisotopes for use in medical isotopes, some of which can be inaccurate, non-objective or politically motivated. As a result, the Company is frequently required to address or respond to such media coverage, which can be costly and time-consuming for the Company. Such inaccurate and non-objective media coverage can also negatively impact public perception of the Company's activities, the market for the Company's securities, government relations, permitting activities and legal challenges.

Potential impacts of public perceptions on our commercial relations

Given the controversial nature of the mining and nuclear industries, the Company is subject to the risk that suppliers, customers, co-venturers or other business relations may be discouraged from or decline to continue commercial relations with or enter into new commercial relations with the Company due to fear of reprisals from the media, public or special interest groups, based on public perceptions of the nature of the Company's business or the nature or location of its assets, particularly driven by the ability of the media, public and special interest groups to influence public perceptions through the media, social media and the internet.

The uranium industry is highly competitive.

The international uranium industry, including the supply of uranium concentrates, is competitive. We market uranium in direct competition with supplies available from a relatively small number of uranium mining companies, from nationalized uranium companies, from uranium produced as a byproduct of other mining operations, from excess inventories, including inventories made available from decommissioning of nuclear weapons, from reprocessed uranium and plutonium, from used reactor fuel, and from the use of excess Russian enrichment capacity to re-enrich depleted uranium tails. A large quantity of current world production is foreign state subsidized and appears to be relatively inelastic, in that uranium market prices appear to have little effect on the quantity supplied. In the case of foreign state subsidized production, uranium production may not be fully subject to market factors and may be sold at prices that may be less than the cost of production. The supply of uranium from Russia is, to some extent, impeded by a number of international trade agreements and policies. These agreements and any similar future agreements, governmental policies or trade restrictions are beyond our control and may affect the supply of uranium available in the United States and Europe.

We compete with other mining companies and individuals for capital, mineral resources and reserves, and other mining assets, which may increase the cost of acquiring suitable claims, properties and assets, and we also compete with other mining companies to attract and retain key executives, employees and consultants. In addition, there are relatively few customers for uranium. There can be no assurance that we will continue to be able to compete successfully with our competitors in acquiring such properties and assets or in attracting and retaining skilled and experienced employees.

Mining operations involve a high degree of risk.

The exploration, construction, development, operation, and other activities associated with mineral projects, along with the expansion of existing recovery operations and mining activities and restarting of projects, involve significant risks, including financial, technical, and regulatory risk. Development or advancement of any of the exploration properties in which we have an interest will only follow upon obtaining satisfactory exploration results, project permitting and licensing, and financing. The exploration, construction, development, operation and other activities associated with mineral projects involves significant financial risks over an extended period of time, which even a combination of careful evaluation, experience and knowledge may not eliminate. While discovery of a mine or other facility may result in substantial rewards, few properties which are explored are ultimately developed into producing mines or extraction or recovery facilities. Major expenses may be required to establish mineral resources and mineral reserves by drilling and to finance, permit, license, and construct extraction, mining, recovery and processing facilities. It is impossible to ensure that the current or proposed exploration, permitting, construction, or development programs on our mineral properties will result in a profitable commercial extraction, mining, or recovery operations.

Whether a mineral deposit will be commercially viable depends on a number of factors, which include, among other things: the accuracy of resource and reserve estimates; the particular attributes of the deposit, such as its size, geology and grade; the ability to economically recover commercial quantities of the minerals; proximity to infrastructure and availability of personnel; financing costs; governmental regulations, including regulations relating to prices, taxes, royalties; the potential for litigation; land use; importing and exporting; and environmental and cultural protection. The construction, development, expansion and restarting of projects are also subject to: the successful completion of engineering studies; the issuance of necessary governmental permits; the availability of adequate financing; engineering and construction timetables and capital costs being correctly estimated for our projects, including restarting projects on standby; and such construction timetables and capital costs not being affected by unforeseen circumstances. The effect of these factors cannot be accurately predicted, but the combination of these factors, along with others, may result in our not receiving an adequate return on invested capital.

It is possible that actual costs and economic returns of current and new extraction, mining, or recovery operations may differ materially from our best estimates. It is not unusual in the mining industry for new mining operations and facilities to experience unexpected problems during the start-up phase, take much longer than originally anticipated to bring into a recovery or producing phase, require more capital than anticipated, operate at a higher cost than expected, and/or have reclamation liabilities which are higher than expected.

There can be no assurance that as the Company mines its properties, or disposes of properties, the reduction of existing mineral resources through depletion or sales, will be replaced with new resources of comparable value.

There is uncertainty in the estimation of Mineral Reserves and Mineral Resources.

Only one of our properties – Sheep Mountain – contains Mineral Reserves as defined under S-K 1300 and NI 43-101. See “*Cautionary Note to Investors Concerning Disclosure of Mineral Reserve and Mineral Resource Estimates.*”

Mineral Reserves and Mineral Resources are statistical estimates of mineral content pursuant to S-K 1300 and NI 43-101 based on limited information acquired through drilling and other sampling methods and require judgmental interpretations of geology. Successful extraction requires safe and efficient mining and processing. Our Mineral Reserves and Mineral Resources are estimates, and no assurance can be given that the estimated Mineral Reserves and Mineral Resources are accurate or that the indicated level of uranium or vanadium will be produced economically or otherwise. Such estimates are, in large part, based on interpretations of geological data obtained from drill holes and other sampling techniques. Actual mineralization or formations may be different from those predicted. Further, it may take many years from the initial phase of drilling before production is possible, and during that time the economic feasibility of exploiting a discovery may change.

Mineral Reserve and Mineral Resource estimates for properties that have not commenced extraction, production or recovery are based, in many instances, on limited and widely spaced drill-hole information, which is not necessarily indicative of the conditions between and around drill holes. Accordingly, such Mineral Resource and Mineral Reserve estimates may require revision as more drilling information becomes available or as actual extraction, production or recovery experience is gained. It should not be assumed that all or any part of our Mineral Resources constitute, or will be converted into, Mineral Reserves. Market price fluctuations of uranium or vanadium, as applicable, as well as increased production and capital costs or reduced recovery rates, may render our proven and probable Mineral Reserves unprofitable to develop at a particular site or sites for periods of time or may render mineral reserves containing relatively lower grade mineralization uneconomic.

Opposition to mining may disrupt our business activities.

In recent years, governmental agencies, non-governmental organizations, individuals, communities and courts have become more vocal and active with respect to their opposition to certain mining and business activities including with respect to production and uranium recovery at our facilities, such as the Mill and the Pinyon Plain Project. This opposition may take on forms such as road blockades, applications for injunctions seeking to cease certain construction, development, extraction, mining and/or milling or recovery activities, refusals to grant access to lands or to sell lands on commercially viable terms, lawsuits for damages or to revoke or modify licenses and permits, issuances of unfavorable laws and regulations, and other rulings contrary to our interests. These actions can occur in response to current activities or in respect of mines or facilities that are decades old. In addition, these actions can occur in response to our activities or the activities of other unrelated entities. Opposition to our activities may also result from general opposition to nuclear energy and mining. Opposition to our business activities are beyond our control. Any opposition to our business activities may cause a disruption to our business activities and may result in increased costs and delays, and this could have a material adverse effect on our business and financial condition.

We are subject to technical innovation and obsolescence.

Requirements for our products and services may be affected by; technological changes in nuclear reactors, enrichment, and used uranium fuel reprocessing; facilities and processes for REE and radioisotope recovery; and substitutes for REEs and the radioisotopes the Company may potentially be producing. These technological changes could reduce the demand for our products and services and/or increase the supply of competitive products and services. The cost competitiveness of our operations may be impacted through the development and commercialization of other mining, milling, processing and other technologies. As a result, our competitors may adopt technological advancements that give them an advantage over the Company, or that reduce the demand for the Company's products and services or make them obsolete.

Mining, extraction, recovery, processing, construction, development, and exploration activities depend, to a substantial degree, on adequate infrastructure.

Reliable roads, bridges, power sources, and water supply are important determinants affecting capital and operating costs. We consider the existing infrastructure to be adequate to support our proposed operations and activities. However, unusual or infrequent weather phenomena including drought, sabotage, government, or other interference in the maintenance or provision of such infrastructure could adversely affect our operations and activities, financial condition and results of operations.

Mining, mineral extraction, recovery and milling are subject to a high degree of risk, and we are not insured to cover against all potential risks.

Our operations and activities are subject to all of the hazards and risks normally incidental to exploration, construction, development, extraction and mining of mineral properties, and recovery, processing and milling, including: environmental hazards; industrial accidents; labor disputes, disturbances and unavailability of skilled labor; encountering unusual or unexpected geologic formations; rock bursts, pressures, cave-ins, flooding; periodic interruptions due to inclement or hazardous weather conditions; technological and processing problems, including unanticipated metallurgical difficulties, ground control problems, process upsets and equipment malfunctions; the availability and/or fluctuations in the costs of raw materials and consumables used in our production and recovery processes; the ability to procure mining and other equipment and operating and other supplies in sufficient quantities and on a timely basis; and other extraction, mining, recovery, milling, and processing risks, as well as risks associated with our dependence on third parties in the provision of transportation and other critical services. Many of the foregoing risks and hazards could result in damage to, or destruction of, our mineral properties or processing or recovery facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of extraction, mining, production and recovery from our mines or processing facilities or in our exploration, construction or development activities, delay in or inability to receive regulatory approvals to transport our uranium concentrates, or costs, monetary losses and potential legal liability and adverse governmental action. In addition, due to the radioactive nature of the materials handled in uranium extraction, mining, recovery, and processing, additional costs and risks are incurred by us on a regular and ongoing basis.

While we may obtain insurance against certain risks in such amounts as we consider adequate, the nature of these risks are such that liabilities could exceed policy limits or could be excluded from coverage. There are also risks against which we cannot insure or against which we may elect not to insure. The potential costs which could be associated with any liabilities not covered by insurance or in excess of insurance coverage or compliance with applicable laws and regulations may cause substantial delays and require significant capital outlays, adversely affecting our future earnings, financial position and competitive position. No assurance can be given that such insurance will continue to be available or will be available at economically feasible premiums or that it will provide sufficient coverage for losses related to these or other risks and hazards. This lack of insurance coverage could result in material economic harm to us.

Risks associated with our REE business.

There are a number of risks inherent to our REE activities, which include the following:

- The risk of achieving and maintaining an adequate supply of monazite sands for processing at the Mill. The Company does not currently own its own monazite-bearing mines and is completely dependent on contractual arrangements for its REE feed sources. There can be no guarantee that the Company will be able to secure adequate monazite supply over the long-term at suitable prices. In addition, the price the Company may be required to pay for monazite sands is subject to the risk of influence by foreign policy and/or foreign state-owned enterprises. We will evaluate potential acquisitions of mines or resource properties and joint ventures with mine or resource property owners but there can be no guarantee that any such acquisitions or joint ventures can be realized on acceptable terms. Further, to the extent the Company is required to purchase monazite ore sources and rely on REE separation facilities located outside the United

States, we may be at a transportation cost disadvantage compared to processing facilities in China or elsewhere that may be closer to potential ore sources and/or REE separation facilities;

- The risk of being able to contract to sell the Mill's REE product at satisfactory prices. The Company has entered into one sales contract with an REE separation facility and intends to secure potential sales contracts with other REE separation facilities for the sale of the RE Carbonate produced at the Mill, but there can be no guarantee that any such contracts will be entered into on satisfactory terms, or at all, or extended, in the future. If the Company is not able to secure adequate contracts for the sale of its RE Carbonate, or the Company does not develop its own REE separation capability, we may be required to hold our RE Carbonate in inventory until it can be sold at reasonable prices, which would require the commitment of the Company's cash resources while the REE product is being held in inventory. We would also bear the risk that the REE product may not be able to be sold at reasonable prices in the future, either due to a lack of a market for the purchase of our RE Carbonate, and/or a reduction in REE commodity prices and hence a reduction in the value of the carbonate. We anticipate that the U.S. government may take steps to support the development of a U.S. supply chain for REEs through price support or other mechanisms, but there can be no guarantee that any such support will be given, or if given, would benefit the Company.
- The risk of process failures in the production of RE Carbonates such as the ability of the Company to produce RE Carbonate to meet commercial specifications on a commercial scale at acceptable costs, which could prevent the commercial production of RE Carbonate at the Mill cost-competitively or at all;
- The risk that we may not be able to increase our sources of natural monazite sands or other ores in amounts sufficient to result in cost competitive production of RE Carbonate at the Mill;
- The inability of the Company to successfully or cost-competitively process other types of REEs and uranium bearing ores at the Mill produced from coal-based resources;
- The inability of the Company to construct and operate an REE separation facility, and potentially other downstream REE activities, including metal-making and alloying, in the future at the Mill or elsewhere in the United States;
- The risk of permit and license challenges or the failure to obtain any needed permit or license amendments. The Mill can produce RE Carbonate, along with uranium, from natural uranium- and REE-bearing monazite sand ores, but additional licensing may be required to permit and construct a separation facility and potential REE metal and metal alloy facilities at the Mill. The existing licensing regime and any new permits or licenses or amendments that may be required are subject to challenge, which could delay or prevent existing production or any new construction, as well as any separation and other activities;
- The risk that our strategic venture for the development of a novel technology for the production of REE metals may not actually be able to reduce the costs of production, reduce energy consumption, and/or significantly reduce green house gas emissions and as a result the technology may not be technically or economically feasible. In addition, there is a risk that technological enhancements in competing technologies could render the technology less attractive or obsolete;
- The current shortage of supply of REEs and the resulting prices for REEs, and the fear that supplies of REEs may not be forthcoming on a timely basis to meet new demands for REEs, such as for permanent magnets for EVs, may encourage end-users to substitute away from REEs to advance and use other technologies to meet consumer demands for end products, which could result in a significant reduction in demand for and prices of REEs. Sustained reductions in the price of REEs would impact the Company's returns from its REE initiatives and could render them infeasible; and
- Increases in the supply of REEs through the addition of REE processing facilities could increase the global supply of REEs and reduce the price of REEs. Sustained reductions in the price of REEs would impact the Company's returns from its REE initiatives and could render them infeasible.

Risks Associated with our TAT Radioisotope Initiatives

There are a number of risks related to our potential recovery of radioisotopes at the Mill for use in the development and production of emerging cancer treatment therapeutics, including:

- The risk that the potential recovery of such radioisotopes at the Mill may not be technically feasible or that the radioisotopes may not meet commercial specifications;
- The risk that such radioisotopes may not be economically feasible to produce or may not be able to be sold on a commercial basis at a sufficient price and quantity;
- The risk that the Company may not be able to secure the reagents necessary for recovery of the radioisotopes on reasonable commercial terms or in adequate quantities;
- The risk that all required licenses, permits and regulatory approvals may not be obtained on a timely basis or at all;
- The risk that the medical isotopes derived from such radioisotopes produced at the Mill may not prove their efficacy at clinical trials and may not obtain all required approvals for commercial use;

- The development of competing cancer treatment therapeutics that could render the TAT therapeutics less attractive or obsolete;
- The current shortage of supply of such radioisotopes and the resulting prices for such radioisotopes, and the fear that supplies of the radioisotopes may not be forthcoming on a timely basis to meet new demands for cancer therapies, may encourage pharmaceutical companies to advance and use other technologies to meet consumer demands for end products, which could result in a significant reduction in demand for and prices of the radioisotopes the Mill is capable of producing. Sustained reductions in the price of such radioisotopes would impact the Company's returns from its TAT initiatives and could render them infeasible; and
- Increases in the supply of such radioisotopes, through the addition of radioisotope processing facilities, including the permitting and retrofitting of other uranium mills for the recovery of radioisotopes, could increase the global supply of such radioisotopes and reduce the price of the radioisotopes. Sustained reductions in the price of such radioisotopes would impact the Company's returns from its TAT radioisotope initiatives and could render them infeasible.

Risks Relating to our Regulatory Environment

The SEC's adoption of the "Modernization of Property Disclosures for Mining Registrants," as codified in Subpart 1300 of Regulation S-K 1300, has created new disclosure requirements for Mineral Reserves and Mineral Resources that create ambiguity for issuers required to comply with both the requirements of S-K 1300 and NI 43-101, and may result in increased compliance costs for the Company.

SEC Industry Guide 7 has been rescinded and replaced by S-K 1300, which requires that the Company disclose specific information related to its material mining operations, including with particularity its Mineral Resources and Mineral Reserves. While S-K 1300 is substantively the same as NI 43-101 (with the primary difference being NI 43-101's required format, a matter on which S-K 1300 is silent), the regulatory changes nonetheless required the Company to update its existing technical reports to ensure its continued compliance within the U.S. requirements. However, S-K 1300 is subject to unknown interpretations, which could require the Company to incur substantial costs associated with compliance. The Company has prepared one report for each of its material properties to comply with the requirements of both S-K 1300 and NI 43-101; however, there has been little guidance as to the acceptability of such an approach by the SEC and OSC. Where substantive disclosure in one regulatory scheme is more restrictive/stringent than in the other, the Company has opted to take the more restrictive/stringent approach. As NI 43-101 has a prescribed format and S-K 1300 does not, the reports follow the formatting requirements of NI 43-101. This is the first year in which the Company is required to comply with both S-K 1300 and NI 43-101 and the Company cannot predict the nature of any future enforcement, interpretation, or application of S-K 1300. Any further revisions to, or interpretations of, S-K 1300 or NI 43-101 could result in the Company incurring unforeseen costs associated with compliance, including in relation to its NI 43-101 disclosure.

We are a "large accelerated filer" and are subject to a fully integrated audit pursuant to SOX.

As of December 31, 2021, the Company qualified as a "large accelerated filer," meaning that, as of that date: (i) we had a public float of \$700 million or more as of the most recently completed second fiscal quarter; (ii) we had been subject to the requirements of the Exchange Act Section 13(a) or 15(d) for a period of at least 12 calendar months; (iii) we filed at least one annual report pursuant to the Exchange Act Section 13(a) or 15(d), and (iv) we were not eligible to use the requirements for "smaller reporting companies" ("SRCs") under the applicable revenue test. As a result of the transition from our status as a "non-accelerated filer" SRC to a "large accelerated filer," we are required to file this Annual Report 30 days earlier than before and without the scaled disclosure options provided to SRCs.

In addition, we are subject to a fully integrated audit pursuant to SOX 404(b) in order to assess, as of the most recent fiscal year-end, the effectiveness of the Company's internal control structure and procedures for financial reporting, as reported in an audit report of our independent public accounting firm. As a result, there are risks that one or more significant deficiencies or material weaknesses may be identified in the Company's internal controls and procedures requiring remediation.

Our future business and results of operations face uncertainties as a result of any action or inaction of the U.S. Government pursuant to the 2021 Omnibus Spending Bill that appropriates funding for a proposed U.S. Uranium Reserve, and any further evaluations by the U.S. Nuclear Fuel Working Group.

On December 27, 2020, the COVID-Relief and Omnibus Spending Bill, which includes \$75 million per year for the proposed establishment of a strategic U.S. Uranium Reserve, was signed into law. Because the U.S. Uranium Reserve has yet to be established at this time, however, there can be no certainty as to the outcome of a Uranium Reserve, if any, including the process for and details of its development, or for any further evaluations of the U.S. Nuclear Fuel Working Group established in July 2019 to "develop recommendations for reviving and expanding domestic nuclear fuel production." If the required



appropriations passed by the U.S. Congress are deferred, or if they are implemented in a way that does not provide the required support for the Company's activities, and uranium and vanadium markets do not improve and/or the Company's REE and TAT initiatives are not adequate to otherwise sustain the Company's other business activities, we may further reduce our operational activities and monetize certain non-core conventional mining assets as required in order to minimize our cash expenditures while preserving our core asset base for increased production in the future as market conditions may warrant.

Participation in Industry Trade Petition and related activities could have negative repercussions.

The Company previously participated in the filing of a Petition for Relief with the U.S. Department of Commerce ("DOC") under Section 232 of the Trade Expansion Act of 1962 (as amended) From Imports of Uranium Products that Threaten U.S. National Security (the "**Section 232 Petition**"), which resulted in the establishment of the Working Group on July 12, 2019 to study U.S. nuclear fuel production, including uranium mining, in order "to develop recommendations for reviving and expanding domestic nuclear fuel production" and to "reinvigorate the entire nuclear fuel supply chain, consistent with United States national security and nonproliferation goals." Based on recommendations from the Working Group, the U.S. Congress included in its COVID-Relief and Omnibus Spending Bill, which was signed into law on December 27, 2020, \$75 million for the proposed establishment of a strategic U.S. Uranium Reserve.

Although the Company believes this bipartisan appropriation is a significant accomplishment that will ultimately strengthen the U.S. uranium mining industry, bolster national defense, and improve supply diversification for U.S. utilities and their customers, there is a risk that such funds will not be allocated in a way that benefits the Company, a risk that the proposed U.S. Uranium Reserve will not be established, or will see a delay in its establishment, and the potential for negative responses or repercussions to these activities from various special interest groups, government entities, consumers of uranium and participants in other phases of the nuclear fuel cycle, both domestically and abroad, which could have a negative impact on the Company and its operations. In addition, the costs of pursuing such actions have been and could continue to be significant. It should also be noted that there can be no certainty as to the any further recommendations of the Working Group, and therefore its influence on the U.S. Congress and uranium industry going forward is uncertain.

Participation in the renewal of the Russian Suspension Agreement and related activities could have negative repercussions.

In October 2020, the DOC and State Atomic Energy Corporation Rosatom, on behalf of the Government of the Russian Federation, signed an amendment (the "**Russian Amendment**") to the "*Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation*" (the "**Russian Agreement**"), thereby extending limitations on the import of Russian low-enriched uranium into the U.S. for use as fuel for nuclear reactors until the year 2040 and tightening restrictions in order to close loopholes identified in the original Russian Agreement. The Company participated with the DOC in its efforts to secure the Russian Amendment as an advocate for domestic uranium producers, which has the potential for negative responses or repercussions to these activities from various special interest groups, government entities, consumers of uranium and participants in other phases of the nuclear fuel cycle, both domestically and abroad, which could have a negative impact on the Company and its operations.

Our business is subject to extensive environmental regulations that may make exploring, mining, or related activities expensive, and which may change at any time.

We are required to comply with environmental protection laws and regulations and permitting requirements promulgated by federal agencies and various states and counties in which we operate and conduct our activities, in connection with extraction, mining, recovery and milling operations. The uranium industry is subject not only to the worker health and safety and environmental risks associated with all mining activities, but also to additional risks uniquely associated with uranium extraction, mining, recovery, and milling. We expend significant resources, both financial and managerial, to comply with these laws and regulations. The possibility of more stringent regulations exists in the areas of worker health and safety, storage of hazardous materials, standards for heavy equipment used in extraction, mining, recovery or milling, the disposition of wastes, the decommissioning and reclamation of exploration, extraction, mining, recovery, milling and *in-situ* sites, climate change and other environmental matters, each of which could have a material adverse effect on the cost or the viability of a particular project.

We cannot predict what environmental legislation, regulations or policies will be enacted or adopted in the future or how future laws and regulations will be administered or interpreted. The recent trend in environmental legislation and regulation is generally toward stricter standards, and this trend is likely to continue in the future. This recent trend includes, without limitation, laws and regulations relating to air and water quality, mine and other facility reclamation, waste handling and disposal, the protection of certain species and the preservation of certain lands. These regulations may require the acquisition of permits or other authorizations for certain activities. These laws and regulations may also limit or prohibit activities on certain

lands. Compliance with more stringent laws and regulations, as well as potentially more vigorous enforcement policies, stricter interpretation of existing laws and stricter permit and license conditions, may necessitate significant capital outlays, may materially affect our results of operations and business or may cause material changes or delays in our intended activities. There can be no assurance of our continued compliance or ability to meet stricter environmental laws and regulations and permit or license conditions. Delays in obtaining permits and licenses could impact expected production levels or increases in expected uranium extraction levels.

Our operations may require additional analysis in the future including environmental, cultural, and social impact and other related studies. Certain activities require the submission and approval of environmental impact assessments. We cannot provide assurance that we will be able to obtain or maintain all necessary permits that may be required to continue operations or exploration and development of our properties or, if feasible, to commence construction, development, operation or other activities relating to mining facilities at such properties on terms that enable operations or activities to be conducted at economically justifiable costs. If we are unable to obtain or maintain, licenses, permits or other rights for construction or development of our properties, or otherwise fail to manage adequately future environmental issues, our uranium recovery operations and mining activities could be materially and adversely affected.

Mineral Withdrawals and National Monuments

Mining claims on U.S. federal lands are subject to mineral withdrawals by the federal government or the designation of national monuments by the President of the United States under the Antiquities Act. In both cases the withdrawal or the designation of a national monument withdraws the area from location and entry under the Mining Law of 1872, subject to valid existing rights. What this means is that no new mining claims may be filed on the withdrawn or designated lands and no new plans of operations may be approved, other than plans of operations on mining claims that were valid at the time of withdrawal or designation and that remain valid at the time of plan approval. Whether or not a mining claim is valid must be determined by a mineral examination conducted by BLM or USFS, as applicable. The mineral examination, which involves an economic evaluation of a project, must demonstrate the existence of a locatable mineral resource and that the mineral resource constitutes discovery of a valuable mineral deposit. We believe that all of our material Arizona Strip projects are on valid mining claims that would withstand a mineral examination. Mineral claims that are in the exploration stage and upon which economic deposits have not yet been delineated are generally prevented from proceeding to the plan of operations stage during the withdrawal period or indefinitely in the case of the designation of a national monument. See the discussions under Part I, Item 1. “*Land Tenure*,” above, for a discussion on the recent Grand Canyon withdrawal and designation of the Bears Ears National Monument, both of which do not have significant impacts on the Company at this time, but which have the potential to significantly impact the Company in the future.

In addition to the Grand Canyon withdrawal and the Bears Ears National Monument, there are currently other designated or proposed withdrawals of federal lands for the purposes of mineral location and development and proposed designations of national monuments. While such proposals are not yet final and would require further federal action, if they were to occur, it is uncertain whether any such withdrawals or designations would affect in any manner our current mineral projects.

Any future withdrawal of mineral lands from location and entry or future designation of additional national monuments has the potential to prevent further development on exploration stage claims held by the Company in the affected area as well as the potential for the Company to lose the ability to continue to develop mining operations on other claims in the affected area if a mineral examination indicates the deposit is uneconomical and that the claim is not valid, either of which could have significant impacts on the Company.

The new or lasting impacts of the USMCA (formerly NAFTA) on the Company remain unclear, and any action by President Biden to withdraw from or materially modify certain other international trade agreements in the future could adversely affect our business, financial condition and results of operations, to the extent dependent on the jurisdiction of our incorporation.

Although our primary trading market is the NYSE American, we have a majority of U.S. resident shareholders, are a U.S. Domestic Issuer for SEC purposes, and all of our assets, operations and employees are in the U.S., the Company is incorporated in Ontario, Canada. On September 30, 2018, trade representatives acting on behalf of the U.S., Mexico and Canada renegotiated the terms of the North American Free Trade Agreement (“NAFTA”) in what is known as the United States-Mexico-Canada Agreement (“USMCA”), which entered into force on July 1, 2020 after being approved by the U.S. Congress. At this time, the new or lasting impacts of the USMCA on the Company remain unclear. In addition, if President Biden takes action to withdraw from or materially modify certain other international trade agreements, and such actions depend on the jurisdiction of our

incorporation, then our business, financial condition and results of operations could possibly be adversely affected, depending on the nature of the action.

Possible amendments to the General Mining Law or other laws could make it more difficult or impossible for us to execute our business plan.

Members of the U.S. Congress have repeatedly introduced bills which would supplant or alter the provisions of the United States Mining Law of 1872, as amended. Such bills have proposed, among other things, to (i) either eliminate or greatly limit the right to a mineral patent; (ii) significantly alter the laws and regulations relating to uranium mineral development and recovery from unpatented and patented mining claims; (iii) impose a federal royalty on production from unpatented mining claims; (iv) impose time limits on the effectiveness of plans of operation that may not coincide with mine or facility life; (v) impose more stringent environmental compliance and reclamation requirements on activities on unpatented mining claims; (vi) establish a mechanism that would allow states, localities and Native American tribes to petition for the withdrawal of identified tracts of federal land from the operation of the U.S. general mining laws; and (vii) allow for administrative determinations that mining or similar activities would not be allowed in situations where undue degradation of the federal lands in question could not be prevented. If enacted, such legislation could change the cost of holding unpatented mining claims and could significantly impact our ability to develop locatable mineral resources on our patented and unpatented mining claims. Although it is impossible to predict at this point what any legislated royalties might be, enactment could adversely affect the potential for construction and development and the economics of existing operating mines and facilities. Passage of such legislation could adversely affect our financial performance.

The U.S. Environmental Protection Agency has in recent years announced an intention to propose new rules that, if promulgated, could result in increases in mine surety arrangements to cover currently non-existing and unidentified potential future environmental costs, which could severely impact or render infeasible many existing or prospective mining operations. EPA dropped this proposal after considering comments received during the public participation process. Nevertheless, there is a risk that similar regulations could be proposed in the future, which could have significant impacts on the Company and the mining industry as a whole.

Risks Related to Our Business

Because the probability of an individual prospect ever having Mineral Reserves as defined by S-K 1300 and NI 43-101 is not known, our properties (other than Sheep Mountain) may not contain any Mineral Reserves, and any funds spent on exploration may be lost.

We have only one Mineral Reserve, the Sheep Mountain Project, as defined by S-K 1300 and NI 43-101. Because the probability of an individual prospect ever having Mineral Reserves” as defined by S-K 1300 and NI 43-101 is uncertain, our properties may not contain any Mineral Reserves, and any funds spent on exploration, construction, development, extraction, and recovery may be lost. We do not know with certainty that economically recoverable uranium exists on any of our properties as defined by S-K 1300 and NI 43-101. Further, although we are undertaking uranium extraction activities at our Mill, our lack of established reserves means that we are uncertain as to our ability to continue to generate revenue from our operations. We may never discover additional uranium in commercially exploitable quantities, and our identified deposits currently classified as Mineral Resources may never qualify as commercially mineable Mineral Reserves. We will continue to attempt to acquire the surface and mineral rights on lands that we think are geologically favorable or where we have historical information in our possession that indicates uranium mineralization might be present.

The exploration and, if warranted, construction relating to or development of mineral deposits involves significant financial and other risks over an extended period of time, which even a combination of careful evaluation, experience and knowledge may not eliminate. Few properties which are explored are ultimately developed into producing mines. Major expenditures are required to establish Mineral Reserves by drilling and to construct mining and processing facilities at a site. Other than Sheep Mountain, which is classified as a Mineral Reserve, all of our uranium properties are classified under S-K 1300 and NI 43-101 as being in the “exploration” stage without any known Mineral Reserves at this time (though the Company itself is deemed to be a “development stage issuer” as a result of the Sheep Mountain Mineral Reserve). It is impossible to ensure that the current or proposed exploration programs and other activities on properties in which we have an interest will result in the delineation of Mineral Reserves or in profitable commercial operations. Our operations and activities are subject to the hazards and risks normally incident to exploration and production of uranium, precious and base metals, any of which could result in damage to life or property, environmental damage and possible legal liability for such damage. While we may obtain insurance against certain risks, the nature of these risks is such that liabilities could exceed policy limits or could be excluded from coverage. There are also risks against which we cannot insure or against which we may elect not to insure. The potential costs which could be associated with any liabilities not covered by insurance, or in excess of insurance coverage, or compliance with

applicable laws and regulations may cause substantial delays and require significant capital outlays, adversely affecting our future earnings and competitive position and, potentially our financial viability.

The Mill has historically been run on a campaign basis as sufficient feed materials are available, and there can be no assurance that sufficient mill feed will be available in the future to sustain future campaigns.

The Mill has historically operated on a campaign basis, whereby mineral processing occurs as mill feed, cash needs, contract requirements, and/or market conditions may warrant. Each milling campaign is subject to receipt of sufficient mill feed that would allow us to operate the Mill on a profitable basis and/or recover a portion of its standby costs.

At current uranium and vanadium prices, none of the Company's conventional mines were active in 2021; all such conventional properties are either on standby, in the evaluation and permitting phase, or inactive, and no third-party conventional properties are operating to provide mill feed. In times of depressed commodity prices, when conventional mine production is on standby, the Mill has relied primarily on processing Alternate Feed Materials and has also recycled tailings pond solutions for the recovery of uranium and vanadium. The Company continuously seeks to identify and secure additional Alternate Feed Materials and other sources of mill feed, such as materials from the cleanup of abandoned uranium mine sites. The Company is also in the process of ramping up its commercial production of RE Carbonate, having commenced such production at the Mill in 2021. However, there can be no assurance that sufficient conventional ores, Alternate Feed Materials, suitable tailings pond solutions and/or other sources of mill feed will be available in the future, or that our planned increases to production of RE Carbonate will be successful, so as to allow us to operate the Mill on a profitable basis and/or recover a portion of the Mill's standby costs at any time.

Our prior term sales contracts for a portion of our recovered uranium have expired, with no new long-term contracts for the sale of uranium or vanadium made in 2021 or to date in 2022, and there can be no guarantee that we will be able to enter into new term sales contracts in the future for uranium, vanadium or REEs on suitable terms and conditions.

All the Company's existing long-term sales contracts for a portion of our recovered uranium expired following the Company's final April 1, 2018 deliveries. Fixed-price long-term contracts for vanadium are generally not available and the Company's existing contract for the sale of RE Carbonate is at prices that vary with the prices of REEs. The Company did not enter into any new long-term contracts for the sale of uranium or vanadium in 2019, 2020, 2021 or, as of the date of this Form 10-K, in 2022, and there can be no guarantee that the Company will be able to enter into long-term contracts for the delivery of a sufficient amount of uranium, vanadium or RE Carbonate at satisfactory prices in the future. The failure to enter into new term sales contracts on suitable terms could adversely impact our operations and mining activity decisions and resulting cash flows and income.

Vanadium mineral resource estimates for the La Sal Complex are based in part on Mill production records.

For the Company's La Sal Complex uranium-vanadium property, vanadium assay results are not available for all drill holes such that the vanadium mineral resource estimate is in part based on a ratio of vanadium to uranium supported by actual mill production records from the Mill. There is a risk that the use of a ratio based on mill production records may increase the potential uncertainty in vanadium grades.

We may be unable to timely pay our outstanding debt obligations, which may result in us losing some of our assets covered by mortgage and/or other security arrangements, and which may adversely affect our assets, results of operations, and future prospects.

We may from time to time enter into arrangements to borrow money in order to fund our operations and expansion plans, and such arrangements may include covenants that restrict our business in some way. We may also from time to time acquire properties whereby certain payment obligations owed to the seller are paid by us over time, with the seller's sole remedy for non-payment by us being re-acquisition of the property. Events may occur in the future, including events out of our control that would cause us to fail to satisfy our debt or financing instruments. In such circumstances, or if we were to default on our obligations under such debt or financing instruments, the amounts drawn in accordance with the underlying agreements may become due and payable before the agreed maturity date, and we may not have the financial resources to repay such amounts when due.

Although most, but not all, of our reclamation obligations are bonded, and cash and other assets have been reserved to secure a portion but not all of this bonded amount, to the extent the bonded amounts are not fully collateralized, we will be required to provide additional cash to perform our reclamation obligations when they occur. In addition, the bonding companies have the right to require increases in collateral at any time, failure of which would constitute a default under the bonds. In such

circumstances, we may not have the financial resources to perform such reclamation obligations or to increase such collateral when due.

We may need additional financing in connection with the implementation of our business and strategic plans from time to time.

The exploration, construction and development of mineral properties and the ongoing operation of mines and other facilities requires a substantial amount of capital and may depend on our ability to obtain financing through joint ventures, debt financing, equity financing or other means. We may accordingly need further capital in order to take advantage of further opportunities or acquisitions. Our financial condition, general market conditions, volatile uranium and vanadium markets, volatile interest rates, legal claims against us, a significant disruption to our business or operations, or other factors may make it difficult to secure financing necessary for the expansion of mining activities or to take advantage of opportunities for acquisitions. Further, continuing volatility in the credit markets may increase costs associated with debt instruments due to increased spreads over relevant interest rate benchmarks, or may affect our ability, or the ability of third parties we seek to do business with, to access those markets. Continued volatility in equity markets, specifically including energy and commodity markets, may increase the costs associated with equity financings due to a low share price, and the potential need to offer higher discounts and other value (e.g., warrants). There is no assurance that we will be successful in obtaining required financing as and when needed on acceptable terms, if at all.

We have experienced negative cash flows from operations and may need additional financing in connection with the implementation of our business and strategic plans from time to time.

The Company has had negative cash flow from operations in prior years, and at low commodity prices a number of our mining properties will be on standby, making it less likely that the Company will be able to generate positive cash flows from operations. If the Company cannot generate positive cash flows from operations, its ability to fund its operations and implement its business plans may depend on its ability to obtain financing through joint ventures, debt financing, equity financing or other means. There can be no assurance that we will be able to achieve and maintain positive cash flow from operations to fund our financing needs. Further, if cash flows from operations are negative, there is no assurance that the Company will be able to raise additional funds, if needed, or that if any such additional funds are raised, that the Company will be able to raise such funds on commercially attractive terms. If we do not achieve positive cash flows or are unable to raise additional funds when needed, we may not be able to continue to fund our operations.

We are subject to costs associated with decommissioning and reclamation of our properties.

As owner and operator of the Mill, the Nichols Ranch Project, the Alta Mesa Project, and numerous uranium and uranium/vanadium projects and other facilities located in the United States and certain permitting, construction, development and exploration properties, and for so long as we remain an owner thereof, we are obligated to eventually reclaim or participate in the reclamation of such properties. Most, but not all, of our reclamation obligations are bonded, and cash and other assets have been reserved to secure a portion, but not all, of this bonded amount. Although our financial statements will record a liability for the asset retirement obligation, and the bonding requirements are generally periodically reviewed by applicable regulatory authorities, there can be no assurance or guarantee that the ultimate cost of such reclamation obligations will not exceed the estimated liability to be provided on our financial statements. Further, to the extent the bonded amounts are not fully collateralized, we will be required to come up with additional cash to perform our reclamation obligations when they occur.

Decommissioning plans for our properties have been filed with applicable regulatory authorities. These regulatory authorities have accepted the decommissioning plans in concept, not upon a detailed performance forecast, which has not yet been generated. Over time, further regulatory review of the decommissioning plans may result in additional decommissioning requirements, associated costs and the requirement to provide additional financial assurances, including as our properties approach or go into decommissioning. It is not possible to predict what level of decommissioning and reclamation (and financial assurances relating thereto) may be required in the future by regulatory authorities.

Our mineral properties may be subject to defects in title.

We have investigated our rights to explore and exploit all of our material properties and, to the best of our knowledge, those rights are in good standing. However, no assurance can be given that such rights will not be revoked, or significantly altered, to our detriment. There can also be no assurance that our rights will not be challenged or impugned by third parties, including by governments, surface owners, and non-governmental organizations.

The validity of unpatented mining claims on U.S. public lands is sometimes difficult to confirm and may be contested. Due to the extensive requirements and associated expense required to obtain and maintain mining rights on U.S. public lands, our properties are subject to various title uncertainties which are common to the industry with the attendant risk that there may be defects in title. In addition, the Secretary of the Interior has withdrawn certain lands around the Grand Canyon National Park from location and entry under the Mining Laws. All of our material Arizona Strip properties, other than the Wate Property, are located on these withdrawn lands. No new mining claims may be filed on the withdrawn lands and no new plans of operations may be approved, other than plans of operations on mining claims that were valid at the time of withdrawal and that remain valid at the time of plan approval. Whether or not a mining claim is valid must be determined by a mineral examination conducted by BLM or USFS, as applicable. The mineral examination, which involves an economic evaluation of a project, must demonstrate the existence of a locatable mineral resource and that the mineral resource constitutes discovery of a valuable mineral deposit. We believe that all of our material Arizona Strip projects are on valid mining claims that would withstand a mineral examination. Further, our Arizona 1 Project has an approved PoO which, absent modification, would not require a mineral examination. Although our Pinyon Plain Project also has an approved PO, which, absent modification, would not require a mineral examination, the USFS performed a mineral examination at that mine in 2012, and concluded that the underlying mining claims are valid existing rights (a decision which has been involved in a court challenge). However, market conditions may postpone or prevent the performance of mineral examinations on certain other properties and, if a mineral examination is performed on a property, there can be no guarantee that the mineral examination would not result in one or more of our mining claims being considered invalid, which could prevent a project from proceeding.

Certain of our properties, or significant portions thereof, are mineral leases that have fixed terms, both with State and private parties. Certain of our properties are subject to other agreements that may affect our ability to explore, permit, develop and operate them, including surface use, access and other agreements. There can be no guarantee that we will be able to renew or extend such leases and agreements on favorable terms or at all. The failure to renew any such leases or agreements could have a material adverse effect on our operations.

Because we may be unable to secure access rights to certain of our properties, we may be unable to explore and/or advance such properties.

We are currently in the process of negotiating and clarifying access rights to certain of our properties, such as the Roca Honda Project and the Wate Project, with private landholders. There can be no guarantee that we will be able to negotiate or clarify such access rights on favorable terms, or at all. The failure to negotiate or clarify such access rights on suitable terms could have a material adverse effect on our operations.

We are subject to foreign currency risks.

Our operations are subject to foreign currency fluctuations. Our operating expenses and revenues are primarily incurred in U.S. dollars, while some of our cash balances and expenses are measured in Canadian dollars. The fluctuation of the Canadian dollar in relation to the U.S. dollar will consequently have an impact on our profitability and may also affect the value of our assets and shareholders' equity. In addition, any strengthening of the U.S. dollar relative to other currencies makes our mineral extraction and recovery less competitive in relation to similar activities in other countries. Any strengthening of the U.S. dollar in relation to the currencies of other countries can have a material impact on our cash flows and profitability and affect the value of our assets and shareholders' equity.

We may not realize the anticipated benefits of previous acquisitions.

We may not realize the anticipated benefits of acquiring: the Sheep Mountain Project in 2012; Denison Mines Corp.'s U.S. Mining Division in 2012, including the Mill, certain of the Arizona Strip Properties, the Bullfrog Project, and the La Sal Project; Strathmore in 2013, including the Roca Honda Project; Uranerz in 2015, including the Nichols Ranch Project; and EFR Alta Mesa in 2016, including the Alta Mesa Project, due to integration, operational and uranium market challenges. Decreases in commodity prices have required us to place or maintain a number of acquired properties and facilities on standby and to defer permitting and construction and development activities on certain other acquired assets, until market conditions warrant otherwise, and, in some cases, we have elected to sell or abandon certain of these properties at a loss. Our success following those acquisitions will depend in large part on the success of our management in integrating the acquired assets into the Company. Our failure to achieve such integration and to mine or advance such assets could result in our failure to realize the anticipated benefits of those acquisitions and could impair our results of operations, profitability and financial results.

We prepare estimates of future uranium extraction and recovery, and there are no assurances that such estimates will be achieved.

We may from time to time prepare estimates of future uranium extraction and recovery, or increases in uranium extraction and recovery, for particular operations, or relating to our ability to increase uranium extraction and recovery in response to increases in commodity prices, as market conditions warrant or otherwise. No assurance can be given that any such extraction and recovery estimates will be achieved, nor can assurance be given that extraction or recovery increases will be achieved in a cost effective or timely manner. Failure to achieve extraction and recovery estimates or failure to achieve extraction and recovery in a cost effective or timely manner could have an adverse impact on our future cash flows, earnings, results of operations and financial condition. These estimates are based on, among other things, the following factors: the accuracy of mineral resource and reserve estimates; the accuracy of assumptions regarding ground conditions and physical characteristics of mineralized materials, such as hardness and presence or absence of particular metallurgical characteristics; the accuracy of estimated rates and costs of extraction, recovery and processing; assumptions as to future commodity prices; assumptions relating to changes in laws, regulations or policies, or lack thereof, that could impact the cost and time required to obtain regulatory approvals, licenses and permits; assumptions relating to obtaining required licenses and permits in a timely manner, including the time required to satisfy environmental analyses, consultations and public input processes; assumptions relating to challenges to or delays in the licensing and permitting process; and assumptions regarding any appeals or lack thereof, or injunctions or lack thereof, relating to any approvals, licenses or permits.

Our actual uranium extraction and recovery may vary from estimates for a variety of reasons, including, among others: actual mineralized material extracted, mined or recovered varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; short term operating factors relating to the mineral resources and reserves, such as the need for sequential construction or development of mineralized materials or deposits and the processing of new or different mineral grades; risk and hazards associated with extraction, mining and recovery; natural phenomena, such as inclement weather conditions, underground floods, earthquakes, pit wall failures and cave-ins; unexpected labor shortages or strikes; varying conditions in the commodities markets; and delays in obtaining or denial, challenges or appeals of regulatory approvals, licenses and permits or renewals of existing approvals, licenses or permits.

In addition, the Company is evaluating potentially recovering copper at the Mill as a byproduct with uranium from its Pinyon Plain Project. There can be no assurance that this evaluation will result in the Mill being able to recover copper at the Mill as a byproduct on an economic basis.

We depend on the issuance of license amendments and renewals which cannot be guaranteed.

We maintain regulatory licenses and permits in order to operate our Mill, Nichols Ranch Project and Alta Mesa Project, all of which are subject to renewal from time to time and are required in order to operate in compliance with applicable laws and regulations. In addition, depending on our business requirements, it may be necessary or desirable to seek amendments to one or more of our licenses or permits from time to time. While we have been successful in renewing our licenses and permits on a timely basis in the past and in obtaining such amendments as have been necessary or desirable, there can be no assurance that such license and permit renewals and amendments will be issued by applicable regulatory authorities on a timely basis or at all in the future.

We will need to continuously add to our Mineral Reserve and Mineral Resource base and to our Alternate Feed Materials.

The majority of our properties do not contain any Mineral Reserves under S-K 1300 and NI 43-101. See “Cautionary Note to Investors Concerning Disclosure of Mineral Reserve and Mineral Resource Estimates.”

Our material Mineral Resources are located at the Nichols Ranch Project, the Alta Mesa Project, the Pinyon Plain Project, the Roca Honda Project, the Sheep Mountain Project, the Bullfrog Project and the La Sal Project. These projects are our primary sources (and potential sources) of current and future uranium concentrates. Unless other Mineral Resources or Mineral Reserves are discovered or extensions to existing resource bodies are found, our sources of extraction, production and recovery for uranium concentrates will decrease over time as our current Mineral Resources and sole Mineral Reserve (Sheep Mountain) are depleted. There can be no assurance that our future exploration, construction, development and acquisition efforts will be successful in replenishing our Mineral Resources or finding or developing Mineral Reserves. In addition, while we believe that many of our properties will eventually engage in extraction or mining activities, there can be no assurance that they will be placed into such activities, or that they will be able to replace current extraction or mining activities.

We also recover uranium from processing Alternate Feed Materials at our Mill. There can be no assurance that additional sources of Alternate Feed Materials will be forthcoming in the future on commercially acceptable terms or otherwise, or that we

will be successful in receiving all required regulatory approvals, licenses and permits on a timely basis to allow for the receipt and processing of any such Alternate Feed Materials.

Our sales of uranium, vanadium and REE products expose us to the risk of non-payment.

Our sales of uranium, vanadium and REE products expose us to the risk of non-payment. We manage this risk by monitoring the credit worthiness of our customers and requiring prepayment or other forms of payment security from customers with an unacceptable level of credit risk. Most of the Company's uranium sales are to major nuclear utilities, which pose a relatively low risk of non-payment due to their large size and capitalization.

We are dependent on key personnel and qualified and experienced employees.

Our success will largely depend on the efforts and abilities of certain senior officers and key employees, some of whom are approaching retirement. Certain of these individuals have significant experience in the uranium industry. The number of individuals with significant experience in this industry is small. While we do not foresee any reason why such officers and key employees will not remain with us, other than through retirement, if for any reason they do not, we could be adversely affected. We have not purchased key person life insurance for any of these individuals, other than for our Chief Executive Officer.

Our compensation programs include cash and equity incentive compensation components designed to attract and retain qualified personnel, which, in the case of our equity incentive programs, contain vesting requirements which also help retain qualified personnel. Further, all the Company's current executive officers have, and all future executive officers are expected to have, employment agreements with the Company, which also serve to attract and retain qualified personnel. In addition, the Company prioritizes the development of its existing management personnel and the advancement of existing personnel to fill vacancies as they arise, which the Company believes is an important element in developing, attracting and retaining the most qualified management personnel.

Nevertheless, our success will depend on the availability of qualified and experienced employees to work in our operations and our ability to develop, attract and retain such employees. The number of individuals with relevant mining and operational experience in this industry, especially the U.S. uranium industry, is small. As the Company grows there is a risk that we may not be able to grow our qualified workforce and management team in pace with the growth of our business and activities, which could hamper our growth efforts.

We are dependent on business partners, government and third-party consents.

We have a number of joint ventures and other business relationships from time to time relating to our properties and projects, including key projects, such as the Arkose Mining Venture, which can restrict our ability to act unilaterally with respect to those projects in certain circumstances. There can be no assurances that we will be able to maintain relationships with our joint venture and business partners to allow for satisfactory exploration, permitting, construction, development, extraction, mining, recovery or milling relating to any such projects. Our operations and activities are also dependent from time to time on receiving government and other third-party consents and approvals. There can be no assurances that all such consents and approvals will be forthcoming when required.

Certain of our directors may be in a position of conflict of interest with respect to the Company due to their relationship with other resource companies.

Some of our directors are also directors of other companies that are similarly engaged in the business of acquiring, exploring and developing natural resource properties. Such associations may give rise to conflicts of interest from time to time. In particular, one of the consequences will be that corporate opportunities presented to a director may be offered to another company or companies with which the director is associated and may not be presented or made available to us. Our directors are required by law to act honestly and in good faith with a view to the best interests of the Company, to disclose any interest which they may have in any project or opportunity of the Company, and to abstain from voting on such matter. Conflicts of interest that arise will be subject to and governed by the procedures prescribed in our Code of Ethics and by the *Business Corporations Act* (Ontario).

Our relationship with our employees may be impacted by changes in labor relations.

None of our operations or activities currently directly employ unionized workers who work under collective agreements. However, there can be no assurance that our employees or the employees of our contractors will not become unionized in the

future, which may impact our operations and activities. Any lengthy work stoppages may have a material adverse impact on our future cash flows, earnings, results of operations and financial condition.

U.S. investors may have difficulty bringing actions and enforcing judgments under U.S. securities laws against an Ontario corporation.

Although our primary trading market is the NYSE American, we have a majority of U.S. resident shareholders, are a U.S. Domestic Issuer for SEC purposes, and all of our assets, operations and employees are in the U.S., the Company was incorporated in Ontario, and as a result, investors in the United States or in other jurisdictions outside of Canada may have difficulty bringing actions and enforcing judgments against us, our directors, our executive officers and some of the experts named in this Annual Report on Form 10-K based on civil liabilities provisions of the federal securities laws or other laws of the United States or any state thereof or the equivalent laws of other jurisdictions of residence.

An information security incident, including a cybersecurity breach, could have a negative impact to the Company's business or reputation.

To meet business objectives, the Company relies on both internal information technology (“IT”) systems and networks, and those of third parties and their vendors, to process and store sensitive data, including confidential research, business plans, financial information, process technology, intellectual property, and personal data that may be subject to legal protection. The extensive information security and cybersecurity threats, which affect companies globally, pose a risk to the security and availability of these IT systems and networks, and the confidentiality, integrity, and availability of the Company’s sensitive data. The Company continually assesses these threats and makes investments to increase internal protection, detection, and response capabilities, as well as ensure the Company’s third-party providers have required capabilities and controls, to address this risk. In addition, we provide confidential and proprietary information to our third-party business partners in certain cases where doing so is necessary to conduct our business. While we obtain assurances from those parties that they have systems and processes in place to protect such data, and where applicable, that they will take steps to assure the protections of such data by third parties, nonetheless those partners may also be subject to data intrusion or otherwise compromise the protection of such data. Any compromise of the confidential data of our customers, consumers, suppliers, partners, employees or ourselves, or failure to prevent or mitigate the loss of or damage to this data through breach of our information technology systems or other means could substantially disrupt our operations, harm our customers, consumers, employees and other business partners, damage our reputation, violate applicable laws and regulations, subject us to potentially significant costs and liabilities and result in a loss of business that could be material. To date, the Company has not experienced any material impact to the business or operations resulting from information or cybersecurity attacks; however, because of the frequently changing attack techniques, along with the increased volume and sophistication of the attacks, there is the potential for the Company to be adversely impacted. The Company may not maintain cybersecurity insurance in the event of an information security or cyber incident with sufficient coverage to cover all financial losses, or at all.

The Company may compromise or lose its proprietary technology or intellectual property in certain circumstances, which could result in a loss in the Company's competitive position and/or the value of its intangible assets.

The increased reliance on technology, coupled with the Company’s new REE and radioisotope initiatives, which involve novel technology developed in part by the Company and in part by others and by consultants, may expose the Company to material risks of theft or loss of proprietary technology and other intellectual property, including technical data, business processes, data sets or other sensitive information. Among the risks faced by the Company are:

- Failure to obtain patents or trade rights when available;
- Failure to adequately contractually establish rights to proprietary technology and other intellectual property in joint venture situations or other situations where the Company and its co-venturers, other business associates or consultants may be jointly contributing to the development of proprietary technology and other intellectual property;
- Failure to adequately limit rights or access to unprotected proprietary technology and other intellectual property;
- Failure to adequately identify and enforce infringements of proprietary technology and other intellectual property;
- The risk of theft of technology, data and intellectual property through a direct intrusion by private parties or foreign actors, including those affiliated with or controlled by state actors;
- The risk of reverse engineering by joint venture partners or other parties, including those affiliated with state actors, and any patents the Company may have being subsequently infringed or know-how or trade secrets being stolen; and
- The Company may be required to compromise protections or yield rights to technology, data or intellectual property in order to conduct business in or access markets in a foreign jurisdiction, either through formal written agreements or due to legal or administrative requirements in the host nation.

The Company takes what it considers to be reasonable steps to protect its proprietary technology and intellectual property, but there can be no assurance that it will successfully protect its proprietary technology and intellectual property in all



circumstances. There is therefore a risk that the Company may compromise or lose its proprietary technology and intellectual property in certain circumstances, which could result in a loss in the Company's competitive position and/or the value of its intangible assets.

We may be required to provide the audited financial statements of one or more of our equity method investees in our Annual Report on Form 10-K, and rely on our equity method investees to provide us with these audited financial statements to fulfill our SEC reporting obligations.

We account for our economic ownership interest in our equity method investments using the equity method of accounting or at fair value using the fair value option (collectively, the "**equity method investees**"). Pursuant to Rule 3-09 of Regulation S-X ("**Rule 3-09**"), we may be required to provide in our Annual Report on Form 10-K audited financial statements for these equity method investees (the "**Regulation S-X Audited Financial Statements**"). If required to provide Regulation S-X Audited Financial Statements for these equity method investees, we have relied, and may in the future rely, on these equity method investees to provide us with their Regulation S-X Audited Financial Statements. In addition, we do not control the financial reporting process of our equity method investees and cannot change the way in which these equity method investees report their respective financial results.

These equity method investees may not provide us with the Regulation S-X Audited Financial Statements necessary to enable us to complete our SEC filings on a timely basis or at all. If we are required to provide Regulation S-X Audited Financial Statements for any of our equity method investees and are unable to do so, it may cause us to no longer be deemed timely and current with our SEC reporting obligations. In such event, we could become ineligible to use a registration statement on Form S-3. In addition, the SEC may not declare effective any registration statement that we file in connection with an offering that requires the financial statements under Rule 3-09 to be included. Any resulting inability to complete a registered offering may materially adversely impact our business, liquidity position, growth prospects, financial condition and results of operations.

Our method of accounting for equity investments in other companies held by the Company could result in material changes to the Company's financial results that are not fully within the Company's control.

The Company accounts for investments over which it exerts significant influence, but not control, over the financial and operating policies through the fair value option of ASC Topic 825 – Financial Instruments. Changes in the fair value of these investments are recognized in Other Income (Loss) in the Company's Consolidated Statements of Operations and Comprehensive Income (Loss). The resulting related gains or losses are not fully within the control of the Company and could be material.

General Risk Factors

We are subject to global economic risks.

In the event of a general economic downturn or a recession, there can be no assurance that our business, financial condition, and results of operations would not be materially adversely affected. During the global financial crisis of 2007-2008, economic problems in the U.S. and Eurozone caused deterioration in the global economy, as numerous commercial and financial enterprises either went into bankruptcy or creditor protection or had to be rescued by governmental authorities. Access to public financing was negatively impacted by sub-prime mortgage defaults in the U.S., the liquidity crisis affecting the asset-backed commercial paper and collateralized debt obligation markets, and massive investment losses by banks with resultant recapitalization efforts. Moreover, the occurrence of unforeseen or extended catastrophic events, including in particular the COVID-19 pandemic, and the emergence of a future pandemic or other widespread health emergency (or concerns over the possibility of such an emergency), could create economic and financial disruptions. These types of challenges can impact commodity prices, including for uranium, vanadium and REEs, as well as currencies and global debt and stock markets. As a result of the ongoing COVID-19 pandemic, or in the case of a future pandemic or other widespread health emergency, quarantine or other requirements or circumstances may require the Company to change the way it conducts its business and operations, including require the Company to reduce or cease operations at some or all its facilities for an indeterminate period of time. Furthermore, our critical supply chains may similarly be disrupted for an indeterminate amount of time. All these factors could have a material impact on the Company's business, operations, personnel and financial condition.

These types of challenges may impact our ability to obtain equity, debt, or other financing on terms commercially reasonable to us, or at all. Additionally, these types of factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. If these types of challenges occur, or if there is a material deterioration in general business and economic conditions, our operations could be adversely impacted, and the trading price of our securities could be adversely affected.

COVID-19

The Company continues to respond to the effects of the global COVID-19 pandemic on the Company's business objectives, projections and workforce. To date, although the Company has made operational adjustments since the onset of the pandemic to ensure its workforce remains protected, the Company has not been required to shut down any operations as a result of COVID-19. None of these operational adjustments have been material to the Company. The Company has evaluated any potential shutdown of Company production facilities as a result of COVID-19 and has determined that any such shutdown could be accommodated by the Company in a manner consistent with a typical shutdown of Company production facilities as a result of depressed commodity prices. Nevertheless, circumstances could change in the future, which could create economic and financial disruptions and require the Company to reduce or cease operations at some or all its facilities for an indeterminate period of time, and which could have a material impact on the Company's business, operations, personnel and financial condition.

The price of our Common Shares is subject to volatility.

Securities of mining companies have experienced substantial volatility and downward pressure in the recent past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic conditions in North America and globally, and market perceptions of the attractiveness of particular industries. The price of our securities is also likely to be significantly affected by short-term changes in uranium, vanadium and REE prices, changes in industry forecasts of uranium, vanadium and REE prices, other mineral prices including oil and natural gas, currency exchange fluctuation, or in our financial condition or results of operations as reflected in our periodic earnings reports. Other factors unrelated to our performance that may have an effect on the price of our securities include the following: the extent of research coverage available to investors concerning our business may be limited if investment banks with research capabilities do not follow our securities; adverse proxy voting recommendations or limited portrayals of the Company's business, operations or executive compensation practices made to shareholders by shareholder advisory firms resulting from their use of general-purpose formulas that are not suited to the Company's business, operations or practices, and that may counteract the Company's substantive disclosures, which often include detailed analyses specific to the Company and which are capable of mitigating apparent market concerns; lessening in trading volume and general market interest in our securities may affect an investor's ability to trade significant numbers of our securities; the size of our public float and the exclusion from market indices may limit the ability of some institutions to invest in our securities; and a substantial decline in the price of our securities that persists for a significant period of time could cause our securities to be delisted from an exchange, further reducing market liquidity. Our exclusion from certain market indices may reduce market liquidity or the price of our securities. If an active market for our securities does not continue, the liquidity of an investor's investment may be limited, and the price of our securities may decline. If an active market does not exist, investors may lose their entire investment. As a result of any of these factors, the market price of our securities at any given point in time may not accurately reflect our long-term value. Securities class-action litigation often has been brought against companies in periods of volatility in the market price of their securities and following major corporate transactions or mergers and acquisitions. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

The issuance of additional Common Shares may impact the trading price of our Common Shares.

In times of depressed commodity prices, the Company may be required to raise additional capital to meet its liquidity requirements, through the issuance of additional Common Shares under our ATM program or otherwise, and/or dispose of assets. If we raise additional funding by issuing additional equity securities or securities convertible, exercisable, or exchangeable for equity securities, such financing may substantially dilute the interests of our shareholders and reduce the value of their investment. Similar dilution could result from the sale of assets to meet liquidity requirements.

We are subject to litigation and other legal proceedings arising in the normal course of business and may be involved in disputes with other parties in the future which may result in litigation.

The causes of potential future litigation and legal proceedings cannot be known and may arise from, among other things, business activities, environmental laws, permitting and licensing activities, volatility in stock prices, or alleged failure to comply with disclosure obligations. The results of litigation and proceedings cannot be predicted with certainty and may include injunctions pending the outcome of such litigation and proceedings. Failure to resolve any such disputes favorably may have a material adverse impact on our financial performance, cash flow and results of operations.

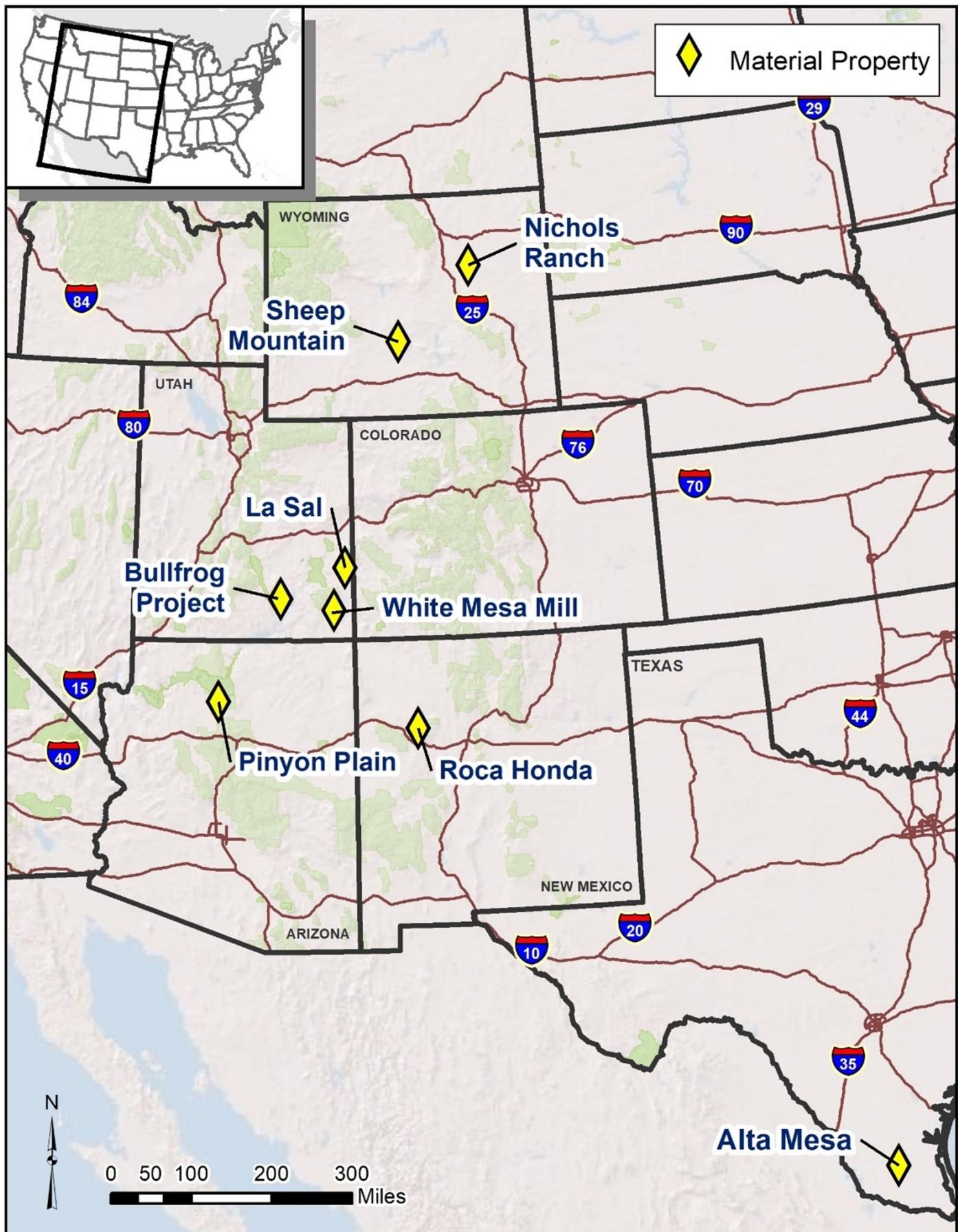
If we fail to maintain an effective system of internal controls, we may not be able to accurately report financial results or prevent fraud.

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. Disclosure controls and procedures are designed to ensure that information required to be disclosed by a company in reports filed with securities regulatory agencies is recorded, processed, summarized, and reported on a timely basis and is accumulated and communicated to a company's management, including its chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance with respect to the reliability of reporting, including financial reporting and financial statement preparation.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. DESCRIPTION OF PROPERTIES



Overview

Energy Fuels is engaged in conventional and ISR uranium extraction and recovery, along with the exploration, permitting and evaluation of uranium properties in the United States.

On October 27, 2021, the Company and CUR jointly announced that the parties had closed on a sale of certain of Energy Fuels' non-core conventional uranium projects located in Utah and Colorado, including the Daneros Mine, the Tony M Mine, the Rim Mine, the Calliham (Sage Plain) Project and seven DOE lease tracts. As a result, those properties are no longer included in this disclosure.

ISR Uranium Activities

The Company conducts its ISR recovery activities through its Nichols Ranch Project in northeast Wyoming, which it acquired in June 2015 through the acquisition of Uranerz, and its Alta Mesa Project in south Texas, which it acquired in June 2016 through the acquisition of EFR Alta Mesa.

The Nichols Ranch Project includes: (i) the Nichols Ranch Plant (100% ownership); (ii) the Nichols Ranch Wellfields (100% ownership); (iii) the Jane Dough Property (81% ownership); (iv) the Hank Project (100% ownership), which includes the permitted but not constructed Hank Satellite Plant; (v) North Rolling Pin (100% ownership); and (vi) West North Butte (100% ownership). See "*The Nichols Ranch ISR Project*." The Company also acquired through the acquisition of Uranerz the Reno Creek Property (which it has since sold) and the Arkose Mining Venture, a joint venture of ISR properties held 81% by Energy Fuels. See "*Non-Material Mineral Properties - Other ISR Projects*." Production from existing wellfields at Nichols Ranch was depleted during 2021. In order for Nichols Ranch to engage in future uranium production, the Company will need to incur capital expenditures to develop additional wellfields. A decision to commence development will be made if the Company decides to take action in response to increasing uranium prices to a point where economic feasibility of the Nichols Ranch Project is realized.

The 100% owned Alta Mesa Project has a fully-licensed and constructed ISR uranium recovery plant, with a design capacity of 1.5 million pounds of uranium concentrate per year. In order for Alta Mesa to engage in future uranium production, the Company will need to incur capital expenditures to develop wellfields. A decision to commence development will be made if the Company decides to take action in response to increasing uranium prices to a point where the economic feasibility of the Alta Mesa Project is realized.

Conventional Uranium Activities

The Company conducts its conventional uranium extraction and recovery activities through its 100% owned White Mesa Mill, which is the only operating conventional uranium mill in the United States. The Mill located near Blanding, Utah is centrally located such that it can be fed by a number of the Company's uranium and uranium/vanadium projects in Colorado, Utah, Arizona and New Mexico, as well as by ore purchase or toll milling arrangements with third party miners in the region, as market conditions warrant. The Company also owns the Sheep Mountain Project in Wyoming, which is a conventional uranium project. Due to its distance from the White Mesa Mill, the Sheep Mountain Project is not expected to be a source of feed material for the Mill. The Sheep Mountain Project consists of the Sheep Mountain Extraction Operation (both open pit and underground), which is permitted, and the proposed Sheep Mountain Processing Operation (heap leach), which is not permitted at this time.

The Company's principal conventional properties include the following:

- the White Mesa Mill (see "*The White Mesa Mill*");
- the Pinyon Plain Project (formerly the Canyon Project) (see "*The Pinyon Plain Project*");
- the Roca Honda Project (see "*The Roca Honda Project*");
- the Sheep Mountain Project (see "*The Sheep Mountain Project*");
- the Bullfrog Project (see "*The Bullfrog Project*");
- the La Sal Project (see "*The La Sal Project*");
- the Arizona Strip uranium properties located in north-central Arizona, including: the Arizona 1 Project, the Wate Project, and EZ Project (see "*Non-Material Mineral Properties – Other Conventional Projects – Arizona Strip*"); and
- the Whirlwind Project located in southwest Colorado on the Colorado and Utah border (see "*Non-Material Mineral Properties – Other Conventional Projects – Colorado Plateau*").

The Company has a 100% interest in all of these conventional properties.

The Mill is licensed to process 2,000 tons of mineralized material per day. It is primarily a uranium recovery facility but can also recover vanadium and REEs. In addition, the Mill can recycle other uranium-bearing materials not derived from conventional ore,

known as Alternate Feed Materials, for the recovery of uranium, alone or in combination with other metals. In this regard, the Company is currently evaluating a number of potential Alternate Feed Materials for the recovery of uranium. The Mill is also currently receiving low-grade mineralized material from the cleanup of a conventional mine in northwest New Mexico and is pursuing other opportunities to process mineralized materials from the clean-up of abandoned uranium mines on the Navajo Reservation and in the four corners area of the United States. The Mill is also evaluating the potential recovery of thorium and radium from the Company's existing RE Carbonate and uranium process streams for use in the production of medical isotopes for emerging TAT cancer therapeutics. Part I, Item 1. *"Development of the Business: The Company's Strategic Alliance for the Development of Radioisotopes for Medical Therapeutics."*

The material projects are shown on the map above and are described in further detail below. Properties that the Company does not consider material are summarized at the end of this Item 2.

Uranium and Vanadium Recovery History

The following tables show the mineralized material processed and pounds of uranium and vanadium recovered from the Company's projects and facilities from January 1, 2017 to December 31, 2021:⁽¹⁾

Recovery History⁽¹⁾

Project or Source	2021	2020	2019	2018	2017
Alternate Feed Materials⁽²⁾					
Tons (000)	---	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
Ave. % U ₃ O ₈	---	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	18.86%
Recovered Pounds U ₃ O ₈ (000)	---	144 ⁽³⁾	---	561 ⁽³⁾	1,004 ⁽³⁾
Tailings Solution Recycle & In-Circuit Material⁽⁴⁾					
Recovered Pounds U ₃ O ₈ (000)	---	47	---	216	308
Recovered Pounds V ₂ O ₅ (000)	---	67	1,807	---	---
Recovered Metric Tons Total Rare Earth Oxide (TREO)	166	---	---	---	---
Conventional Feed Materials					
Tons (000)	---	---	---	---	---
Contained Grade % U ₃ O ₈	---	---	---	---	---
Recovered Pounds U ₃ O ₈ (000)	---	---	---	---	---
Recovered Pounds V ₂ O ₅ (000)	---	---	---	---	---
Recovered Metric Tons Total Rare Earth Oxide (TREO)	120	---	---	---	---
Nichols Ranch⁽⁵⁾					
Recovered Pounds U ₃ O ₈ (000)	0.5	6	70	140	259
Alta Mesa					
Recovered Pounds (000)	---	---	---	---	---
Total Pounds of U₃O₈ Recovered (000)	---	197	70	917	1,571
Total Pounds of V₂O₅ Recovered (000)	---	67	1807	---	---
Total Metric Tons of TREO Recovered	120	---	---	---	---

Notes:

- (1) Mineralized material is shown as being processed and pounds recovered during the year in which the materials were processed at the Mill or at the Nichols Ranch Plant, which is not necessarily the year in which the materials were extracted from the project facilities.
- (2) All Alternate Feed Materials were processed at the Mill. A number of different Alternate Feed Materials were processed during the period 2017 – 2021. The table shows the average uranium grades and the total pounds recovered from all Alternate Feed Materials processed at the Mill during each of the years in that period. Because of the variability in uranium grades, pounds recovered is considered to be the relevant metric and tons fed is not considered to be relevant.
- (3) The 144,000 pounds recovered in 2020 include nil pounds recovered for the accounts of third parties. The 561,000 pounds recovered in 2018 from Alternate Feed Materials include 424,000 pounds recovered for the accounts of third parties. The 1,004,000 pounds recovered in 2017 include 952,000 pounds recovered for the accounts of third parties.
- (4) Pounds contained in tailings solutions containing previously unrecovered uranium and vanadium, together with in-circuit mineralized material from previous conventional mine material processing, were recovered at the Mill, though tons and grade are not available because they cannot be tied to any specific source.
- (5) Uranium recovery commenced at the Nichols Ranch Project on April 17, 2014. Because the Nichols Ranch Project uses ISR instead of conventional extraction methods, grade and tons of mineralized material are inapplicable to the Nichols Ranch Project.

Mineral Extraction

The following table shows the extraction history from 2017 to December 31, 2021 from the mineral properties currently owned by the Company:

Project ⁽¹⁾	2021	2020	2019	2018	2017
Nichols Ranch					
Pounds U ₃ O ₈ (000)	0.5	6	70	140	259

Notes:

- (1) All properties reported in this table were owned by the Company on December 31, 2021 and continue to be owned by the Company. Nichols Ranch was acquired by the Company in June 2015 as part of the Uranerz acquisition. Properties sold or otherwise disposed of are not included in this table.

Summary of Mineral Reserves and Resources

Daniel Kapostasy, a Professional Geologist licensed in Wyoming (PG-6778) and in Utah (10110615-2250), employed as the Company's Director of Technical Services, is the Qualified Person responsible for the disclosure of scientific or technical information concerning mineral projects in this Annual Report. Except to the extent explicitly stated, the land tenure and permitting efforts disclosed in this Part I, Item 2 are not made in reliance on or with reference to any of the technical reports or the preliminary feasibility study referenced herein and attached hereto as Exhibits 96.1 through 96.7, and are the responsibility of Daniel Kapostasy in his capacity as a Qualified Person.

The following tables show the Company's estimate of Mineral Reserves and Mineral Resources as defined in S-K 1300 and NI 43-101 as of December 31, 2021. Both S-K 1300 and NI 43-101 require mineral companies to disclose Mineral Reserves and Mineral Resources using the subcategories of Proven Mineral Reserves, Probable Mineral Reserves, Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources. The Company reports Mineral Resources exclusive of Mineral Reserves. Except as stated below, the Mineral Reserve and Mineral Resource information shown below, which was reviewed and approved by Daniel Kapostasy, one of the Company's non-independent Qualified Persons, is as reported in the various Technical Report Summaries prepared in accordance with S-K 1300 and NI 43-101 (the "Technical Report Summaries") by Qualified Persons employed by SLR International Corporation ("SLR"), Woods Process Services, Consultants in Hydrogeology, and BRS Inc. ("BRS"), none of which is affiliated with the Company or any other entity that has an ownership, royalty, or other interest in the relevant property that is the subject of the Technical Report Summary. See "Mineral Projects."

Mineral Reserve Estimates - In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾

	Proven Mineral Reserves			Probable Mineral Reserves		
	Tons (000)	Grade % eU ₃ O ₈	Pounds eU ₃ O ₈ (000)	Tons (000)	Grade % eU ₃ O ₈	Pounds eU ₃ O ₈ (000)
Sheep Mountain - Congo Pit	---	---	---	3,955	0.115 %	9,117
Sheep Mountain - Underground	---	---	---	3,498	0.132 %	9,248
Total Mineral Reserves	---	---	---	7,453	0.123%	18,365

Notes:

- (1) The Mineral Reserve estimates in this table comply with the requirements of both S-K 1300 and NI 43-101.
- (2) Mineral Reserves are estimated at a uranium grade x thickness (G.T.) cut-off grade of 0.10 G.T. (2 ft. of 0.05% eU₃O₈) for the Congo Pit and 0.45 G.T. (6 ft. of 0.075% eU₃O₈) for Sheep Underground.
- (3) Mineral Reserves are estimated using a long-term uranium price of \$55 per pound U₃O₈.
- (4) Numbers may not add due to rounding.
- (5) The Mineral Reserves are fully excluded from the total Mineral Resources shown below.
- (6) Mineral Reserves are 100% attributable to the Company.

Mineral Resource Estimates – In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽¹⁰⁾

	Measured Mineral Resources			Indicated Mineral Resources			Inferred Mineral Resources		
	Tons (000s)	Grade (% eU ₃ O ₈)	Pounds (000s eU ₃ O ₈)	Tons (000s)	Grade (% eU ₃ O ₈)	Pounds (000s eU ₃ O ₈)	Tons (000s)	Grade (% eU ₃ O ₈)	Pounds (000s eU ₃ O ₈)
ISR Properties									
Nichols Ranch ⁽⁵⁾	11	0.187%	41	2,924	0.106%	6,142	614	0.097%	1,176
Alta Mesa ⁽⁶⁾	54	0.152%	164	1,516	0.107%	3,246	6,996	0.120%	16,793
ISR Subtotal			205			9,388			17,969
Conventional Properties									
Pinyon Plain ⁽⁷⁾	6	0.46%	55	127	0.92%	2,347	16	0.38%	126
Roca Honda	208	0.48%	1,984	1,639	0.48%	15,638	1,513	0.46%	13,842
Sheep Mountain ⁽⁸⁾	---	---	---	4,210	0.11%	9,570	---	---	---
Bullfrog	---	---	---	1,560	0.29%	9,100	410	0.25%	2,010
La Sal ⁽⁹⁾	---	---	---	---	---	---	823	0.26%	4,281
Conventional Subtotal			2,039			36,655			20,059
Total Mineral Resources			2,244			46,043			38,228

Notes:

- (1) The Mineral Resource estimates in this table comply with the requirements of both S-K 1300 and NI 43-101.
- (2) Mineral Resources were estimated at various %eU₃O₈ or G.T. cut-off grades. Nichols Ranch 0.05% U₃O₈ (0.20 GT), Alta Mesa 0.02% U₃O₈ (0.3 GT), Pinyon Plain 0.30% (Uranium Only) and 0.40% (Uranium + Copper) eqv. U₃O₈, Roca Honda 0.19% U₃O₈, Sheep Mountain 0.05% U₃O₈ (0.10 GT Open Pit) and 0.05% U₃O₈ (0.3 GT Underground), Bullfrog 0.165% U₃O₈ (0.50 GT), and La Sal 0.17% U₃O₈.
- (3) Mineral Resources were estimated using a long-term uranium price of \$65/lb.
- (4) Numbers may not add due to rounding.
- (5) The Nichols Ranch Project is comprised of four properties: Nichols Ranch, the Hank Property, the Jane Dough Property, and North Rolling Pin. The numbers shown represent Energy Fuels' share of the Nichols Ranch Project, which is less than 100% due to a portion of the Jane Dough Property being held through the Arkose Mining Venture, in which the Company has an 81% interest. For more information, see "The Nichols Ranch Project," below.
- (6) Includes Alta Mesa and Mesteña Grande.

- (7) The name of the Canyon Project was changed to “Pinyon Plain Project” in 2020.
 (8) The Sheep Mountain Indicated Mineral Resource excludes the Probable Mineral Reserves calculated in accordance with S-K 1300 and NI 43-101 of 18,365,000 pounds of eU₃O₈ in 7,453,000 tons at a grade of 0.123%.
 (9) The La Sal Project includes the Energy Queen, Redd Block, Beaver, and Pandora properties.
 (10) Except for Nichols Ranch (see note 5), Mineral Resources are 100% attributable to the Company.

Mineral Resource Estimate – In Situ Vanadium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾⁽⁹⁾

	Measured Mineral Resources			Indicated Mineral Resources			Inferred Mineral Resources		
	Tons (000)	Grade % V ₂ O ₅	Pounds V ₂ O ₅ (000)	Tons (000)	Grade % V ₂ O ₅	Pounds V ₂ O ₅ (000)	Tons (000)	Grade % V ₂ O ₅	Pounds V ₂ O ₅ (000)
La Sal ⁽⁶⁾	---	---	---	---	---	---	823	1.08 %	17,746
Total Mineral Resources (V₂O₅)	---	---	---	---	---	---	823	---	17,746

Notes:

- (1) Both S-K 1300 and NI 43-101 definitions were followed for all Mineral Resource categories.
- (2) Mineral Resources were estimated at a %U₃O₈ or G.T. cut-off grade of 0.17%.
- (3) The cut-off grade is calculated using a metal price of \$65/lb U₃O₈.
- (4) No minimum mining width was used in determining Mineral Resources.
- (5) Mineral Resources are based on a tonnage factor of 14.5ft³/ton (Bulk density 0.0690 ton /ft³ or 2.21 t/m³).
- (6) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- (7) Total may not add due to rounding.
- (8) Mineral Resources are 100% attributable to the Company.
- (9) The La Sal Project includes the Energy Queen, Red Block, Beaver and Pandora properties.

Mineral Resource Estimate – In Situ Copper⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾

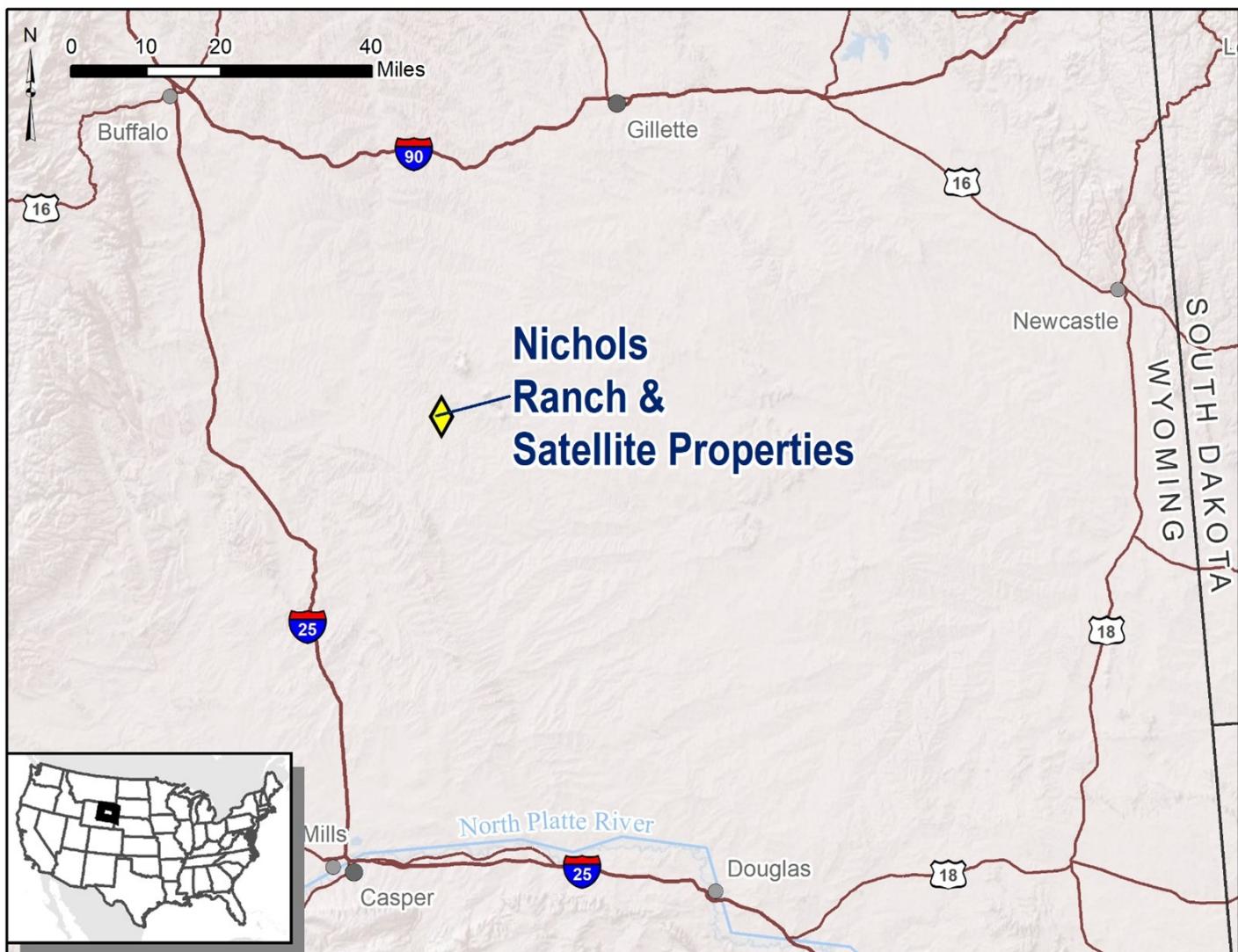
	Measured Mineral Resources			Indicated Mineral Resources			Inferred Mineral Resources		
	Tons (000)	Grade % Cu	Pounds Cu (000)	Tons (000)	Grade % Cu	Pounds Cu (000)	Tons (000)	Grade % Cu	Pounds Cu (000)
Pinyon Plain	6	9.60%	1,155	90	5.89%	10,553	4	6.50%	470
Total Mineral Resources (Cu)			1,155			10,553			470

Notes:

- (1) The Mineral Resource estimates in this table comply with the requirements of both S-K 1300 and NI 43-101.
- (2) For the Main and Main-Lower zones of the Pinyon Plain Project, a 0.40% uranium equivalent cut-off grade (% U₃O₈ Eq) was applied to account for both the copper and uranium mineralization. The %U₃O₈ Eq grade term is not the same as the eU₃O₈ % grade term with indicates probe rather than assay data listed elsewhere in this report. For details, see the Pinyon Plain Project below.
- (3) Mineral Resources are estimated using a long-term uranium price of \$65 per pound and a Copper price of \$4.00 per lb.
- (4) A copper to U₃O₈ conversion factor of 18.19 was used for converting copper grades to equivalent U₃O₈ grades (U₃O₈ Eq) for cut-off grade evaluation and reporting.
- (5) Numbers may not add due to rounding.
- (6) For the Pinyon Plain Project, Mineral Resource tonnages of uranium and copper cannot be added as they overlap in the Main and Main-Lower Zones.
- (7) The name of the Canyon Project was changed to “Pinyon Plain Project” in 2020.
- (8) Mineral Resources are 100% attributable to the Company.

The Company was not subject to S-K 1300 and did not obtain any Technical Report Summaries until 2022. None of the Company's properties had S-K 1300 Mineral Reserves or Mineral Estimates as at December 31, 2020 because the Company was not then subject to S-K 1300.

The Nichols Ranch Project



The following technical and scientific description of the Nichols Ranch Project is based in part on the report titled “*Technical Report on the Nichols Ranch Project, Johnson and Campbell Counties, Wyoming, USA*” dated February 22, 2022, prepared by Grant A. Malensek, M.Eng., P. Eng., Mark B. Mathisen, C.P.G., Jeremy Scott Collyard, PMP, MMSA QP, each a Qualified Person employed by SLR, Jeffrey L. Woods, MMSA QP, a Qualified Person employed by Woods Process Services, and Phillip E. Brown, C.P.G., R.P.G., a Qualified Person employed by Consultants In Hydrogeology (the “**Nichols Ranch Technical Report Summary**”). The Nichols Ranch Technical Report Summary was prepared in accordance with S-K 1300 and also constitutes a PEA pursuant to NI 43-101. The Nichols Ranch Project does not have known “Mineral Reserves” and is therefore considered under SEC S-K 1300 definitions to be an exploration stage property, despite commercial uranium extraction activities occurring as recently as 2019.

Property Description

The Nichols Ranch Uranium Complex (the “**Complex**”) is an existing ISR mine with associated prospective ISR properties located in Campbell and Johnson Counties, in eastern Wyoming, USA in the Pumpkin Buttes Mining District of the Powder River Basin, 80 miles northeast of the city of Casper, Wyoming. The Complex is located approximately at latitude 43°42' North and longitude 106°01' West. The proposed Nichols Ranch Project will produce approximately 366 klb of U_3O_8 annually.

Excluding the Jane Dough area in which the Company owns an 81% interest, the Company owns a 100% interest in the remaining areas which comprise the Complex land holdings totaling 10,755 acres.

The Complex is divided into two primary areas, the Nichols Ranch Mining Unit and the Satellite Properties.

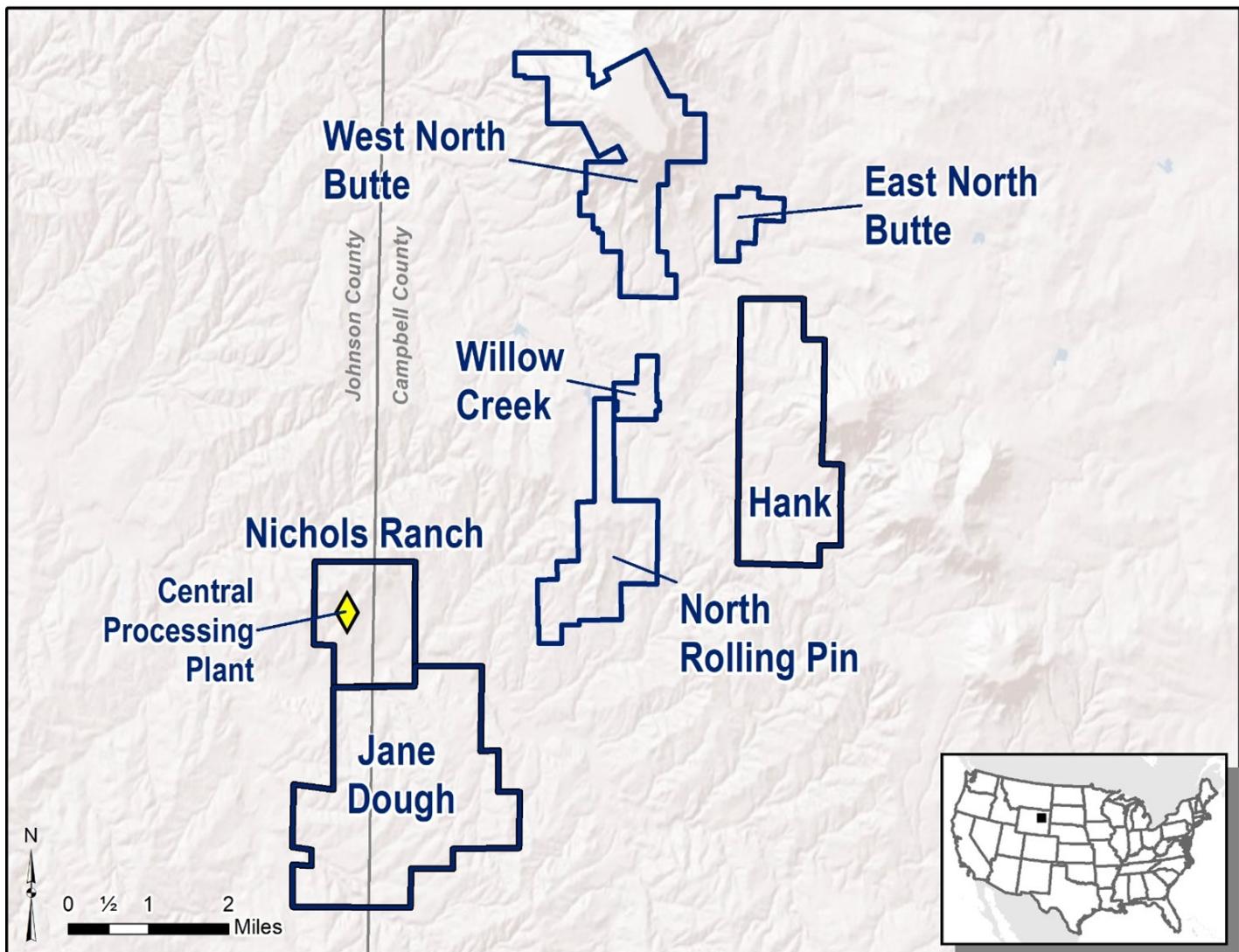
The Nichols Ranch Mining Unit includes the following:

- a. **Nichols Ranch Area** (approximately 740 acres)
- b. **Jane Dough Area** (approximately 3,680 acres)
- c. **Hank Area** (approximately 2,250 acres)

Nichols Ranch and Jane Dough are contiguous, and the Hank area is located approximately six miles north of Nichols Ranch.

The Company currently controls four additional properties (the Satellite Properties) which are known to have significant mineralization, but not currently included in the mine permit. These include:

- a. **North Rolling Pin (NRP) Area** (approximately 1,180 acres)
- b. **West North Butte (WNB) Area** (approximately 2,360 acres)
- c. **East North Butte (ENB) Area** (approximately 325 acres)
- d. **Willow Creek (WC) Area** (approximately 220 acres)



Ownership

Nichols Ranch

The permit boundary for the Nichols Ranch Area, located in Sections 7, 8, 17, and 18, T43N, R76W, encompasses 1,120.00 acres. Within the Nichols Ranch permit boundary, Energy Fuels Resources (USA) Inc. ("EFR") has 38 unpatented lode-mining claims, two fee mineral leases and three Surface Use Agreements ("SUAs"). The claims and fee leases encompass approximately 920 acres.

The mineral fee leases and SUA have a 10-year term. Provisions are set by the SUA for reimbursement to the surface owner for damages resulting from operations.

Claims do not have an expiration date, however, affidavits must be filed annually with the BLM and respective county recorder's offices in order to maintain the claims' validity. In addition, most of the unpatented lode claims are located on Stock Raising Homestead land where the U.S. government has issued a patent for the surface to an individual and reserved the minerals to the U.S. government subject to the location rights by claimants as set forth in the 1872 Mining Law. The Nichols Ranch lode mining claims are held by Uranerz Energy Corporation ("Uranerz"), which is 100% owned by the Company.

In Section 21, the northern portion of Section 28, eastern portion of Section 20, and northeast quarter of Section 29, unpatented lode mining claims have an overriding royalty interest burden of 6% or 8% depending on the sale price of uranium. In the southern portion of Section 32, 20 of the unpatented lode mining claims have an overriding royalty of 0.25% based on production. In the southern portion of Section 28 where North Jane is located, 14 fee mineral leases have royalties ranging from 2% to 10% depending on the sale price of uranium. In the western half of Section 29 two mineral leases have a royalty of 6% or 8% depending on the sale price of uranium. Surface owners have a set rate for reimbursement of any land taken out of service for mining activities and two of the Surface Owners could receive an extraction fee on production with a burden of 1% or 2% percent depending on the sale price of uranium.

The unpatented lode mining claims will remain the property of EFR provided it adheres to the required filing and annual payment requirements with Campbell County and the BLM. The SUAs will remain in force so long as the mining claims are maintained. Legal surveys of unpatented lode mining claims are not required and are not known to have been completed.

All of the unpatented lode mining claims have annual filing requirements (US\$165 per claim) with the BLM, to be paid on or before September 1 of each year.

Jane Dough

The permit boundary for the Jane Dough Area encompasses approximately 3,680 acres. Within the Jane Dough permit boundary, the Company controls 117 unpatented lode-mining claims, three SUAs, and 16 fee mineral leases. The fee mineral leases and claims encompass approximately 3,121.43 acres. The fee mineral leases and SUAs have terms of 10 years, which can be extended indefinitely. The SUAs have set provisions for reimbursement to the surface owner for damages resulting from the Company's operations.

Portions of the Jane Dough Area were formerly held separately by EFR and the Arkose Project Joint Venture ("JV"). These holdings have been combined. The Company retains 100% of the mineral rights for the portion it originally held and 81% of the mineral rights for the Arkose Project JV portion of Jane Dough. Mineral Resources for Jane Dough reflect this partition of mineral ownership. The Jane Dough lode mining claims are held by Uranerz, which is 100% owned by the Company. In a single instance, in the south half of Section 28, T43N, R76W, the JV only controls 57.29% of a fee mineral lease. The partial ownership of the lease is split along the JV ownership agreement with the Company holding 81%.

In the south portion of Section 32, twenty of the unpatented lode mining claims have an overriding royalty of 0.25% based on production. In the southern half of Section 28 and northern half of section 32, five fee mineral leases have royalties ranging from 2% to 10% depending on the sale price of uranium. In the west half of Section 29, two mineral leases have a royalty of 6% or 8% depending on the sale price of uranium. Surface owners have a set rate for reimbursement of any land taken out of service for mining activities and two of the Surface Owners could receive an extraction fee on production with a burden of 1% or 2%, depending on the sale price of uranium.

The unpatented lode mining claims will remain the property of EFR provided it adheres to required filing and annual payment requirements with Campbell County and the BLM. The SUAs will remain in force so long as the mining claims are maintained. Legal surveys of unpatented lode mining claims are not required and are not known to have been completed.

All of the unpatented lode mining claims have annual filing requirements with the BLM, to be paid on or before September 1 of each year.

Hank

The Hank Area permit boundary encompasses approximately 2,250 acres. Within the permit boundary, the Company has 49 unpatented lode-mining claims, and one SUA covering approximately 1,392.58 acres. The Hank lode mining claims are held by Uranerz, which is 100% owned by the Company.

All claims were located or acquired by EFR and a portion of the claims were subject to a 6% to 8% royalty which has since been extinguished. Four claims may be subject to a 5% overriding royalty vested in Brown Land Company and its successors. The claims will remain the property of EFR provided they adhere to required filing and annual payment requirements with Campbell County and the BLM. All of the unpatented lode claims have annual filing requirements with the BLM, to be paid on or before September 1 of each year.

The SUA will remain in force so long as the terms of the agreements are met. Legal surveys of unpatented claims are not required and are not known to have been completed.

North Rolling Pin

The North Rolling Pin (“**NRP**”) Area has 54 unpatented lode-mining claims and one SUA. There are no mineral fee leases associated with the NRP Area. There is one SUA that will remain in force so long as the terms of the agreement are met. All of the unpatented lode mining claims have annual filing requirements with the BLM, to be paid on or before September 1 of each year. The claims area encompasses approximately 1,180 acres. The NRP lode mining claims are held by Uranerz, which is 100% owned by the Company.

Lode mining claims in the North Rolling Pin area are not subject to royalties. There are no fee mineral leases.

West North Butte

The West North Butte (“**WNB**”) Area claims were acquired by Uranerz, which was acquired by the Company in 2015. There are no fee leases associated with West North Butte. There is one SUA that will remain in force provided the terms of the agreement are met. The WNB lode mining claims are held by Uranerz, which is 100% owned by the Company.

The claims were acquired by Uranerz and none of the unpatented lode claims in the West North Butte Area are subject to a royalty. There are no fee leases associated with West North Butte. There is one SUA which will remain in force so long as the mining claims are maintained.

East North Butte

The East North Butte (“**ENB**”) Area claims were acquired by Uranerz. There are no fee leases associated with East North Butte. There is one SUA which will remain in force so long as the terms of the agreement are met. The ENB lode mining claims are held by Uranerz, which is 100% owned by the Company.

None of the unpatented lode claims in the ENB Area are subject to a royalty. There are no fee mineral leases.

Willow Creek

The Willow Creek (“**WC**”) Area claims were acquired by Uranerz. There are no fee leases associated with Willow Creek. There is one SUA that will remain in force so long as the terms of the agreement are met. The WC lode mining claims are held by Uranerz, which is 100% owned by the Company.

The claims were acquired by Uranerz and none of the unpatented lode claims in the WC Area are subject to a royalty. There are no fee leases associated with Willow Creek.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

Nichols Ranch is located 80 mi northeast of Casper, Wyoming and accessible via two-wheel drive on existing county and/or private gravel and dirt roads by proceeding north approximately 10 mi from Wyoming Highway 387 on the IDT Road and approximately 12 mi northwest of the junction of Wyoming Highway 387 and Wyoming Highway 50.

NRP is accessible via two-wheel drive on existing private gravel and dirt roads, many of which have been improved by coal bed methane (“**CBM**”) development. The approximate center of the NRP property is approximately nine miles north of Wyoming Highway 387. Some road development and improvements may be required at a later time to facilitate future development of wellfields or satellite facilities.

WNB is accessible via two-wheel drive on existing county and/or private gravel and dirt roads. The approximate center of the Satellite Properties is roughly 8 mi to 11 mi west of Wyoming Highway 50, and the southern edge of the Satellite Properties is

approximately 12 mi to 15 mi north of Wyoming Highway 387. Road development and improvements may be required at a later time to facilitate future development of wellfields and processing facilities. The north-northwest half of the WNB Area is located in an area of significant topographical relief and would likely require significant excavation to construct roads to potential wellfields or require the use of directional drilling to develop the resource.

In the vicinity of the Nichols Ranch Uranium Complex, the climate is semi-arid and receives an annual precipitation of approximately 13 in., the majority of which falls from February to April as snow. Cold, wind, and snow/blizzards may occasionally present challenges for winter exploration and construction work in this area however operations can take place year-round. The summer months are typically hot, dry, and clear, except for infrequent high-intensity, short-duration storm events.

The Nichols Ranch Uranium Complex is located in Johnson and Campbell Counties. These counties are generally rural; according to the 2010 United States Census, there were 8,569 people living in Johnson County and 46,133 people living in Campbell County. Most of the workers at the Complex are from the local area and nearby communities such as Casper, Wyoming, approximately 80 mi southwest of the Complex. Casper is the county seat of Natrona County and, as of the 2010 census, has a population of 55,316. Casper has numerous industrial supply and service companies to support mining operations. EFR maintains an office in Casper to support its Wyoming mining operations.

The Company has secured sufficient surface access rights for exploration and development of the Complex. The Nichols Ranch Mining Unit is a fully licensed, operable facility with sufficient sources of power, water, and waste disposal facilities for operations and aquifer restoration.

The basic infrastructure (power, water, and transportation) necessary to support an ISR mining operation has been established at the Nichols Ranch Mining Unit and is located within reasonable proximity of all satellite properties within this report. Existing infrastructure is associated with local oil, gas, and CBM development.

Non-potable water is and/or will be supplied by wells developed at or near the sites. Water extracted as part of ISR operations will be recycled for reinjection. Typical ISR mining operations also require a disposal well for limited quantities of fluids that cannot be returned to the production aquifers. Two deep disposal wells have been permitted and are operational at the Nichols Ranch ISR Plant.

The proximity of the Complex to paved roads will facilitate transportation of equipment, supplies, personnel, and product to and from the properties. Although the population within 50 mi of the subject properties consists mainly of rural ranch residences, personnel required for exploration, construction, and operation are available in the nearby towns of Wright, Midwest, Edgerton, Gillette, Buffalo, and Casper, Wyoming.

Power transmission lines are located on or near parts of the property. EFR has secured power from the local electrical service provider to accommodate all operational needs.

Tailing storage areas, waste disposal areas, heap leach pad(s) are not part of the required infrastructure for the Complex, as ISR operations do not require these types of facilities. Waste disposal is accomplished via deep well injection. EFR has two such wells permitted and in operation at Nichols Ranch.

The Complex is located within the Wyoming Basin physiographic province in the western portion of the Powder River Basin, within the Pumpkin Buttes Mining District. The Pumpkin Buttes are a series of small buttes rising up to nearly 6,000 feet above sea level (ft ASL) in elevation and approximately 1,000 ft above the surrounding plains. The rock capping the top of the buttes is the Oligocene age White River Formation erosional remnant, which is believed to have overlain the majority of the Powder River Basin. The volcanic tuffs in the White River Formation have been cited as the source of uranium in the basin (Davis, 1969). Historic and current land use in the Pumpkin Buttes Mining District includes livestock grazing, mineral development, and oil and gas development.

Vegetation and wildlife surveys of the Complex area were completed as part of the environmental baseline studies required for permitting and licensing. Vegetation communities consist primarily of sagebrush shrub-land and mixed grasslands, with limited juniper, greasewood, and wetland communities. The Complex area has the potential to provide habitat for mule deer, elk, pronghorn antelope, jackrabbit, cottontail rabbit, coyote, bobcat, mountain lion, red fox, badger, raccoon, skunk, chipmunk, rodents, songbirds, waterfowl, eagles, hawks, owls, sage grouse, chukar, wild turkey, Hungarian partridge, mourning dove, magpie, and crow. Most species are yearlong residents, however, some species such as elk, eagles, songbirds, and waterfowl are more abundant during migration periods.

The Nichols Ranch Mining Unit is situated in a low-lying plain with elevations ranging from roughly 4,600 ft ASL to 4,900 ft ASL. There are two main ephemeral drainages at the site. Both are tributaries of Cottonwood Creek, which drains to the Cheyenne River. The NRP Area area consists of sagebrush and native grasses, covering rolling hills, steep walled gullies, and ephemeral streams. Elevations range from approximately 4,800 ft ASL to 5,180 ft ASL.

The WNB is located on the west flank of the North Pumpkin Butte. This area consist of sagebrush and native grasses, covering rolling hills, steep walled gullies, and flat-topped North Butte. Elevations range from approximately 4,900 ft ASL to 5,800 ft ASL, and generally slope from northeast to southwest.

History

The Complex was originally part of a large exploration area encompassing Townships 33 through 50 North of Ranges 69 through 79 West, on the Sixth Principal Meridian. In 1966, Mountain West Mines Inc. (“MWM”) – now Excalibur Industries) began a drilling exploration program in this area. In 1967, MWM entered into an agreement with Cleveland-Cliffs Iron Company (“CCI”) for further exploration and option if suitable resources were found. CCI exercised its option in 1976 with plans to begin underground mining operations near North Butte, approximately six and a half miles northeast of Nichols Ranch. As economic conditions changed, and with the development of ISR mining technology, CCI’s interest in the area waned. By the late 1980s, it began selling select properties or allowing them to revert back to MWM.

Uranerz acquired six uranium properties in the Powder River Basin from a third party in 2005, including the Complex.

In June 2015, EFR acquired all of the outstanding shares of Uranerz. Under that transaction, EFR acquired the Nichols Ranch Project, the Hank Project, the Reno Creek Property, the West North Butte Property, the North Rolling Pin Property, and the Arkose Project Joint Venture (a joint venture of ISR mining properties held 81% by Uranerz and 19% by United Nuclear Corp.), uranium sales contracts, and other assets, as well as the shares of Uranerz, which holds those assets. In May 2018, EFR sold its non-core Reno Creek Property to Uranium Energy Corp. In August 2018, EFR acquired royalties on the Nichols Ranch Project, along with royalties on several operating, standby, and advanced-stage ISR projects in Wyoming owned and operated by Power Resources, Inc., a wholly owned subsidiary of Cameco Corporation.

The Nichols Ranch Mining Unit includes: (i) the Nichols Ranch Plant; (ii) the Nichols Ranch Wellfields; (iii) the Jane Dough Area; and (iv) the Hank Area, which includes the permitted but not constructed Hank Satellite Plant and the Hank Deposit. A portion of the Jane Dough Area is held through the Arkose Project JV, in which the EFR has an 81% interest.

The North Rolling Pin Area is located within a large exploration area encompassing Townships 33 through 50 North of Ranges 69 through 79 West, on the Sixth Principal Meridian. In 1966, MWM (now Excalibur Industries) began a successful drilling exploration program in a portion of the larger area. In 1967, MWM entered into an agreement with CCI for further exploration and option if suitable resources were found. CCI exercised its option in 1976 with plans to begin underground mining operations in the vicinity of North Butte. Changing economic conditions and the development of ISR mining technology reportedly ended much of CCI’s interest in the area.

In addition to CCI, other uranium exploration companies during the last forty years have controlled property either within or near the North Rolling Pin Property. These included Kerr McGee, Conoco, Texaco, American Nuclear, Tennessee Valley Authority, Rio Algom Mining Corporation (Rio Algom), and Uranerz. The mining claims and leases originally controlled by most of these companies were let go over the years due to market conditions. These property abandonments continued into 2004.

In February 2007, Uranerz purchased the North Rolling Pin claims group from Robert Shook as part of a larger 138 Federal mining claims acquisition. Uranerz subsequently expanded the properties by staking additional claims in the immediate area.

The West North Butte, East North Butte, and Willow Creek Areas were originally part of a large exploration area encompassing Townships 33 through 50 North of Ranges 69 through 79 West, on the 6th principal meridian. In 1966, MWM (now Excalibur Industries) began a successful drilling exploration program in a portion of this area. In 1967, MWM entered into an agreement with CCI for further exploration and option if suitable resources were found. CCI exercised its option in 1976 with plans to begin underground mining operations in the vicinity of North Butte. Changing economic conditions and the development of ISR mining technology reportedly ended much of CCI’s interest in the area.

In addition to CCI, other uranium exploration companies during the last forty years have controlled property either within or near the Satellite Properties. These included Kerr McGee, Conoco, Texaco, American Nuclear, Tennessee Valley Authority, and Uranerz U.S.A., Inc. Areva NC, via subsidiary Cogema Resources Inc. (Cogema), and Power Resources Inc. (a subsidiary of Cameco

Corporation) have retained portions of their original land positions in the area. The mining claims and leases originally controlled by most of these companies were let go over the years due to market conditions. These property abandonments continued into 2004.

WNB, ENB, and WC cover an area of land located on the west, east and south flank of North Butte in Campbell County, Wyoming. Detailed disclosure pertaining to the chain of title of the properties comprising these Areas is not known to the Authors or Uranerz representatives and is beyond the scope of this Technical Report. The following is a brief description of what is known about ownership history of these Areas.

The locators of the claims acquired rights to the properties comprising the West North Butte Area in 1987. In January 2007, Uranerz completed an acquisition of an undivided one-hundred percent interest in the claims comprising the West North Butte Area.

The locators of the claims acquired rights to the properties comprising the East North Butte Area in 1987. In January 2007, Uranerz completed an acquisition of an undivided 100% interest in the claims comprising the East North Butte Area.

The locators of the claims acquired rights to the properties comprising the Willow Creek Area in the 1960s. In December 2005, Uranerz entered into an option agreement to acquire an undivided one-hundred percent interest in the claims comprising the Willow Creek Area. The terms of the option agreement were satisfied in 2007 and the transfer of the claims to Uranerz was completed.

On October 15, 1951, J. D. Love discovered uranium mineralization in the Pumpkin Buttes districts in the Wasatch Formation on the south side of North Pumpkin Butte in the west-central portion of the Powder River Basin. The mineralization was one of eight areas recommended by the U.S. Geologic Survey (USGS) in April 1950 for investigation in the search for uranium bearing lignites and volcanic tuffs. In response to this recommendation, an airborne radiometric reconnaissance of most of these areas was undertaken by the USGS in October 1950. The uranium mineralization discovered by J. D. Love was near an aerial radiometric anomaly identified from this survey (Love, 1952).

Exploration drilling was conducted in the Jane Dough Area, Section 21 and 28, T43N, R76W, between the late 1960s and late 1970s by CCI. Little interest was generated by the completion of 46 holes from this drilling. Between 1968 and 1980 CCI drilled 150 holes and installed 3 water wells on the Nichols Ranch and Jane Dough Areas. Texas Eastern Nuclear Inc. completed limited drilling and exploration on the property in 1985. In the early 1990s, Rio Algom also completed limited drilling in the area. In December 2005, Uranerz purchased the Nichols Ranch, Jane Dough, and Hank claims groups as part of a six-property agreement to option from Excalibur Industries. Uranerz then expanded the properties by staking additional claims in the immediate and surrounding areas.

Uranerz began exploration drilling on the Nichols Ranch Area on July 11, 2006, and continued to June 6, 2015. A total of 1,098 holes (253 exploration holes, 105 monitor wells, and 740 production wells) were drilled during that time. A total of 51 exploration holes were drilled on the Hank Area in 2008.

Uranerz received the Source Material License SUA-1597 in July of 2011. Nichols Ranch ISR operations began on April 15, 2014, after completion of a pre-operational inspection by the NRC Region IV office. There were two planned Production Areas (PA1 and PA2) in the Nichols Ranch Area. Five header houses and their respective wellfields were installed and in operation in June 2015, when EFR acquired Uranerz, in Production Area #1. Header house #6 was commissioned in November 2015. In 2016, the EFR completed drilling 12 delineation holes and drilling and casing of 86 extraction wells in Header Houses #7 and #8 in Production Area #1. Header House #7 was turned on in March 2016 and Header House #8 was turned on in June 2016. In Production Area #2, 133 extraction and injection wells were drilled and cased. Header House #9 was completed and turned on in March 2017. No drilling or other development activities have been performed since 2017.

In January 2008, Uranerz entered into a joint venture (JV) on the Arkose Project, resulting in an 81% undivided interest in the mineral rights controlled by the JV. Uranerz commenced exploration on the Arkose Project in 2008. A total of 1,971 exploration holes were drilled on the Arkose Project JV from April 2008 to August 2012. A portion of the Arkose Project JV holdings were subsequently incorporated into the Jane Dough portion of the Nichols Ranch Mining Unit and remain subject to the 81% ownership, as discussed in Section 4.0 of this Technical Report.

Mining claims were first staked in the North Rolling Pin Area by MWM sometime before 1968. Exploration drilling was conducted in the North Rolling Pin Area Sections 11, 14 and 15, T43N, R76W, between 1968 and 1982 by CCI. A total of 476 exploration holes were drilled including 10 core holes. CCI was reported to be investigating the NRP Area for open pit mining potential but never carried those plans past the exploration phase. In 2008 and 2009, Uranerz drilled 18 exploration holes in Sections 11 and 14. This drilling was performed to evaluate the potential for mineralization below the zones explored by CCI and for confirmation of the previously identified mineralization in the F Sand.

Between 1968 and 1985, CCI drilled approximately 380 exploratory holes within the West North Butte, East North Butte, and Willow Creek Areas. From 1983 to 1985, Texas Eastern Nuclear drilled approximately 12 exploratory holes in these Areas. From approximately 1990 to 1992, Rio Algom drilled approximately 5 exploratory holes. In 2006, Uranerz completed an acquisition of these Areas, and in 2007 and 2008, drilled approximately 127 exploratory holes.

The Complex is an advanced stage project which is licensed to operate by the NRC and the WDEQ. Construction of the processing facility began in 2011. Plant construction and initial wellfield installation was completed in 2014 and operations were initiated in April 2014. Production of 1,265,805 pounds of uranium oxide has been reported from initiation of production through December 31, 2019, via ISR mining. Since 2019, the Nichols Ranch portion of the Complex has been on standby due to low uranium prices.

Permitting and Licensing

Energy Fuels has received all regulatory approvals necessary to conduct extraction and uranium processing activities at the Nichols Ranch Plant and Nichols Ranch Wellfield. In December 2010, Uranerz received its Permit to Mine for the Nichols Ranch Project from the WDEQ-LQD. In July 2011, Uranerz received a Source Material License from the NRC for the Nichols Ranch Plant and Nichols Ranch Wellfield, and construction of the Nichols Ranch Plant immediately began. Effective September 30, 2018, the State of Wyoming became an Agreement State under the Atomic Energy Act (as amended) for the regulation of uranium mills and uranium ISR facilities, and regulation of the Source Material License was transferred from the NRC to WDED-LQD.

Both the state and federal agencies analyzed all environmental aspects of the Nichols Ranch Project including reclamation of the land surface following extraction operations and restoration of impacted ground water. Workplace safety and the safety of the public are also closely monitored by regulatory agencies. We have posted a reclamation bond with the regulatory agencies in an amount of \$6.8 million to cover the total estimated cost of reclamation by a third party as a requirement of the licenses.

The various state and federal permits and licenses that were required and have been obtained for the Nichols Ranch Project, exclusive of the expansion to the Jane Dough Property, are summarized below:

Primary Permits and Licenses for the Nichols Ranch Project (Nichols Ranch and Hank Units Only)

Permit, License, or Approval Name	Agency	Status
Source Material License	NRC (2011); WDEQ-LQD (2018)	Obtained
Permit to Mine (UIC Permit)	WDEQ-LQD	Obtained
Aquifer Exemption	WDEQ-LQD; EPA	Obtained
Permit to Appropriate Groundwater	WSEO	Obtained
Wellfield Authorization	WDEQ-LQD	Obtained
Class I UIC Deep Disposal Well Permits	WDEQ-WQD	Obtained
WYPDES	WDEQ-WQD	Obtained
Plan of Operations (Hank Unit only)	BLM	Obtained
Air Quality Permit	WDEQ-AQD	Obtained

Notes:

- (1) NRC - Nuclear Regulatory Commission
- (2) EPA - Environmental Protection Agency
- (3) UIC - Underground Injection Control
- (4) WDEQ-LQD - Wyoming Department of Environmental Quality Land Quality Division
- (5) WDEQ-WQD - Wyoming Department of Environmental Quality Water Quality Division
- (6) WDEQ-AQD - Wyoming Department of Environmental Quality Air Quality Division
- (7) WSEO - Wyoming State Engineer's Office
- (8) WYPDES - Wyoming Pollutant Discharge Elimination System

Under the licensed plan, the Nichols Ranch Plant has been built, and a satellite processing facility is licensed for the Hank Project. In 2017, the NRC approved a source material license amendment to add the Jane Dough Property to the existing license for the Nichols Ranch Project, and the Wyoming Department of Environmental Quality approved an amendment to our Permit to Mine to

incorporate the Jane Dough Property. The Jane Dough Property is now fully licensed and permitted as part of the Nichols Ranch Project. The Jane Dough Property is adjacent to the Nichols Ranch Wellfield and is expected to share its infrastructure. We are now able to bring the Jane Dough Property into extraction operations before the Hank Project. Due to its close proximity, extracted solutions from the Jane Dough Property may be delivered directly to our Nichols Ranch Plant by pipeline, thus eliminating the need for a larger capital outlay to construct a satellite plant as is planned for the Hank Project. The Jane Dough Property includes the Doughstick, South Doughstick and North Jane properties. Additional wellfields may be added to the extraction operations plan as the Company continues to assess geological data.

Geological Setting, Mineralization and Deposit

The Complex is located in the Powder River Basin, which is a large structural and topographic depression sub-parallel to the trend of the Rocky Mountains. The Basin is bounded on the south by the Hartville Uplift and the Laramie Range, on the east by the Black Hills, and on the west by the Big Horn Mountains and the Casper Arch. The Miles City Arch in southeastern Montana forms the northern boundary of the Basin.

The Powder River Basin is an asymmetrical syncline with its axis closely paralleling the western basin margin. During sedimentary deposition, the structural axis (the line of greatest material accumulation) shifted westward resulting in the Basin's asymmetrical shape.

Uranium mineralization at the Complex deposits is hosted by the Eocene Wasatch Formation. The Wasatch Formation was deposited in a multi-channel fluvial and flood plain environment. The climate at the time of deposition was wet tropical to subtropical with medium stream and river sediment load depositing most medium grained materials. The source of the sediments, as evidenced by abundant feldspar grains in the sandstones, was the nearby Laramie and Granite Mountains.

Within the Complex, there is a repetitive transgressive/regressive sequence of sandstones separated by fine-grained horizons composed of siltstone, mudstone, carbonaceous shale, and poorly developed thin coal seams. The fine-grained materials were deposited in flood plain, shallow lake (lacustrine), and swamp environments. Ultimately, deposition of the Wasatch Formation was a function of stream bed load entering the basin and subsidence from within the basin. However, in the central part of the Powder River Basin, long periods of balanced stability occurred. During these periods the stream gradients were relatively low and allowed for development of broad (0.5 mi to 6.0 mi wide) meander belt systems, associated over-bank deposits, and finer grained materials in flood plains, swamps, and shallow bodies of water.

Meander belts in the Wasatch Formation are generally 5 ft to 30 ft thick. The A Sand at Nichols Ranch Area is made up of three to four stacked meander belts and the F Sand at Hank Area has two to three stacked meander belts. Individual meander belt layers will rarely terminate at the same location twice. Meanders have been noted to frequently terminate in the interior of a belt system but are more likely to terminate somewhere closer to the edge of the meander stream valley. The net effect for fluvial sands is to generally thin away from the main axis of the meander belt system. The A Sand meander belt system at Nichols Ranch Area is approximately four miles wide. At Hank, the F Sand meander belt system is smaller than Nichols Ranch at approximately one and a half miles wide.

At the North Rolling Pin Area, the mineralized sand horizon (F Sand) occurs within the Wasatch Formation at an approximate depth from surface ranging from 51 ft to 403 ft and averaging 282 ft to the top of the mineralization. Generally, the depth of mineralization decreases from the northeast to the southwest due mainly to topography along which the surface elevation decreases from approximately 5,180 ft to approximately 4,800 ft. The F Sand primarily consists of two stacked sand sets, termed the Upper and Lower F Sands that each average 20 ft to 25 ft thick.

The mineralized sand horizons occur within the lower part of the Wasatch Formation, at an approximate depth from surface ranging from 482 ft to 1,012 ft at West North Butte, 540 ft to 660 ft at East North Butte, and 172 ft to 567 ft at Willow Creek. The host sands are primarily arkosic in composition, friable, and contain trace carbonaceous material and organic debris. There are local sandy mudstone/siltstone intervals with the sandstones, and the sands may thicken or pinch-out in some locations. Mineral resources are located in the Eocene age Wasatch Formation in what is identified as the A, B, C and F host sand units of the WNB Area, the A and B host sands of the ENB Area and in the A and F host sand units of the WC Area.

The uranium mineralization is composed of amorphous uranium oxide, sooty pitchblende, and coffinite, and is deposited in void spaces between detrital sand grains and within minor authigenic clays. The host sandstone is composed of quartz, feldspar, accessory biotite and muscovite mica, and locally occurring carbon fragments. Grain size ranges from very fine to very coarse sand but is medium-grained overall. The sandstones are weakly to moderately cemented and friable. Pyrite and calcite are associated with the sands in the reduced facies. Hematite or limonite stain from pyrite are common oxidation products in the oxidized facies.

Montmorillonite and kaolinite clays from oxidized feldspars are also present in the oxidized facies (Uranerz, 2010a). The uranium being extracted is hosted in a sandstone, roll front deposit at a depth ranging from 400 ft to 800 ft.

Wyoming uranium deposits are typically sandstone roll front uranium deposits as defined in the “World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification” (IAEA, 2009). The key components in the formation of roll front type mineralization include:

- A permeable host formation:
 - Sandstone units of the Wasatch Formation.
- A source of soluble uranium:
 - Volcanic ash flows coincidental with Wasatch deposition containing elevated concentration of uranium is the probable source of uranium deposits for the Pumpkin Buttes Uranium District.
- Oxidizing groundwaters to leach and transport the uranium:
 - Groundwaters regionally tend to be oxidizing and slightly alkaline.
- Adequate reductant within the host formation:
 - Conditions resulting from periodic hydrogen sulfide (H_2S gas) migrating along faults and subsequent iron sulfide (pyrite) precipitation created local reducing conditions.
- Time sufficient to concentrate the uranium at the oxidation/reduction interface.
 - Uranium precipitates from solution at the oxidation/reduction boundary (REDOX) as uraninite (UO_2 , Uranium oxide), which is dominant, or coffinite ($USiO_4$, uranium silicate).
 - The geohydrologic regime of the region has been stable over millions of years with groundwater movement controlled primarily by high-permeability channels within the predominantly sandstone formations of the Tertiary.

Data Verification

The primary assay data used to calculate the Mineral Resource estimate for the Complex is downhole radiometric log data. Calibration data for both natural gamma and prompt fission neutron (“PFN”) geophysical logging units are available for both historical and recent drilling. When drilling is active, both the natural gamma and PFN logging trucks are calibrated at least every three months. Natural gamma calibration is performed at U.S. Department of Energy (“DOE”) standard calibration facilities located in Casper, Wyoming. Commercial logging services for both natural gamma and PFN logging are calibrated at the DOE standard facilities located in Casper, Wyoming, and/or Grand Junction, Colorado.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The use of a PFN logging unit, which directly measures uranium content, would remove this risk. The disequilibrium factor applied to the Mineral Resource is 1.0.

Mineral Resource Estimates

Mineral Resources have been estimated using the GT (Grade x Thickness) contour method for each of the mineral sandstone horizons or units identified across the deposits (1, A, B, C, F, G and H). The uranium resource can generally be defined by existing drilling information which is of sufficient density and continuity to identify a meandering discontinuous mineralized trend. The grade and mineralized zone thickness were obtained from historical and recent drilling.

The GT contour method is well suited for estimating tonnage and average grades of relatively planar mineralized bodies. It is a smoothing technique that allows the geologist to apply judgment regarding the variability of the mineralization within the plane of the mineralized body. This technique is particularly effective in generating a realistic landscape of metal values along the plane of the mineralized body and limiting the effect of local high values. The technique is best applied to estimate tonnage and average grade of relatively planar bodies, i.e., where the two dimensions of the mineralized body are much greater than the third dimension (Agnerian and Roscoe, 2001). For these types of deposits, the contour method can provide a clear view of the “mineralization landscape” with “peaks and valleys” along the plane of the mineralization. Due to the two-dimensional nature of the contour method, data from drillhole intersections means the reported averaged assay grade is across the entire thickness of the mineralized body being considered. If necessary, the average intersection value is diluted to a specified minimum thickness.

The rationale for all Mineral Resource estimation methods is that there is continuity of mineralization from one sample point to another, whether they are drillhole pierce points, underground workings, surface trenches, or wellfields. When a mineral deposit has

been tested by many drillholes, the estimate of tonnage and average grade by all of the conventional methods will likely be similar. When a deposit has been tested by a relatively few widely spaced or irregularly spaced drillholes, however, the estimates by various methods may vary greatly and a few high-grade or wide intercepts may have a large influence on the average grade or tonnage of the deposit. The contour method can be effective in reducing the influence of high-grade or wide intersections as well as the effects of widely spaced, irregularly spaced, or clustered drillholes. This is particularly the case for roll front uranium deposits. It can also be applied to estimate Mineral Reserves by deleting certain portions of the Mineral Resources estimated by the same method, such as clipping the edges of the contoured area, deleting certain parts of the tonnage estimate as pillars and sills and/or applying economic factors to the Mineral Resources.

The Mineral Resource estimates were calculated using GT contours with a minimum grade cut-off of 0.03% eU₃O₈ and a minimum mineralization thickness of 1.0 feet. The GT values of the subject sand intervals for each hole were plotted on a drillhole map and contour lines were drawn along the mineralization trend using ArcGIS software. The contour map was developed from the calculated GTs for various GT ranges. The areas within the GT contour boundaries, up to certain distances from the drillhole and to certain maximum areas of influence, were used for calculating estimates for resources. All resources were limited to the extent of the 0.2 GT boundaries. The contained pounds of uranium were calculated using the following formula:

$$\text{Mineral Resource, pounds} = (\text{Area, ft}^2) \times (\text{GT, \%-ft}) \times (20 \text{ lb}) \times (\text{DEF}) / (\text{RD, ft}^3/\text{ton})$$

- Area (ft²) = Area of influence in square feet (measured from contour interval)
- GT (percent x feet) = Material grade in percent times feet thickness of mineralization (GT multiplied by 20 lb to convert from short tons to pounds as 1% of a short ton equals 20 lb)
- DEF (1.00) = Disequilibrium factor (1.00)
- RD (15.5) = Rock density (15.5 ft³/ton)

Tonnage was calculated based on grade, pounds and a tonnage conversion factor for a given GT contour area.

Details regarding the Mineral Resource estimate disclosed herein can be found in Section 14.0, Mineral Resource Estimates of the Nichols Ranch Technical Report Summary.

The table below sets out the Mineral Resources estimates for the Nichols Ranch Project as at December 31, 2021. These estimates are derived from the Nichols Ranch Technical Report Summary, which estimated the Mineral Resources as of December 31, 2021. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the Nichols Ranch Technical Report Summary remained accurate as at December 31, 2021.

Nichols Ranch Remaining Mineral Resources – In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾

Classification	Project Area	Cut-off (ft-%) ⁽²⁾⁽⁸⁾	Tons (000s)	Grade (%U ₃ O ₈)	Contained Metal (000s lb U ₃ O ₈)	EFR Basis (%)	EFR Metal (000s lb U ₃ O ₈)
Measured Mineral Resources (M)	Nichols Ranch	0.2	11	0.187	41	100	41
	Jane Dough	0.2	---	---	---	---	---
	Hank	0.2	---	---	---	---	---
	North Rolling Pin	0.2	---	---	---	---	---
	West North Butte	0.2	---	---	---	---	---
Total Measured			11	0.187	40	100	40
Indicated Mineral Resources (I)	Nichols Ranch	0.2	359	0.166	1,190	100	1,190
	Jane Dough	0.2	1,892	0.112	4,237	81	3,432
	Hank	0.2	450	0.095	855	100	855
	North Rolling Pin	0.2	582	0.057	665	100	665
Total Indicated		0.2	3,283	0.106	6,947	88.4	6,142
Total Measured + Indicated (M+I)		0.2	3,294	0.106	6,988	88.5	6,183

Inferred Mineral Resources (I)	Nichols Ranch	0.2	---	---	---	---	---
	Jane Dough	0.2	188	0.112	420	81	340
	Hank	0.2	423	0.095	803	100	803
	North Rolling Pin	0.2	39	0.042	33	100	33
Total Inferred		0.2	650	0.097	1,256	93.6	1,176

Notes:

- (1) SEC S-K definitions were followed for all Mineral Resource categories. These definitions are also consistent with CIM (2014) definitions in NI 43-101.
- (2) The cut-off grade is calculated using a metal price of \$65/lb. U₃O₈.
- (3) Mineral Resources are based on a tonnage factory of 15.0 ft³/ton (Bulk density 0.0667 ton/ft³ or 2.13 t/m³).
- (4) Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- (5) Numbers may not add due to rounding.
- (6) Mineral Resources are 100% attributable to EFR for Nichols Ranch, Hank, and North Rolling Pin.
- (7) Mineral Resources are 81% attributable to EFR and 19% attributable to United Nuclear Corp in parts of Jane Dough.
- (8) Cut-off grade is a GT cut-off or %U₃O₈ x thickness (ft).

Present Condition of the Property

Current Status of Wellfields

All the currently planned and permitted wellfields are in Production Areas #1 and #2 of the Nichols Ranch Wellfield. The Nichols Ranch Wellfield is expected to have a total of 13 header-houses, with Production Area #1 comprising header-houses 1 through 8, and Production Area #2 comprising header-houses 9 through 13. Each of the two planned Nichols Ranch Wellfield Production Areas will include a number of injection wells, recovery wells, monitoring wells, header houses and associated piping and power supply. Header houses will be located within the Production Areas and will distribute recovered fluids from recovery wells to trunk lines, and injection fluids from the processing facility through the trunk lines to injection wells.

The first five header houses and their respective wellfields in Production Area #1 at the Nichols Ranch Wellfield were installed and extracting uranium at the time we acquired Uranerz in June 2015. Header house #6 was turned on in November 2015. The Company placed the 7th and 8th header-houses on-line in March and July 2016, respectively, thereby completing development of Production Area #1. In February 2017 we completed construction on our 9th header-house, marking the beginning of development in Production Area #2. Uranium recovery operations from Production Area #2 commenced in March of 2017. Nichols Ranch is currently on standby and is engaged in reduced uranium recovery activities in Production Area #1 and Production Area #2. In order for Nichols Ranch to engage in future uranium production, the Company will need to incur capital expenditures to develop additional wellfields.

Nichols Ranch Plant

In 2014, construction of the Nichols Ranch Plant was completed. The Nichols Ranch Plant is licensed to produce up to two million pounds of uranium per year through three major processing solution circuits: (i) a recovery and extraction circuit; (ii) an elution circuit; and (iii) a yellowcake production circuit. The Nichols Ranch Plant is currently constructed and operated with the recovery and extraction circuit and the elution circuit installed. We retain the ability to construct and operate a yellowcake drying and packaging circuit at the Nichols Ranch Plant at a later date if desired.

The Nichols Ranch Plant is currently on standby, but is still processing uranium-bearing wellfield solutions from Production Areas #1 and #2 of the Nichols Ranch Wellfield for *de minimis* recoveries of uranium. When not on standby, yellowcake slurry, produced at the Nichols Ranch Plant, is shipped by truck from the Nichols Ranch Project to the White Mesa Mill where it is dried and packaged in drums as uranium concentrate product. Prior to the completion of the elution circuit in February 2016, loaded resin was transported by truck to a third-party facility for elution, drying and packaging, under a toll processing arrangement.

In August 2020, deep disposal well #1 (NICH-DW-1) was placed back into operation after a successful work-over.

The Nichols Ranch Plant was acquired by the Company on June 18, 2015 through the acquisition of Uranerz. As of December 31, 2021, the total book value attributable to the Nichols Ranch Plant on the Company's financial statements was \$19.7 million.



The Company's Planned Work

Nichols Ranch is currently on standby, pending market conditions improving sufficiently to resume production. In 2022, the Company will contemplate initiating restoration activities at Production Area #1. In order for Nichols Ranch to engage in future uranium production, the Company will need to incur capital expenditures to develop additional wellfields, as all existing wellfields are now depleted. A decision to commence development will be made if the Company decides to take action in response to uranium prices increasing to a point where the economic feasibility of the Nichols Ranch Project is realized.

The Alta Mesa Project



The following technical and scientific description of the Alta Mesa Project is based in part on the report titled “*Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg Counties, Texas, USA*” dated December 31, 2021, prepared by Douglas Beahm, PE, PG, a Qualified Person employed by BRS, as well as Travis Boam, PG, a non-independent Qualified Person employed with the Company (the “**Alta Mesa Technical Report Summary**”). The Alta Mesa Technical Report Summary was prepared in accordance with S-K 1300 and also constitutes a PEA pursuant to NI 43-101. The Alta Mesa Project does not have known “Mineral Reserves” and is therefore considered under SEC S-K 1300 definitions to be an exploration stage property, despite commercial uranium extraction activities occurring as recently as 2013.

Property Description

The Alta Mesa Project is a fully-licensed ISR uranium recovery facility that the Company acquired in June 2016 through the acquisition of EFR Alta Mesa LLC (previously named Mesteña Uranium LLC). It is located in South Texas and is currently on standby. The Alta Mesa Project is not an underground or open pit project.

The Alta Mesa Project does not have known “Mineral Reserves” and is therefore considered under S-K 1300 definitions to be exploratory in nature.

The Alta Mesa central processing facility and mine office is located at 755 CR 315, Encino, Texas 78353, in Brooks County, Texas, at approximately 26° 54' 08" North Longitude and 98° 18' 54" West Latitude. The site is located approximately 11 miles west of the intersection of US 281 and Ranch Road 755, which is 22 miles south of Falfurrias, Texas.

The Alta Mesa Project is located within a portion of the private land holdings of the Jones Ranch, founded in 1897. The ranch comprises approximately 380,000 acres. The ranch holdings include surface and mineral rights including oil and gas and other minerals including uranium. Active uses of the lands in addition to uranium exploration and production activities include agricultural use (cattle), oil and gas development, and private hunting.

The Alta Mesa Project consists of Uranium Mining Leases for uranium ISR mining (4,598 acres) and Mineral Options (195,501 acres) comprising some 200,099 total acres. The Alta Mesa Project is defined as constituting two distinct project areas with sufficient drilling to define resources. These two areas are subdivided, as listed below and illustrated on the map on the following page:

- The Alta Mesa project area, Brooks County, Texas, comprising 16,010 acres, including,
 - The Alta Mesa mine area and central processing facility
 - South Alta Mesa
 - Indigo Snake
- The Mesteña Grande project area, Jim Hogg County, Texas, comprising 47,088 acres, including,
 - Mesteña Grande Goliad
 - Mesteña Grande North
 - Mesteña Grande Central
 - Mesteña Grande Alta Vista
 - El Sordo

The remaining 137,002 acres lack sufficient exploration drilling to define any resources at this time.

Ownership

Mineral ownership in Texas is a private estate. Private title to all land in Texas emanates from a grant by the sovereign of the soil (successively, Spain, Mexico, the Republic of Texas, and the state of Texas). By a provision of the Texas Constitution the state released to the owner of the soil all mines and mineral substances therein. Under the Relinquishment Act of 1919, as subsequently amended, the surface owner is made the agent of the state for the leasing of such lands, and both the surface owner and the state receive a fractional interest in the proceeds of the leasing and production of minerals.

The Alta Mesa Project consists of a private Uranium Solution Mining Lease (4,598 acres) and Options (195,501 acres) for uranium comprising some 200,100 total acres consisting of acreage associated with currently approved mining permits issued by the Texas Commission on Environmental Quality and 9 prospect areas.

The Uranium Solution Mining Lease, originally dated June 1, 2004, covers approximately 4,575 acres out of the “La Mesteñas” Ysidro Garcia Survey, A-218, Brooks County, Texas and “Las Mesteñas Y Gonzalena” Rafael Garcia Salinas Survey, A-480, Brooks County, Texas (description corrected in a later amendment). This original Uranium Solution Mining Lease has been superseded by the Amended and Restated Uranium Solution Mining Lease dated June 16, 2016, as part of the share purchase agreement between the Company and the various former holders of the Alta Mesa Project. The Lease now covers uranium, thorium, vanadium, molybdenum, other fissionable minerals, and associated minerals and materials under 4,597.67 acres. The term of the amended lease is fifteen (15) years commencing on June 16, 2016, or so long as the lessee is continuously engaged in any mining, development, production, processing, treating, restoration or reclamation operations on the leased premises. The amended lease can be extended by the Lessee for an additional 15 years upon payment of a stipulated cash payment. The lease includes provisions for royalty payments on the net proceeds (less allowable deductions) received by the Lessee. The royalty payment is 7.5% of Market Value of Product sold at a uranium price greater than \$95.00 per pound, 6.25% of Market Value of Product sold at a uranium price

greater than \$65.00 and up to and including \$95.00 per pound, and 3.125% of the Market Value of Product sold at a uranium price of \$65.00 or less per pound.

The Uranium Testing Permit and Lease Option Agreement, originally dated August 1, 2006, covers all of the land containing mineral potential as identified through exploration efforts and covers uranium, thorium, vanadium, molybdenum, and all other fissionable materials, compounds, solutions, mixtures, and source materials, has been superseded by the Amended and Restated Uranium Testing and Lease Option Agreement dated June 16, 2016, as part of the share purchase agreement between the Company and the various holders of the Alta Mesa Project. It now covers some 195,501.03 acres. The term of the amended lease and option agreement is for eight years commencing June 16, 2016. The amended lease and option agreement can be extended by the grantee for an additional seven years. Certain payments by the Grantee to the Grantor are required prior to year three of the initial eight-year lease. The amended Lease Option Agreement provides for designating acreage to be leased for production by making certain payments to the Grantor (cash or stock). If acreage designation occurs within the first three years of the initial eight-year lease, the payments will be deducted from the certain payments required by year three in the lease option agreement. The Grantor then has sixty business days to execute and return the lease.

Amended surface use agreements have been entered in to with all surface owners on the various prospect areas as part of the Membership Interest purchase agreement between the Company and the various former holders of the Alta Mesa Project. These amended agreements, unchanged from those originally entered in to on June 1, 2004, provide, among other things, for stipulated damages to be paid for certain activities related to the exploration and production of Uranium. Specifically, the agreements call for Consumer Price Index adjusted payments for the following disturbances: exploratory test holes, development test holes, monitor wells, new roads, and related surface disturbances. The lease also outlines an annual payment schedule for land taken out of agricultural use around the area of a deep disposal well, land otherwise taken out of agricultural use, and pipelines constructed outside of the production area.

Surface rights are expressly stated in the lease and in general provide the lessee with the right to ingress and egress, and the right to use so much of the surface and subsurface of the leased premises as reasonably necessary for ISR mining. Open pit and/or strip mining is prohibited by the lease.

Ad valorem tax rates per \$100 of taxable value applicable to tangible property for 2016 were as follows:

Brooks County	0.743829
Brooks County Rd and Bridge	0.150000
Brooks County ISD	1.572555
Brooks County FM FC	0.098837
Brush Country Groundwater	0.026020

Accessibility, Climate, Local Resources, Infrastructure and Physiography

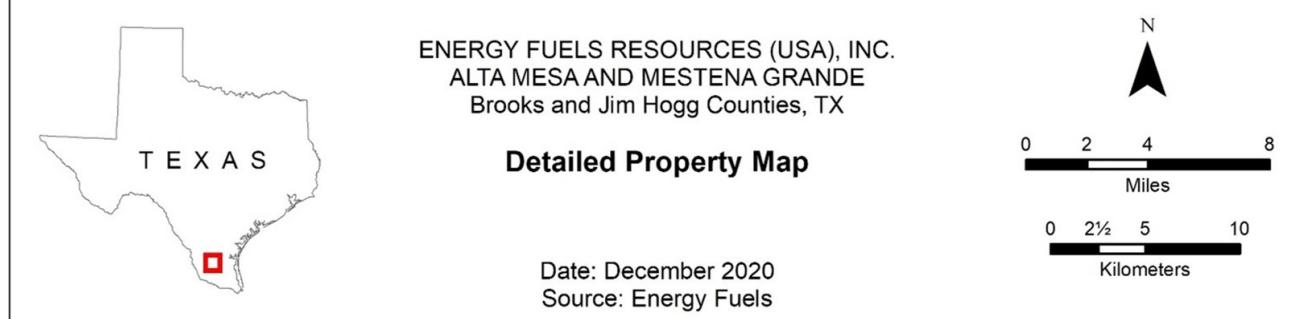
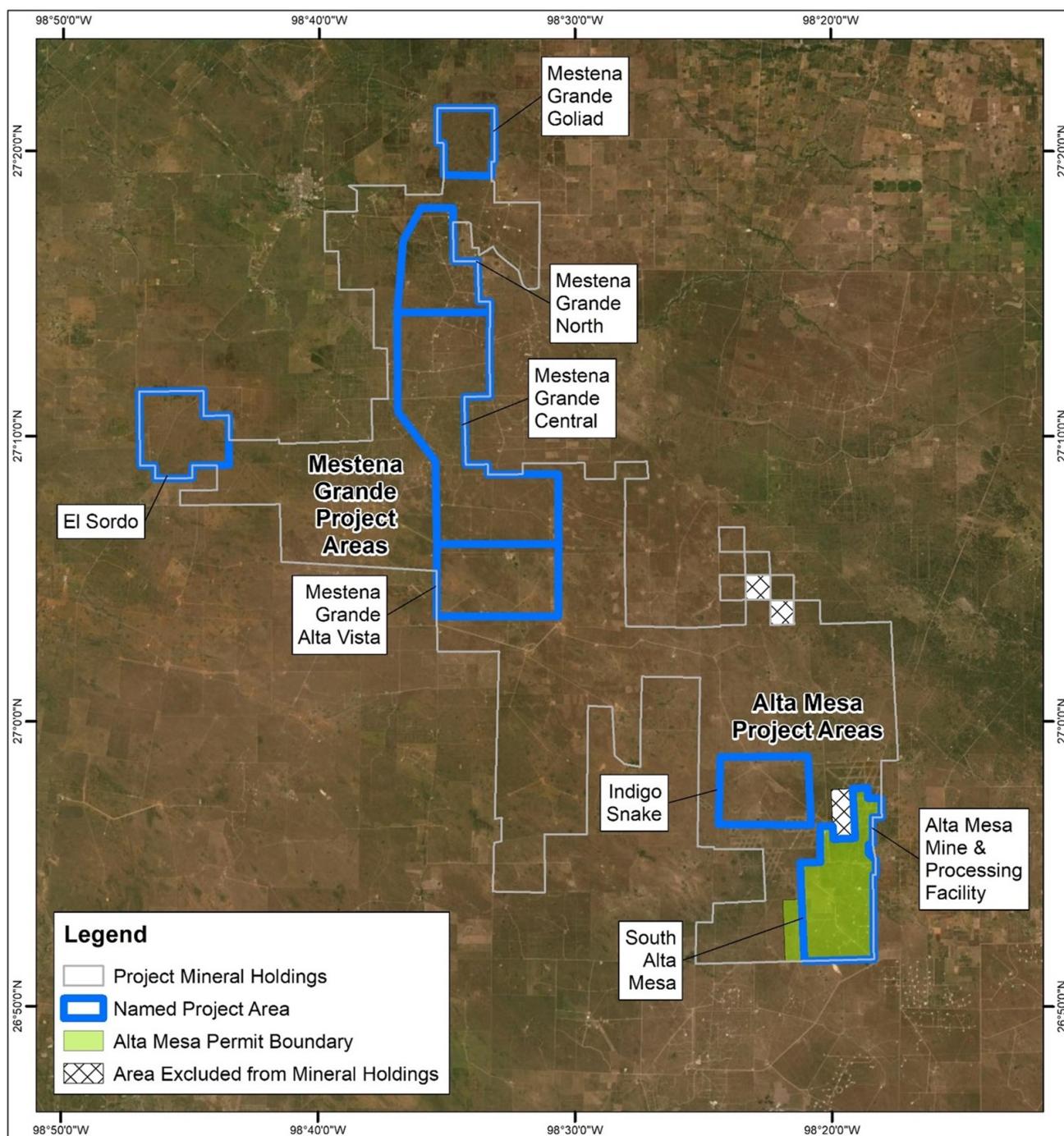
The Alta Mesa Project is located primarily in Brooks and Jim Hogg counties, Texas, with the central processing facility in Brooks County. Brooks County is generally rural and according to the 2010 United States Census, there were 7,223 people living in the county. The population density was 8 people per square mile. Most of the workers for the operation are from the local area and nearby communities such as Kingsville, Texas approximately 40 miles from the site. Some staff members commute from Corpus Christi, Texas approximately 90 miles from the site.

The Alta Mesa Project is located in the coastal plain of the Gulf of Mexico. Topography of the lower Gulf Coast is relatively flat, whereas the upper Gulf Coast, including most of the current and past mining operations of the South Texas Uranium Province, generally has low relief, rolling plains, except where it is locally dissected by rivers and streams. Elevations range from sea level to about 800 ft. in the southwest. Three major rivers from south to north are: the Nueces River, which flows into Corpus Christi Bay, and the San Antonio and Guadalupe Rivers, which flow into San Antonio Bay southeast of the city of Victoria.

The Alta Mesa Project is accessible year-round by various paved, gravel and dirt roads. The site is located approximately 11 miles west of the intersection of US Highway 281 (paved) and Ranch Road 755 (paved), 22 miles south of Falfurrias, Texas. Commercial airlines serve San Antonio, Corpus Christi and Harlingen. Many of the local communities have small airfields and there are numerous private airfields in the region.

In general, the climate is warm and dry, with hot summers and relatively mild winters. However, the region is strongly influenced by its proximity to the Gulf of Mexico and, as a result, has a much more marine-type climate than the rest of Texas, which is more typically continental. Monthly mean temperatures in the region range from 55°F in January to 96°F in August. The area rarely experiences freezing conditions and, as a result, the majority of the processing facility and infrastructure is located outdoors.

Wellfield piping and distribution lines do not require burial for frost protection. Annual precipitation ranges from 20 to 35 inches regionally. Primary risk for severe weather is related to heavy thunderstorms and the effects of hurricanes along the Gulf Coast.



Local infrastructure includes electricity service, which is adequate for mine and mineral processing activities. The Alta Mesa facility also has telephone and internet service in the form of a T-1 fiber optics line. The plant has an automated control and monitoring system, which allows remote monitoring of the facility, and includes fail safe systems, which can shut down portions of the system in the event of an upset condition. The facility is fully secured with on-site and remote monitoring. Water supply for the Alta Mesa Project is from established and permitted local wells. Liquid waste from the processing facility is disposed of via deep well injection through two permitted Class I UIC disposal wells. Solid waste from the processing facilities is disposed of off-site at licensed disposal facilities. No tailings or other related waste disposal facilities are needed.

The Alta Mesa Project is located on an operating cattle ranch. In addition, there is significant local oil and gas development and production. The Alta Mesa area was first developed as an oilfield in the 1930s with production ongoing, primarily for natural gas. Other land uses include farming and recreational uses, such as hunting.

The area is regionally classified as a coastal sand plain. Brooks County comprises 942 square miles of brushy mesquite land. The level to undulating soils are poorly drained, dark and loamy or sandy; isolated dunes are found. In the northeast corner of the county the soils are light-colored and loamy at the surface and clayey beneath.

The mineral leases and options described below include provisions for reasonable use of the land surface for the purposes of ISR mining and mineral processing. Alta Mesa is a fully licensed, operable facility with sufficient sources of power, water, and waste disposal facilities for operations and aquifer restoration. While the current staff level has been reduced, sufficient local personnel are available for mine operations.

History

Ownership of the Alta Mesa Project has changed several times in the past.

- Early 1970s through June 1985, Chevron Minerals.
- June 1985, mineral leases reverted to landowners.
- July 1988 to 1993, Total Minerals (“**Total**”).
 - Total engaged Uranium Resources Incorporate (“**URI**”) to complete a feasibility study of the project.
 - 1993 Total relinquished mineral leases to Cogema under directive from French government.
- 1993 to 1996, Cogema.
- 1996 to 1998, URI who obtained the Radioactive Materials License for the facility.
- 1999, Mesteña Uranium LLC (“**MULLC**”) was formed by landowners.
 - MULLC completed most of the drilling on the project.
 - MULLC began construction of the ISR facility in 2004
 - Production began in the 4th quarter of 2005.
 - MULLC operated the facility through February 2013 and the project has been on care and maintenance standby since that time.
- June 17, 2016, EFR acquired the Project, including both Alta Mesa and Mesteña Grande.

Alta Mesa was first discovered in the mid-1970s by Chevron Resources as a result of researching oil and gas logs for natural gamma geophysical signatures. Chevron controlled the Alta Mesa portion of the project through June of 1985 when they returned the mineral lease due to Chevron exiting the uranium business. Chevron reportedly drilled a total of 360 holes inclusive of exploration drilling, coring, and well completion during a four-year period from 1981 through 1984. In July of 1988, Total executed a lease agreement for the Alta Mesa portion of the project. Total also engaged URI to complete a feasibility study for the project. The Total mineral lease was terminated as a result of the French Government requiring Total to sell all their uranium assets to Cogema.

Subsequently, the Alta Mesa Project was evaluated by Cogema in 1994 and later by URI. URI held the mineral lease and obtained the Radioactive Material License during the period of 1996 through 1998. EFR Alta Mesa (previously named Mesteña Uranium LLC) was formed in 1999 and continued permitting activities in April of 2000 and completed licensing in 2003. Plant construction at Alta Mesa began in 2004 with initial production in the 4th quarter of 2005. The Alta Mesa Project produced approximately 4.6 million pounds of uranium oxide between 2005 and 2013 via ISR mining. The facility was in production from 2005 until primary production ceased in February 2013. The Alta Mesa Project operated in a groundwater clean-up mode until February 2015; therefore, any uranium mined since 2013 remains as in-circuit inventory.

Permitting and Licensing

The Alta Mesa Project area is fully permitted for ISR mining and recovery of uranium. The table below summarizes the current permits held by EFR Alta Mesa. Similar permits would be required for the Mesteña Grande project area depending upon the nature of operations and their integration with the Alta Mesa facility.

Primary Permits and Licenses for the Alta Mesa Project

Permit, License or Approval Name	Agency	Status
Radioactive Material License	TCEQ	Obtained
Class III UIC Mine Area Permit	TCEQ	Obtained
Aquifer Exemption	TCEQ	Obtained
Production Area Authorization(s)	TCEQ	Obtained
Class I UIC Deep Disposal Well Permit(s)	TCEQ	Obtained

Notes:

- (1) TCEQ - Texas Commission on Environmental Quality
- (2) UIC - Underground Injection Control

The ISR processing facility at Alta Mesa has an operating capacity of 1.5 million pounds of uranium per year. Primary regulatory authority resides with the State of Texas. Financial assurance instruments are held by the state for completed wells, ISR mining, and uranium processing to ensure reclamation and restoration of the affected lands and aquifers in accordance with state regulations and permit requirements.

Geological Setting, Mineralization and Deposit

The Alta Mesa Project is located within the Texas Gulf Coast along a belt of Tertiary and Quaternary sedimentary formations. The Alta Mesa Project is located within the South Texas Uranium Province, which is known to contain more than 100 uranium deposits that were developed in the second half of the 20th century.

Regionally, uranium deposits are hosted by four formations:

- Miocene/Pliocene Goliad Formation, consisting of fluvial deposits, mostly unconsolidated sands.
- Miocene Oakville Formation, consisting of fluvial deposits (sands, some clay).
- Oligocene/Miocene Catahoula Formation, consisting of fluvial deposits, mostly sands, clay, and clastic volcanic rich sediments.
- The Jackson Group consisting of fluvial deposits sands, silt, clay, and lignite.

At the Alta Mesa Project, in order of importance, uranium is hosted by the Goliad, Oakville, and Catahoula formations.

South Texas uranium deposits are sandstone roll-front uranium deposits. The key components in the formation of roll-front type mineralization include:

- **A permeable host formation:**
 - Sandstone units of the Goliad, Oakville, and Catahoula formations.
- **A source of soluble uranium:**
 - Volcanic ash-fall tuffs coincidental with Catahoula deposition containing elevated concentration of uranium is the probable source of uranium deposits for the South Texas Uranium Province.
- **Oxidizing ground waters to leach and transport the uranium:**
 - Ground waters regionally tend to be oxidizing and slightly alkaline.
- **Adequate reductant within the host formation:**
 - Conditions resulting from periodic H₂S gas migrating along faults and subsequent iron sulfide (pyrite) precipitation created local reducing conditions.
- **Time sufficient to concentrate the uranium at the oxidation/reduction interface:**
 - Uranium precipitates from solution at the oxidation/reduction boundary (REDOX) as uraninite which is dominant (UO₂, uranium oxide) or coffinite (USiO₄, uranium silicate).

- The geohydrologic regime of the region has been stable over millions of years with ground water movement controlled primarily by high-permeability channels within the predominantly sandstone formations of the Tertiary.

The structural map of the Gulf Coast area is dominated by an abundance of growth faults that trend with, or are slightly oblique to, stratigraphic strike, which is roughly parallel to the Gulf of Mexico. In addition, local structural features such as salt domes influence the distribution and deposition of uranium mineralization potentially through various mechanisms including effects on ground water flow and the introduction of additional reductant via the migration of H₂S gas along the faulting related to the salt dome intrusion. This mechanism is thought to be of importance at Alta Mesa.

The Alta Mesa Project is located in the South Texas Uranium Province. Mineralization within the South Texas Uranium Province is interpreted to be dominantly roll-front type mineralization and primarily of epigenetic origin. Roll-fronts are formed along an interface between oxidizing ground water solutions, which encounter reducing conditions within the host sandstone unit. This boundary between oxidizing and reducing conditions is often referred to as the REDOX interface or front. Mineralization tends to be very continuous.

Within the Alta Mesa portion of the Alta Mesa Project, Quaternary formations are exposed at the surface. These are conformably underlain by the Goliad Formation, the primary uranium host. Alta Mesa ISR mine units have exploited uranium mineralization in the Goliad C sands within wellfields PAA-1, PAA-2, PAA-3, PAA-4, and PAA-6. The B sand was targeted in wellfield PAA-5. Mineral resources have been estimated for the A, B, C, and D sands. Exploration targets in the South Alta Mesa area lie within successively deeper D, E, F, G, and H sands of the Goliad.

Within the Mesteña Grande portion of the project, mineralization is also present in the Goliad Formation but is dominantly found in the Oakville Formation. In the western portion of Mesteña Grande mineralization is found in the Catahoula Formation. Mineral resources have been estimated for all areas within the Mesteña Grande portion of the project.

Data Verification

The primary assay data used to calculate the Mineral Resource estimate for Alta Mesa is downhole radiometric log data. Calibration data for both natural gamma and PFN geophysical logging units are available for both historical and recent drilling. When drilling is active, both the natural gamma and PFN logging trucks are calibrated quarterly. Natural gamma calibration is performed at U.S. Department of Energy DOE standard calibration facilities located in George West, Texas.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The use of a PFN logging unit, which directly measures uranium content, would remove this risk. The disequilibrium factor applied to the Mineral Resource is 1.0.

Mineral Resource Estimates

The primary geologic modeling associated with roll-front deposits in Texas is first identifying the sand in which the uranium mineralization is contained. The geophysical logs obtained following drilling contain gamma data as described in previous sections as well as electrical properties of the rock formations. A trained geologist can interpret these electrical logs as different rock types and therefore assign a formation or sand unit to a uranium intercept. The gamma signature and the cuttings logged during drilling can be used to tell what where the drill hole is within the roll front. The drill hole can be on the oxidized or reduced side of the roll front or within the mineralized “nose” of the roll front. All this information is used to define geologic continuity and the location of the mineralization.

Where drilling density was sufficient to complete GT contour calculations, resource estimates were completed in accordance with industry standards, in areas where this was not possible, trend width was determined from producing wellfields PAA-6 and portions of PAA-4 or average GT values where estimated based on overall averages for all Alta Mesa drill hole data. Estimation parameters used for each resource area are provided in the discussions that follow.

When dealing with ISR mineral resources, the contained pounds of uranium are calculated from the GT value applied to the respective area of mineralization with the application of the appropriate bulk density. As such average thickness is not a critical parameter in the determination of the pounds contained but is needed to calculate tonnage and average grade. Based on the typical geometry of the sands, a thickness of 10 feet was assumed for exploration targets and corresponds generally with the average

screened interval for wells. Mineral resource tonnages were thus calculated assuming an average thickness of 10 feet unless specific data relating to thickness was available.

The table below sets out the Mineral Resources estimates for the Alta Mesa Project as of December 31, 2021. These estimates are derived from the Alta Mesa Technical Report Summary. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the Alta Mesa Technical Report Summary remained accurate as at December 31, 2021.

Alta Mesa and Mesteña Grande Mineral Resources – In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾

Classification	Cut-Off Grade (GT)	Tons (000)	Grade % eU ₃ O ₈	Pounds eU ₃ O ₈ (000)
Total Measured Resources (M) ⁽⁵⁾	0.3	54	0.152%	164
Alta Mesa Indicated Resources (I)	0.3	1,397	0.106%	2,959
Mesteña Grande Indicated Resources (I)	0.3	119	0.120%	287
Total Indicated Resources	0.3	1,516	0.107%	3,246
Total (M & I)	0.3	1,570	0.109%	3,410
Alta Mesa Inferred Resources	0.3	1,263	0.126%	3,192
Mesteña Grande Inferred Resources	0.3	5,733	0.119%	13,601
Total Inferred Resources	0.3	6,996	0.120%	16,793

Notes:

- (1) S-K 1300 and NI 43-101 definitions were followed for all Mineral Resource categories.
- (2) Mineral Resources are estimated at a 0.3 GT (0.02% U₃O₈ minimum).
- (3) Mineral Resources are estimated using a long-term Uranium price of US\$65 per pound.
- (4) Total measured mineral resource is that portion of the in-place mineral resources that is estimated to be recoverable within existing well fields. Wellfield recovery factors have not been applied to indicated and inferred mineral resources.
- (5) Bulk density is 0.0588 tons/ft³ (17.0 ft³/ton).
- (6) Mineral Resources are exclusive of Mineral Reserves and do not have demonstrated economic viability.
- (7) Numbers may not add due to rounding.
- (8) Mineral Resources are 100% attributable to the Company.

Present Condition of the Property and Work Completed to Date

The Alta Mesa Project produced approximately 4.6 million pounds of uranium oxide between 2005 and 2013 via In Situ Recovery mining. The facility was in production from 2005 until primary production ceased in February 2013. The Alta Mesa Project operated in a groundwater clean-up mode until February 2015; therefore, any uranium mined since 2013 remains as in-circuit inventory. The first wellfield (PAA-1) has undergone restoration, and the groundwater has been released by the State of Texas. In 2018, all of the cased wells associated with PAA-1 were plugged as per permit requirements. All other wellfields are being maintained by a small bleed (less than 100 gpm) for permit compliance. The bleed solutions are disposed of in the deep disposal wells.

Drill data is available for a total of 10,744 drill holes of which approximately 3,000 are within existing wellfields. The primary assay data for the Alta Mesa Project is downhole geophysical log data. EFR Alta Mesa relied entirely on prompt-fission-neutron (“PFN”) logging for uranium grade assay and used natural gamma logging to screen intervals for PFN logging. Of the 10,744 drill holes in the Alta Mesa database, PFN logging was not available for only 7.2% of the drill holes. For the Mesteña Grande portion of the Alta Mesa Project, all 460 drill holes were completed by EFR Alta Mesa and all gamma intercepts greater than 0.02 % eU₃O₈ were logged by PFN.

For determination of uranium grade, EFR Alta Mesa LLC relied on PFN log data for 92.8% of the data, which is a direct measurement of uranium content and not an equivalent radiometric assay. As a result, assessment of disequilibrium factor (“DEF”) is not applicable.

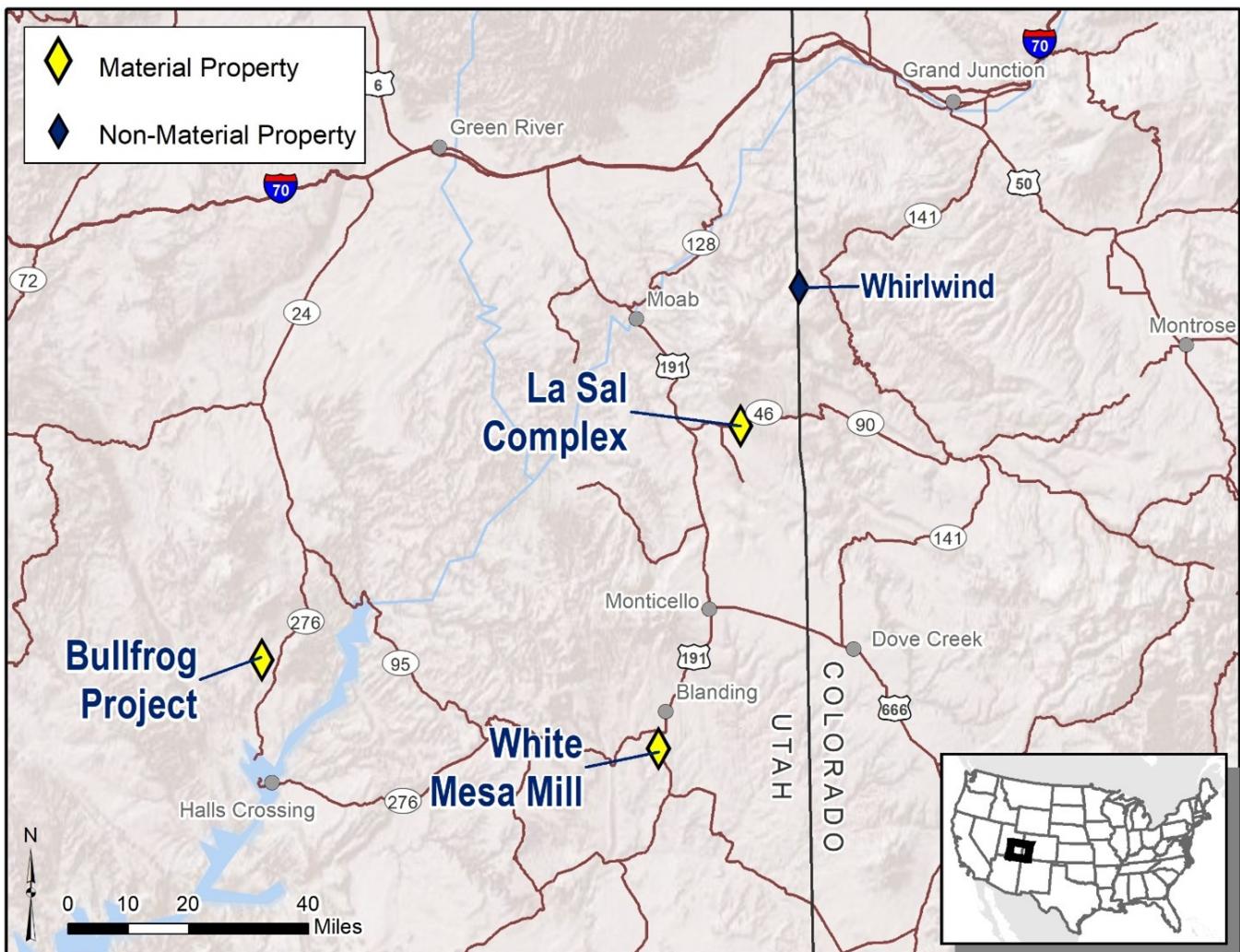
In 2019, the Company performed significant surface decommissioning work in PAA-1. The Alta Mesa Project was maintained in a standby mode during 2021.

As of December 31, 2021, the total book value attributable to the Alta Mesa Project on the Company's financial statements was \$9.1 million.

The Company's Planned Work

In 2022, the Company expects to continue to keep the Alta Mesa Project on standby until such time as improvements in uranium market conditions are observed or suitable sales contracts can be procured. Alta Mesa is capable of resuming production within a relatively short period of time after a positive production decision by the Company, with only minimal capital requirements.

The White Mesa Mill



General

The White Mesa Mill is a fully licensed uranium and vanadium processing facility located in southeastern Utah, approximately six miles south of the city of Blanding, Utah. The Mill offices are located at $37^{\circ}32'3.749''$ north latitude and $109^{\circ}30'10.297''$ west longitude. It is within trucking distance of the Company's conventional properties in Utah, Colorado, Arizona and New Mexico, including the Pinyon Plain Project, the Roca Honda Project, the Bullfrog Project, the La Sal Project and the Whirlwind Project. The Mill is the only fully operational and licensed conventional uranium mill in the U.S. It is capable of functioning independently of off-site support except for commercial power from Rocky Mountain Power and as-needed supplemental water supply from the City of Blanding, Utah, and the San Juan Water Conservancy District. The Mill is a uranium processing and recovery facility. It is not an underground or open pit project.

The Mill is licensed to process an average of 2,000 tons of ore per day and to extract over 8.0 million pounds of U_3O_8 per year. In addition to the conventional circuit, the Mill has a separate vanadium by-product recovery circuit.

In addition to the Mill processing equipment, which includes the grinding and leaching circuits, CCD (liquid–solid separation), solvent extraction, and precipitation and drying circuits, the Mill has several days of reagent storage for sulfuric acid, hydrochloric acid, ammonia, salt, soda ash, caustic soda, ammonium sulfate, flocculants, kerosene, amines, and liquefied natural gas.

The onsite infrastructure also includes a stockpile area capable of storing up to 450,000 tons of mineralized material, and existing tailings capacity of approximately 3.5 million tons of solids. In addition, the Mill has approximately 90 acres of evaporation capacity.

Synthetic lined cells are used to contain tailings and solutions for evaporation. The Company operates two tailings cells and one or more evaporation ponds during normal operations. As each tailings cell is filled, the water is drawn off and pumped to an



evaporation pond and the tailings solids are allowed to dry. As each tailings cell reaches final capacity, reclamation begins with the placement of interim cover over the tailings. Additional cells are excavated, and the overburden is used to reclaim previous cells. In this way, there is an ongoing reclamation process.

When in full operation, the Mill employs approximately 150 people, which is reduced to approximately 110 people when the vanadium circuit is not being operated.

Alternate Feed Materials

The Mill License (defined below) also gives the Company the right to process other uranium-bearing materials known as Alternate Feed Materials pursuant to an Alternate Feed Guidance published by the NRC. Alternate Feed Materials are uranium-bearing materials, usually classified as waste products by the generators of the materials, which can be recycled by the Mill for the recovery of U₃O₈. The Mill License does not permit the processing of uranium-bearing materials that have undergone enrichment. Requiring a routine amendment to the Mill License for each different Alternate Feed Material, the Company can process these uranium-bearing materials and recover uranium, in some cases, at a fraction of the cost of processing conventionally mined material. In other cases, the generators of the Alternate Feed Materials are willing to pay a recycling fee to the Company to process these materials to recover uranium and then dispose of the remaining by-product in the Mill's licensed tailings cells, rather than directly disposing of the materials at a disposal site. By working with the Company and taking the recycling approach, the suppliers of Alternate Feed Materials can significantly reduce their remediation costs, as there are only a limited number of disposal sites for such materials in the United States. Alternate Feed Materials are particularly attractive to Energy Fuels because they carry no associated mining costs.

Throughout its history, the Mill has received 18 license amendments, authorizing it to process 22 different Alternate Feed Materials. Of these amendments, twelve have involved the processing of feeds provided by nuclear fuel cycle facilities and private industry, and one has involved the processing of material from the DOE. These thirteen feed materials have been relatively high in uranium content and relatively low in volume. The remaining five amendments have allowed the Mill to process uranium-bearing soils from former defense sites, known as FUSRAP sites, which were being remediated by the U.S. Army Corps of Engineers. These materials are typically relatively low in uranium content but relatively high in volume.

The Mill has a separate circuit for processing certain types of Alternate Feed Materials, which was built in 2009. This circuit enables the Mill to process both conventionally mined material and Alternate Feed Materials simultaneously.

Rare Earth Elements

In 2021, the Company began utilizing the Mill to process REEs at commercial scale from a monazite feed source. Monazite is typically produced as part of heavy-mineral sand mining operations and contains elevated quantities of the rare earth suite of elements as well as uranium and thorium. The Mill was able to successfully recover rare earths as a mixed rare earth carbonate ("RE Carbonate") product which was then sold into the rare earth market. The Mill processed approximately 400 tons of monazite in 2021 and the Company is planning on processing 800 to 1,200 tons of monazite in 2022. The Mill has also begun piloting the separation of the individual rare earth elements by solvent extraction. The Mill is uniquely suited to process monazite and extract both the REEs as well as the uranium and safely dispose of the thorium. See "*Part I, Item 1. Business Overview: The Company's Rare Earth Elements Business*" for a more detailed discussion of the Company's REE initiative.

Potential Recovery of Radioisotopes for use in Advanced Cancer Therapeutics

In 2021, the Company announced the execution of a Strategic Alliance Agreement with RadTran, LLC, a technology development company focused on closing critical gaps in the procurement of medical isotopes for emerging TAT cancer therapeutics and other applications. Under this strategic alliance, the Company is evaluating the feasibility of recovering Th-232, and Ra-226, from its existing RE Carbonate and uranium process streams at the Mill and, together with RadTran, is evaluating the feasibility of recovering Ra-228 from the Th-232, Th-228 from the Ra-228 and concentrating Ra-226 at the Mill using RadTran technologies. Recovered Ra-228, Th-228 and Ra-226 would then be sold to pharmaceutical companies and others to produce Pb-212, Ac-225, Bi-213, Ra-224 and Ra-223, which are the leading medically attractive TAT isotopes for the treatment of cancer. Existing supplies of these isotopes for TAT applications are in short supply, and methods of production are costly and currently cannot be scaled to meet the demand created as new drugs are developed and approved. This is a major roadblock in the research and development of new TAT drugs as pharmaceutical companies wait for scalable and affordable production technologies to become available. Under this initiative, the Company has the potential to recover valuable isotopes from its existing process streams, therefore recycling back into the market material that would otherwise be lost to disposal for use in treating cancer. See "*Part I, Item 1. Business Overview: The Company's Strategic Alliance for the Development of Radioisotopes for Medical Therapeutics*" for a more detailed discussion of this initiative.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Mill is located in central San Juan County, Utah, approximately six miles (9.5 km) south of the city of Blanding. It can be reached by taking a private road for approximately 0.5 miles west of U.S. Highway 191.

The climate of southeastern Utah is classified as dry to arid continental. Although varying somewhat with elevation and terrain, the climate in the vicinity of the Mill can be considered as semi-arid with normal annual precipitation of about 13.4 inches. The weather in the Blanding area is typified by warm summers and cold winters. The mean annual temperature in Blanding is about 50° (F). Winds are usually light to moderate in the area during all seasons, although occasional stronger winds may occur in the late winter and spring.

The Mill site is located on a gently sloping mesa that, from the air, appears similar to a peninsula, as it is surrounded by steep canyons and washes and is connected to the Abajo Mountains to the north by a narrow neck of land. On the mesa, the topography is relatively flat, sloping at less than one (1) percent to the south and nearly horizontal from east to west.

The natural vegetation presently occurring within a 25-mile (40-km) radius of the Mill site is very similar to that of the region, characterized by pinyon-juniper woodland integrating with big sagebrush (*Artemisia tridentata*) communities.

Off-site infrastructure includes paved highway access from U.S. Highway 191, and rights-of-way for commercial power and a water supply pipeline from Recapture Reservoir, which brings up to 1,000 acre-feet of water per year to the Mill site. The Mill also has three deep (2,000+ foot) water supply wells, which are available to supply process water during normal operations.

Ownership

The White Mesa Mill is located on 4,816 acres of private land owned in fee by Energy Fuels. This land is located in Township 37S and 38S Range 22E Salt Lake Principal Meridian. Energy Fuels also holds 253 acres of mill site claims and a 320-acre Utah state lease. No facilities are planned on the mill site claims or leased land, which are used as a buffer to the operations.

All operations authorized by the Mill's License are conducted within the confines of the existing site boundary. The milling facility currently occupies approximately 50 acres, and the current tailings disposal cells encompass another 250 acres.

Permitting and Licensing

The White Mesa Mill holds a Radioactive Materials License through the State of Utah (the "**Mill License**"). Uranium milling in the U.S. is primarily regulated by the NRC pursuant to the Atomic Energy Act of 1954, as amended. The NRC's primary function is to ensure the protection of employees, the public and the environment from radioactive materials, and it also regulates most aspects of the uranium recovery process. The NRC regulations pertaining to uranium recovery facilities are codified in Title 10 of the Code of Federal Regulations. These regulations also apply to our ISR facilities in Wyoming and Texas.

On August 16, 2004, the State of Utah became an Agreement State for the regulation of uranium mills. This means that the primary regulator for the Mill is the UDEQ rather than the NRC. At that time, the Source Material License, which was previously issued and regulated by the NRC, was transferred to the State and became a Radioactive Materials License. The State of Utah incorporates, through its own regulations or by reference, all aspects of Title 10 pertaining to uranium recovery facilities. The Mill License was due for renewal on March 31, 2007. Energy Fuels' predecessor timely submitted its application for its Mill License renewal on February 28, 2007. The renewed Mill License was issued by UDEQ on January 19, 2018, then reissued on February 16, 2018 for a period of ten years (with a number of Amendments issued since), after which another application for renewal will need to be submitted. During the review period for each application for renewal, the Mill can continue to operate under its then existing Mill License until such time as the renewed Mill License is issued. The Mill License was initially issued in 1980 and was also renewed in 1987 and 1997.

When the State of Utah became an Agreement State, it required that a GWDP be put in place for the Mill. The GWDP is required for all similar facilities in the State of Utah, and effects the State groundwater regulations to the Mill site. The State of Utah requires that every operating uranium mill have a GWDP, regardless of whether the facility discharges to groundwater. The GWDP for the Mill was finalized and implemented in March 2005. The GWDP required that the Mill add over 40 additional monitoring parameters and 15 additional monitoring wells at the site. The GWDP came up for renewal in 2010, at which time an application for renewal was timely submitted. The renewed GWDP was issued by UDEQ on January 19, 2018 for a period of five years. An application for renewal of the GWDP will need to be submitted prior to expiration of the current GWDP. During the review period for each application for renewal, the Mill can continue to operate under its then existing GWDP until such time as the renewed GWDP is issued. The Mill also maintains a permit for air emissions with the UDEQ, Division of Air Quality.

The Mill is subject to decommissioning liabilities. Energy Fuels, as part of the Mill License, is required to annually review its estimate for the decommissioning of the Mill site and submit it to UDEQ for approval. The estimate of closure costs for the Mill is \$20.8 million as of December 31, 2021, and financial assurances are in place for the total amount. However, there can be no assurance that the ultimate cost of such reclamation obligations will not exceed the estimated liability contained in the Company's financial statements.

History

The Mill was originally constructed and owned by Energy Fuels Nuclear, Inc. ("EFN") and its affiliates (no relation to the Company). It was licensed by the NRC and commenced operations in June 1980. In 1984, EFN transferred a 70% interest in the Mill to UMETCO Minerals Corp., a subsidiary of Union Carbide Corporation ("UMETCO"). UMETCO became the operator of the Mill in 1984 and continued to be the operator until 1994, at which time UMETCO transferred its interest in the Mill back to EFN and its affiliates. The Mill was acquired by Denison Mines Corp. ("Denison"), then named International Uranium Corporation ("IUC") and its affiliates in 1997 and was operated by Denison until it was acquired by the Company in June 2012. From the original commissioning in 1980 through December 31, 2021, the Mill has recovered a total of approximately 40 million pounds of U_3O_8 and 46 million pounds of vanadium.

In late 2006, Denison began a program to refurbish the Mill. The refurbishment program included the purchase of mobile equipment, restoration of the vanadium roasting, fusion and packaging circuits, replacement of major pumps and component drives, modernization of the Mill's instrumentation and process control systems, and completion of relining tailings Cell 4A. The total cost of the refurbishment program was approximately \$31.0 million and was completed in 2008.

The Mill has historically operated on a campaign basis. In 2008, the Mill began processing uranium/vanadium conventional mined material, extracting uranium concentrate in the form of U_3O_8 , and vanadium in the form of V_2O_5 . Mineral processing continued through the end of March 2009, at which time maintenance activities were performed at the Mill. Mineral processing recommenced near the end of April 2009 but was discontinued due to a decline in uranium prices at the time. The Mill began mineral processing again in March 2010 and continued through June 2011. Conventional processing recommenced in November 2011 and continued until early March 2012, at which time it ceased for routine maintenance. Conventional mineral processing recommenced at the Mill in August 2012 and continued until early June 2013. Mineral processing began again in May 2014 and continued through August 2014. The alternate feed circuit processed materials from January through December 2014 and continued processing Alternate Feed Materials through December 2015. In 2016, the Company continued processing several Alternate Feed Materials and processed 45,057 tons of mineralized material from its Pinenut mine. In 2017 and 2018, the Mill continued processing Alternate Feed Materials as well as the recovery of uranium from tailings pond solutions at the site. In 2020, Mill activities focused solely on processing Alternate Feed Materials and uranium and vanadium recovery from tailings pond solutions at the site. In 2021, Mill activities focused solely on processing monazite from heavy mineral sands operation for the recovery of U_3O_8 and rare earth elements.

Energy Fuels acquired the Mill from Denison Mines Corp. on June 29, 2012. All mineral processing after that date has been for the account of Energy Fuels.

Recovery History⁽¹⁾

Project or Source	2021	2020	2019	2018	2017
Alternate Feed Materials⁽²⁾					
Tons (000)	---	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
Ave. % U_3O_8	---	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	18.86%
Recovered Pounds U_3O_8 (000)	---	144 ⁽³⁾	---	561 ⁽³⁾	1,004 ⁽³⁾
Tailings Solution Recycle & In-Circuit Material⁽⁴⁾					
Recovered Pounds U_3O_8 (000)	---	47	---	216	308
Recovered Pounds V_2O_5 (000)	---	67	1,807	---	---
Recovered Metric Tons Total Rare Earth Oxide (TREO)	166	---	---	---	---
Conventional Feed Materials					

	Tons (000)	---	---	---	---	---
Contained Grade % U ₃ O ₈	---	---	---	---	---	---
Recovered Pounds U ₃ O ₈ (000)	---	---	---	---	---	---
Recovered Pounds V ₂ O ₅ (000)	---	---	---	---	---	---
Recovered Metric Tons Total Rare Earth Oxide (TREO)	120	---	---	---	---	---
Nichols Ranch ⁽⁵⁾						
Recovered Pounds U ₃ O ₈ (000)	0.5	6	70	140	259	
Alta Mesa						
Recovered Pounds (000)	---	---	---	---	---	---
Total Pounds of U₃O₈ Recovered (000)	---	197	70	917	1,571	
Total Pounds of V₂O₅ Recovered (000)	---	67	1,807	---	---	
Total Metric Tons of TREO Recovered	120	---	---	---	---	---

Notes:

- (1) Mineralized material is shown as being processed and pounds recovered during the year in which the materials were processed at the Mill or at the Nichols Ranch Plant, which is not necessarily the year in which the materials were extracted from the project facilities.
- (2) All Alternate Feed Materials were processed at the Mill. A number of different Alternate Feed Materials were processed during the period 2017 – 2021. The table shows the average uranium grades and the total pounds recovered from all Alternate Feed Materials processed at the Mill during each of the years in that period. Because of the variability in uranium grades, pounds recovered is considered to be the relevant metric and tons fed is not considered to be relevant.
- (3) The 144,000 pounds recovered in 2020 include nil pounds recovered for the accounts of third parties. The 561,000 pounds recovered in 2018 from Alternate Feed Materials include 424,000 pounds recovered for the accounts of third parties. The 1,004,000 pounds recovered in 2017 include 952,000 pounds recovered for the accounts of third parties.
- (4) Pounds contained in tailings solutions containing previously unrecovered uranium and vanadium, together with in-circuit mineralized material from previous conventional mine material processing, were recovered at the Mill, though tons and grade are not available because they cannot be tied to any specific source.
- (5) Uranium recovery commenced at the Nichols Ranch Project on April 17, 2014. Because the Nichols Ranch Project uses ISR instead of conventional extraction methods, grade and tons of mineralized material are inapplicable to the Nichols Ranch Project.

Present Condition of the Property

Planned Operations and Maintenance

In 2017 and 2018, the Mill processed only Alternate Feed Materials and recovered uranium from tailings pond solutions at the site. The Mill recovered no pounds of U₃O₈ during 2019, and operations focused solely on vanadium recovery from dissolved vanadium in the Mill's tailings management system not recovered from previous processing activities (“**Pond Return**”). The Mill recovered approximately 67,000 pounds of V₂O₅ in 2020 from Pond Return. Of these 67,000 pounds of V₂O₅, all were for the account of the Company. During 2020, the Company recovered approximately 190,000 pounds of U₃O₈ from the processing of Alternate Feed Materials and Pond Return. The Company also recovered approximately 68,000 pounds of V₂O₅ from Pond Returns. In 2020, the Company also began processing an REE feed at a pilot scale. The Company produced approximately 4 metric tons of RE Carbonate. In 2021, the Mill processed 400 tons of monazite and produced 120 tonnes of TREO in the form of RE Carbonate. The Mill operations registered zero lost time accidents in 2017, 2018, 2019, 2020 and 2021.

Environmental Matters

Prior to Energy Fuels' acquisition of the Mill from Denison, chloroform in the shallow aquifer at the Mill site was discovered. The chloroform appears to have resulted from the operation of a temporary laboratory facility that was located at the site prior to and during the construction of the Mill, and from septic drain fields that were used for laboratory and sanitary wastes prior to

construction of the Mill's Tailings Management System ("TMS"). In April 2003, Denison commenced an interim remedial program of pumping the chloroform affected water from the groundwater to the Mill's TMS. This action enabled Energy Fuels to begin cleanup of the affected areas and to take a further step towards resolution of this outstanding issue. Pumping from the wells continued through 2015. On September 14, 2015, the State of Utah approved a long-term Corrective Action Plan ("CAP") for cleanup of the chloroform, which involves additional pumping wells and continued pumping of the affected water to the Mill's TMS. While the investigations to date indicate that this chloroform appears to be contained in a manageable area, the scope and costs of final remediation have not yet been determined and could be significant.

Prior to Energy Fuels' acquisition of the Mill from Denison, elevated concentrations of nitrate and chloride were observed in some of the monitoring wells at the Mill site in 2008, a number of which are upgradient of the Mill's TMS. Pursuant to a Stipulated Consent Agreement with UDEQ, Denison retained INTERA, Inc., an independent professional engineering firm, to investigate these elevated concentrations and to prepare a Contamination Investigation Report for submittal to UDEQ. The investigation was completed in 2009, and the Contamination Investigation Report was submitted to UDEQ in January 2010. INTERA concluded in the Report that: (1) the nitrate and chloride are co-extensive and appear to originally come from the same source; and (2) the source is upgradient of the Mill property and is not the result of Mill activities. UDEQ reviewed the Report and concluded that further investigations were required before it could determine the source of the contamination and the responsibility for cleanup. Such investigations were performed in 2010 and 2011 but were considered inconclusive by UDEQ. As a result, after the investigations, it was determined that there are site conditions that make it difficult to ascertain the source(s) of contamination at the site, and that it was not possible at that time to determine the source(s), causes(s), attribution, magnitude(s) of contribution, and proportion(s) of the local nitrate and chloride in groundwater. For those reasons, UDEQ decided that it could not eliminate Mill activities as a potential cause, either in full or in part, of the contamination. The Company and UDEQ have therefore agreed that resources are better spent in developing and implementing a CAP, rather than continuing with further investigations as to the source(s) and attribution of the groundwater contamination. Pursuant to a revised Stipulated Consent Agreement, Denison submitted a draft CAP for remediation of the contamination to UDEQ in November 2011. The CAP proposed a program of pumping the nitrate contaminated groundwater to the Mill's tailings cells, similar to the chloroform remedial program. On December 12, 2012, DWMRC signed the Stipulation and Consent Order ("SCO"), Docket Number UGW12-04, which approved the Mill's CAP dated May 7, 2012 and required the Mill to fully implement all elements of it. In accordance with the CAP, in 2013 the Company commenced pumping nitrate/chloride contaminated water from four monitoring wells for use in Mill processing or discharge into the Mill's process or TMS. In December 2017 the Mill filed its first Corrective Action Comprehensive Monitoring Evaluation ("CACME"), required under the CAP every five years. By letter dated June 22, 2018, the DWMRC requested the implementation of Phase III actions specified in the CAP. Phase III actions include modeling, and study of plume dynamics and assessment of future actions if any. The Phase III report was submitted to DWMRC in December 2018 and is currently under review by DWMRC. Although the contamination appears to be contained in a manageable area, the scope and costs of final remediation have not yet been determined and could be significant.

The Mill has reported consecutive exceedances of groundwater compliance limits ("GWCLs") under the Mill's GWDP for several constituents in several wells. These exceedances include wells that are up-gradient of the Mill facilities, far down-gradient of the Mill site cross-gradient of the Mill site and at the site itself. As required by the GWDP, these consecutive exceedances of GWCLs have resulted in the completion of constituent specific assessments and additional studies which are documented in Source Assessment Reports. Source Assessment Reports were submitted addressing each exceedance at the site. UDEQ has accepted the Source Assessment Reports and has concluded that such exceedances are due to natural background influences at the site. The renewed groundwater discharge permit ("GWDP"), issued on January 19, 2018, as well as revised GWDPs issued March 19, 2019 and March 8, 2021 has revised GWCLs which are intended to account for these background influences and put those constituents, back into compliance.

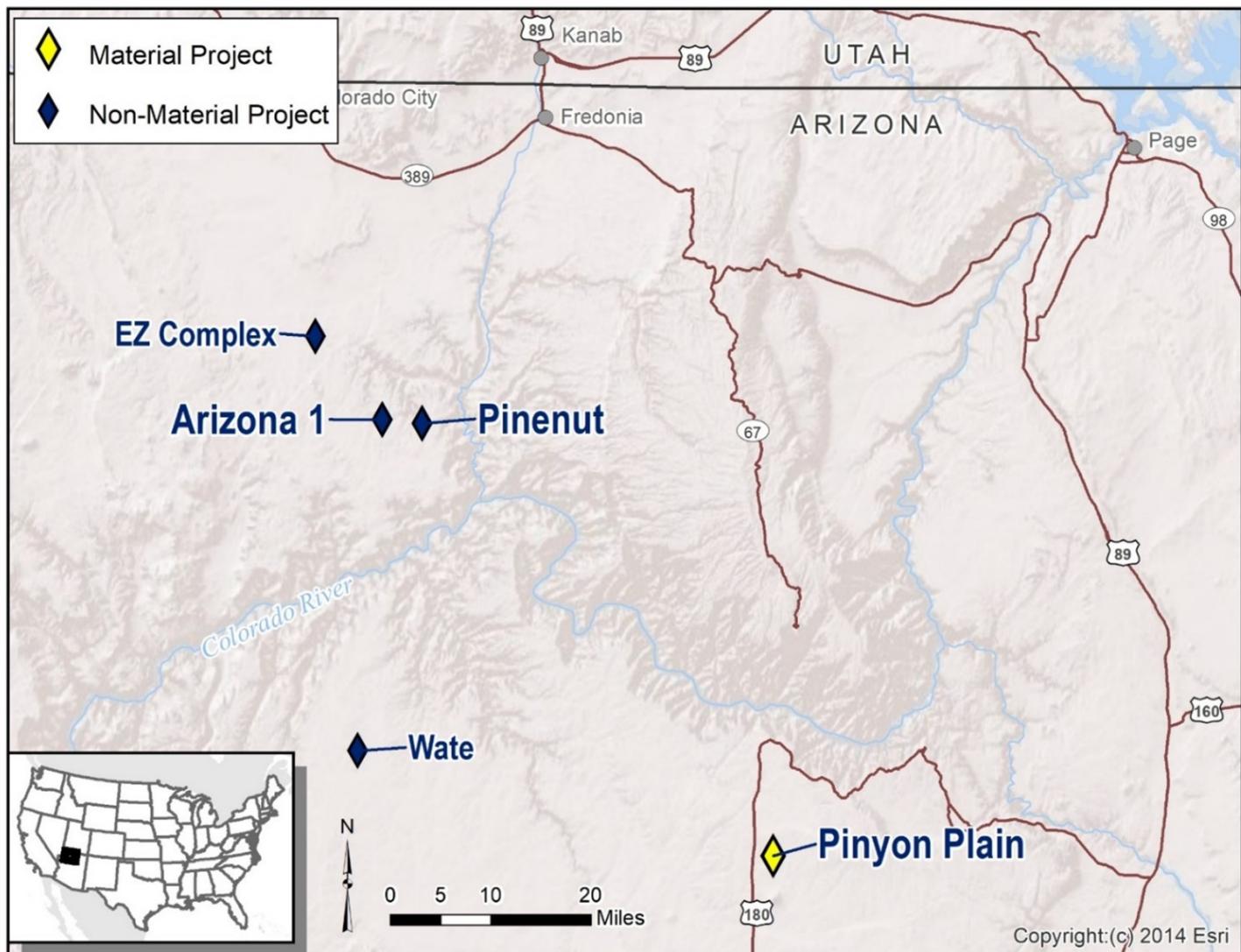
Total Cost of Project

The Mill was acquired by the Company in June 2012, through the acquisition of the U.S. Mining Division from Denison. The cost of the Mill has been fully impaired, and as of December 31, 2021, the total book value attributable to the Mill and its associated equipment on the financial statements of the Company was nil.

The Company's Planned Work

During 2022, the Company expects to recover approximately 100,000 to 120,000 pounds of U_3O_8 at the Mill. These pounds will primarily be a result of processing Alternate Feed Materials with a small contribution from monazite sand processing. The Mill also expects to process 800 to 1,200 tons of monazite generating approximately 300 to 450 tonnes of TREO. During this time, separation of individual rare earth elements will be piloted. This piloting will allow for the design of a commercial-scale separation facility at the Mill. No vanadium production is currently planned during 2022, though the Company is currently evaluating potential vanadium production in light of recent market improvements in vanadium pricing.

The Pinyon Plain Project (formerly, the Canyon Project)

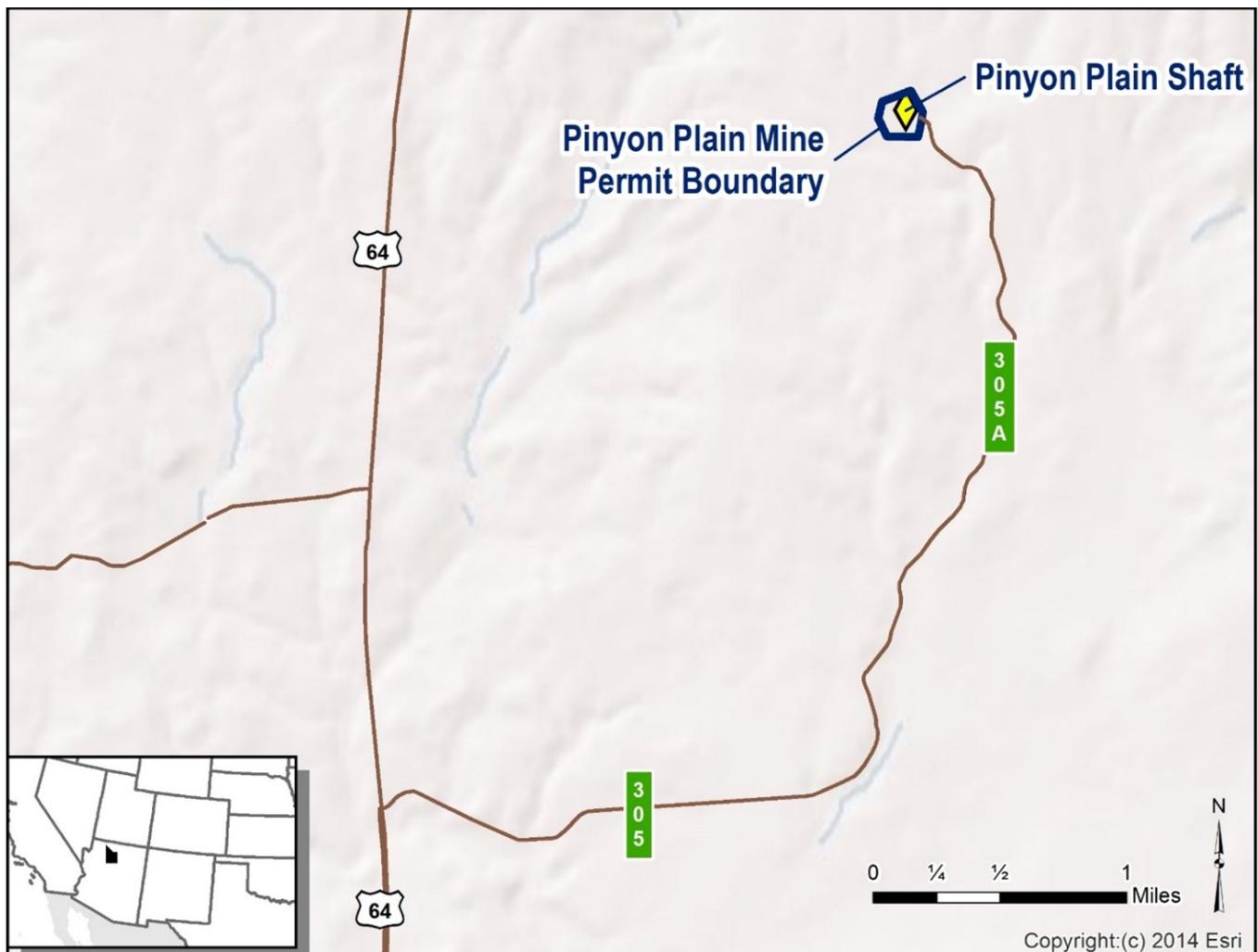


The following technical and scientific description of the Pinyon Plain Project is based in part on the report titled “*Technical Report on the Pinyon Plain Project, Coconino County, Arizona, USA*,” dated February 22, 2022 and prepared by Mark B. Mathisen, C.P.G., a Qualified Person employed by SLR (the “**Pinyon Plain Technical Report Summary**”). The Pinyon Plain Technical Report Summary was prepared in accordance with S-K 1300 and NI 43-101. The Pinyon Plain Project does not have known “Mineral Reserves” and is therefore considered under SEC S-K 1300 definitions to be an exploration stage property, despite currently being a permitted mine with an existing shaft and associated surface facilities.

Property Description

The Pinyon Plain Project is a fully permitted underground uranium and copper deposit in northern Arizona, located on a 17-acre site within the Kaibab National Forest. It is situated 153 mi north of Phoenix, 86 mi northwest of Flagstaff, and seven miles southeast of Tusayan, in Sections 19 and 20, Township 29 North, Range 03 East, Gila and Salt River Meridian (GSRM), Coconino County, Arizona. Ore haulage from the Pinyon Plain Project to the Mill in Blanding, Utah, is 320 mi on paved roads.

The Pinyon Plain Project does not have known “Mineral Reserves” and is therefore considered under S-K 1300 definitions to be exploratory in nature.



Ownership

The Company's property position at the Pinyon Plain Project consists of nine unpatented lode mining claims (Canyon 64–66, 74–76, and 84–86), located on USFS land, encompassing approximately 186 acres. EFR acquired the Pinyon Plain Project in June 2012 and has a 100% interest in the claims. The property is located at latitude 35°52'58.65" N and longitude 112° 5'47.05" W. All claims are in good standing until September 30, 2022.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

Access to the Pinyon Plain Project site is via State Highway 64 and Federal Highway 180 to within five miles of the project site, then over unsurfaced public USFS roads. The Atchison, Topeka and Santa Fe railway line passes east-west 50 mi south of the site at Williams, and a spur of the railway, which passes 10 mi west of the Pinyon Plain Project site, services the Grand Canyon National Park. Airports at Flagstaff, Phoenix, and Tusayan provide air access to the area.

The climate in northern Arizona is semi-arid, with cold winters and hot summers. January temperatures range from approximately 7°F to 57°F and July temperatures range from 52°F to 97°F. Annual precipitation, mostly in the form of rain but with some snow, is about 12 in.

Northern Arizona is part of the Colorado Plateau, a region of the western United States characterized by semi-arid, high-altitude, gently sloping plateaus dissected by steep walled canyons, volcanic mountain peaks, and extensive erosional escarpments. The Pinyon Plain Project is located on the Coconino Plateau within the Colorado Plateau, at an elevation of approximately 6,500 feet above sea level (ft ASL).

Although the Coconino Plateau is sparsely populated, tourist traffic to Grand Canyon National Park results in large numbers of people passing through the region daily. Personnel for future mining operations are expected to be sourced from the nearby towns of

Williams and Flagstaff, Arizona (50 miles and 70 miles, respectively), as well as other underground mining districts in the western United States. Material mined at the Pinyon Plain Project will be transported 320 miles on paved roads to EFR's White Mesa Mill in Blanding, Utah for processing.

In 1982, Energy Fuels Nuclear, Inc. ("EFNI"), which is not part of Energy Fuels Inc., acquired the Project. From 1982 to 1987, EFNI conducted exploration drilling, permitted the mine, constructed certain surface facilities including a headframe, hoist, and compressor, and sunk the shaft to a depth of 50 ft. From 1987 to 2013, the Project was put on standby due to low uranium prices. In 2012, EFR acquired the Project through its acquisition of Denison Mines Corporation's US assets (Denison). Beginning in 2013, EFR refurbished the surface facilities and extended the shaft an additional 228 ft to a depth of 278 ft. In late 2013, the project was again placed on standby due to low uranium prices. In October 2015, EFR re-started the Project and committed to completing the shaft and underground delineation drilling program. From October 2015 to March 2017, the shaft was sunk to a depth of 1,452 ft, and three development levels were started at the 1,003 ft, 1,220 ft; and 1,400 ft depths, all of which have functioned as drill stations. The final depth for the shaft is 1,470 ft.

In addition to the mine shaft, existing surface mine infrastructure includes surface maintenance shops, employee offices and change rooms, a water well, an evaporation pond, water treatment plant, explosive magazines, water tanks, fuel tank, and a rock stockpile (development rock). Electrical power is available through an existing power line that terminates at the site.

History

The Pinyon Plain Project is located on mining claims that EFNI acquired from Gulf Mineral Resources (Gulf) in 1982 who originally staked the claims in April 1978. EFNI was acquired by the Concord group in the early-1990s. The Concord group declared bankruptcy in 1995, and most of the EFNI assets, including the Pinyon Plain Project, were acquired by IUC in 1997. IUC merged with Denison Mines Inc. on December 1, 2006, and the new company changed its name to Denison Mines Corporation. In June 2012, Energy Fuels Inc. acquired all of Denison's mining assets and operations in the United States. Currently the Pinyon Plain Project claims are held by the Company. Between 1978 and 1994, Gulf and EFNI drilled 45 surface holes, including a deep water well, totaling 62,289 ft.

Since 1994, exploration activities undertaken on the property have only included drilling. Prior to that, exploration activities carried out by EFR's predecessors from 1983 to 1987 include:

- Ground control source audio magneto tellurium (CSAMT) surveys
- Ground magnetics
- Ground very low frequency (VLF) surveys
- Time domain electro-magnetic surveys (TDEM)
- Surface gravity surveys
- Airborne electromagnetic (EM) surveys

During 2016 and 2017 the Company conducted an underground exploration drilling campaign during shaft sinking completing 30,314 ft. of drilling. Shaft sinking continued into 2018 finishing at a total depth of 1,470 ft. Since 2018 the property has been on care and maintenance, which includes ongoing environmental monitoring.

Permitting and Licensing

The Pinyon Plain Project is located on public lands managed by the USFS and has an approved PoO with the USFS. In 2020, the Company submitted a clean closure plan to the USFS to provide a description of how the Company will reclaim the mine to clean closure standards after the cessation of mining operations, as contemplated in the USFS-approved PoO, Record of Decision and modifications to the reclamation plan contained in Appendix B of the Environmental Impact Statement. The clean closure plan included an update to the reclamation cost estimate, resulting in an increase from \$461,245 to \$1,407,235. In September 2009, the groundwater General Aquifer Protection Permit ("APP") was obtained for the water storage pond from the Arizona Department of Environmental Quality ("ADEQ"). This permit was up for renewal in 2019, and an application for renewal was timely submitted by the Company in 2019. General APPs were also obtained from ADEQ for the development rock stockpile and intermediate ore stockpile in December 2011 and renewed in 2018. At the request of the ADEQ, the three General APPs are currently being consolidated into an Individual APP. An application for coverage under the Individual APP was submitted to ADEQ in November 2020 and a draft permit was issued in 2021 for public comment. The Individual APP is expected to be issued in mid-2022. An Air Quality Permit was issued by the ADEQ in March 2011, renewed in 2016, amended in 2017 and renewed in 2021. The Company received EPA's approval under the Clean Air Act National Emissions Standard for Hazardous Air Pollutants for the Pinyon Plain Project in September of 2015.

Development of uranium-bearing breccia pipes of the Arizona Strip requires minimal surface disturbance, typically less than 20 acres total. Thus, the overall environmental impact is minimal. Nevertheless, the areas in the general vicinity of the Grand Canyon can be environmentally sensitive in many ways and so the permitting, development, and operation of a uranium extraction facility in this area remains a contentious issue. In 2009, as described below, over one million acres of federal land were withdrawn from mineral location, subject to valid existing rights. Reclamation at the Pinyon Plain Project is bonded at its total expected cost.

Geological Setting, Mineralization and Deposit

Parts of two distant physiographic provinces are found in Arizona: the Basin and Range Province located in the southern portion of the state; and the Colorado Plateau Province located across the northern and central portions of the state. Pinyon Plain lies within the Colorado Plateau Province.

The region has experienced volcanic activity since the Pliocene epoch. A number of lava-capped buttes rise above the general landscape, and lava flows cover large areas in the southern part of the district. Faulting has exerted significant control on the geologic development and geomorphic history of the region. Major structural features include the Grand Wash, Hurricane, and Toroweap fault systems, all trending generally north-south with an eastern up-thrown side. These faults are topographically prominent and show impressive scarps though other less prominent fault systems exist.

The surface expression of the Pinyon Plain breccia pipe is a broad shallow depression in the Permian Kaibab Formation. The pipe is essentially vertical with an average diameter of less than 200 ft. but is considerably narrower through the Coconino and Hermit horizons (80 ft in diameter). The cross-sectional area is in the order of 20,000 ft² to 25,000 ft². The pipe extends for at least 2,300 ft vertically from the Toroweap limestone to the upper Redwall horizons. The ultimate depth of the pipe is unknown. Uranium mineralization is concentrated in an annular ring within the breccia pipe.

Mineralization extends vertically both inside and outside the pipe over approximately 1,700 vertical ft, but potentially economic grade mineralization has been found mainly in the collapsed portions of the Coconino, Hermit, and Esplanade horizons and at the margins of the pipe in fracture zones. Sulphide zones are found scattered throughout the pipe but are especially concentrated in a sulphide cap near the Toroweap-Coconino contact, where the cap averages 20 ft in thickness and consists of pyrite and bravoite, an iron-nickel sulphide. The mineralization assemblage consists of uranium-pyrite-hematite with massive copper sulphide mineralization common in and near the uranium zone. The strongest mineralization appears to occur in the lower Hermit-upper Esplanade horizons in an annular fracture zone.

In the mineralized zone, the uranium mineralization occurs largely as blebs, streaks, small veins, and fine disseminations of uraninite/pitchblende (UO₂). Mineralization is mainly confined to matrix material, but may extend into clasts and larger breccia fragments, particularly where these fragments are Coconino sandstone. In addition to uranium, copper mineralization is also found within the Main Zone of the breccia pipe. Typically replacing the matrix material, copper occurs as chalcocite, bornite, tennantite, and covelite. Arsenic is present where tennantite mineralization occurs. Additionally, lower quantities of silver, zinc, lead, molybdenum, copper, nickel, and vanadium are present and scattered throughout the pipe.

Data Verification

The assay data used to calculate the Mineral Resource estimate for the Project is a combination of radiometric log data and core. Calibration data for natural gamma is available for both historical and recent drilling. When drilling is active, the natural gamma logging trucks and tools are calibrated at least every three months. Natural gamma calibration is performed at DOE standard calibration facilities located in Grand Junction, Colorado.

Drill core was collected from both historical surface holes and recent underground drilling. Recent core, which makes up the majority of data for the Project was analyzed at the Company's White Mesa Mill in Blanding, Utah. The Company utilized standard QA/QC procedures for analyzing both uranium and copper. This QA/QC program involved the submission of duplicate samples, certified reference materials and blank samples to the White Mesa Mill laboratory. It also included sending samples to 3rd Party laboratories for analysis and the submission of certified reference materials to those laboratories.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The use of core to verify natural gamma logs is standard practice and allows for the calculation of a disequilibrium factor. The disequilibrium factor applied to the Project Mineral Resource is 1.0.

Mineral Resource Estimate

Mineral Resource estimates were prepared for the Pinyon Plain deposit using both historical surface drill hole gamma and assay data and gamma and assay data collected during underground drilling in 2016 and 2017. A model of the breccia pipe host was constructed based on drill logs and constrains the Mineral Resource. Mineralization wireframes for U₃O₈ were based on assays and gamma data at a nominal cut-off grade of 0.15%. Low and high-grade copper wireframes were based on nominal cutoff grades of 1% and 8% respectively. Values for U₃O₈ and copper were interpolated into blocks using inverse distance squared or ordinary kriging. Resources are presented a 0.40% U₃O₈ Eq equivalent cut-off grade for zones that contain both uranium and copper mineralization (Main and Main-Lower) and at a 0.30% U₃O₈ Eq cut-off grade for zones that contain only uranium mineralization (Cap, Upper, Juniper I, and Juniper II).

There are no Mineral Reserves estimated at the Pinyon Plain deposit at this time. Additional underground drilling conducted by the Company in 2016 and 2017 allowed for the classification of measured and indicated mineral resources, and the inclusion of a copper Mineral Resource.

The table below sets out the Mineral Resources estimates for the Pinyon Plain Project as of December 31, 2021. These estimates are derived from the Pinyon Plain Technical Report Summary. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the Pinyon Plain Technical Report Summary remained accurate as at December 31, 2021.

Pinyon Plain Project – Summary of Mineral Resources – In Situ Uranium and Copper, December 13, 2021⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾⁽⁹⁾⁽¹⁰⁾

Zone	Classification	Cut-Off (equiv. U ₃ O ₈)	Tonnage (Tons)	Grade (%U ₃ O ₈)	Contained Metal (lb U ₃ O ₈)
Main Zones	Measured	0.4	6,000	0.46	55,000
	Indicated	0.4	90,000	0.92	1,644,000
	Measured + Indicated	0.4	96,000	0.88	1,699,000
	Inferred	0.4	4,000	0.22	16,000
Juniper Zones	Measured	0.3	---	---	---
	Indicated	0.3	37,000	0.95	703,000
	Measured + Indicated	0.3	37,000	0.95	703,000
	Inferred	0.3	1,000	0.53	3200
Upper Zones	Measured	0.3	---	---	---
	Indicated	0.3	---	---	---
	Measured + Indicated	0.3	---	---	---
	Inferred	0.3	9,300	0.42	78,000
Total Measured		0.40	6,000	0.46	55,000
Total Indicated		0.30 & 0.40	127,000	0.92	2,347,000
Total Measured + Indicated		0.30 & 0.40	133,000	0.9	2,402,000
Total Inferred		0.30 & 0.40	16,300	0.39	126,000

Zone	Classification	Cut-Off (equiv. U ₃ O ₈)	Tonnage (Tons)	Grade (%Cu)	Contained Metal (lb Cu)
Main Zones	Measured	0.4	6,000	9.6	1,155,000
	Indicated	0.4	90,000	5.89	10,553,000
	Measured + Indicated	0.4	96,000	6.1	11,708,000
	Inferred	0.4	4,000	6.5	470,000
Total Measured		0.4	6,000	9.6	1,155,000
Total Indicated		0.4	90,000	5.89	10,553,000
Total Measured + Indicated		0.4	96,000	6.1	11,708,000
Total Inferred		0.4	4,000	6.5	470,000

Notes:

- (1) SEC S-K 1300 and NI 43-101 definitions were followed for all Mineral Resource categories.
- (2) Mineral Resources are estimated at an equivalent uranium cut-off grade of 0.40% U₃O₈ for copper bearing zones and 0.30% U₃O₈ for non-copper bearing zones, with estimated recoveries of 96% for uranium and 90% for copper.
- (3) Mineral Resources are estimated using a long-term uranium price of US\$65 per pound, and a copper price of US\$4.00 per pound.
- (4) A copper to U₃O₈ conversion factor of 18.19 was used for converting copper grades to equivalent U₃O₈ grades for cut-off grade evaluation and reporting.
- (5) No minimum mining width was used in determining Mineral Resources.
- (6) Bulk density is 0.082 st/f³ (12.2 ft³/ton or 2.63 ton/m³).
- (7) Mineral Resources are exclusive of Mineral Reserves and do not have demonstrated economic viability.
- (8) Numbers may not add due to rounding.
- (9) Tonnages of uranium and copper cannot be added as they overlap in the Main and Main Lower Zone.
- (10) Mineral Resources are 100% attributable to the Company.

Present Condition of the Property and Work Completed to Date

At the Pinyon Plain Project, all surface facilities are in place. During 2017, an underground drilling program was completed, shaft sinking continued, and a large water tank was installed. The shaft sinking was completed by mid-March 2018. The depth of the shaft is approximately 1,470 feet below ground surface. Shaft stations are developed at depths of 1,000 feet (elevation 5,506 feet above sea level), 1,220 feet (elevation 5,286) and 1,400 feet (elevation 5,106).

The Company is evaluating the potential to recover copper from the mine as a co-product with uranium. During 2018, bench scale and pilot plant scale metallurgical test work was carried out by Hazen Research (“HAZEN”) in Golden, Colorado, in connection with the potential recovery of copper from the mine. At this time, any copper recovered would be expected to be processed using roasting, followed by acid leach and solvent extraction. Acid leach followed by solvent extraction is the current process used for uranium recovery. Following solvent extraction, if recovered, a saleable copper product would be expected to be produced by electro-winning. To recover copper from the Pinyon Plain mineralized material, some modifications to White Mesa Mill process circuits would be required. The copper modifications would be expected to include using the existing vanadium solvent extraction circuit for copper extraction, the addition of a roaster to improve copper recovery, and the addition of an electro-winning circuit. Bench and pilot scale test work done by HAZEN in 2018 indicates that acid leaching after roasting pre-treatment is expected to result in satisfactory copper and uranium recoveries. The Company has not yet determined whether it would be feasible to recover copper along with uranium at the Pinyon Plain mine, and may elect to forego copper recovery at the mine.

During 2019, a 1,000,000-gallon water tank was installed, in addition to the existing 400,000-gallon tank installed in 2017. These above-ground storage tanks are used for operational flexibility and extra water storage capacity during winter months. Three floating, downcasting, enhanced evaporators were installed in the Non-Stormwater Impoundment to aid in evaporation. The tanks and evaporators are part of Energy Fuels’ water balance management practices at the site.

During 2020, a fourth floating, down-casting, enhanced evaporator was installed at the site to increase the operational flexibility of the water balance management practices. Additionally, a water capture and pumping system was installed in the shaft to segregate unimpacted water and store it for beneficial use.

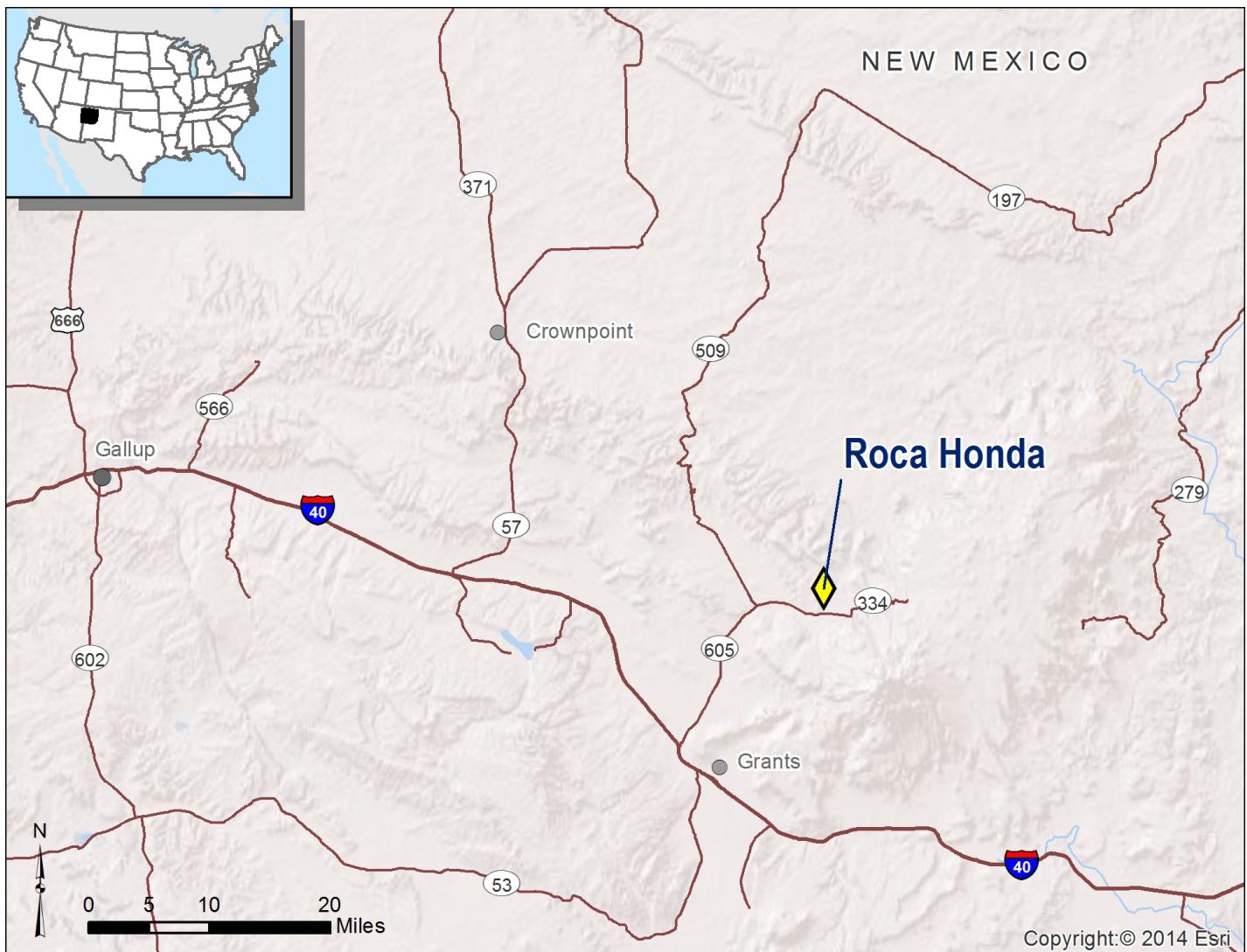
During 2021, a water treatment plant was installed to process water for offsite transport. The water treatment plant was commissioned in April 2021. Water use agreements have been entered into with local farmers and ranchers through which they may utilize excess water from the Pinyon Plain Project for their own beneficial uses within the Coconino Plateau groundwater basin.

The Pinyon Plain Project was acquired by the Company in June 2012 through the acquisition of the U.S. Mining Division from Denison. The cost of the Pinyon Plain Project has been fully impaired and, as of December 31, 2021, the total book value attributable to the Pinyon Plain Project and its associated equipment on the financial statements of the Company was nil.

The Company’s Planned Work

In 2022, the Company plans to maintain the Pinyon Plain Project in compliance with all applicable permits as well as conduct engineering work that needs completed prior to restart of mining activities. The timing of the Company’s plans to extract and process mineralized material from the Pinyon Plain Project will be based on market conditions, available financing, and sales requirements.

The Roca Honda Project



The following technical and scientific description of the Roca Honda Project is based in part on the report titled "*Technical Report on the Roca Honda Project, McKinley County, State of New Mexico, USA*" dated February 22, 2022, prepared by Grant A. Malensek, M.Eng, P.Eng., Mark B. Mathisen, C.P.G., and David M. Robson, P.Eng., MBA, each a Qualified Person employed by SLR, Jeffrey L. Woods, MMSA QP, a Qualified Person Employed by Woods Process Services, Phillip E. Brown, C.P.G., R.P.G., a Qualified Person employed by Consultants in Hydrogeology, and Daniel D. Kapostasy, P.G., SME R.M., a non-independent Qualified Person employed with the Company (the "**Roca Honda Technical Report Summary**"). The Roca Honda Technical Report Summary was prepared in accordance with S-K 1300 and also constitutes a PEA pursuant to NI 43-101. The Roca Honda Project does not have known "Mineral Reserves" and is therefore considered under S-K 1300 definitions to be an exploration stage property, despite current ongoing permitting activities.

The Company acquired a majority of the Roca Honda Project on August 29, 2013 as a result of its acquisition of Strathmore. Certain adjacent properties (which now form part of the Roca Honda Project) were later acquired by the Company from URI in June 2015.

Property Description

The Roca Honda project is a proposed underground uranium mine located in McKinley County, in Central New Mexico, USA in the Ambrosia Lake subdistrict, immediately northeast of the city of Grants, New Mexico. The Mine is located at latitude 35°21'34.36" N and longitude 107°42'20.39" W.

The Roca Honda Project does not have known "Mineral Reserves" and is therefore considered under S-K 1300 definitions to be exploratory in nature.

Ownership

Since May 27, 2016, the Roca Honda Project has been held solely by Strathmore Resources (US) Ltd (Strathmore), which is a wholly owned subsidiary of Energy Fuels Inc. Strathmore acquired the initial portion of the property on March 12, 2004, from Rio Algoma Mining LLC (Rio Algoma), a successor to Kerr-McGee Corporation (Kerr-McGee), which had staked the claims in 1965 and had continuously maintained them. Roca Honda Resources LLC. (RHR) was established on July 26, 2007, when Strathmore formed a limited liability company with Sumitomo Corporation of Japan and transferred the property to RHR. Energy Fuels Inc. acquired a 100% interest in Strathmore in August 2013 and assumed Strathmore's 60% ownership interest in RHR. Energy Fuels Inc. acquired the remaining 40% ownership interest in RHR in May 2016 and is now 100% owner of the Roca Honda Project.

The Roca Honda Project covers an area of 4,440 acres and includes 63 unpatented lode-mining claims in Sections 9, 10 and 11; 64 unpatented claims in Sections 5 and 6; 36 unpatented claims in Section 8; one adjoining New Mexico State General Mining Lease in Section 16; and the fee mineral interest in all of Section 17. The mining claims also extend onto a 9.4-acre narrow strip of Section 11. The New Mexico State Lease was acquired by David Miller (former Strathmore CEO) on November 30, 2004, and subsequently transferred to Strathmore. Strathmore subsequently relinquished the lease and acquired it again in December 2015 (HG-0133) for a new 15-year term expiring on December 14, 2030. The "Rocca Honda" Claims in Sections 5 and 6 were staked by Miller and Associates in September 2004 and assigned to RHR on August 28, 2013. Strathmore acquired the "Roca Honda" claims in Section 8 and the fee mineral interest in Section 17 on June 26, 2015, from Uranium Resource Incorporated (URI).

Mining claim numbers RH 252, RH 279, RH 306, and RH 333, located in the southern part of Section 10, overlap into the northern part of Section 15, which is privately owned land, therefore, the overlapping portion of these claims are not valid. The Roca Honda property extends only to the Section 15 boundary.

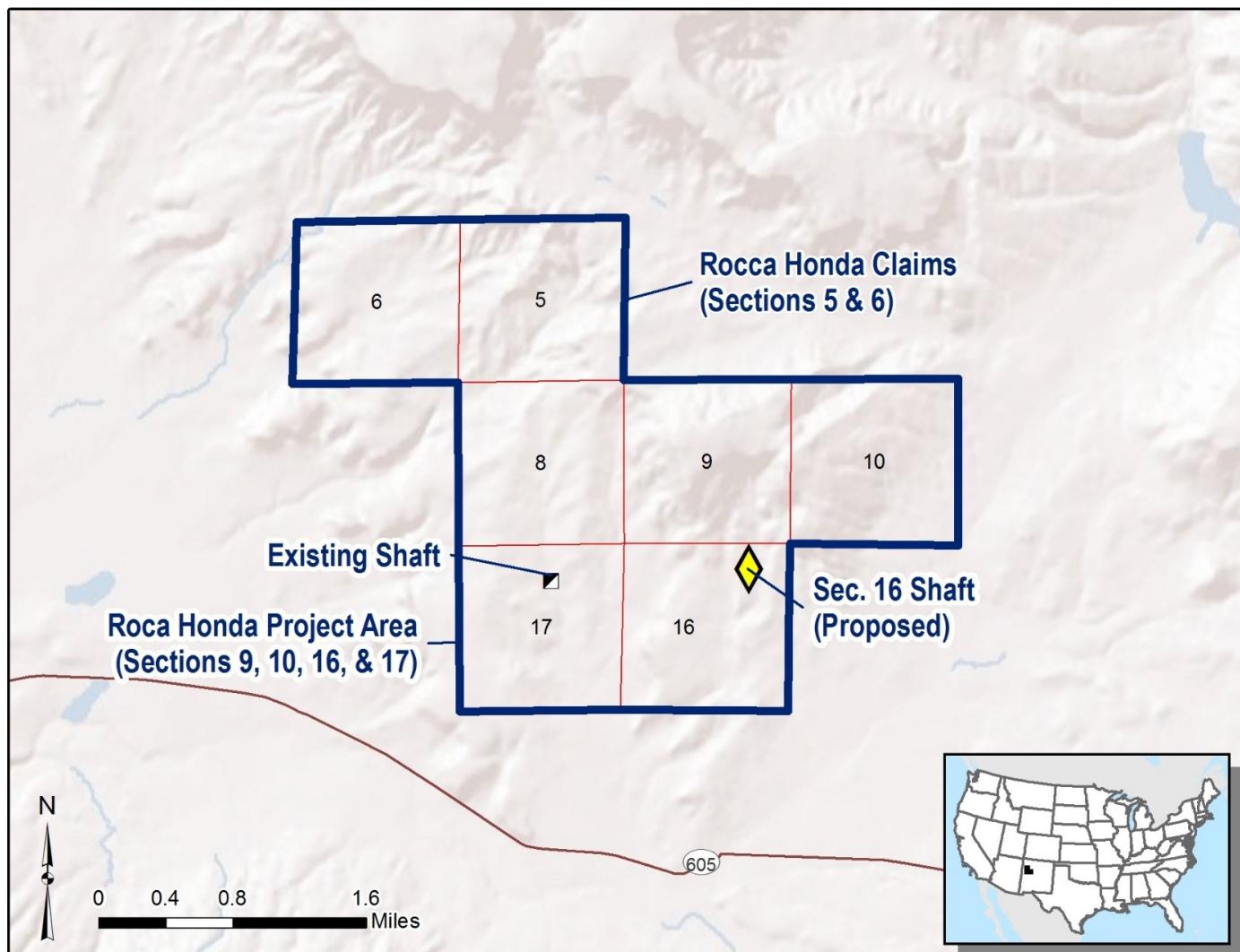
Mining claim numbers RH 325 to RH 333 are located along the eastern boundary of Section 10, extending west across the Section 11 line by approximately 150 ft.

The initial 63 unpatented, contiguous mining claims (the Roca Honda group), covering an area of approximately 1,248.5 acres, are located on Sections 9, 10, and 11, which are federally owned lands within the Cibola National Forest administered by the USFS. Section 5 is also administered by the USFS while claims in Section 6 are located on U.S. Bureau of Land Management (BLM) land. Section 8 is split estate, the private surface belonging to Fernandez Ranch. Sections 5, 6, 9, 10, and 11 are open to the public, with the land used for a variety of purposes including grazing, mineral extraction, hunting, hiking, and other outdoor recreation activities. All claims are listed in the U.S. BLM Mining Claim Geographic Index Report Mineral and Land Record System (MLRS). The claims covering Section 9, 10, and part of 11 have a location date of June 29 and 30, 1965. The claims in Section 8 have location dates of September 10, 1997. The Rocca Honda claims in Sections 5 and 6 were located on September 6, 2004. The latest assessment year shown in MLRS is 2021 and the claims are shown as "Active."

There is a 1% gross revenue, no deduction royalty payable to the original claim holders for the claims on Section 9. There are no royalties associated with the claims on Sections 5, 6, 8, 10, or 11.

Holding costs for the 163 claims include a claim maintenance fee of \$165.00 per claim payable to the BLM before September 1 of each calendar year and recording an affidavit and Notice of Intent to hold with the McKinley County Clerk, New Mexico. County recording fees for the claims are approximately \$425 per year.

New Mexico General Mining Lease number HG-0133, located on Section 16, covers an area of 638 acres. The mining lease has a primary, secondary, tertiary, and quaternary term, each with annual rentals to be paid in advance. Strathmore first acquired a lease on Section 16 in November 2004 (Lease number HG-0036-002). As there was no provision to extend the lease past 2019 other than by production, Strathmore dropped the lease as its payment came due in December 2015. The New Mexico Land Office held an auction of the lease parcel that same month. Strathmore was the successful bidder, paying a \$100,000 bonus. The new lease has a primary term of three years, and the annual rental is \$1.00/acre (\$640). The secondary term for years 4 and 5 will require a payment of \$10/acre each year, and the tertiary term, years 6 through 10, will cost \$3.00/acre each year. The lease will have a quaternary term for years 11 through 15 requiring an annual rental of \$10.00 per acre plus an escalating advanced royalty of \$10.00 per acre per year. By acquiring the new lease, Strathmore may now hold the land until production can begin up to December 14, 2030. At the end of the quaternary term, the lease may be automatically extended if production has begun. The lease stipulates a 5% of gross returns royalty to the State of New Mexico "less actual and reasonable transportation and smelting or reduction costs, up to 50% of the gross returns" for production of uranium, which is designated a "special mineral" in the lease.



Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Roca Honda Project is located approximately three miles northwest of the community of San Mateo, New Mexico, in McKinley County, and approximately 22 miles by road northeast of Grants, New Mexico, via State Highway NM 605.

Climate in the project area may be classified as arid to semi-arid continental, characterized by cool, dry winters, and warm, dry summers. Grants has an annual average temperature of 50°F, with an average summer high of 87°F and low of 52°F, and average winter high of 47°F and low of 18°F.

The Roca Honda Project would employ 257 personnel who would be based around the town of Grants, Cibola County, New Mexico, which is the largest community near the Mine area. As of the 2020 census, Cibola County has a population of 27,172 people of which 8,866 people reside in Grants. Additionally, the city of Albuquerque, New Mexico is located approximately 100 miles east of the Roca Honda Project area and could be a source of most materials and technical support needed for the Roca Honda Project. To process mill feed from the Roca Honda Project for the 11-year mine life.

The Roca Honda Project is located in a historically important uranium-producing region of central New Mexico. All the infrastructure necessary to mine and process significant commercial quantities of U₃O₈ currently exists. Infrastructure items include high voltage electrical supplies, water sources, paved roads and highways for transporting ROM mill feed crude ore and finished products, and accommodations for employees. Local and State infrastructure also includes hospitals, schools, airports, equipment suppliers, fuel suppliers, and communication systems.

The Roca Honda Project is located at elevations ranging from 7,100 ft above sea level (ft ASL) to 7,680 ft ASL with easterly and southerly dipping slopes. The area is sparsely populated, rural, and largely undeveloped. The predominant land uses include low-

density livestock grazing, hay cultivation, and recreational activities such as hiking, sightseeing, picnicking, and seasonal hunting. Vegetation in the area consists mainly of grasses, pinyon pine, and juniper trees.

Material mined at Roca Honda will be trucked 272 mi to the Mill in Blanding, Utah for processing.

History

The Roca Honda Project has a long history of exploration and development with a number of owners. Kerr-McGee Oil Industries (Kerr-McGee), its subsidiaries, and successor (Rio Algom) completed significant work from the mid-1960s until 1982 succeeded by Western Nuclear Corporation (Western Nuclear), Conoco, and Strathmore Resources (Strathmore). Roca Honda Resources (RHR) was established on July 26, 2007, when Strathmore (60%) formed a limited liability company with Sumitomo Corporation (40%) and transferred the property to RHR. In August 2013, EFR acquired a 100% interest in Strathmore, and assumed Strathmore's 60% ownership interest in RHR. In June 2015, EFR acquired a 100% interest in the mineral properties controlled by Uranium Resource Incorporated (URI). In May 2016, EFR completed the purchase of Sumitomo Corporation's 40% interest in RHR and, since then, has a 100% interest in the Property.

No additional work has been completed on the property since its acquisition by the Company in 2013.

Permitting and Licensing

The Roca Honda Project is at an advanced stage of permitting. A Draft EIS was completed by the USFS in February 2013. In March 2015 the USFS initiated the scoping process for a new mine dewatering alternative to be addressed in a Supplement to the Draft EIS. In September 2016, an additional scoping process to incorporate Section 17 (the "**Adjacent Properties**") and development drilling into the mine plan was initiated by the USFS. The Supplement to the Draft EIS is expected to be completed during late 2022 or early 2023 with a Final EIS and RoD scheduled to be completed in 2023.

Other major permits required for the Roca Honda Project include a Permit to Mine to be issued by the New Mexico Mining and Minerals Division, a Discharge Permit issued by the New Mexico Environment Department, and a Mine Dewatering Permit issued by the New Mexico State Engineer's Office. The Mine Dewatering Permit was approved in December 2013 but appealed by the Acoma Pueblo in January 2014. RHR subsequently proposed a new alternative for discharging treated mine water that would benefit a number of downstream users including the Acoma Pueblo. The Acoma Pueblo agreed to withdraw the dewatering permit appeal in March 2015. The dewatering permit will need to be revised to reflect a higher dewatering rate with the addition of Section 17 to the mine plan.

The two other major permits that are in the agency review stage are the Discharge Permit, which is expected to be issued in late 2023, and the Permit to Mine, which is expected to be issued in 2023 following approval of the Final EIS by the USFS. Permit approvals from the USACE and the EPA are also required for discharge of treated mine water associated with mine activities. An application for the USACE permit has been submitted and the permit is expected prior to issuance of the Permit to Mine in 2023. An application for the EPA permit has also been submitted, however; the previous application is expected to be withdrawn and a new application submitted during 2022. The EPA permit for discharge of treated mine water is expected prior to issuance of the Permit to Mine in 2023. EPA approval under the Clean Air Act National Emissions Standard for Hazardous Air Pollutants will also be required prior to mining.

As the project has not yet been developed or operated, we are not aware of any environmental liabilities of any significance.

No permitting is required to start milling the Roca Honda Project material at the White Mesa Mill. The White Mesa Mill is fully permitted with the State of Utah and has all the necessary operating licenses for a conventional uranium mill. As additional tailings storage capacity may eventually be required at the Mill over the life of the mine, an Amendment to the White Mesa Mill's Radioactive Materials License issued by the Utah Division of Waste Management and Radiation Control will be required in due course to construct additional tailing cells, if and when required.

Geological Setting, Mineralization and Deposit

More than 340 Mlb of U₃O₈ have been produced from the Grants uranium deposits in New Mexico between 1948 and 2002, and at least 403 Mlb of U₃O₈ remain as unmined resources. The Grants uranium district is one of the largest uranium provinces in the world. The Grants uranium district extends from east of Laguna to west of Gallup in the San Juan Basin of New Mexico. Three types of sandstone uranium deposits are recognized: tabular, redistributed (roll-front, fault-related), and remnant-primary.



Rocks exposed in the Ambrosia Lake subdistrict of the Grants uranium district, which includes the Roca Honda Project area, include marine and non-marine sediments of Late Cretaceous age, unconformably overlying the uranium-bearing Upper Jurassic Morrison Formation. The uppermost sequence of conformable strata consists of the Mesaverde Group, Mancos Shale, and Dakota Sandstone. All rocks that outcrop at the Roca Honda Project area are of Late Cretaceous age; these rocks and the Quaternary Period deposits that cover them in some places.

The uranium mineralization found in the Roca Honda Project area is contained within five sandstone units of the Westwater Canyon Member. Zones of mineralization vary from approximately one foot to 30 ft thick, 100 ft to 600 ft wide, and 200 ft to 3,000 ft in length in elongated pods. Uranium mineralization in the Roca Honda Project area west to east, and northwest to southeast depending on general area within the Roca Honda Project area, consistent with trends of the fluvial sedimentary structures of the Westwater Canyon Member, and the general trend of mineralization across the Ambrosia Lake subdistrict.

Uranium mineralization in the Roca Honda Project area is believed to be predominantly primary (trend) mineralization, with some secondary mineralization due to oxidation and mobilization of uranium near permeable geologic structures. Uranium mineralization consists of dark organic-uranium oxide complexes. The uranium in the Roca Honda Project area is dark grey to black in color and is found between depths of approximately 1,380 ft to 2,600 ft below the surface.

Primary mineralization pre-dates the formation of the Laramide aged structures in the Mine area, with a small amount of vertical offset of mineralization present across the local faults. There is a possibility of some redistribution and stack ore along faults, however, it appears that most of the Roca Honda Project mineralization is primary. Paleochannels that contain quartz-rich, arkosic, fluvial sandstones are the primary mineralization control associated with this trend.

Data Verification

The assay data used to calculate the Mineral Resource estimate for the Project is natural gamma radiometric log data. Core was collected by Strathmore Resources during a 2007 drill program to verify historical natural gamma data, but was not used for Mineral Resource estimation. Calibration data for natural gamma logs are available for both historical and recent drilling. The majority of the data used in the Mineral Resource estimate is historical and collected by Kerr-McGee. Kerr-McGee regularly calibrated their logging tools at the DOE calibration test pits in Grants, NM. The calibration data associated with the Kerr-McGee drilling is contained in series of calibration notebooks and tables.

Drill core collected by Strathmore Resources was analyzed at Energy Labs in Casper, Wyoming.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The use of core to verify natural gamma logs is standard practice and allows for the calculation of a disequilibrium factor. In addition, the Project is located in a large uranium district that never reported issues with disequilibrium. The disequilibrium factor applied to the Project Mineral Resource is 1.0.

Mineral Resource Estimates

Grades were estimated for the Roca Honda project using a combination of nearest neighbor, inverse distance and ordinary kriging methods. Grades were estimated from surface drilling that was composed of historical drilling completed by Kerr-McGee, Western Nuclear, Conoco, and Strathmore Minerals. Information regarding the Mineral Resource calculation are given below, specific details regarding the estimation procedure can be found in Section 14.0, Mineral Resource Estimate of the Roca Honda Technical Report Summary.

In sections 9, 10 and 16, Block grades were estimated using the Inverse Distance Cubed (ID³) method. Domain models were used as hard boundaries to limit the extent of influence of composite grades within the domains.

Suitable variograms could not be generated for individual or combined domain models due to the small number of contained composite samples. Search ranges were determined visually based on continuity of mineralization and drillhole spacing.

Search directions were determined visually for each domain. Isotropic search ranges in the major and semi-major directions following the trend of individual domain models were applied. Minor search ranges were also determined visually and were shorter.

Two grade estimation passes were run with the major, semi-major, and minor search ranges increased by a factor of 1.5 in the second estimation run. Estimation flags were stored for each estimation run based on increasing search distances. The number of samples and holes were stored in separate block variables for use in determining resource classification.

Octant restrictions were not enforced to preserve local grades. Only the closest composites to block centroids (adhering to defined trends) were used.

In section 17, Block grades were estimated using the Inverse Distance Squared (ID²), Ordinary Kriging (OK), or Nearest Neighbor (NN) methods. Domain models were used as hard boundaries to limit the extent of influence of composite grades within the domains.

Where wireframes contained only a single drillhole, the NN method was used; in cases where there was enough data to generate variograms, OK was used; and in all other cases, ID² was used. ID² was used in Section 17 instead of ID³ because the drill spacing is much tighter than in Sections 9, 10, and 16 and nearby drillholes were determined to have better grade continuity, and therefore more holes should have a greater influence on a block estimate than the nearest drillhole.

Search directions were determined visually for each domain. Anisotropic search ranges were used oriented along the major trend of the mineralized zones. As the mineralization tends to be tabular in nature, tops and bottoms of the mineralization were modeled as part of the wireframe process. Those top and bottom surfaces were used to generate unfolding models that were used in place of dip and plunge (Y Rotation and X Rotation).

Up to three grade estimation passes were run with the major, semi-major, and minor search ranges increased by a factor of 2.0 in the second and third estimation runs. Estimation flags were stored for each estimation run based on increasing search distances. The number of samples and holes were stored in separate block variables for use in determining resource classification.

Octant restrictions were not enforced to preserve local grades. Only the closest composites to block centroids (adhering to defined trends) were used.

The table below sets out the Mineral Resources estimates for the Roca Honda Project as of December 31, 2021. These estimates are derived from the Roca Honda Technical Report Summary. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the Roca Honda Technical Report Summary remained accurate as at December 31, 2021.

Roca Honda Project – Summary of Mineral Resources – In Situ Uranium, December 1, 2021⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾

Classification	Cut-Off Grade (% U ₃ O ₈)	Area	Tonnage (Tons)	Grade (%U ₃ O ₈)	Contained Metal (lbs. U ₃ O ₈)
Measured	0.19	Sec. 9, 10, & 16	208,000	0.48	1,984,000
	0.19	Sec. 17	---	---	---
Total Measured	0.19	Sec. 9, 10, 16, & 17	208,000	0.48	1,984,000
Indicated	0.19	Sec. 9, 10, & 16	1,303,000	0.48	12,580,000
	0.19	Sec. 17	336,000	0.45	3,058,000
Total Indicated	0.19	Sec. 9, 10, 16, & 17	1,639,000	0.48	15,638,000
Total Measured + Indicated	0.19	Sec. 9, 10, 16, & 17	1,847,000	0.48	17,622,000
Inferred	0.19	Sec. 9, 10, & 16	1,198,000	0.47	11,206,000
	0.19	Sec. 17	315,000	0.42	2,636,000
Total Inferred	0.19	Sec. 9, 10, 16, & 17	1,513,000	0.46	13,842,000

Notes:

- (1) SEC S-K 1300 and NI 43-101 definitions were followed for all Mineral Resource categories.
- (2) Mineral Resources are estimated at a U₃O₈ cut-off grade of 0.19% U₃O₈.
- (3) Mineral Resources are estimated using a long-term Uranium price of US\$65 per pound
- (4) Bulk density is 0.067 tons/ft³ (15.0 ft³/ton or 2.14 t/m³).
- (5) There are no Mineral Reserves for the property.
- (6) Numbers may not add due to rounding.
- (7) Mineral Resources are 100% attributable to the Company.

Present Condition of the Property and Work Completed to Date

Old drill roads were previously established across the property, and an electrical line transects the northern half of Section 16 in the project area. The line continues along the west side of the project area into Section 17, where it terminates, and on the east side of Section 16 through the northwest quarter of Section 15 and along the southern section boundary of Section 10. Three monitor water wells were drilled by RHR in 2007 and are located on Section 16. More than 900 historic drill exploration holes were completed on the property from the late 1960s to the early 1980s. Except for the existing shaft on Section 17, there are no mine workings, existing tailings ponds, waste deposits or other improvements or facilities at the site.

The Company has not conducted any exploration activities on the Project since acquiring the properties in August 2013.

The Roca Honda Project was acquired by the Company in August 2013, through the Company's acquisition of Strathmore. As of December 31, 2021, the total book value attributable to the Roca Honda Project on the financial statements of the Company was \$22.1 million.

The Company's Planned Work

The Company intends to continue its permitting and related activities at the Roca Honda Project during 2022. Permitting efforts in 2022 include the integration of the Adjacent Roca Honda Properties into the permitting efforts underway for the Roca Honda Project properties, including the submittal of a revised National Pollutant Discharge Elimination System ("NPDES") permit application to the EPA and continuation of the Supplement to the Draft EIS through the USFS.

The Sheep Mountain Project



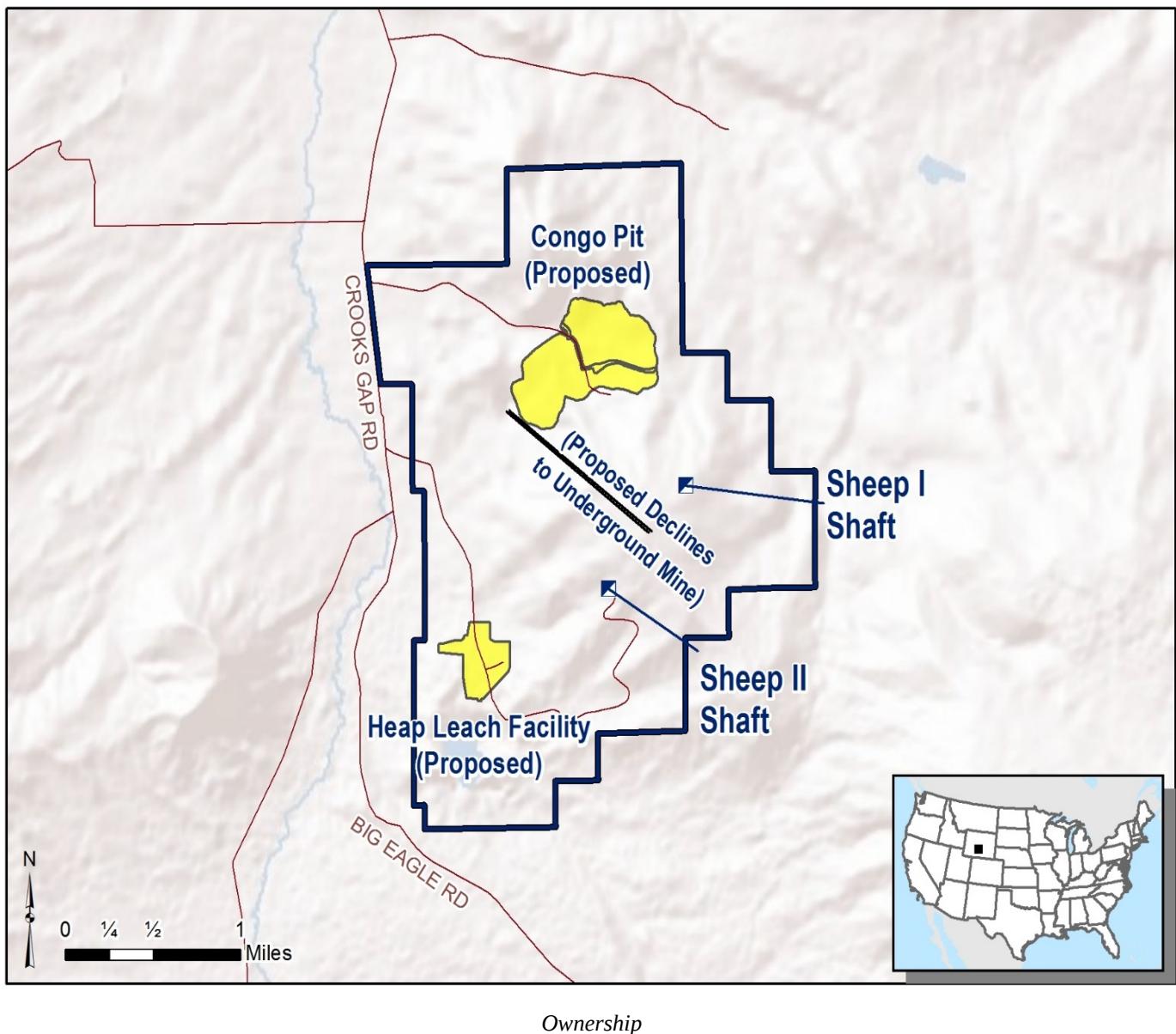
The following technical and scientific description of the Sheep Mountain Project is based in part on a Preliminary Feasibility Study titled “*Preliminary Feasibility Study for the Sheep Mountain Project, Fremont County, Wyoming, USA*” dated December 31, 2021, prepared by Douglas Beahm, PE, PG SME R.M., a Qualified Person employed by BRS, as well as Daniel Kapostasy, PG, SME R.M., a non-independent Qualified Person employed with the Company, and Terence McNulty, PE, PhD, an independent consultant (the “**Sheep Mountain Technical Report Summary**”). The Sheep Mountain Technical Report Summary was prepared in accordance with both S-K 1300 and NI 43-101. The Sheep Mountain Project contains both Mineral Resources and Minerals Reserves, as defined in S-K 1300 and NI 43-101, and is therefore considered under SEC S-K 1300 definitions to be a development stage property.

Project Description

The Sheep Mountain Project is located in portions of Sections 15, 16, 17, 20, 21, 22, 27, 28, 29, 32, and 33, Township 28 North, Range 92 West at approximate Latitude 42° 24' North and Longitude 107° 49' West, within the Wyoming Basin physiographic province in the Great Divide Basin at the northern edge of the Great Divide Basin. The project is approximately eight miles south of Jeffrey City, Wyoming.

The Sheep Mountain Project includes the Congo Pit, comprised of the Congo, North Gap, and South Congo areas, a proposed heap leach facility, and the reopening of the existing underground facility (the “**Sheep Underground**”), which includes the Sheep I and Sheep II underground areas. Although alternatives were considered in the past, the current recommended recovery method is the processing of extracted materials via an on-site heap leach facility. Material from the underground and open pit operations are expected to be commingled at the stockpile site located near the underground portal and in close proximity to the pit. At the

stockpile, the mineralized material will be sized if needed, blended, and then conveyed via a covered overland conveyor system to the heap leach pad where it will be stacked on a double lined pad for leaching. The primary lixiviant will be sulfuric acid. Concentrated leach solution will be collected by gravity in a double lined collection pond and then transferred to the mineral processing facility for extraction and drying. The final product produced will be uranium concentrate (U_3O_8 , also known as “yellowcake”). Energy Fuels owns the Mill and the Nichols Ranch Plant, which creates the option to transport loaded resin to either of those facilities for stripping, and to the Mill for drying, and packaging of yellowcake.



The mineral properties at the Sheep Mountain Project are comprised of 218 unpatented mining claims on land administered by the BLM, and approximately 640 acres within a State of Wyoming lease. The combination of the mineral holdings comprises approximately 5,055 acres.

In February 2012, Energy Fuels purchased 320 acres of private surface overlaying some of the federal minerals covered by 18 of the claims. The purchased parcel includes the SW $\frac{1}{4}$ Section 28 and SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, and NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 29, T28N, R92W. A final payment of \$5,000 was made in January 2016 for the purchased parcel. The combination of land holdings gives Energy Fuels mineral rights to resources as defined in the Congo Pit and the Sheep Underground areas. The Company increased the Sheep Mountain property size by 26 unpatented mining claims (approximately 520 acres) through the acquisition of Strathmore. These contiguous claims form a larger buffer, with potential for additional uranium resources, along the west side of the Sheep Mountain Project.

To maintain these mineral rights, the Company must comply with the lease provisions, including annual payments with respect to the State of Wyoming leases; BLM and Fremont County, as well as Wyoming filing and/or annual payment requirements to maintain the validity of the unpatented mining lode claims as follows. Mining claims are subject to annual filing requirements and payment of a fee of \$165 per claim. Unpatented mining claims expire annually but are subject to indefinite annual renewal by filing appropriate documents and paying the fees described above. ML 0-15536 will expire on January 1, 2024. Annual payments to maintain ML 0-15536 are \$2,560 per year.

The original claims owned by Western Nuclear in the Sheep Mountain Project are subject to an overall sliding scale royalty of 1% to 4% due to Western Nuclear, based on the Nuclear Exchange Corporation Exchange (“NUEXCO”) Value. Claims which were not included in the agreement are not subject to this royalty. Under Wyoming State Lease ML 0-15536, there is a royalty of 5% of the quantity or gross realization value of the U_3O_8 , based on the total arms-length consideration received for uranium products sold.

Uranium mining in Wyoming is subject to both a gross products (county) tax and a mineral severance tax (state). At the Federal level, aggregate corporate profit from mining ventures is taxable at corporate income tax rates, i.e., individual mining projects are not assessed Federal income tax but rather the corporate entity is assessed as a whole. For mineral properties, depletion tax credits are available on a cost or percentage basis, whichever is greater. The percentage depletion tax credit for uranium is 22%, among the highest for mineral commodities (IRS Pub. 535).

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Sheep Mountain Project is located at approximate Latitude 42°24' North and Longitude 107° 49' West within the Wyoming Basin physiographic province in the Great Divide Basin at the northern edge of the Great Divide Basin. The project is approximately eight miles south of Jeffrey City, Wyoming. The nearest commercial airport is located in Riverton, Wyoming approximately 56 miles from Jeffrey City on a paved two-lane state highway. The project is accessible via 2-wheel drive on existing county and two-track roads.

The Sheep Mountain Project falls within the inter-mountain semi-desert weather province, with average maximum temperatures ranging from 31.1 °F (January and December) to 84.9 °F (July), average minimum temperatures ranging from 9.1 °F (January) to 49.2 °F (July), and average total monthly precipitation ranging from 0.36 inches (January) to 2.04 inches (May). The topography consists of rounded hills with moderate to steep slopes. Elevations range from 6,600 feet to 8,000 feet above sea level. The ground is sparsely vegetated with sage and grasses and occasional small to medium sized pine trees at higher elevations. Year-round operations are contemplated for the Sheep Mountain Project.

Telephone, electric and natural gas service adequate for the planned extraction and mineral processing operations have been established at the Sheep Mountain Project. Electric service and a waterline have been extended via right-of-way issued by the BLM in 2011 to the existing Sheep 1 and 2 shafts. Adequate water rights are held by the Company for planned extraction and mineral processing operations but need to be updated with the Wyoming State Engineer with respect to type of industrial use, points of diversion, and points of use.

History

Three companies dominated the district by the mid-1950s: Western Nuclear Corporation (“WNC”), Phelps Dodge (“PD”) and Continental Uranium Corporation (“CUC”). WNC built the Split Rock Mill at Jeffrey City in 1957 and initiated production from the Paydirt pit in 1961, Golden Goose 1 in 1966 and Golden Goose 2 in 1970. PD was the principal shareholder and operator of the Green Mountain Uranium Corporation’s Ravine Mine, which began production in 1956. CUC developed the Seismic Pit in 1956, the Seismic Mine in 1957, the Reserve Mine in 1961 and the Congo Decline in 1968. In 1967, CUC acquired the PD properties and in 1972, WNC acquired all of CUC’s Crooks Gap holdings. During the mid-1970s, PD acquired an interest in WNC, which began work on Sheep Mountain I in 1974, the McIntosh Pit in 1975, and Sheep Mountain II in 1976. WNC ceased production from the area in 1982.

Subsequent to closure of the Sheep Mountain I by WNC, during April to September 1987, Pathfinder Mines Corp. (“PMC”) mined a reported 12,959 tons, containing 39,898 pounds of uranium at an average grade of 0.154% U_3O_8 from Sheep Mountain I, (PMC, 1987). U.S. Energy-Crested Corp. (“USECC”) acquired the properties from WNC in 1988 and during May to October 1988 USECC mined 23,000 tons from Sheep Mountain I, recovering 100,000 lbs. of uranium for a mill head grade of 0.216% U_3O_8 (WGM, 1999). The material was treated at PMC’s Shirley Basin mill, 130 miles east of the mine.

In December 2004, Uranium Power Corp. (“UPC”), then known as Bell Coast Capital, entered into a Purchase and Sales Agreement with USECC to acquire a 50% interest in the Sheep Mountain property. The acquisition was completed in late 2007 with aggregate payments to USECC of \$7.05 million and the issuance of four million Common Shares to USECC. USECC sold all of its uranium

assets, including its 50% interest in Sheep Mountain, to Uranium One Inc. (“U1”) in April 2007. Titan Uranium Inc. acquired a 50% interest in the property when it acquired UPC by a Plan of Arrangement in July 2009. The ownership was subsequently transferred to Titan Uranium Inc.’s (“TUI”) wholly owned subsidiary, Titan Uranium USA Inc. (referred herein to as “Titan”). The remaining 50% interest was purchased from U1 on October 1, 2009. Subsequently, Energy Fuels and TUI announced that they had entered into a Certificate of Arrangement giving effect to the parties’ February 29, 2012 Plan of Arrangement, whereby Energy Fuels acquired TUI, making Titan a wholly-owned subsidiary of Energy Fuels, which is now named Energy Fuels Wyoming Inc.

Other than care and maintenance work, the Company has not performed any significant work on the Sheep Mountain Property since its acquisition.

Permitting and Licensing

In June 2010, Titan commenced baseline environmental studies to support an application to the NRC for a Source Material and Byproduct Material License (the “License”) for operation of a heap leach facility. Work was also initiated on a revision to the existing WDEQ Mine Permit, as well as a PO for the BLM. Baseline studies included wildlife and vegetation surveys, air quality and meteorological monitoring, ground and surface water monitoring, radiological monitoring, and cultural resource surveys.

Submission of the PO to the BLM was made in June 2011. The PO was accepted as complete by the BLM, and an EIS was initiated in August 2011. Energy Fuels revised the PO in July 2012, consistent with the modified plan presented in the Sheep Mountain Technical Report. In July 2013, the PO was again revised to reflect a new waste rock disposal layout for the open pit mine and an improved and more economical heap leach and processing facility. The revised PO also included the option of transporting mineralized material off-site for processing. The Final EIS was completed in August of 2016. On January 6, 2017, the BLM issued its RoD and approved the PO.

In October 2011, Titan submitted a draft revision to its existing Mine Permit 381C to WDEQ. WDEQ then provided Titan with review comments as part of its “courtesy review.” The proposed permit amendment was revised and resubmitted in January 2014. In July 2015, the revision was approved by WDEQ. The revision includes expansion of surface and underground mining operations and an updated reclamation plan consistent with current reclamation practices.

Development of an application to the NRC for a license to construct and operate the uranium recovery facility has been taken to an advanced stage of preparation. This license would allow Energy Fuels to process the mineralized material into yellowcake at the Sheep Mountain Project site. The draft application to NRC for a Source Material License was reviewed in detail by the NRC in October 2011. The NRC audit report identified areas where additional information should be provided. Effective September 30, 2018, the State of Wyoming became an Agreement State under the Atomic Energy Act (as amended) for the regulation of uranium mills and heap leach facilities, and authorization for the Source Material and Byproduct Material License was transferred from the NRC to WDEQ-LQD. The review and approval process for this license is anticipated to take approximately four years from the date submitted to the WDEQ-LQD. Submittal of the license application to the WDEQ-LQD is on hold pending the Company’s evaluation of off-site processing options for this project, and whether or not to proceed with an on-site uranium recovery facility, pending improvements in uranium market conditions.

The heap leach facility has been permitted by the State of Wyoming through issuance of the Mine Permit and by the BLM, yet still requires licensing by the WDEQ-LQD. Mining could commence at this time under the existing RoD and Mine Permit, but the mined ore would need to be processed at a licensed off-site processing facility under a toll-milling or other arrangement.

Geological Setting, Mineralization and Deposit

A primary component of the geology for the Sheep Mountain Project is the Battle Spring Formation. Battle Spring is Eocene in age. Prior to deposition of the Battle Spring Formation and subsequent younger Tertiary formations, underlying Paleocene, Cretaceous, and older formations were deformed during the Laramide Orogeny. During the Laramide Orogeny, faults, including the Emigrant Thrust Fault at the northern end of the project area, were active and displaced sediments by over 20,000 feet. Coincident with this mountain building event, Paleocene and older formations were folded in a series of echelon anticlines and synclines, generally trending from southeast to northwest. The Battle Spring Formation was deposited unconformably on an erosional landscape influenced by these pre-depositional features. Initial stream channels transporting clastic sediments from the Granite Mountains formed in the synclinal valleys.

The geologic setting of the Sheep Mountain Project is important in that it controlled uranium mineralization by focusing movement of the groundwaters, which emplaced the uranium into the stream channels, which had developed on the pre-tertiary landscape. The Battle Spring Formation and associated mineralization at the Sheep Mountain Project is bounded to the east by the western flank of

the Sheep Mountain Syncline and to the west by the Spring Creek Anticline. To the north the system is cut off by erosion. To the south the Battle Spring continues into the northern portions of the Great Divide Basin.

Mineralization occurs throughout the lower A Member of the Battle Spring Formation and is locally up to 1,500 feet thick. The upper B Member is present only in portions of the project and may be up to 500 feet thick. Although arkosic sandstone is the preferred host, uranium has been extracted from all lithologies. Grade and thickness are extremely variable depending on whether the samples are taken from the nose or the tails of a roll front. Typically, the deposits range from 50 feet to 200 feet along a strike, five feet to eight feet in height, and 20 feet to 100 feet in width. Deposits in the Sheep Mountain Project area occur in stacked horizons from 7,127 feet in elevation down to 6,050 feet in elevation.

Most of the mineralization in the Crooks Gap District occurs in roll-front deposits. Roll fronts have an erratic linear distribution but are usually concordant with the bedding. Deposits have been discovered from the surface down to a depth of 1,500 feet. The two major uranium minerals are uranophane and autunite. Exploration drilling indicated that the deeper roll-type deposits are concentrated in synclinal troughs in the lower Battle Spring Formation. Three possible sources for uranium have been suggested: post-Eocene tuffaceous sediments, leached Battle Spring arkoses, and Precambrian granites. Structural controls of uranium occurrences along roll fronts include carbonaceous siltstone beds that provide a local reducing environment for precipitation of uranium-bearing minerals, and abrupt changes in permeability along faults, where impermeable gouge is in contact with permeable sandstones. Uranium has also been localized along the edges of stream channels and at contacts with carbonaceous shales.

Data Verification

The assay data used to calculate the Mineral Resource and Mineral Reserve estimate for the Project is a natural gamma radiometric log data. Core was collected by Uranium Power Corp. starting in 2005 and continued by Titan after its acquisition in 2009 to verify historical natural gamma data, but was not used for Mineral Resource estimation. Calibration data for natural gamma logs are available for both historical and recent drilling

Drill core collected by Uranium Power Corp. and Titan was analyzed at Energy Labs in Casper, Wyoming.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The use of core to verify natural gamma logs is standard practice and allows for the calculation of a disequilibrium factor. The disequilibrium factor applied to the Project Mineral Resource is 1.0.

Mineral Resource and Mineral Reserve Estimate

Mineral Resources

The mineral resource estimate was completed using the Grade x Thickness Contour Method (also known as the GT Method) on individual mineralized zones as defined in a full 3D geological model of the deposit. The GT Method is a well-established approach for estimating uranium resources and has been in use since the 1950s in the U.S. The technique is most useful in estimating tonnage and average grade of relatively planar bodies where lateral extent of the mineralized body is much greater than its thickness, as was observed in drilling of the Congo and Sheep deposits.

For tabular and roll front style deposits the GT Method provides a clear illustration of the distribution of the thickness and average grade of uranium mineralization. The GT Method is particularly applicable to the Congo and Sheep deposits as it can be effective in reducing the undue influence of high-grade or thick intersections as well as the effects of widely spaced, irregularly spaced, or clustered drill holes, all of which occur to some degree in the Congo and Sheep deposits. This method also makes it possible for the geologist to fit the contour pattern to the geologic interpretation of the deposit.

Details and figures regarding the estimation can be found in Section 14.0, Mineral Resource Estimates, of the Sheep Mountain Technical Report Summary

Open Pit Mineral Resources

The current mineral resource model includes 18 separate sand units for all areas and includes deletion of the portions of the mineral resource model that falls within the historic mine limits determined from mine maps, which equated to approximately 25% of the

initial resource estimate. Historic mining limits were imported into the resource model by individual sand horizons in three dimensions. The extent of mining was taken to be the actual mapped underground mine limit or the GT boundary representing the historical mining cut-off (8 feet at 0.095 or a GT of 0.76), whichever was greatest. Although in many cases the mine maps showed remnant pillars, none of these areas were included in the Mineral Reserve estimate. Thus, the estimate of current Mineral Resources is conservative with respect to the exclusion of areas affected by historic mining.

The Congo sum GT, diluted to a minimum 2-foot mining thickness from the mineralized envelope for each drill hole, was plotted in AutoCAD. If the thickness exceeded 2 feet, no dilution was added. The diluted thickness of mineralization for each drill hole was also plotted. Resource estimates include deletion of the portions of the mineral resource model that fall within the historic mine limits as previously discussed.

Underground Mineral Resources

The GT contours, diluted to a minimum 6-foot mining thickness from the mineralized envelope for each drill hole and each horizon, was plotted in AutoCAD™. If the thickness exceeded 6 feet no dilution was added. The diluted thickness of mineralization for each drill hole was also plotted. Mineral resource estimates account for the deletion of mined areas within the resource model estimated from surface drilling. The total reported mined tonnage from the Sheep I underground mine was 275,000 tons containing 522,500 pounds of U₃O₈ and an average grade of 0.095% U₃O₈. However, the portions of the current mineral resource estimates which were within the defined previously mined area was only an estimated 62,618 tons of material containing 160,666 pounds of eU₃O₈ and an average grade of 0.128% eU₃O₈. From review of the Sheep, I and II as-built mine plans, it was apparent that little or no material was mined at Sheep II and that only development work was completed. Further, it was apparent at the Sheep I mine that many of the mined areas were located by underground delineation drilling rather than by surface drilling. The mine history clearly shows that underground development drilling and sampling expanded the resource as compared to that which could be projected from the surface drilling alone.

For mine planning purposes, a three-dimensional block model was created from the Sheep GT, geologic and mineralized envelope models. The modeling utilized an automated routine that assigned the thickness of mineralization, GT, and mineralized elevation reflected by their respective contours, to the centroids of a uniform 25 x 25-foot (25'x25') grid. From the thickness and GT contours, average grade, mineralized and waste tonnages, and contained pounds was calculated and assigned to each block. Each 25'x25' block was then evaluated based on its grade and thickness for mine planning and scheduling.

The table below sets out the Mineral Resources estimates for the Sheep Mountain Project as of December 31, 2021. These estimates are derived from the Sheep Mountain Technical Report Summary and are exclusive of Mineral Reserves. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the Sheep Mountain Technical Report Summary remained accurate as at December 31, 2021.

Sheep Mountain Mineral Resources – In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾

Classification	Zone	G.T. Cut-off	Tons (000)	Grade % eU₃O₈	Pounds eU₃O₈ (000)
Sheep Mountain Measured Resources (M)	---	---	---	---	---
	Sheep Underground	0.30	2,049	0.0923%	3,784
Sheep Mountain Indicated Resources (I)	Congo Pit Area	0.10	2,161	0.134%	5,786
Total Indicated Resources			4,210	0.116 %	9,750
Total (M & I)			4,210	0.116 %	9,750
Sheep Mountain Inferred Resources	---	---	---	---	---

Notes:

- (1) S-K 1300 and NI 43-101 definitions were followed for Mineral Resources.
- (2) Mineral Resources are estimated at a uranium grade x thickness (G.T.) cut-off grade of 0.10 G.T. (2 ft. of 0.05% eU₃O₈ for the Congo Pit and 0.30 G.T. (6 ft. of 0.05% eU₃O₈) for the Sheep Underground.
- (3) Numbers may not add due to rounding.
- (4) Mineral Resources are estimated using a long-term uranium price of \$65 per pound U₃O₈.
- (5) Mineral Resources are exclusive of Mineral Reserves.

(6) Mineral Resource are 100% attributable to the Company

Mineral Reserves

Conversion of Open Pit Resources to Reserves

This estimate includes deletion of the portions of the mineral resource model that fall within the historic mine limits. Historic mining limits were imported into the resource model by individual sand horizons in three dimensions. The extent of mining was taken to be the actual mapped underground mine limit or the GT boundary representing the historical mining cut-off (8 feet at 0.095 or a GT of 0.76), whichever was greatest. Although in many cases the mine maps showed remnant pillars, none of these areas were included in the mineral reserve estimate, though the potential exists for these to be mined. Both the estimated mineral resources and mineral reserves were diluted to a minimum mining thickness of two feet. The reported Probable Mineral Reserve is that portion of the reported Indicated Mineral Resource that is within the current open pit design.

Conversion of Underground Resources to Reserves

This estimate includes deletion of the portions of the mineral resource model which falls within the historic mine limits. Both the estimated Mineral Resources and Mineral Reserves were diluted to a minimum mining thickness of six feet. The reported Probable Mineral Reserve is that portion of the reported Indicated Mineral Resource that is within the current underground mine design.

The table below sets out the Mineral Reserve estimates for the Sheep Mountain Project as of December 31, 2021. These estimates are derived from the Sheep Mountain Technical Report Summary. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Reserve estimates set forth in the Sheep Mountain Technical Report Summary remained accurate as of December 31, 2021.

Sheep Mountain Mineral Reserves – In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾

Classification	Zone	G.T. Cut-off	Tons (000)	Grade % eU ₃ O ₈	Pounds eU ₃ O ₈ (000)
Sheep Mountain Proven Reserves	---	---	---	---	---
Sheep Mountain Probable Reserves	Open Pit	0.1	3,955	0.115%	9,117
	Underground	0.45	3,498	0.132%	9,248
Total Probable Reserves			7,453	0.123%	18,365
Total Proven and Probable Reserves			7,453	0.123%	18,365

Notes:

- (1) The Mineral Reserve estimate in this table complies with the requirements of both S-K 1300 and NI 43-101.
- (2) Mineral Reserves are estimated at a uranium grade x thickness (G.T.) cut-off grade of 0.10 G.T. (2 ft. of 0.05% eU₃O₈) for the Congo Pit and 0.45 G.T. (6 ft. of 0.075% eU₃O₈) for Sheep Underground.
- (3) Mineral Reserves are estimated using a long-term uranium price of \$55 per pound U₃O₈.
- (4) Numbers may not add due to rounding.
- (5) The Mineral Reserves are excluded from the Mineral Resources shown above.
- (6) Mineral Reserves are 100% attributable to the Company.

The Probable Mineral Reserve is that portion of the Indicated Mineral Resource that is economic under the estimated costs and assumed pricing conditions. The cutoff grade of 0.075% eU₃O₈ at a minimum mining height of 2 foot equates to a 0.10 GT cutoff for the Congo Pit. The cutoff grade of 0.075% eU₃O₈ at a minimum mining height of 6 feet equals a 0.45 GT cutoff used for the Sheep underground extraction area. The cutoff grade was determined based on an assumed uranium price of \$55 per pound U₃O₈.

Present Condition of the Property and Work Completed to Date

The Sheep Mountain Project includes the Congo Pit, a proposed heap leach, and the planned reopening of the existing Sheep Underground mining facility. Mineral Extraction at the Sheep Underground mining facility was suspended in 1988 and the project has been on care and maintenance since that time.

The Sheep Mountain Project does not currently have a processing facility. Transportation of mineralized materials to the White Mesa Mill is not economic at current uranium prices. As a result, it will be necessary to permit and construct a heap leach processing facility at the site or make arrangements to process Sheep Mountain mineralized materials at a third-party processing facility.

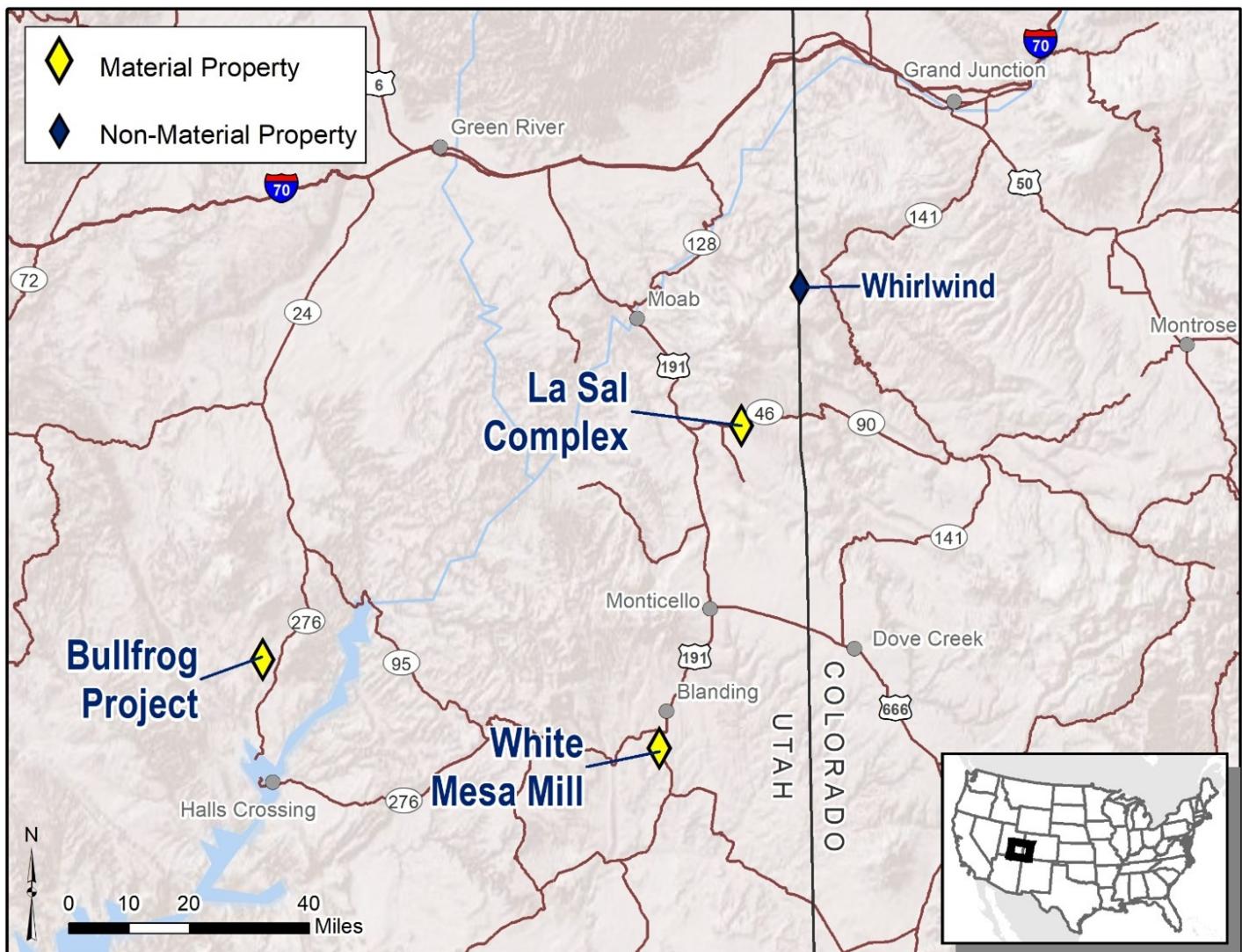
The Company is subject to liabilities for mine reclamation at the Sheep Mountain Project. The Company files an annual report with the State of Wyoming, and the amount of the bond may be adjusted annually to ensure sufficient surety is in place to cover the full cost of reclamation. The Company's reclamation of the exploration drilling performed by Titan was deemed complete in October 2014; the drilling permit was terminated, and that bond was fully released.

The Sheep Mountain Project was acquired by the Company in February 2012, through the Company's acquisition of Titan. As of December 31, 2021, the total book value attributable to the Sheep Mountain Project on the financial statements of the Company was \$34.2 million.

The Company's Planned Work

The Company will continue to evaluate its options for processing Sheep Mountain mineralized material, including continuing to pursue permitting for a heap leach facility at the site, or determining whether arrangements can be made to process Sheep Mountain mineralized materials at a third-party processing facility. Submittal of the license application to the WDEQ-LQD for a heap leach processing facility at the site is on hold pending the Company's evaluation of off-site processing options for this project. The project is currently on standby, pending completion of the evaluation of the processing options for the Sheep Mountain Project and improvement in market conditions. Additional work is subject to any actions the Company may take in response to the proposed establishment of a U.S. Uranium Reserve and general market conditions.

The Bullfrog Project



The following technical and scientific description of the Bullfrog Project is based in part on the report titled “*Technical Report on the Bullfrog Project, Garfield County, Utah, USA*,” dated February 22, 2022, prepared by Mark B. Mathisen, C.P.G., a Qualified Person employed by SLR (the “**Bullfrog Technical Report Summary**”). The Bullfrog Technical Report Summary was prepared in accordance with S-K 1300 and NI 43-101. The Bullfrog Project does not have known “Mineral Reserves” and is therefore considered under SEC S-K 1300 definitions to be an exploration stage property. Once developed, Bullfrog will operate as an underground mine.

Property Description

The Bullfrog Project consists of two separate contiguous deposits, also known as Copper Bench and Indian Bench. The Bullfrog Project is located in eastern Garfield County, Utah, 17 miles north of Bullfrog Basin Marina on Lake Powell and approximately 40 air miles south of the town of Hanksville, Utah. The property is located at latitude 37°48'38.71" N and longitude 110°41'50.09" W.

The Bullfrog Project does not have known “Mineral Reserves” and is therefore considered under S-K 1300 definitions to be exploratory in nature.

Ownership

The Company’s property position at the Bullfrog Project consists of 168 unpatented mining claims located on BLM land, encompassing approximately 2,344 acres. Surface access to conduct exploration, development and mining activities on unpatented

mining claims is granted by the BLM as long as NEPA regulations are met. The property is 100% owned by the Company and was acquired from Denison Mines Corp. and its affiliates in June 2012.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

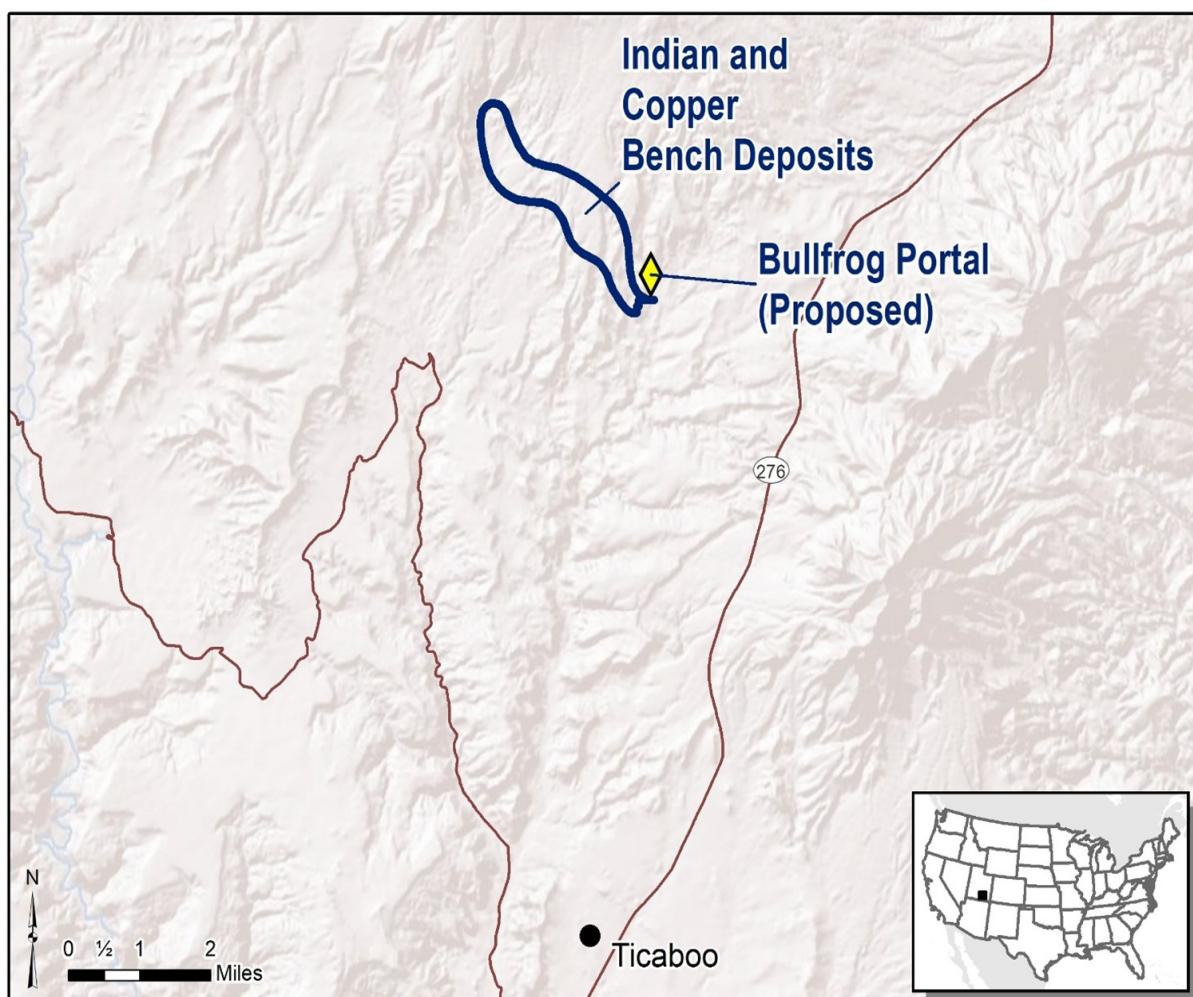
Road access to the Bullfrog Project is by paved Highway 276, running between Hanksville, Utah, and Bullfrog Basin Marina, Utah. An unimproved gravel road, maintained by Garfield County, extends west from Highway 276, passes by the portal of the Tony M Mine, and extends northerly to the Bullfrog Project. The northern end of the Bullfrog Project can be accessed by the Eggnog Star Spring county road, approximately 10.4 miles north of Ticaboo, Utah along Highway 276. A network of unimproved, dirt exploration roads provide access over the property except in the areas of rugged terrain.

The climate is distinctly arid with an average annual precipitation of approximately eight inches, in addition to approximately 12 in. of snow. Local records indicate the temperature ranges from a minimum of -10°F to a maximum of 110°F. These conditions allow year-round exploration to take place.

Skilled labor can be recruited from the region, which has a tradition of uranium mining.

The Bullfrog Project is located in a relatively remote area of Utah with limited supporting infrastructure in the area. The town of Ticaboo, Utah, is located approximately five miles south of the Bullfrog Project. The next closest community is Hanksville, Utah, a small town of a few hundred people, located approximately 40 mi north of the Bullfrog Project. The Bullfrog Basin airstrip is located approximately 15 mi south of the Bullfrog Project area. There is no line power or water service in the area, all power for the project will need to be generated on site and a well will need to be drilled for water.

Materials and supplies are transported to the site by truck approximately 275 mi from Salt Lake City, Utah, and approximately 190 mi from Grand Junction, Colorado. Material mined at Bullfrog will be transported 117 road mi to Energy Fuels' White Mesa Mill near Blanding, Utah, of which 107 miles are on paved roads.





History

In the late 1960s, Gulf Minerals (Gulf) acquired a significant land position southwest of the Bullfrog Project (formerly referred to as the Henry Mountains Complex) and drilled approximately 70 holes with little apparent success. In 1970 and 1971, Rioamex Corporation conducted a 40-hole drilling program in an east-west zone extending across the southerly end of the Bullfrog property and the northerly end of the Tony M–Frank M property. Some of these holes intercepted significant uranium mineralization.

The ownership history of the Bullfrog and Southwest deposits and The Tony M deposit evolved independently from the mid-1970s until early 2005. The Bullfrog and Southwest deposits were initially explored by Exxon Minerals Company (“**Exxon**”), while the Tony M deposit was explored and developed by Plateau, a subsidiary of Consumers Power Company (Consumers) of Michigan. In 2005, International Uranium Corporation (“**IUC**”) combined the three deposits into a larger land package. In 2021, EFR divested of the Tony M Property and Southwest deposit, retaining the mineral claims associated with the Bullfrog Deposits (Copper Bench and Indian Bench).

Exxon conducted reconnaissance in the area in 1974 and 1975, resulting in staking of the first “Bullfrog” claims in 1975 and 1976. The first drilling program in 1977 resulted in the discovery of what became the Southwest deposit. Additional claims were subsequently staked, and drilling was continued, first by Exxon’s Exploration Group, and then by its Pre-Development Group. Several uranium and vanadium zones were discovered in the Southwest and Copper Bench areas, and mineralization exhibiting potential economic grade was also discovered in the Indian Bench area. With the declining uranium markets of the early 1980s, Exxon prepared a prefeasibility report and then discontinued development of the property. Subsequently, Exxon offered the property to Atlas Minerals Corporation (“**Atlas**”) in January 1982.

Atlas entered into an agreement to purchase the Bullfrog property from Exxon in July 1982. From July 1982 to July 1983, Atlas completed 112 drillholes delineating the Southwest and Copper Bench deposits on approximately 100 ft centers. In August 1983, Atlas commissioned Pincock, Allen and Holt, Inc. (“**PAH**”), to conduct a feasibility study for development of the Southwest and Copper Bench deposits. From July 1983 to March 1984, Atlas completed a core drilling program throughout the Bullfrog property, as well as a rotary drillhole program to delineate the Indian Bench deposit. In November 1983, Atlas renamed the Bullfrog deposits as the “Edward R. Farley Jr. Deposit,” but that name is no longer used.

Atlas continued to hold the Bullfrog property until 1990 when a corporate decision was made to consider its sale. During that year, Mine Reserves Associates, Inc. (MRA) of Tucson, Arizona, was retained to prepare mineral inventory and mineable reserve estimates for the Indian Bench deposit and incorporate the results into a project-wide reserve base. Steve Milne of Milne and Associates (“**Milne**”), a principal engineer for the PAH study, was engaged in November 1990 to update the PAH feasibility study and to complete an optimization study on selected mining/milling scenarios. The completed Milne study was submitted to Atlas in December 1990.

Atlas did not sell the Bullfrog property, and in 1991 returned it to Exxon. In late 1992, Energy Fuels Nuclear Inc. (“**EFNI**”), no relation to EFR, acting through its subsidiary Energy Fuels Exploration Company, purchased the property from Exxon. EFNI conducted a geologic review and internal economic analysis of the Bullfrog property. In 1997, IUC became the owner of the Bullfrog property as part of an acquisition in which IUC acquired all of EFNI’s assets. IUC performed no exploration activities on the properties.

On December 1, 2006, IUC combined its operations with those of Denison Mines Inc. (“**DMI**”), and DMI became a subsidiary of IUC. IUC was then renamed Denison.

In June 2012, Energy Fuels acquired 100% of the Bullfrog Project (formerly referred to as the Henry Mountains Complex) through the acquisition of Denison and its affiliates’ U.S. Mining Division. The Company has not performed any work on the property since the Bullfrog Project was acquired in 2012.

In October 2021, EFR divested of the Tony M property and Southwest deposit to CUR, retaining the mineral claims associated with the Bullfrog (Copper Bench and Indian Bench) Deposits.

Permitting

Although the Company has completed initial environmental baseline studies and mine plans for permitting purposes at the Bullfrog Property, the submittal of permit applications has been deferred pending more favorable market conditions.

Geologic Setting, Mineralization and Deposit

The Copper Bench and Indian Bench Deposits are classified as sandstone hosted uranium deposits. Sandstone-type uranium deposits typically occur in fine to coarse grained sediments deposited in a continental fluvial environment. The uranium may be derived from a weathered rock containing anomalously high concentrations of uranium, leached from the sandstone itself or an adjacent stratigraphic unit. It is then transported in oxygenated groundwater until it is precipitated from solution under reducing conditions at an oxidation-reduction interface. The reducing conditions may be caused by such reducing agents in the sandstone as carbonaceous material, sulfides, hydrocarbons, hydrogen sulfide, or brines.

Uranium mineralization on the Bullfrog Property is hosted by favorable sandstone horizons in the lowermost portion of the Salt Wash Member of the Jurassic age Morrison Formation, where detrital organic debris is present. Mineralization primarily consists of coffinite, with minor uraninite, which usually occurs in close association with vanadium mineralization. Uranium mineralization occurs as intergranular disseminations, as well as coatings and/or cement on and between sand grains and organic debris. Vanadium occurs as montroseite (hydrous vanadium oxide) and vanadium chlorite in primary mineralized zones located below the water table.

The vanadium content of the Henry Mountains Basin deposits is relatively low compared to many other Salt Wash hosted deposits on the Colorado Plateau. Furthermore, the Henry Mountains Basin deposits occur in broad alluvial sand accumulations, rather than in major sandstone channels as is typical of the Uravan Mineral Belt deposits of western Colorado. The Henry Mountains Basin deposits do, however, have the same general characteristic geochemistry of the Uravan deposits, and are therefore classified as Salt Wash type deposits.

Data Verification

The assay data used to calculate the Mineral Resource estimate for the Project is natural gamma radiometric log data. Core was collected by both Exxon and Atlas at various times to verify natural gamma data, but was not used for Mineral Resource estimation. Calibration data for natural gamma logs are available for all drilling.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The Project is part of a larger mining district with no history of disequilibrium issues. The disequilibrium factor applied to the Project Mineral Resource is 1.0.

Mineral Resource Estimates

Mineral Resources for the Bullfrog deposits were calculated using the GT contour method. The GT contour method is commonly used in the uranium industry and refers to the estimated grade multiplied by estimated thickness. In many uranium deposits, thin uranium mineralization can be mined due to those zones being higher grade. The GT method allows that information to be accurately calculated and displayed.

For the GT method, composite samples were flagged by each sand unit for each deposit. GT contours were modeled using this composite data for each of the three mineralized sand zones (MIU, ML, and L) within the Bullfrog deposit. The modeling process resulted in the creation of grade and thickness grid files or rasters.

Mineral Resources have been estimated using ESRI's ArcGIS software Spline with Barriers tool routine. The Spline with Barriers tool applies a minimum curvature method, as implemented through a one-directional multigrid technique that moves from an initial coarse grid, initialized in this case to the average of the input data, through a series of finer grids until an approximation of a minimum curvature surface is produced at the desired row and column spacing.

The methodology employed was chosen to replicate the 2012 Mineral Resource estimate that used the GT contour method (Agnerian and Roscoe, 2001), while allowing for calculating resources at various GT cut-off grades. Each of the deposits was gridded into 25 ft by 25 ft cells and a spline interpolator was used to calculate a grade (% eU₃O₈) and thickness (feet) raster for each of the sands for the deposit. Based on the grade raster, a 0.10% eU₃O₈ contour was generated for each of the sand units. The 0.10% eU₃O₈ constrained grade contours were used as a maximum extent to determine a reasonable prospect for economic extraction for each zone. Both the grade and thickness rasters for each of the sands were constrained to the 0.10% U₃O₈ contour. Those two rasters were then multiplied together to get a GT grid.

Interpolated grade and thickness for each 25 ft by 25 ft grid node within the grade boundary defined by 0.10% eU₃O₈ were exported into a series of Excel spreadsheets to calculate GT on a per grid node bases for the MU, ML, and L zones.

The plan areas of the MU, ML, and L zones resolved into numerous lenses of mineralization above 0.10% eU₃O₈. Only GT and thickness interpolated values inside the 0.10% eU₃O₈ “cookie cutter” boundaries were retained, and isolated areas over 0.10% eU₃O₈ defined by a single drillhole were removed.

The thickness times area products for each set of grid node were summed to give a volume for each of the MU, ML, and L zones. A tonnage factor of 15 ft³/ton was applied to calculate the total tonnage for each domain.

The GT by area products for each grid node were summed and divided by the tonnage factor of 15 ft³/ton for a total that is converted to pounds of contained metal (lb eU₃O₈) for each zone. The average grade of each node is obtained from converting the total contained pounds of metal (lb eU₃O₈) into tons of contained metal (ton eU₃O₈) divided by the total tonnage.

Specific details regarding the estimation of Mineral Resources can be found in Section 14.0 Mineral Resource Estimates of the Bullfrog Technical Report Summary.

The table below sets out the Mineral Resources estimates for the Bullfrog Project as of December 31, 2021. These estimates are derived from the Bullfrog Technical Report Summary. Daniel Kapostasy, the Company’s non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the Bullfrog Technical Report Summary remained accurate as at December 31, 2021.

Bullfrog Project Mineral Resources – In Situ Uranium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾

Classification	Area	Cut-Off Grade (%U ₃ O ₈)	Tons (000s)	Grade (% U ₃ O ₈)	Contained Metal (000s lbs of U ₃ O ₈)
Total Measured Resources	Bullfrog	0.165	---	---	---
Total Indicated Resources	Bullfrog	0.165	1,560	0.29	9,100
Total Measured + Indicated Resources	Bullfrog	0.165	1,560	0.29	9,100
Total Inferred Resources	Bullfrog	0.165	410	0.25	2,010

Notes:

- (1) SEC S-K 1300 and NI 43-101 definitions were followed for all Mineral Resource categories.
- (2) Cut-off grade is a 0.5GT cut-off (minimum 0.165% eU₃O₈ over a minimum thickness of 3 ft.)
- (3) Cut-off grade is calculated using a sale price of \$65/lb. U₃O₈
- (4) No minimum mining width was used in determining Mineral Resources.
- (5) Mineral Resources based on a tonnage factory of 15.0 ft.³/ton (Bulk density 0.0667 ton/ft³ or 2.13 t/m³).
- (6) Mineral Resources have not been demonstrated to be economically viable
- (7) Total may not add due to rounding
- (8) Mineral Resources are 100% attributable to EFR.

Present Condition of the Property and Work Completed to Date

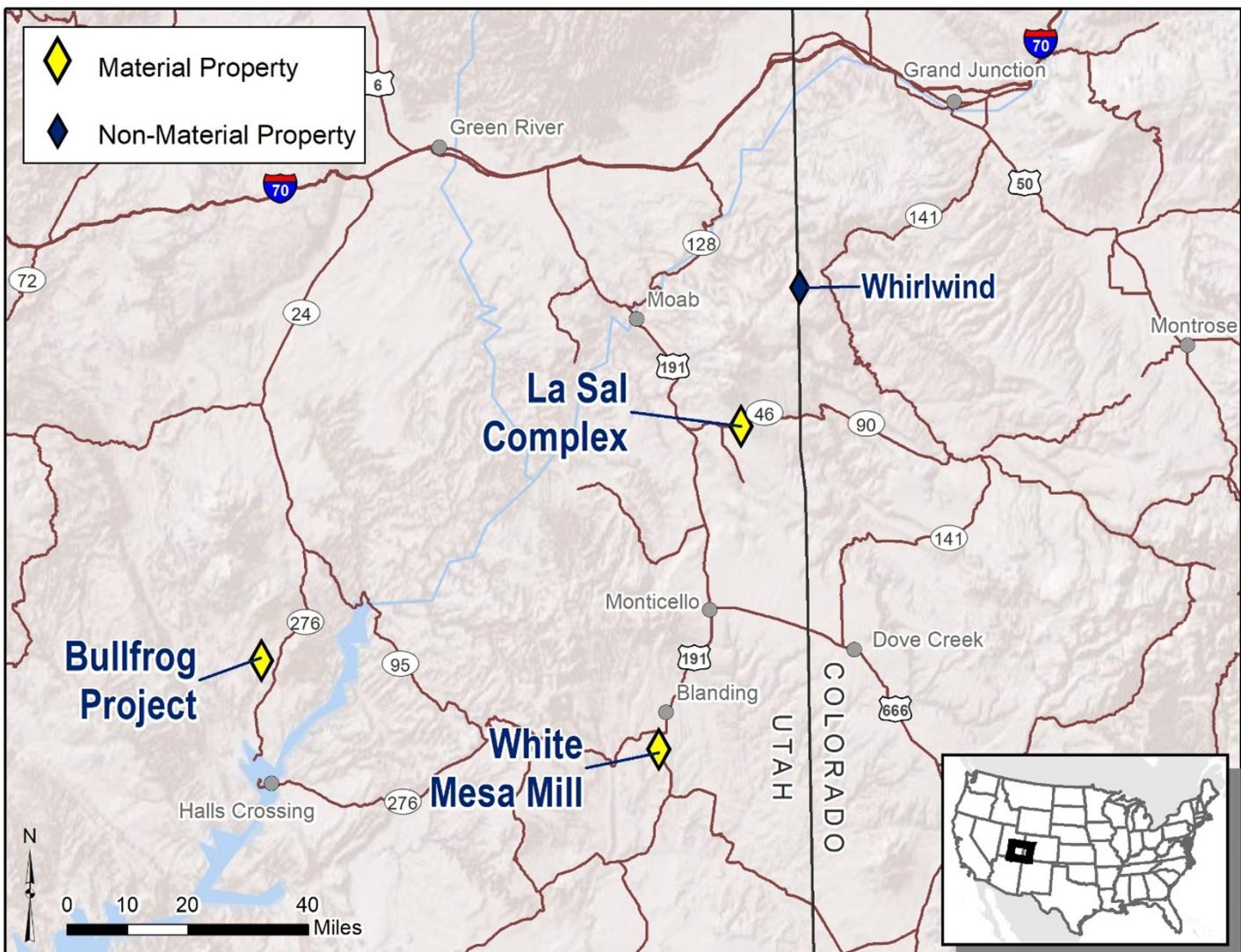
There is no existing infrastructure on the Bullfrog Property.

The Bullfrog Project was acquired by the Company in June 2012, through the acquisition of the U.S. Mining Division from Denison. The cost of the Bullfrog Project has been fully impaired, and as of December 31, 2021, the total book value attributable to the Bullfrog Project and its associated equipment on the financial statements of the Company was nil.

The Company’s Planned Work

During 2022, the Company is not planning on conducting any work at the Bullfrog Project. Additional work is subject to any actions the Company may take in response to general market conditions.

The La Sal Project



The following technical and scientific description of the La Sal Project is based in part on the report titled “*Technical Report on the La Sal Project, San Juan County, Utah, USA*” dated February 22, 2022, prepared by Mark B. Mathisen, C.P.G., a Qualified Person employed by SLR (the “**La Sal Technical Report Summary**”). The La Sal Technical Report Summary was prepared in accordance with S-K 1300 and NI 43-101. The La Sal Project does not have known “Mineral Reserves” and is therefore considered under SEC S-K 1300 definitions to be an exploration stage property.

Project Description

The La Sal Project is an existing complex comprised of seven individual underground uranium mines and properties. From east to west, these are Pine Ridge (reclaimed mine), Pandora Mine, Snowball Mine, La Sal Decline, Beaver Shaft, Redd Block IV (property), and the Energy Queen Mine. All the properties that make up the La Sal Project are 100% controlled by the Company’s wholly owned subsidiary EFR Colorado Plateau LLC (“**EFR Colorado**”).

The area encompassed by the La Sal Project is located on two U.S. Geological Survey 7½ minute quadrangle topographic maps, La Sal West and La Sal East. The geographic coordinates for the approximate center of the La Sal Project are latitude 38°18'48.20" N and longitude 109°15'56.28" W.

Ownership

The Project consists of approximately 9,500 acres of mineral rights in a combination of unpatented mining claims owned by EFR Colorado, unpatented mining claims leased by EFR Colorado, State of Utah mineral leases, a San Juan County surface use, access,

and mineral lease, and mining leases on private mineral rights, all located in the La Sal Mining District. The land surface overlying some mineral rights is also of varying ownership. Where the federal government controls the surface and minerals, EFR Colorado has the right to access, explore, develop, and mine on unpatented mining claims located on land managed by the BLM or USFS, as long as National Environmental Protection (NEPA) regulations are met. All other property, regardless of ownership, is covered by access or surface lease agreements with landowners, including ranchers, San Juan County, and the State of Utah.

The Company holds 90 unpatented mining claims on various sections of both USFS and BLM land across the Project. A mining lease between Robert H. Sayre, Jr. and Umetco Minerals, dated July 11, 1973, applies to the 10 unpatented Martha claims at the east end of the Pandora claims. EFR Colorado is successor to this lease. Production from these claims is subject to a royalty to Sayre's successors of 10% of the contained value of uranium and vanadium, less certain allowable deductions. The Martha claims lie in Section 31, Township 28 South, Range 25 East and Section 5, Township 29 South, Range 25 East. The mining lease does not include any requirement for annual advance royalties or other lease payments.

All claims, which are renewed annually in September of each year, are in good standing until September 1, 2022 (at which time they will be renewed for the following year as a matter of course). All unpatented mining claims are subject to an annual federal mining claim maintenance fee of \$165 per claim plus approximately \$10 per claim for county filing fees to the BLM.

The Company leases the mineral rights on 119 claims located across the Project. These claims are held through four separate mineral leases (MLs) described in detail below.

Crested and T&A Claims.

Six Crested and two T&A claims are covered by a Mining Lease dated February 1, 2009, between eight individual owners and Denison, which was acquired by the Company in June 2012. These claims are located in Sections 33 and 34, Township 28 South, Range 24 East and Section 3, Township 29 South, Range 24 East. EFR Colorado pays an annual advance royalty determined by the long-term uranium price in the preceding twelve months. Production royalties are on a sliding scale for both uranium and vanadium depending on the respective commodity's market price. The uranium royalty varies from 3% to 8% and the vanadium royalty from 2% to 6%, less allowable deductions. The annual \$165/claim annual BLM fees are the responsibility of the Company. No other lease costs apply to these claims.

Six Mike claims are covered by a Mining Lease dated August 1, 2001, between various stakeholders of the Mike claims and Denison, which was acquired by the Company in June 2012. This lease supersedes the original 1970 lease between Umetco and the owners. The claims lie in Section 1, Township 29 South, Range 24 East. Production royalties are on a sliding scale for both uranium and vanadium depending on the respective commodity's market price. The uranium royalty varies from 3% to 8% and the vanadium royalty from 2% to 6%, less allowable deductions. The annual \$165/claim annual BLM fees are the responsibility of the Company. No other lease costs apply to these claims.

The Pandora Mining Lease, dated June 16, 1967, was originally between Robert H. Sayre, Jr. and American Metal Climax, Inc. (American Metal). Successors to American Metal include Atlas Minerals in 1973 and Umetco Minerals Corporation (Umetco) in 1988. The Company is the current successor to the Pandora Mining Lease and its amendments. The Pandora Mining Lease and amendments apply to 105 unpatented Pandora claims. The claims lie in Sections 1 and 12, Township 29 South, Range 24 East, Section 31, Township 28 South, Range 25 East, and Sections 5, 6, and 7, Township 29 South, Range 25 East. Production from these claims is subject to a royalty to Sayre's successors of 10% of the contained value of uranium and vanadium, less certain allowable deductions. The annual \$165/claim annual BLM fees are the responsibility of the Company. No other lease costs apply to these claims.

EFR Colorado holds approximately 2,182 acres under mineral lease from the State of Utah School and Institutional Trust Lands Administration ("SITLA") in seven separate leases. Three of the leases (ML-18301, -49313, and -51440), covering 900 acres of the surface area, are owned by the State of Utah and thereby grant access to EFR Colorado for exploration and mining related work. The other 1,282 acres of surface are under private ownership. The private parcels are all subject to valid access and surface use agreements with the landowners. The production royalty for all SITLA leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions.

The Utah State mineral lease ML-18301, covering all of the 640 acres in Section 36, T28S, R24E, was originally issued to an individual, Robert Manly, on April 25, 1960. Through a series of assignments and amendments, the lease is now held by EFR Colorado. The current term of the lease runs through December 31, 2022; it is renewable annually by making an annual rental payment as well as advance royalty payments. The annual rental is \$1.00/acre (\$640 total) and the advance royalty payment is based on the previous January through November's average uranium and vanadium market prices. Rentals and annual minimum

royalties are credited against actual production royalties for the year in which they accrue. Mining costs are not allowable deductions. The surface of approximately 384 acres of the western part of the lease parcel is owned by Charles Hardison Redd and EFR Colorado has a surface access agreement with Redd. The surface of the eastern part of the lease, a total of 256 acres, is owned by the State of Utah State. Rights to necessary surface use are granted by the mineral lease. The eastern part of the Beaver/La Sal mine lies within this lease.

Mineral lease ML-27247 covers 40 acres in the SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 35, T28S, R24E. The lease was originally issued on December 4, 1970, to an individual, Gregory Hoskin. Through a series of assignments and amendments, the lease is now held by the Company. The current term of the lease runs through December 31, 2022; it is renewable annually by making advance royalty payments. The surface of the western 20 acres of the lease parcel is owned by Redd Agri LLC (Redd Agri) and the eastern 20 acres is owned by La Sal Livestock. The Company has a surface access agreement with both Redd Agri and La Sal Livestock. Portions of the western part of the Beaver mine lie on this lease parcel. The lease is held by paying an annual rental payment and an annual minimum royalty based on the previous January through November's average uranium and vanadium market prices. Rentals and annual minimum royalties are credited against actual production royalties for the year in which they accrue.

As with ML-27247, the Mineral Lease ML-27248 was originally issued to Gregory Hoskin in December 1970 and is now held by the Company following several assignments and amendments. It covers 80 acres in the W $\frac{1}{2}$, NW $\frac{1}{4}$, Section 2, Township 29 South, Range 24 East. With the exception of small parcels owned by the San Juan School District and the La Sal Recreation District, the surface is owned by Redd Agri. The Company has a surface use agreement with Redd Agri for those portions held by Redd Agri. Portions of the western part of the Beaver mine are located on this lease. The Company's operations of the Beaver mine and any expected exploration drilling are not affected by access restrictions to the School and Recreation District's acreage. The lease is held by paying in advance an annual rental and an annual minimum royalty based on the previous January through November average uranium and vanadium market prices. Rentals and annual minimum royalties are credited against actual production royalties for the year in which they accrue.

In December 2010, the Company purchased Utah State mineral lease ML-49313 from Uranium One with the seller retaining a 1% overriding royalty. Uranium One acquired the lease from the original assignee, William Sheriff. The lease was renewed by the Company on May 1, 2014, for a second 10-year term. This lease covers about 484 acres in the S $\frac{1}{2}$, S $\frac{1}{2}$ of NW $\frac{1}{4}$, and E $\frac{1}{2}$ of NE $\frac{1}{4}$, Section 36, Township 28 South, Range 23 East. The southeast corner of this section is about one mile west of the Energy Queen shaft. It is connected to the Energy Queen lease property by BLM land (W $\frac{1}{2}$, Section 31, Township 28 South, Range 24 East and part of NW $\frac{1}{4}$, Section 6, Township 29 South, Range 24 East) currently covered by unpatented mining claims (Daisy and DOD claims) held by EFR Colorado. ML-49313 is contiguous to the north border of the RM and Judas claims. No mining has taken place on this lease. The surface is owned by SITLA. Rights to necessary surface use are granted by the lease. This lease is held by an annual payment. No annual minimum royalties apply.

This lease was issued on April 30, 2004, to William Sheriff. Mr. Sheriff assigned it to Energy Metals Corporation in 2006, which then became Uranium One in 2009. In February 2011, Denison (acquired by the Company in June 2012) purchased it from Uranium One. The lease was renewed by the Company on May 1, 2014, for a second 10-year term. The lease covers 640 acres, all of Section 32, Township 28 South, Range 25 East. This lease lies north of the eastern part of the Pandora Mine, but no mining has occurred on this lease. The surface is owned by Paul Redd. EFR Colorado has a surface access agreement with Mr. Redd to access a Pandora Mine ventilation hole. The lease is held by paying in advance an annual rental. No annual minimum royalties apply.

This lease was issued on April 30, 2004, to William Sheriff. Mr. Sheriff assigned it to Energy Metals Corporation in 2006, which then became Uranium One in 2009. In February 2011, Denison (acquired by the Company in June 2012) purchased it from Uranium One. The lease was renewed by the Company on May 1, 2014, for a second 10-year term. The lease covers almost 138 acres, mostly in the NE $\frac{1}{4}$ and parts of the NW $\frac{1}{4}$, Section 5, Township 29 South, Range 24 East. A portion of the Redd Block Mineral Resource is located on this lease. The surface is owned by SITLA. Rights to necessary surface use are granted by the lease. No mining has yet occurred. This lease is held by paying in advance an annual rental. No annual minimum royalties apply.

In September 2008, the Company was the highest bidder on a State of Utah mineral lease, ML-51440, which covers 160 acres in the N $\frac{1}{2}$ S $\frac{1}{2}$, Section 32, Township 28 South, Range 24 East. This lease was renewed by the Company on October 31, 2018, for a second 10-year term. This lease borders the Redd Block Mineral Resource on the north side. The surface is owned by SITLA. Rights to necessary surface use are granted by the lease. An annual payment is required to hold this lease. No annual minimum royalties apply.

The Company has leased the mineral rights on numerous parcels from various private landowners. The Redd family, as individuals or in legal entities, namely La Sal Livestock and Redd Agri, LLC, has owned much of the subject land for many decades, both mineral rights and surface. A few small parcels have joint ownership of minerals with parties other than the Redd family. The

surface estate has been split from the minerals on numerous parcels. The Company has surface use and access agreements in place with all the private landowners that allow for any activities pertaining to exploration, development, and mining.

Most of the mineral ownership east and north of the Energy Queen Mine is vested in Redd Royalties, Ltd. The Energy Queen lease at the west end of the district is not owned by Redd Ranches (a partnership of 11 members of the Redd family) or its affiliates.

The Company entered into a 30-day option with Markle Ranch Holdings, LLC on November 15, 2006, to lease the Energy Queen surface rights. A lease was signed on December 15, 2006, for a term of twenty years, which is extendable if mineral production occurs on a continuing basis. The lease gives EFR the right to use any of the 702 acres for exploration, development, or mining purposes. Markle will be paid a small percentage of market value for any material mined on adjoining properties, if such minerals are removed by use of the mineshaft located on the Markle property.

The Company also entered into a 30-day option to lease the Energy Queen mineral rights from Superior Uranium (Superior) on November 15, 2006. A Mining Lease Agreement was signed on December 13, 2006, for a term of twenty years, which is extendable if mineral production occurs on a continuing basis.

The mineral lease and surface lease cover the same 702 acres located in most of Section 6 and the N $\frac{1}{2}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7, Township 29 South, Range 24 East. A production royalty will be paid on a sliding scale for both uranium and vanadium depending on the market prices of uranium.

The surface and minerals of this parcel were leased previously to Hecla Mining with the surrounding properties controlled by Umetco. These two companies operated the mine, then known as the Hecla Shaft, in a joint venture. The shaft and other surface facilities for the Energy Queen Mine are located in the northeast corner of Section 6.

The leased parcel referred to as Redd 1-A covers 160 acres in the SE $\frac{1}{4}$ Section 31, Township 28 South, Range 24 East, immediately north of the Energy Queen Mine. This lease was once part of a much larger mining lease dated June 1, 1971, between Union Carbide Corporation (Union Carbide) and Redd Ranches, a partnership of 11 members of the Redd family. The other parcels were released in November 1999. Through a succession of assignments, the Company became the owner of the Mining Lease with the acquisition of Denison's U.S. Mining Division in June 2012. It is the intent of the Company to continue to hold the lease. No mining has occurred on this parcel. The production royalty is a percentage of "gross value." The gross value is the combination of the Uranium Base plus the Vanadium Base. The Uranium Base is determined by a table that has specified dollar amounts based on the U₃O₈ grade of the ore produced. The Uranium Base is adjusted from the table value by the actual price received for sale of concentrates in the preceding six months. The Vanadium Base is determined by the V₂O₅ component of an ore purchase price offered by the Mill or other price of V₂O₅ contained in ore prevailing in the area at the time the ore is fed to the initial process. Surface access is granted to this land in an agreement with La Sal Livestock.

The leased parcel referred to as Redd 1-B was entered at the same time and in the same form as the Redd 1-A lease described above, but covering different parcels of land. The Redd 1-B Mining Lease applies to 1,720 acres in the following sections: S $\frac{1}{2}$ SW $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 25, NE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 35, N $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$ Section 36, Township 28 South, Range 23 East; E $\frac{1}{2}$ SE $\frac{1}{4}$ and SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 34 and W $\frac{1}{2}$ NW $\frac{1}{4}$ Section 35, Township 28 South, Range 24 East; all of Section 2, Township 29 South, Range 24 East, except the W $\frac{1}{2}$ NW $\frac{1}{4}$; the SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ and E $\frac{1}{4}$ NE $\frac{1}{4}$, Section 3, Township 29 South, Range 24 East; and the N $\frac{1}{2}$ Section 11, Township 29 South, Range 24 East. An annual advance royalty is paid to hold this lease. It is the intent of EFR Colorado to continue to hold the lease. The production royalty is a percentage of the "gross value"; gross value is defined the same here as under the Redd Royalties Block 1-A mining lease. EFR Colorado is granted access to the surface of this Mining Lease under agreements with both La Sal Livestock and Redd Agri.

This lease was entered into on February 5, 2008, between Denison (acquired by the Company in June 2012) and Redd Royalties for a 20-year term to cover some of the land previously part of the Redd 1-A that had been released from the 1-A lease in 1999. The leased land lies in the following parcels: NE $\frac{1}{4}$ Section 31, Township 28 South, Range 24 East; S $\frac{1}{2}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ Section 4, Township 29 South, Range 24 East; and SE $\frac{1}{2}$ Section 5, Township 29 South, Range 24 East. It totals approximately 683 acres. An annual advance royalty is paid to hold this lease. No mining has occurred on the subject land. If mining occurs on the lease, a "market value" production royalty will be due on a sliding scale. The "market value" is determined to be the published prices for the two products, uranium and vanadium, in the month the ore is fed to process multiplied by the contained pounds less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes. Payments for surface access agreements are made to Lowry Redd and Charles Redd for specific surface parcel ownership.

On January 31, 1968, Union Carbide entered a mining lease with Redd Ranches, a partnership of 11 members of the Redd family, for the rights to more than 3,680 acres north and east of La Sal, Utah. Since then, various parcels have been dropped from the lease.

The current lease held by the Company is applicable to only 60 acres described as SE $\frac{1}{4}$ SW $\frac{1}{4}$ and E $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 31, Township 28 South, Range 25 East. It is the intent of the Company to continue to hold the lease. A production royalty is based upon the “gross value”; gross value is defined the same here as under the Redd Royalties Block 1-A mining lease. Mining in portions of the Snowball Mine took place on the subject land up to the cessation of mining in the Pandora/Snowball Mines in December 2012.

Denison (acquired by the Company in June 2012) entered into a mining lease with Redd Royalties on February 5, 2008, to cover an area previously in the Pine Lodge Unit (described above) that had been dropped from the older lease. The current lease held by the Company applies to 100.4 acres described as W $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$; NW $\frac{1}{4}$ SW $\frac{1}{4}$; and Lots 2 and 3, Section 31, Township 28 South, Range 25 East. An annual advance royalty is paid to hold this lease. It is the intent of the Company to continue to hold this lease. No mining has occurred on the subject land. When ore production commences, a “market value” production royalty will be due on a sliding scale. The “market value” is determined to be the published prices for the two products, uranium and vanadium, in the month the ore is fed to process multiplied by the contained pounds, less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes.

Union Carbide entered into a lease with Katheryn Anne Redd Mullins and 10 other members of the Redd family on April 16, 1973. It covered 50% of the mineral ownership of 280 acres located in S $\frac{1}{2}$ SW $\frac{1}{4}$ and S $\frac{1}{2}$ SE $\frac{1}{4}$, Section 33, Township 28 South, Range 24 East and SE $\frac{1}{4}$ SW $\frac{1}{4}$ and W $\frac{1}{2}$ SE $\frac{1}{4}$, Section 34, Township 28 South, Range 24 East. The remaining 50% mineral ownership of these parcels is discussed in the subsections Crawford-Kelly portion of Redd-Mullins Land and Barton Norton Estate portion of Redd-Mullins Land.

The lease has undergone various assignments and amendments. The lease is held by an annual advance royalty payment. It is the Company’s intent to continue to hold this lease. The production royalty on the 50% mineral ownership on this leased land is due at a percentage of “gross value”; gross value is defined the same here as under the Redd Royalties Block 1-A mining lease. Production from the western end of the Beaver Shaft has occurred on the Section 34 portion of this lease. Surface access is secured through agreements with both La Sal Livestock and Redd Agri for various portions of the leased land.

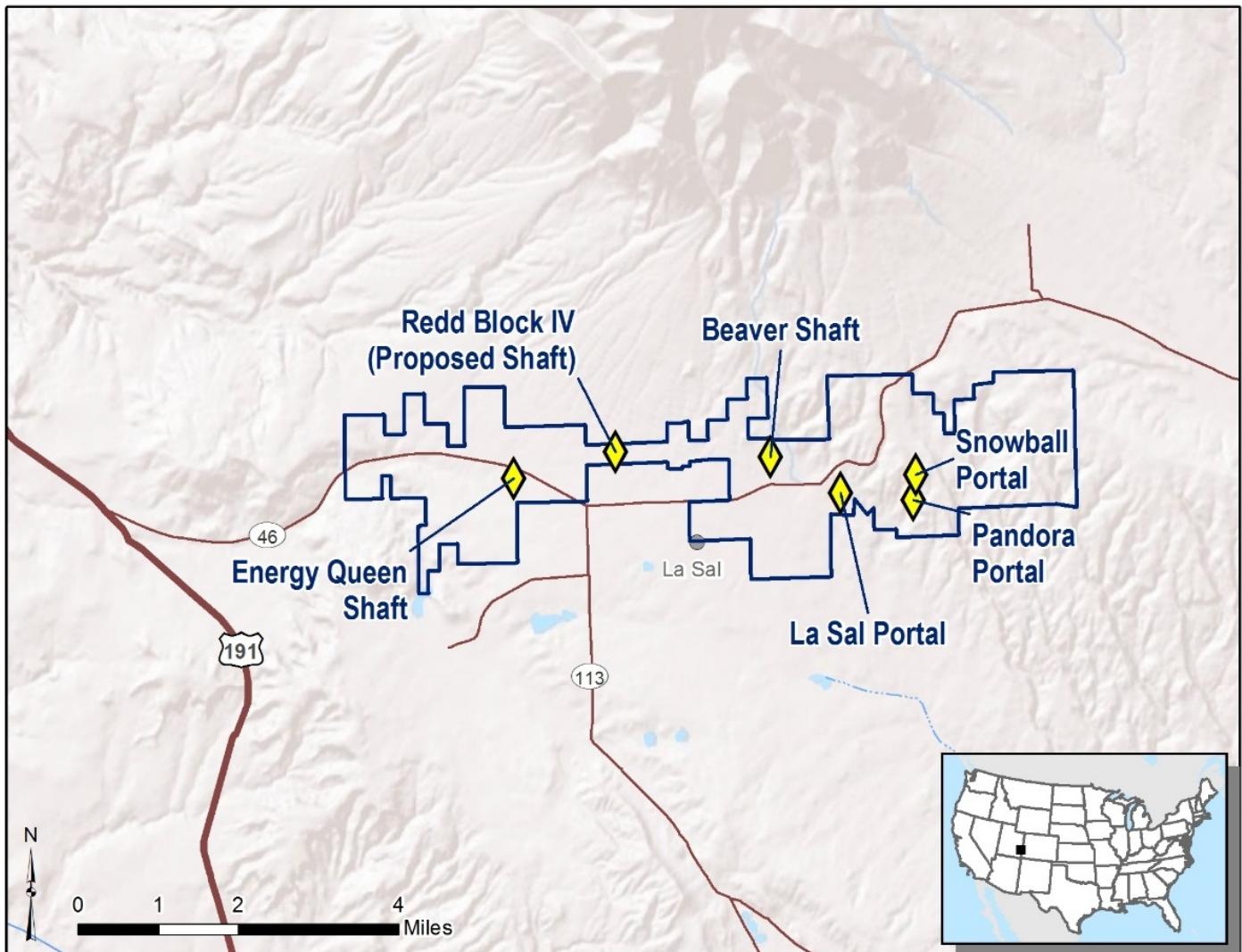
A 20-year mining lease was entered into between Denison (acquired by the Company in June 2012) and the Erma Crawford Family Trust on April 1, 2008. It applies to the Crawford’s 25% mineral ownership of 240 acres of land situated in S $\frac{1}{2}$ SW $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 33, Township 28 South, Range 24 East and SE $\frac{1}{4}$ SW $\frac{1}{4}$ and W $\frac{1}{2}$ SE $\frac{1}{4}$, Section 34, Township 28 South, Range 24 East. An annual advance royalty payment is made to hold this lease. The production royalty is based on a sliding scale. The “market value” is determined to be the published prices for the two products, uranium and vanadium, in the month the ore is fed to process multiplied by the contained pounds, less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes.

Two additional, identical mining leases were made effective May 1, 2008, and May 12, 2008, between Denison (acquired by the Company in June 2012) and Robert and Pamela Fergusson, and between Denison (acquired by the Company in June 2012) and Carole and Fay Giles, respectively, to lease equally the remaining 25% of mineral rights in the same land parcels. These two leases combined are referred to as the Keller Estate portion of the Redd-Mullins Mining Lease. The annual advance royalty, determined in the same manner as the Crawford portion, is paid in four equal parts to the heirs of the Keller Estate. The Keller Estate lease carries the same production royalty as the Crawford portion.

Denison (acquired by the Company in June 2012) entered into a mining lease with Joel Norton, representative of the Thora Barton Norton Estate on April 25, 2008. The lease covers a 50% mineral ownership on 40 acres located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 33, Township 28 South, Range 24 East. The other 50% mineral right resides with Redd Royalties, as described in the Redd-Mullins Mining Lease subsection. An annual advance royalty payment is made to hold the Barton Norton mineral lease. The vanadium “market value” royalty is variable. The “market value” is determined to be the published prices for the two products, uranium and vanadium, in the month the ore is fed to process multiplied by the contained pounds, less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes. A portion of the Redd Block Mineral Resource is located on this parcel. No mining has taken place on this mineral lease. Surface access is covered by the La Sal Livestock Agreement.

A Metalliferous Mineral Lease between San Juan County, Utah, and Hecla Mining Company was signed April 17, 1967. This gave Hecla the right to explore and mine 262.69 acres located in the S $\frac{1}{2}$ S $\frac{1}{2}$, Section 32, Township 28 South, Range 24 East and most of the NW $\frac{1}{4}$, Section 5, Township 29 South, Range 24 East. Two small private parcels in the NW $\frac{1}{4}$ of Section 5 are excluded. A very small parcel, 0.18 acres in Section 10, Township 29 South, Range 24 East, is included in the lease. Hecla assigned 50% interest in the lease to Union Carbide in December 1976 as part of the Hecla-Union Carbide joint venture (JV). This JV operated the Hecla Shaft (now Energy Queen) immediately west of Section 5 on the Superior Uranium Lease. The San Juan County Mineral Lease is held by an annual payment. It is the intent of the Company to continue to hold this lease. An amendment to the lease in January

1968 changed the production royalty to match that used by the State of Utah on its metalliferous leases. When the Energy Queen Mine (Hecla Shaft) ceased operation in 1983, a development drift had advanced into the County land by a few tens of feet. Very little if any ore was produced at that time. The drift was developing toward mineral resources that are now part of the Redd Block Mineral Resources. The mineral lease allows for surface use as necessary for exploration and mining.



Accessibility, Climate, Local Resources, Infrastructure and Physiography

The La Sal Project is easily accessed from the all-weather Utah State Highway 46. Utah 46 enters the La Sal Project land about one mile west of the Energy Queen lease. Utah 46 stays within or very near the La Sal Project for the next eight miles to the east. The Energy Queen headframe, visible from the highway, is located approximately 500 ft south of Utah 46 and is accessed by a gravel road.

The area of the La Sal Project is semi-arid. Temperatures range between an average low of 41°F to an average high of 72°F. Less than 10 in. of precipitation falls per year. Winters are not particularly severe, although there are numerous snowstorms. The temperature drops below 0°F at times, and snow can accumulate to over a foot in the lower elevations and more than two feet at higher elevations.

It is anticipated that most personnel will be hired from the local area with other personnel being hired from other mining districts around the country.

La Sal, Utah, is a small town consisting of a Post Office and general store. Most supplies necessary for mining operations can be found locally in the towns of Moab, Utah, or Monticello, Utah, 24 mi northwest or 34 mi south of the La Project, respectively.

The primary infrastructure as well as electricity and water are already in place at the Project. The mines associated with the Project were in commercial production between 2009 and 2012, before being placed on standby. A test-mining program that began in April 2018 and ran through May 2019 included the rehabilitation of both the La Sal and Pandora declines and re-established underground utilities to most of the mine workings. An airport in Moab, Utah provides daily service to Salt Lake City, Utah, and Denver, Colorado, both of which have international airports.

Electric transmission and distribution lines exist throughout the project area, of sufficient size to supply the load the mines demanded in the past. Many portions of the electrical distribution system were replaced or refurbished as part of a test-mining and rehabilitation program that occurred at the Project between April 2018 and May 2019. The electrical supply is also adequate for additional demand should more ventilation fans, compressors, and even another production shaft with hoisting equipment be added when production resumes and expands. Natural gas is also available for any future production needs.

Water for the mine is purchased from a local rancher who maintains a water well near the Beaver Shaft. Water pumped from the well is either transported by truck to the facilities where it is distributed to the mines or by utility drops located throughout the Project. The eastern end of the Project, including all the current mine workings associated with the Beaver Shaft, La Sal Decline, and Pandora Mines are dry. The Energy Queen Mine workings and shaft are currently flooded and will need to be dewatered prior to mining.

History

In the late 1960s, three mining companies controlled most of the Project. Union Carbide had leases and claims in the central portion of the Project including the La Sal Decline, Snowball Mine, Beaver Shaft, and most of the Redd Block IV property; Union Carbide reorganized in the early 1980s and became Umetco. American Metal Climax held the lease on the Pandora Mine as the east end of the Project; that lease was assigned to Atlas Minerals in 1973 and Atlas Minerals assigned it to Umetco in 1988, retaining an overriding royalty. Hecla Mining held the Energy Queen and San Juan County leases on the west end of the Project. Hecla and Union Carbide formed a joint venture on those properties in 1976.

Umetco and EFNI (no relation to the Company) entered into an agreement in 1984 whereby Umetco owned 70% capacity in, and was the operator of, the Mill. That operating agreement was restructured in 1988 wherein EFNI became 20% owner of the Umetco uranium-vanadium properties in Colorado and Utah, including the La Sal properties. In 1994, Umetco gave back its interest in the Mill to EFNI and assigned all interest in the La Sal properties, among others, to EFNI, thereby giving EFNI control of all previous Umetco, Hecla, and Atlas properties in the Project. Many of the Umetco personnel continued working for EFNI. Original data of the previous operators also transferred to EFNI ownership. EFNI bought-out the Atlas Minerals royalty on the Pandora Mine in the mid-1990s. The Hecla 50% interest was also acquired by EFNI.

IUC bought all assets of EFNI in 1997 including the Project and the Mill. IUC did not retain the Superior Uranium lease (Energy Queen lease). Again, many personnel and all data on the Project transferred to IUC. In 2006, IUC acquired Denison and changed its name to Denison Mines Corporation (Denison). EFR Colorado entered into a new lease on the Energy Queen property in late 2006. The Company acquired Denison's U.S. Mining Division in June 2012, thereby becoming owner and operator (through various subsidiaries) of the entire Project and the Mill. Several Company staff have been associated with all or portions of the Project since the 1980s. All historical data on the Project is the property of the Company.

Following the end of commercial mining at the Project in October 2012, the Project was placed on care and maintenance. In 2018 the La Sal, Beaver, and Pandora portions of the Complex were reopened and rehabilitated as part of a test mining program. In May 2019 the Project was placed back into care and maintenance mode.

Permitting

Mineral extraction facilities on private and public lands in Utah require an approved Notice of Intent ("NOI") with the UDOGM. If the facility generates water, a ground water discharge permit is required for the treatment plant and ponds, and a surface water discharge permit is required for discharge of treated water. Both permits are issued through the DWQ. Air permits for air emissions including radon are issued by the Utah Division of Air Quality ("UDAQ"). Water well permits, water rights, and stream alteration permits are issued through the Division of Water Rights ("DWR"). On federal land, all the state permits listed above are required, as well as a Plan of Operations approved through a NEPA review by the responsible federal land managing agency.

The Company's mineral facilities at the La Sal Project are all existing facilities in historic mining areas, and approvals by the BLM and USFS have been obtained under EAAs and FONSI's under NEPA. The Energy Queen and Redd Block IV Properties are located on private land and were permitted with UDOGM in the early 1980s by Union Carbide. The Energy Queen Property was developed and has conducted mineral extraction, but the Redd Block IV Property was discontinued soon after the start of construction. An NOI

amendment for the Energy Queen Property was approved by the UDOGM on September 22, 2009. This amendment allows the Company to install water treatment and other new surface facilities to support extraction of up to 250 tons per day of mineralized materials. Water discharge permits to allow initial and ongoing discharge of water from underground workings were also approved by the DWQ in 2009 and renewed most recently in 2018. Energy Fuels initiated permitting plans for additional facility expansion in 2012, but then deferred these plans when the Redd Block IV resource was acquired in the Denison acquisition. As market conditions may warrant, the Company intends to perform engineering studies to determine if the Redd Block IV resource can be extracted from the Energy Queen shaft and surface facilities. If this proves to be the case, the Energy Queen UDOGM permit would be updated to include the Redd Block IV area as well as other resources that have been acquired since the 2009 amendment. A Small Source Exemption that is in place for air emissions would also need to be replaced with an air permit because of the increased surface disturbance.

Existing mining operations at the Pandora, Beaver, La Sal and Snowball Properties are fully permitted with the State of Utah, the BLM, and the USFS. In order to allow expansion of the existing mines, Energy Fuels has obtained regulatory approvals for expansion of the Pandora, Beaver, and La Sal operations through the UDOGM, the BLM, and the USFS. In late 2014, an EA, draft Decision Notice and FONSI were issued for public comment. In March 2015, in response to an objection filed by an environmental interest group, the USFS ruled that additional analysis was required before a modified Plan of Operations and EA could be approved for the proposed expansion. An expanded EA was finalized by the USFS and BLM in September 2017. On February 23, 2018, the BLM and USFS issued the EA, Decision Record (BLM)/Decision Notice (USFS), and FONSI approving the expansion, conditional upon the Company incorporating certain specific requirements into the Plan of Operations amendment and having the required reclamation bond in place. On September 26, 2018, the USFS approved the Plan of Operations amendment and surety bond. In November 2020, the Large Mine NOI permit expansion was approved through UDOGM. All other regulatory approvals needed for project expansion, including an air emissions permit, are in place.

Geologic Setting, Mineralization and Deposit

The Colorado Plateau covers nearly 130,000 square miles in the Four Corners regions. The La Sal Project lies in the Canyon Lands Section in the east-central part of the Plateau in Utah. The La Sal Mountains Intrusion is located to the north and east of the La Sal Project and the peaks are visible from most of the La Sal Project.

The La Sal deposits are classified as sandstone hosted uranium-vanadium deposits. Sandstone-type uranium deposits typically occur in fine to coarse grained sediments deposited in a continental fluvial environment. The La Sal Trend uranium-vanadium deposits are a similar type to those elsewhere in the Uravan Mineral Belt. The Uravan Mineral Belt was defined by Fisher and Hilpert (1952) as a curved, elongated area in southwestern Colorado where the uranium-vanadium deposits in the Salt Wash Member of the Morrison Formation generally have closer spacing, larger size, and higher grade than those in adjacent areas and the region as a whole. The location and shape of mineralized deposits are largely controlled by the permeability of the host sandstone. Most mineralization is in trends where Top Rim sandstones are thick, usually 40 ft or greater.

The La Sal Trend is a large channel of Top Rim sandstone that trends due east, possibly as a major trunk channel to tributaries that fanned-out to the east to make a portion of the Uravan Mineral Belt. The Energy Queen deposit appears to be at the location of the junction of a tributary channel that joins the main channel from the southwest. The uranium may be derived from a weathered rock containing anomalously high concentrations of uranium, leached from the sandstone itself or an adjacent stratigraphic unit. It is then transported in oxygenated groundwater until it is precipitated from solution under reducing conditions at an oxidation-reduction interface. The reducing conditions may be caused by such reducing agents in the sandstone as carbonaceous material, sulfides, hydrocarbons, hydrogen sulfide, or brines.

Data Verification

The primary assay data used to calculate the Mineral Resource estimate for the Project is natural gamma radiometric log data. Core was collected by Union Carbide to determine vanadium assays and core was collected by the Company in 2019 to verify vanadium assays and to verify natural gamma grades, Where core data was available it was used in place of natural gamma data. Calibration for natural gamma completed by the Company was done at the DOE test pits in Casper, WY. No calibration records are available from Atlas or Union Carbide, but it is assumed that they followed standard operating procedures for calibrating their natural gamma equipment.

Core analysis from Union Carbide was completed at their own laboratories. Core analysis by the Company was done at the White Mesa Mill in Blanding, Utah. The Company submitted uranium standards and blanks to the mill as part of a standard QA/QC procedure.

Utilizing only natural gamma logs as assay data could lead to an over or under estimation of Mineral Resources due to disequilibrium. Positive disequilibrium occurs when the uranium present has not had enough time to decay and produce daughter isotopes, which are what are actually measured during a natural gamma assay. Under positive disequilibrium a natural gamma assay would indicate lower amounts of uranium than what is present. Negative disequilibrium occurs when uranium has had enough time to decay to produce the daughter radioisotopes, but was remobilized and removed from the deposit. This would lead to measuring more uranium than is present. The Project is part of a larger mining district with no history of disequilibrium issues. The disequilibrium factor applied to the Project Mineral Resource is 1.0.

Mineral Resources Estimates

Uranium block grade estimations for the La Sal Project were based on radiometric drillhole logs on the five principal mineralized domains (La Sal West, Energy Queen, Redd Block, Beaver/La Sal, and Pandora). Mineral Resources were estimated using Vulcan software using inverse distance squared methods. Vanadium grades were calculated based on the uranium grades utilizing a regression analysis. A power relationship was observed between the uranium grade (% U₃O₈) and the vanadium to uranium ratio (V₂O₅:U₃O₈). The relationship is given by the equation below:

$$y = 2.4805x^{-0.382}$$

Where y is the V₂O₅:U₃O₈ ratio and x is the uranium grade (%U₃O₈). The vanadium grade (%V₂O₅) for La Sal can then be calculated by the equation:

$$\%V_2O_5 = \frac{V_2O_5: U_3O_8}{\%U_3O_8}$$

Additional details regarding the estimation technique can be found in Section 14.0 Mineral Resource Estimate in the La Sal Technical Report Summary.

The table below sets out the Mineral Resources estimates for the La Sal Project as of December 31, 2021. These estimates are derived from the La Sal Technical Report Summary. Daniel Kapostasy, the Company's non-independent Qualified Person, reviewed and confirmed that the Mineral Resources estimates set forth in the La Sal Technical Report Summary remained accurate as at December 31, 2021.

La Sal Mineral Resources – In Situ Uranium and Vanadium⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾

Classification	Zone	Cut-Off Grade (%U ₃ O ₈)	Tons (000)	Grade % eU ₃ O ₈	Pounds eU ₃ O ₈ (000)	Grade % V ₂ O ₅	Pounds V ₂ O ₅ (000)
La Sal Inferred Resources	Energy Queen	0.17	147	0.25	749	1.07	3,129
	Redd Block	0.17	336	0.29	1,918	1.14	7,679
	Beaver/La Sal	0.17	118	0.23	552	1.01	2,388
	Pandora	0.17	222	0.24	1,061	1.02	4,551
Total Inferred Resources		0.17	823	0.26	4,281	1.08	17,747

Notes:

- (1) SEC S-K definitions were followed for all Mineral Resource categories. These definitions are also consistent with CIM (2014) definitions in NI 43-101.
- (2) Mineral Resources are estimated at a cut-off grade of 0.17% U₃O₈.
- (3) The cut-off grade is calculated using a metal price of \$65/lb U₃O₈
- (4) No minimum mining width was used in determining Mineral Resources.
- (5) Mineral Resources are based on a tonnage factor of 14.5 ft³/ton (Bulk density 0.0690 ton/ft³ or 2.21 t/m³).
- (6) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- (7) Total may not add due to rounding
- (8) Mineral Resources are 100% attributable to EFR.

Present Condition of the Property and Work Completed to Date

Permanent structures existing at the Energy Queen Property include the head frame and a metal building containing an office, shop, showers, warehouse, and the hoist. The compressor is located in a separate building. One cased vertical ventilation hole was

established into the underground working level. A small water treatment building and settling ponds are located on the San Juan County land in Section 5. In the past, water was treated with barium chloride to remove radium.

The Beaver and La Sal Properties are accessed through the La Sal decline with rubber-tired equipment. The principal shop, offices, and warehouse facilities used by all properties in the district are housed at the surface facilities of the La Sal decline. There are large fenced-in yards, as well as buildings for equipment and supply storage. It is used as a central receiving site for bulk and large orders, which are then distributed to the other Energy Fuels' properties in the district and other parts of the region. The shop areas include facilities specific to electrical equipment, drills, mobile diesel equipment, and welding. Engineering, geology, safety, environmental, and supervisory and clerk offices are also located near the La Sal decline, in addition to staff and underground crew's dry rooms. Ample stockpile space is available for easy truck load-out for transporting mineralized material to the White Mesa Mill. Electrical lines and substations exist and are adequately sized for any future extraction potential of the Mineral Resources. The Beaver and La Sal Properties are dry, so no water treatment facilities are needed.

The surface infrastructure at the Beaver shaft location consists of the hoist house, hoist, and head frame. The shaft is 690 feet deep to the underground haulage level and 750 feet in total depth. There are three loading pockets, two of 70-ton capacity and one of 90-ton capacity. This arrangement allows for separation of mineralized material and waste. The skips dump into a surface bin from which the mineralized material is trucked a short distance to a stockpile and subsequently loaded into highway trucks for haulage to the White Mesa Mill. The shaft conveyance system is certified for man trips, although the routine access for personnel is through the La Sal decline. Another building houses the compressors, which supply compressed air for the underground workings in the Beaver Project. Power lines and substations are in place. The Beaver Property is dry underground; therefore, no water treatment facilities exist.

Access into the Pandora Property is through a decline with rubber-tired equipment. Surface facilities here are less than at the other projects. They consist of a small office and shop buildings. A third building is used for storage of materials and equipment. Power lines exist to the property with enough capacity for the required load of potential future mining activities. The Pandora Property is dry underground.

In 1980, Umetco planned to sink another shaft to access the Redd Block Mineral Resources. The project did not progress far due to low uranium prices. The infrastructure at the Redd Block Property associated with a possible new shaft consists of a cleared and leveled site large enough for future construction of all surface facilities needed to support the mining operation. The power line and transformers are installed, and the concrete base for a compressor building has been poured. As mining activities progress, the water table in the Salt Wash sandstone host horizon will be encountered between the west side of the Beaver Property and the east end of the Redd Block area. Seven monitor wells were installed by Denison around this proposed shaft site.

Starting in April 2018, the Company began a process to rehabilitate the La Sal Complex so that it would be ready to go back into production as market conditions warrant. Work completed between April 2018 and December 2019, when the mine was placed back into standby status, included rehabilitating both the La Sal and Pandora declines, rehabilitating main haulage ways and working areas, unplugging and lining a vent raise, and mining approximately 12,000 tons of mineralized material as part of a test-mining program. Additionally, 30 surface exploration drill holes and 5,200 feet of underground core were drilled between January and May 2019. Of the 30 surface drill holes, 6 intercepted relatively high-grade mineralization. High-grade intercepts are given in the table below.

Hole No.	Intercept Length (ft.)	Uranium Avg. Grade (%U ₃ O ₈)	Uranium GT (Grade x Thickness)	Vanadium Avg. Grade (%V ₂ O ₅)	Ratio (V ₂ O ₅ :U ₃ O ₈)
LS-2019-002	2.5	0.452	1.13	4.835	10.7:1
LS-2019-004	3.5	0.322	1.13	2.738	8.5:1
LS-2019-005	2	0.261	0.52	0.223	0.9:1
LS-2019-014	2	0.067	0.13	1.583	23.6:1
LS-2019-029 ⁽¹⁾	5.5	0.221	1.22	N/A	N/A

Notes:

(1) No core was recovered from hole LS-2019-029 and therefore a vanadium grade is not available. The %U₃O₈ grade given is an equivalent U₃O₈ grade (%eU₃O₈) and is calculated from a downhole gamma probe and not chemical assay.

Note that the 12,000 tons mined have not yet been processed and have not been deducted from the La Sal resources presented above. The Company considers the quantity too small to be considered material.



Reclamation work on the Snowball development rock area was completed in 2021.

The Company acquired the Energy Queen Property in December 2006. The remainder of the La Sal Project was acquired by the Company in June 2012, through the acquisition of the Denison US Mining Division. The cost of the La Sal Project has been fully impaired, and as of December 31, 2021, the total book value attributable to the La Sal Project and its associated equipment on the financial statements of the Company was nil.

The Company's Planned Work

Subject to any actions the Company may take in response to general market conditions, work planned for 2022 includes continuing care and maintenance activities on the properties within the La Sal Project.

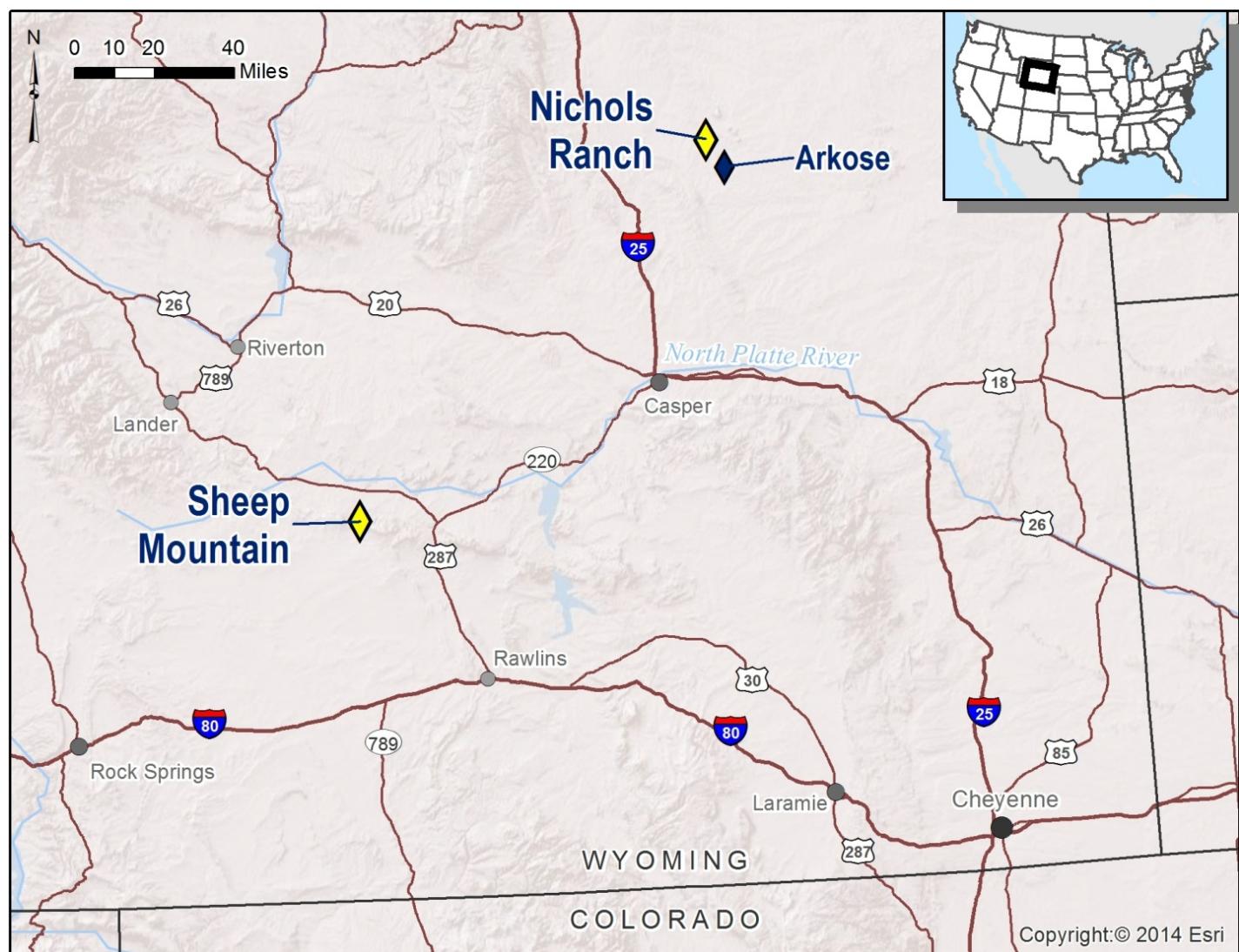
Non-Material Mineral Properties

This section describes certain non-material mineral properties held by the Company. As these properties are not considered material to the Company's business, the Company may choose to pursue or to take under consideration the potential sale, joint venture, trade or other transaction involving one or more of these projects. None of the Company's non-material properties have any Mineral Resources or Mineral Reserves.

The Company holds the following non-material mineral properties:

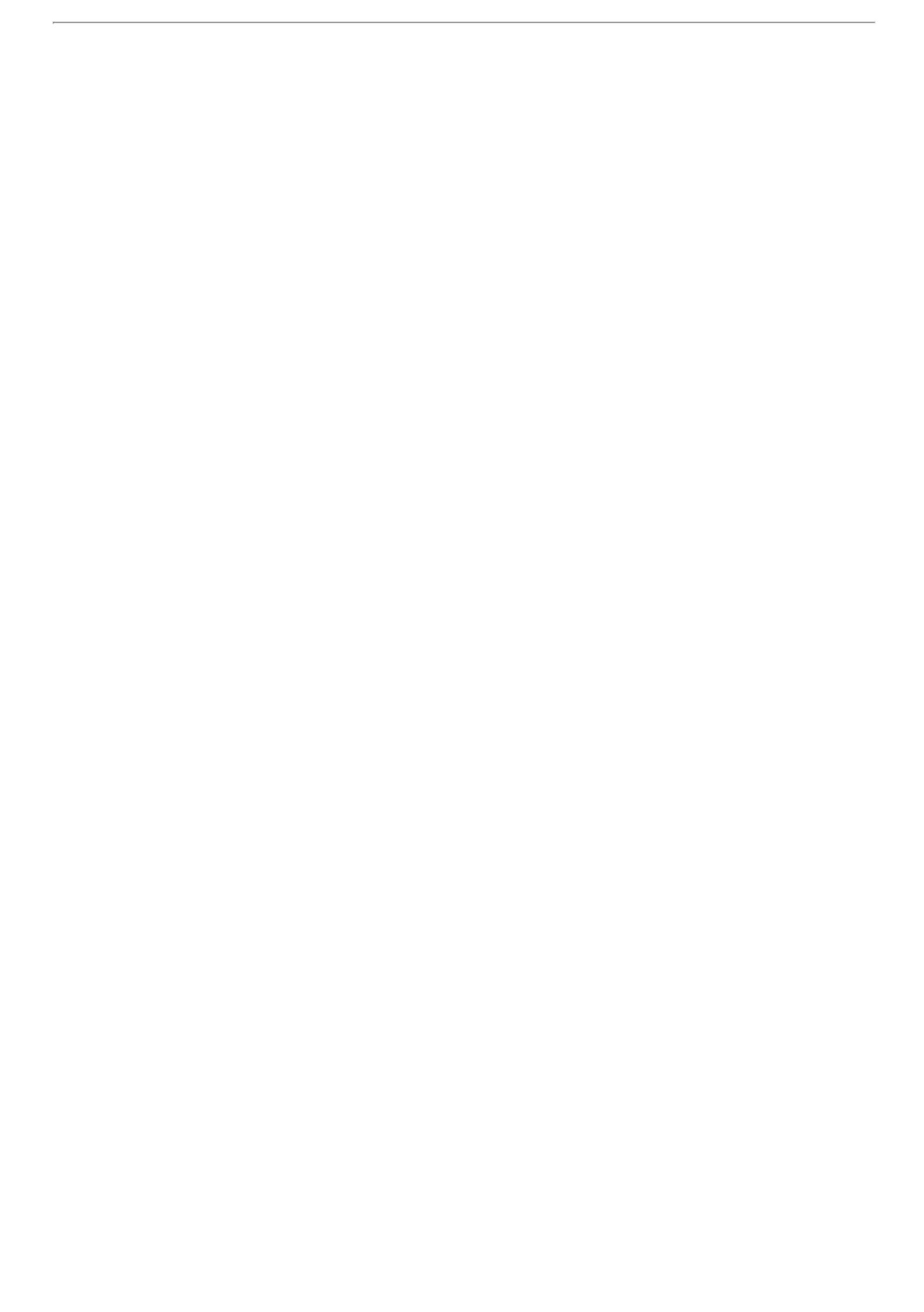
Other ISR Projects

The Company's Properties located in the Powder River Basin, Wyoming, are as follows:



The Company's properties in the Powder River Basin of Wyoming, but outside of the Nichols Ranch Project, include 4,359 acres owned 100% by the Company through its wholly owned subsidiary, Uranerz. These properties, located at Arkose, include the Verna Ann, Niles Ranch, Arvina, Streeter, Table Mountain, Heldt Draw, Drew, Collins Draw, and Jack properties. The Company, through Uranerz, also holds an 81% interest in the Arkose Joint Venture, which holds 40,852 net acres in the Powder River Basin. In May 2018, the Company sold its interest in the Reno Creek property. See Item 1, above.

In September 2016, Uranerz elected to forfeit 298 unpatented lode mining claims covering approximately 6,157 acres from its North Willow Creek (50 claims), Hat (61 claims), Divide (36 claims), North Nichols (107 Claims), and East Nichols (44 claims) properties, which constitutes all the claims in those projects.



In general, these ISR projects are located in basins containing sandstones of Tertiary age with known uranium mineralization. Limited exploration was conducted by Uranerz on each project.

Arkose Joint Venture, Powder River Basin, Wyoming:

The Company, through its wholly owned subsidiary Uranerz, holds an undivided 81% interest in the Arkose Joint Venture, which holds an additional 40,852 net acres in the Powder River Basin. Uranerz completed the acquisition of its interest in the Arkose Joint Venture mineral properties on January 15, 2008. This acquisition was completed pursuant to a purchase and sale agreement previously announced on September 19, 2007 between Uranerz, NAMMCO, Steven C. Kirkwood, Robert W. Kirkwood and Stephen L. Payne (collectively, the “**NAMMCO Sellers**”).

In connection with the acquisition of its interest in the Arkose Joint Venture, Uranerz entered into a venture agreement dated January 15, 2008 (the “**Venture Agreement**”) with United Nuclear, LLC (“**United Nuclear**”), a limited liability company wholly owned by the NAMMCO Sellers and their designee under the purchase and sale agreement. Under the Venture Agreement, United Nuclear retained its nineteen percent (19%) working interest in the Arkose Joint Venture, and Uranerz assumed operations and management responsibilities of the Venture. Uranerz and United Nuclear agreed to contribute funds to programs and budgets approved under the Arkose Mining Venture in accordance with their respective interests in the Venture.

The Arkose Mining Venture includes the following property units on which Uranerz has conducted exploration:

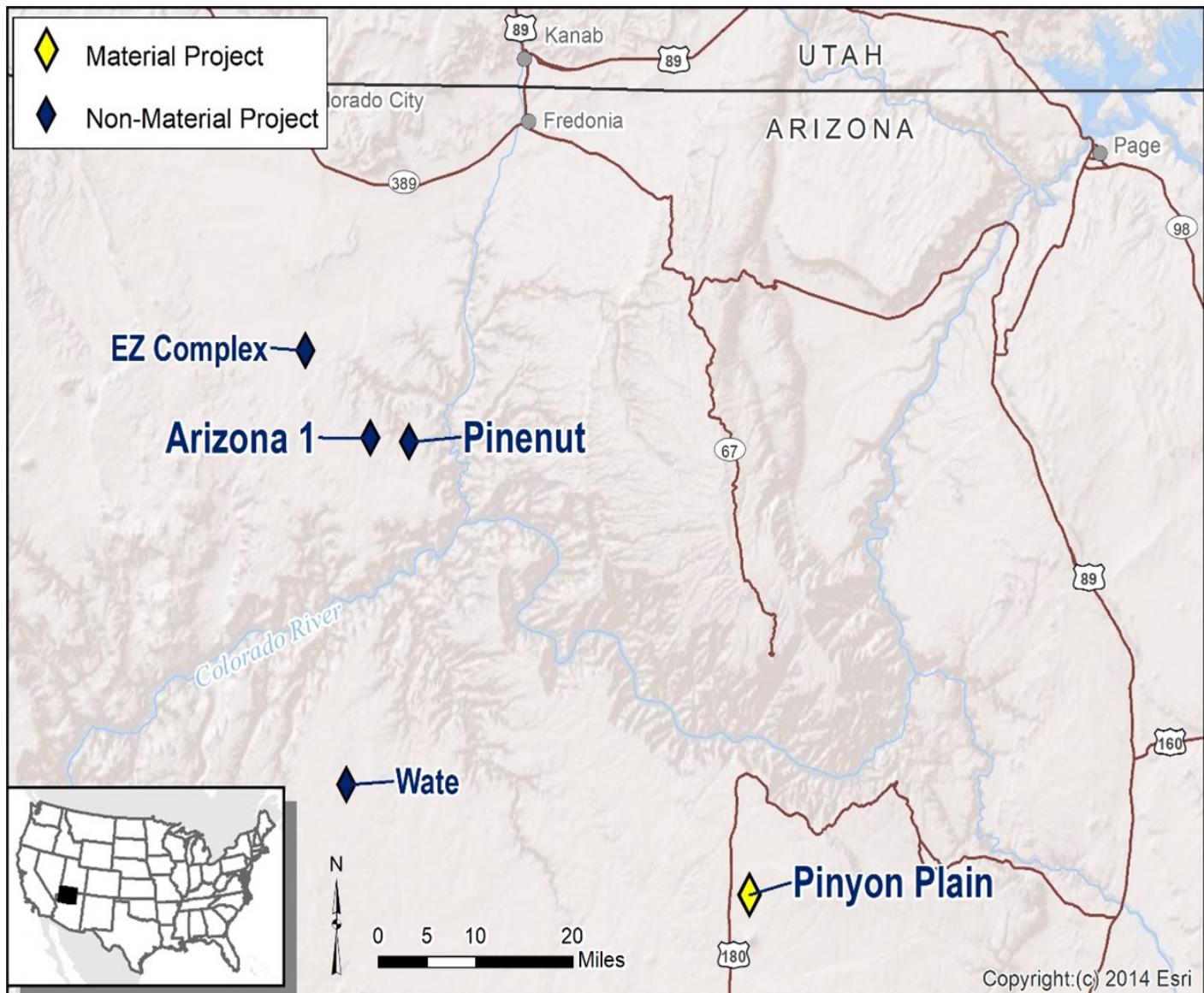
- North Jane*
- South Doughstick
- Cedar Canyon
- East Buck
- South Collins Draw
- Sand Rock
- Little Butte
- Beecher Draw
- Monument
- Stage

*Now included in the Nichols Ranch Project as part of the Jane Dough Property.

In September 2016, the Arkose Joint Venture elected to forfeit 190 unpatented lode mining claims covering 3,925 acres from its Kermit property and 144 claims covering 2,975 acres from its Lone Bull property, which constitute all of the Arkose claims in those projects. In addition, four mineral leases comprising 592 acres in the East Buck project were allowed to expire in 2016 without attempting to negotiate extensions to those leases. In 2017, mineral leases in the Monument, Cedar Canyon, Sand Rock, East Buck and House Creek projects were allowed to expire; however, the expiry of those property interests did not materially affect the Company's ability to continue exploration and extraction activities on its properties.

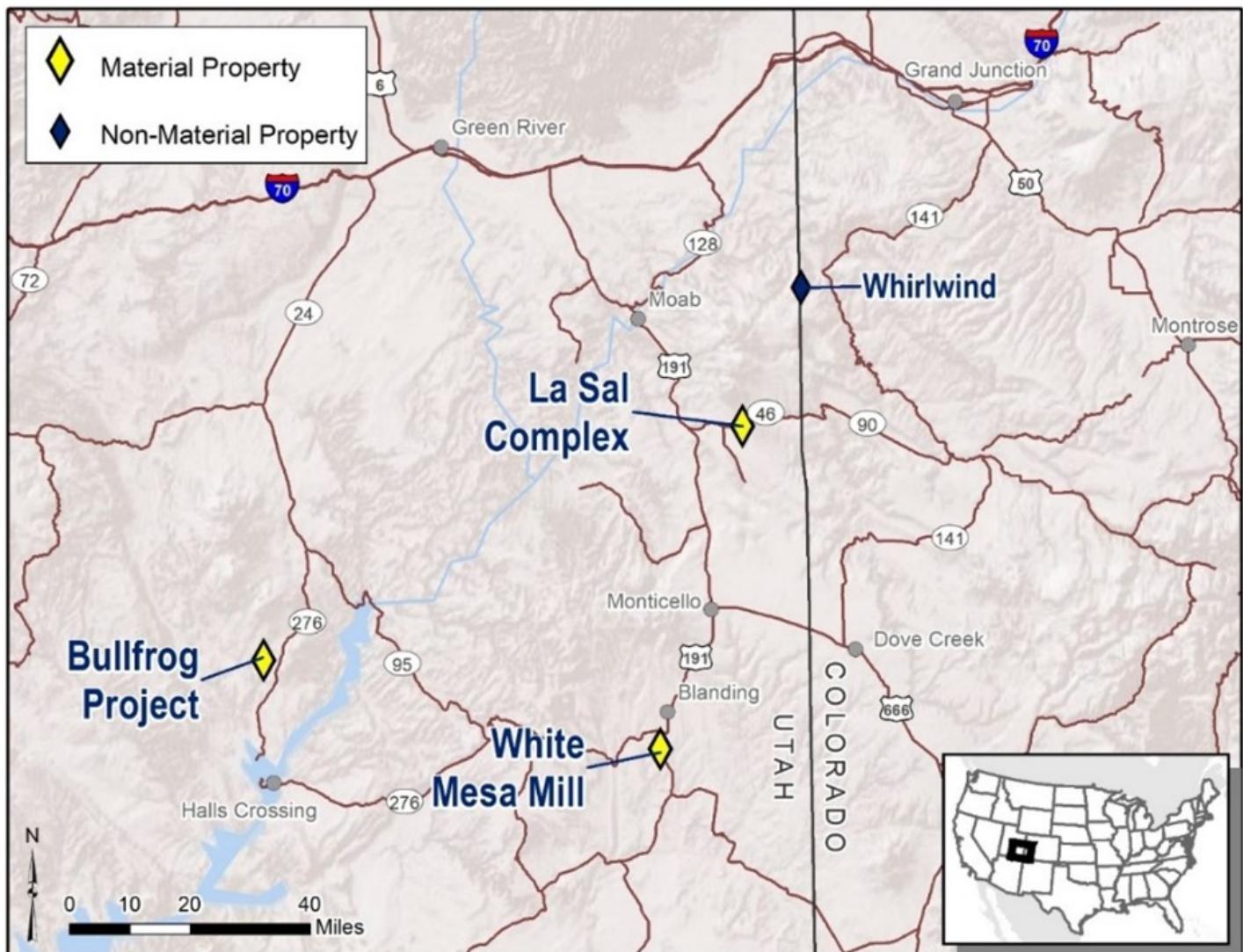
Other Conventional Projects

Arizona Strip



The Pinenut Project has been reclaimed except for a two-acre disturbance associated with a monitor well. Mineral extraction at the Company's Arizona 1 Project commenced in December 2009 and continued until the project was placed on standby in February 2014 due to the depletion of the readily available resources. The Wate Project and EZ Project are in the evaluation stage. Permitting at the Wate and EZ Projects are currently on hold.

Colorado Plateau



The Whirlwind Project comprises 126 unpatented lode mining claims covered by three Mineral Leases and a Utah State Mineral Lease of 320 acres for a total acreage of about 2,800 acres. The property size has been reduced since the acquisition. The retained property continues to cover the known mineralized areas. The Whirlwind Project straddles the Utah/Colorado state line 4.5 miles southwest of Gateway, Colorado. The Whirlwind Project was refurbished by the Company in 2008 and remains on standby status. Exploration drill projects were conducted in 2007, 2008, 2009, 2010, 2011 and 2012.

ITEM 3. LEGAL PROCEEDINGS

Other than routine litigation incidental to our business, or as described below, the Company is not currently a party to any material pending legal proceedings that management believes would be likely to have a material adverse effect on our financial position, results of operations or cash flows.

White Mesa Mill

In 2013, the Ute Mountain Ute Tribe filed a Petition to Intervene and Request for Agency Action challenging the Corrective Action Plan approved by UDEQ relating to nitrate contamination in the shallow aquifer at the White Mesa Mill. The challenge is currently being evaluated and may involve the appointment of an administrative law judge (“ALJ”) to hear the matter. The Company does not consider this action to have any merit. If the petition is successful, the likely outcome would be a requirement to modify or replace the existing Corrective Action Plan. At this time, the Company does not believe any such modification or replacement would materially affect its financial position, results of operations or cash flows. However, the scope and costs of remediation under a revised or replaced Corrective Action Plan have not yet been determined and could be significant.

UDEQ renewed in January 2018, then reissued with minor corrections in February 2018, the Mill License for another ten years and the GWDP for another five years, after which further applications for renewal of the Mill License and GWDP will need to be submitted. During the review period for each application for renewal, the Mill can continue to operate under its existing Mill License and GWDP until such time as the renewed Mill License or GWDP is issued.

In 2018, the Grand Canyon Trust, Ute Mountain Ute Tribe and Uranium Watch (collectively, the “**Mill Plaintiffs**”) served Petitions for Review challenging UDEQ’s renewal of the Mill License and GWDP and Requests for Appointment of an ALJ, which they later agreed to suspend pursuant to a Stipulation and Agreement with UDEQ, effective June 4, 2018. The Company and the Mill Plaintiffs held multiple discussions over the course of 2018 and 2019 in an effort to settle the dispute outside of any judicial proceeding. In February 2019, the Mill Plaintiffs submitted to the Company their proposal for reaching a settlement agreement. The proposal remains under consideration by the Company. The Company does not consider these challenges to have any merit and, if a settlement cannot be reached, intends to participate with UDEQ in defending against the challenges. If the challenges are successful, the likely outcome would be a requirement to modify the renewed Mill License and/or GWDP. At this time, the Company does not believe any such modification would materially affect its financial position, results of operations or cash flows.

On August 26, 2021, the Ute Mountain Ute Tribe filed a Petition to Intervene and Petition for Review challenging UDEQ’s approval of Amendment No. 10 to the Mill License, which expanded the list of Alternate Feed Materials that the Mill is authorized to accept and process for its source material content. Then, on November 18, 2021, the Tribe filed its Request for Appointment of an ALJ, followed shortly thereafter by a stay on the request in accordance with a Stipulation and Agreement between the Tribe, UDEQ and the Company. The Company does not consider this action to have any merit. If the stay is lifted, an ALJ is appointed and the petition is successful, the likely outcome would be a requirement to modify or revoke the Mill License amendment. At this time, the Company does not believe any such modification or revocation would materially affect its financial position, results of operations or cash flows.

Pinyon Plain Project

In March, 2013, the Center for Biological Diversity, the Grand Canyon Trust, the Sierra Club and the Havasupai Tribe (the “**Pinyon Plaintiffs**”) filed a complaint in the U.S. District Court for the District of Arizona (the “**District Court**”) against the U.S. Forest Service (“**USFS**”) and the USFS Forest Supervisor for the Kaibab National Forest (together, the “**Defendants**”) seeking an order (a) declaring that the USFS failed to comply with environmental, mining, public land, and historic preservation laws in relation to our Pinyon Plain Project (formerly known as the Canyon Project), (b) setting aside any approvals regarding exploration and mining operations at the Pinyon Plain Project, and (c) directing operations to cease at the Pinyon Plain Project and enjoining the USFS from allowing any further exploration or mining-related activities at the Pinyon Plain Project until the USFS fully complies with all applicable laws. In April 2013, the Pinyon Plaintiffs filed a Motion for Preliminary Injunction, which was later denied by the District Court. In April 2015, the District Court issued its final ruling on the merits in favor of the Defendants and the Company and against the Pinyon Plaintiffs on all counts. The Pinyon Plaintiffs appealed the District Court’s ruling on the merits to the United States Ninth Circuit Court of Appeals (the “**Ninth Circuit**”) and filed motions for an injunction pending appeal with the District Court. Those motions for an injunction pending appeal were denied by the District Court on May 26, 2015. Thereafter, the Pinyon Plaintiffs filed urgent motions for an injunction pending appeal with the Ninth Circuit, which were denied on June 30, 2015.

The hearing on the merits was held at the Ninth Circuit on December 15, 2016, which resulted in a favorable ruling for the USFS and the Company a year later. The Pinyon Plaintiffs petitioned the Ninth Circuit for a rehearing *en banc* and, in October 2018, the Ninth Circuit panel withdrew its prior opinion and filed a new opinion, which affirmed the prior opinion with one exception to the District Court’s decision. The Ninth Circuit panel reversed itself on its prudential standing analysis as applied to the fourth claim on “valid existing rights,” having initially determined that the Pinyon Plaintiffs lacked standing under the General Mining Law of 1872 (the “**Mining Law**”). The panel remanded the claim back to the District Court to hear on the merits, with the Pinyon Plaintiffs alleging that the USFS did not consider all relevant costs in analyzing whether the Company satisfied the Mining Law’s “prudent person test” in its mineral examination and, thus, erred in concluding that the Company has valid existing rights to operate the Pinyon Plain Project on lands otherwise subject to a 2012 U.S. Department of Interior withdrawal from location and entry.

On May 22, 2020, after the matters were briefed, the District Court issued its final order in favor of the Defendants, which the Pinyon Plaintiffs thereafter appealed to the Ninth Circuit. In December 2020, the Pinyon Plaintiffs filed their Appellant’s Opening Brief with the Ninth Circuit and, in April 2021, the Defendants filed their respective Answering Briefs. Oral arguments were held remotely on August 30, 2021. On February 22, 2022, the Ninth Circuit filed its Opinion in favor of the USFS and the Company. The Pinyon Plaintiffs have the right to request a hearing *en banc* by the Ninth Circuit, or request a hearing on this matter in front of the U.S. Supreme Court. If the Pinyon Plaintiffs successfully appeal the matter at a rehearing *en banc* with the Ninth Circuit or successfully appeal the Ninth Circuit’s decision at the U.S. Supreme Court, the Company may be required to maintain the Pinyon Plain Project on standby pending resolution of the matter. Such a prolonged delay of mining activities could have a significant impact on our future operations.

Daneros Mine

On October 27, 2021, the Company sold the Daneros mine to CUR, in addition to a number of its other non-core conventional uranium assets. See Note 17 for a more extensive discussion of the sale.

ITEM 4. MINE SAFETY DISCLOSURE

The mine safety disclosures required by section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K are included in Exhibit 95.1 of this Annual Report.

PART II

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

Market Information

Energy Fuels Inc.'s (the "Company" or "Energy Fuels") freely tradable Common Shares of the Company (the "Common Shares") are listed and traded on the NYSE American (the "NYSE American") under the symbol "UUUU" and on the Toronto Stock Exchange (the "TSX") under the symbol "EFR." As of March 10, 2022, the closing bid quotation for our Common Shares was \$10.03 per share as quoted by the NYSE American, and was \$12.75 per share as quoted by the TSX. As of March 10, 2022, Energy Fuels had 156,707,285 Common Shares issued and outstanding, held by an estimated 115,000 or more shareholders.

Dividend Policy

We have never declared cash dividends on our Common Shares. We anticipate that we will retain any earnings to support operations and to finance the growth of our business. Therefore, we do not expect to pay cash dividends in the foreseeable future. Any further determination to pay cash dividends will be at the discretion of our Board of Directors and will be dependent on the financial condition, operating results, capital requirements, and other factors that our Board of Directors deems relevant.

Recent Sales of Unregistered Securities

None.

Use of Proceeds

None.

Repurchase of Equity Securities

During 2021, neither we nor any of our affiliates repurchased any of our Common Shares registered under Section 12 of the Exchange Act.

Equity Compensation Plan Information

The following table provides information as of December 31, 2021, concerning stock options, restricted stock units ("RSUs") and stock appreciation rights ("SARs") outstanding pursuant to our 2021 Amended and Restated Omnibus Equity Incentive Compensation Plan (the "Compensation Plan"), which has been approved by the Company's shareholders. The Company does not have an equity compensation plan that has not been approved by shareholders. The table also includes stock options that the Company assumed as part of the Uranerz acquisition.

Plan Category	Number of Common Shares to be issued upon exercise of outstanding options, warrants and rights ⁽¹⁾	Weighted average exercise price of outstanding options, warrants and rights (US\$) ⁽¹⁾⁽³⁾	Number of Common Shares remaining available for future issuance ⁽¹⁾
Equity compensation plans approved by security holders	3,515,368 ⁽²⁾⁽⁴⁾	\$2.87 ⁽⁵⁾	12,110,852
Equity compensation plans not approved by security holders	Nil	Nil	Nil
Total	3,515,368	\$2.87	12,110,852

Notes:

- (1) The number of Common Shares, and the exercise price thereof, has been adjusted to take into account the Consolidation.
- (2) Includes 942,882 stock options and 900,064 RSUs. With a few exceptions, each RSU vests annually at approximately the following intervals: as to 50% on January 27 approximately one year after the date of grant, as to another 25% on January 27 approximately two years after the date of grant and as to the remaining 25% on January 27 approximately three

years after the date of grant. Upon vesting, each RSU entitles the holder to receive one Common Share without any additional payment.

(3) 900,064 RSUs have been excluded from the weighted average exercise price because there is no exercise price.

(4) 1,672,422 SARs granted on January 22, 2019 (the “**2019 SARs**”). Each SAR granted entitles the holder to receive, upon a valid exercise, payment from the Company in cash or Common Shares (at the sole discretion of the Company) in an amount representing the difference between the fair market value (“**FMV**”) of the Company’s Common Shares on the date of exercise and the grant price (the “**Grant Price**”), being the greater of the 5-trading-day volume weighted average price (“**VWAP**”) of the Company’s Common Shares on the NYSE American ending on the trading day immediately prior to the date of grant and the closing market price of the Company’s Common Shares on the NYSE American on the trading day immediately prior to the date of grant. The term of each SAR grant is five years, with SARs vesting only upon the achievement of performance goals specific to each SAR grant. Further, notwithstanding the vesting schedule specific to each SAR grant, no SARs are able to be exercised by the holder for an initial period of one year from the date of grant. The specific terms of each SAR grant are as follows:

a. **2019 SARs.** The Grant Price of the 2019 SARs is \$2.92. The term of the 2019 SARs is five years, ending on January 22, 2024, with the 2019 SARs vesting only upon the achievement of the following performance goals: as to one-third of the 2019 SARs granted, automatically upon the 90-calendar-day VWAP of the Company’s Common Shares on the NYSE American equaling or exceeding \$5.00 for any continuous 90-calendar-day period; as to an additional one-third of the 2019 SARs granted, automatically upon the 90-calendar-day VWAP of the Company’s Common Shares on the NYSE American equaling or exceeding \$7.00 for any continuous 90-calendar-day period; and as to the final one-third of the 2019 SARs granted, automatically upon the 90-calendar-day VWAP of the Company’s Common Shares on the NYSE American equaling or exceeding \$10.00 for any continuous 90-calendar-day period. Further, notwithstanding the foregoing vesting schedule, no 2019 SARs were able to be exercised by the holder for an initial period of one year from the date of grant; the date first exercisable being January 22, 2020. As of March 15, 2022, two-thirds of the 2019 SARs have vested.

(5) Represents a weighted average exercise price of: (i) \$2.87, which is the weighted average exercise price of stock options and SARs pursuant to the Omnibus Equity Incentive Plan, which is inclusive of (ii) \$4.84, which is the weighted average exercise price of the Uranerz Replacement Stock Options.

Energy Fuels Compensation Plan

The Compensation Plan was approved by the Board of Directors on each of January 28, 2015, March 29, 2018 and March 18, 2021 and by shareholders on each of June 18, 2015, May 30, 2018 and May 26, 2021 (amended, restated and approved every three years). The Compensation Plan supersedes and replaces the Energy Fuels Stock Option Plan, which was the Company’s prior equity incentive program. All stock options previously granted pursuant to the Energy Fuels Stock Option Plan which remain outstanding are incorporated into the Compensation Plan. Employees, directors, and consultants of the Company and its affiliates are eligible to participate in the Compensation Plan. The Board of Directors, or a Committee authorized by the Board of Directors (the “**Committee**”), administers the Compensation Plan. The Committee may grant awards for non-qualified stock options, incentive stock options, stock appreciation rights, restricted stock, deferred share units, restricted stock units, performance shares, performance units, and share-based awards to eligible participants. The ability to grant a broad range of equity incentive awards is consistent with the practices of similar public companies. Pursuant to the rules of the TSX, the Compensation Plan must be renewed by approval of Energy Fuels shareholders every three years.

Uranerz Options

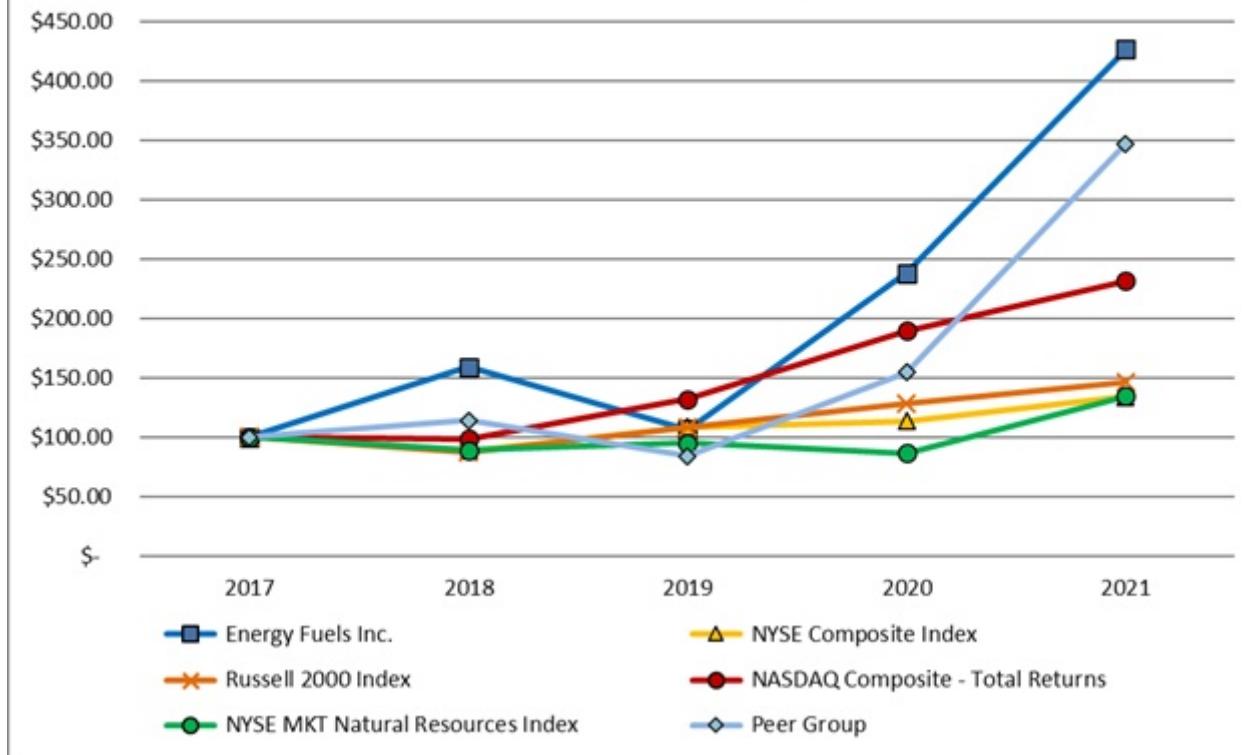
On June 18, 2015, in connection with the acquisition of Uranerz Energy Corporation (“**Uranerz**”), Energy Fuels issued 2,048,000 stock options of Energy Fuels, by assuming the then-existing stock options granted pursuant to the Uranerz 2005 Stock Option Plan, as amended on June 10, 2009 (the “**2005 Stock Option Plan**”). These stock options are now exercisable for Common Shares, subject to the exchange ratio set out in the Merger Agreement that governed the acquisition of Uranerz. No further stock options will be granted pursuant to the 2005 Stock Option Plan. The stock options have varying expiry dates with the last stock options expiring in June 2025.

Stock Performance Graph⁽¹⁾

The performance graph below shows Energy Fuels’ cumulative total 5-year return based on an initial investment of \$100 in Energy Fuels Common Shares beginning on December 31, 2017, as compared with the Russell 2000 Index, NYSE American Natural Resources Index, NYSE Composite, NASDAQ Composite, and a peer group consisting of Cameco, NexGen Energy, Fission Uranium, Uranium Energy Corp, Ur-Energy, Paladin Energy, GoviEx Uranium, Denison Mines, Deep Yellow Ltd., Peninsula Energy and Boss Resources. The chart shows yearly performance marks over a five-year period. This performance chart assumes: (1) \$100 was invested on December 31, 2017 in Energy Fuels Common Shares along with the Russell 2000 Index, NYSE American Natural Resources Index, NYSE Composite, NASDAQ Composite, and the peer group’s common stock; and (2) all dividends are reinvested. Dates on the chart represent the last trading day of the indicated fiscal year.

Comparison of 5-Year Cumulative Total Return

Assuming Initial Investment of \$100
(December 31, 2017 - December 31, 2021)



Notes:

- (1) This peer group represents a broad range of companies operating within the U.S. uranium industry generally, and is distinct from the more select peer group used for the Company's executive officer compensation decisions as reported annually in the Company's proxy circular.

Exchange Controls

There are no governmental laws, decrees or regulations in Canada that restrict the export or import of capital, including foreign exchange controls, or that affect the remittance of dividends, interest or other payments to nonresident holders of the securities of Energy Fuels, other than Canadian withholding tax. See "*Certain Canadian Federal Income Tax Considerations for Non-Residents of Canada*," below.

Certain Canadian Federal Income Tax Considerations for Non-Residents of Canada

The following is, as of the date hereof, a summary of the principal Canadian federal income tax considerations generally applicable under the *Income Tax Act* (Canada) and the regulations promulgated thereunder (the "Tax Act") to a holder who acquires, as beneficial owner, our Common Shares, and who, for purposes of the Tax Act and at all relevant times: (i) holds the Common Shares as capital property; (ii) deals at arm's length with, and is not affiliated with, us; (iii) is not, and is not deemed to be resident in Canada; and (iv) does not use or hold and will not be deemed to use or hold, our Common Shares in a business carried on in Canada (a "Non-Resident Holder"). Generally, our Common Shares will be considered to be capital property to a Non-Resident Holder provided the Non-Resident Holder does not hold our Common Shares in the course of carrying on a business of trading or dealing in securities and has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade. Special rules, which are not discussed in this summary, may apply to a Non-Resident Holder that is an insurer that carries on an insurance business in Canada and elsewhere or is an authorized foreign bank (as defined in the Tax Act). **Such Non-Resident Holders should seek advice from their own tax advisors.**

This summary is based upon the provisions of the Tax Act in force as of the date hereof, all specific proposals, or the Proposed Amendments, to amend the Tax Act that have been publicly and officially announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof and management's understanding of the current administrative policies and practices of the Canada Revenue Agency (the "CRA") published in writing by it prior to the date hereof. This summary assumes the Proposed Amendments will be enacted in the form proposed. However, no assurance can be given that the Proposed Amendments will be enacted in their current form, or at all. This summary is not exhaustive of all possible Canadian federal income tax considerations and, except for the Proposed Amendments, does not take into account or anticipate any changes in the law or any changes in the CRA's administrative policies or practices, whether by legislative, governmental, or judicial action or decision, nor does it take into account or anticipate any other federal or any provincial, territorial or foreign tax considerations, which may differ significantly from those discussed herein.

Non-Resident Holders should consult their own tax advisors with respect to an investment in our Common Shares. This summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any prospective purchaser or holder of our Common Shares, and no representations with respect to the income tax consequences to any prospective purchaser or holder are made. Consequently, prospective purchasers or holders of our Common Shares should consult their own tax advisors with respect to their particular circumstances.

Currency Conversion

Generally, for purposes of the Tax Act, all amounts relating to the acquisition, holding, or disposition of our Common Shares must be converted into Canadian dollars based on the exchange rates as determined in accordance with the Tax Act. The amounts subject to withholding tax and any capital gains or capital losses realized by a Non-Resident Holder may be affected by fluctuations in the Canadian-U.S. dollar exchange rate.

Disposition of Common Shares

A Non-Resident Holder will not generally be subject to tax under the Tax Act on a disposition of a common share, unless the common share constitutes "taxable Canadian property" (as defined in the Tax Act) of the Non-Resident Holder at the time of disposition and the Non-Resident Holder is not entitled to relief under an applicable income tax treaty or convention.

Provided the Common Shares are listed on a "designated stock exchange," as defined in the Tax Act (which currently includes the TSX and NYSE American) at the time of disposition, the Common Shares will generally not constitute taxable Canadian property of a Non-Resident Holder at that time, unless at any time during the 60-month period immediately preceding the disposition the following two conditions are satisfied concurrently: (i) (a) the Non-Resident Holder; (b) persons with whom the Non-Resident Holder did not deal at arm's length; (c) partnerships in which the Non-Resident Holder or a person described in (b) holds a membership interest directly or indirectly through one or more partnerships; or (d) any combination of the persons and partnerships described in (a) through (c), owned 25% or more of the issued shares of any class or series of our shares; and (ii) more than 50% of the fair market value of our shares was derived directly or indirectly from one or any combination of: real or immovable property situated in Canada, "Canadian resource properties," "timber resource properties" (each as defined in the Tax Act), and options in respect of, or interests in or for civil law rights in, such properties. Notwithstanding the foregoing, in certain circumstances set out in the Tax Act, the Common Shares could be deemed to be taxable Canadian property. Even if the Common Shares are taxable Canadian property to a Non-Resident Holder, such Non-Resident Holder may be exempt from tax under the Tax Act on the disposition of such Common Shares by virtue of an applicable income tax treaty or convention. **A Non-Resident Holder contemplating a disposition of Common Shares that may constitute taxable Canadian property should consult a tax advisor prior to such disposition.**

Receipt of Dividends

Dividends received or deemed to be received by a Non-Resident Holder on our Common Shares will be subject to Canadian withholding tax under the Tax Act. The general rate of withholding tax is 25%, although such rate may be reduced under the provisions of an applicable income tax convention between Canada and the Non-Resident Holder's country of residence. For example, under the *Canada-United States Income Tax Convention (1980)* as amended, or the Treaty, the rate is generally reduced to 15% where the Non-Resident Holder is a resident of the United States for the purposes of, and is entitled to the benefits of, the Treaty.

ITEM 6. [RESERVED]

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

The following discussion and analysis should be read in conjunction with our financial statements for the three years ended December 31, 2021 and the related notes thereto. The purpose of this Item 7 is: (i) to provide material information relevant to an assessment of the financial condition and results of operations of Energy Fuels Inc., including an evaluation of the amounts and certainty of cash flows from operations and from outside sources; and (ii) to focus specifically on material events and uncertainties known to management that are reasonably likely to cause reported financial information not necessarily indicative of future operating results or of future financial condition. This Discussion and Analysis contains forward-looking statements that involve risks, uncertainties, and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including, but not limited to, those set forth under the section heading "Item 1A. Risk Factors" and elsewhere in this Annual Report. See page 3, "*Cautionary Statement Regarding Forward-Looking Statements*."

Outlook

Overview

The Company continues to believe that uranium supply and demand fundamentals point to higher sustained uranium prices in the future. In addition, Russia's recent invasion of Ukraine and the recent entry into the uranium market by financial entities purchasing uranium on the spot market to hold for the long-term has the potential to result in higher sustained spot and term prices and, perhaps, induce utilities to enter into more long-term contracts with non-Russian producers like Energy Fuels to ensure security of supply and more certain pricing. However, the Company has not yet entered into sufficient long-term supply agreements to justify commencing uranium production at the Company's mines and *in-situ* recovery ("ISR") facilities. As a result, the Company expects to maintain uranium recovery at reduced levels until such time when sustained increased market strength is observed, additional suitable term sales contracts can be procured, or the U.S. government buys uranium from the Company following the establishment of the proposed U.S. uranium reserve (the "**U.S. Uranium Reserve**"). The Company also holds significant uranium inventories and is evaluating selling all or a portion of these inventories on the spot market in response to future upside price volatility or for delivery into contracts.

The Company will also continue to seek new sources of revenue, including through its emerging rare earth elements ("REE") business, as well as new sources of other uranium-bearing materials not derived from conventional material and sourced by third parties ("**Alternate Feed Materials**") and new fee processing opportunities at the White Mesa Mill (the "**White Mesa Mill**" or the "**Mill**") that can be processed under existing market conditions (i.e., without reliance on current uranium sales prices). The Company is also seeking new sources of natural monazite sands for its emerging REE business, is evaluating the potential to recover radioisotopes for use in the development of targeted alpha therapy ("TAT") medical isotopes for the treatment of cancer, and continues its support of U.S. governmental activities to assist the U.S. uranium mining industry, including the proposed establishment of the U.S. Uranium Reserve.

Extraction and Recovery Activities Overview

During the year ended December 31, 2021, the Company did not package any significant quantities of its final uranium product, uranium oxide concentrates ("U₃O₈" or "**uranium concentrates**"), at any of its facilities. At the Mill, the Company focused on ramping up its mixed RE carbonate ("**RE Carbonate**") production and produced approximately 120 tonnes of mixed RE Carbonate during 2021. The Company recovered small quantities of uranium at the Mill during 2021, but such uranium was retained in-circuit and was not packaged in 2021. The Company also continued to maintain its Nichols Ranch and Alta Mesa ISR facilities on standby.

During 2022, the Company plans to recover 100,000 to 120,000 pounds of uranium at the Mill. The Company does not plan to extract and/or recover any amounts of uranium of any significance from its Nichols Ranch Project in 2022, which was placed on standby in the second quarter of 2020 due to the depletion of its seven constructed wellfields. In addition, the Company expects to keep the Alta Mesa Project and its conventional mining properties on standby during 2022.

During 2022, the Company expects to recover approximately 650 to 1,000 tonnes of mixed RE Carbonate containing approximately 300 to 450 tonnes of total rare earth oxide ("**TREO**") at the Mill, subject to the receipt of sufficient quantities of natural monazite ore. No vanadium production is currently planned during 2022, though the Company is currently evaluating potential vanadium production in light of recent market improvements in vanadium pricing.

The Company has strategically begun to pursue uranium sales commitments, with pricing expected to have both fixed and market-related components. The Company believes that recent price increases, volatility, and focus on security of supply have

increased the potential for the Company to make spot sales, and the Company is actively seeking additional term sales contracts with utilities at pricing that sustains production and covers corporate overhead. Therefore, existing inventories may increase to 791,000 to 811,000 pounds of U₃O₈ at year-end 2022 or may increase to a lesser extent or be reduced in the event the Company sells some inventory on the spot market in 2022. All V₂O₅ inventory is expected to be sold on the spot market if prices rise sufficiently above current levels but will otherwise continue to be maintained in inventory. The Company expects to sell all or a portion of its mixed RE Carbonate to Neo or other global separation facilities and/or to stockpile it for future production of separated REE oxides at the Mill or elsewhere.

ISR Activities

The Company expects to produce insignificant quantities of U₃O₈ in the year ending December 31, 2022 from Nichols Ranch. Until such time when market conditions improve sufficiently, suitable term sales contracts can be procured, or the proposed U.S. Uranium Reserve is established, the Company expects to maintain the Nichols Ranch Project on standby and defer development of further wellfields and header houses. The Company currently holds 34 fully permitted, undeveloped wellfields at Nichols Ranch, including four additional wellfields at the Nichols Ranch wellfields, 22 wellfields at the adjacent Jane Dough wellfields, and eight wellfields at the Hank Project, which is fully permitted to be constructed as a satellite facility to the Nichols Ranch Plant. The Company expects to continue to keep the Alta Mesa Project on standby until such time that market conditions improve sufficiently, suitable term sales contracts can be procured, or the proposed U.S. Uranium Reserve is established.

Conventional Activities

Conventional Extraction and Recovery Activities

During the year ended December 31, 2021, the Mill did not package any material quantities of U₃O₈, focusing instead on developing its REE recovery business. During the year ended December 31, 2021, the Mill produced approximately 270 tonnes of RE Carbonate, containing approximately 120 tonnes of TREO. The Mill recovered small quantities of uranium in 2021, which were retained in circuit. During 2022, the Company expects to recover 100,000 to 120,000 pounds of uranium at the Mill. The Company expects to recover approximately 650 to 1,000 tonnes of mixed RE Carbonate containing approximately 300 to 450 tonnes of TREO at the Mill, subject to the receipt of sufficient quantities of natural monazite ore. The Company is in advanced discussions with several sources of natural monazite sands, including the Company's existing supplier, to secure additional supplies of monazite sands, which if successful, would be expected to allow the Company to increase RE Carbonate production. In addition to its 691,000 pounds of finished uranium inventories currently located at a North American conversion facility and at the Mill, the Company has approximately 355,000 pounds of U₃O₈ contained in stockpiled Alternate Feed Materials and ore inventory at the Mill that can be recovered relatively quickly in the future, as general market conditions may warrant (totaling about 1,046,000 pounds of U₃O₈ of total uranium inventory).

In addition, there remains an estimated 1.0 to 3 million pounds of solubilized recoverable V₂O₅ inventory remaining in tailings solutions awaiting future recovery, as market conditions may warrant.

The Company currently expects that planned uranium production from Alternate Feed Materials, processing natural monazite sands for the recovery of uranium and REEs, and the receipt of uranium-bearing materials from mine cleanup activities will keep the Mill in operation through and beyond 2022. The Company is also actively pursuing opportunities to process additional sources of natural monazite sands, new and additional Alternate Feed Material sources, and new and additional low-grade mineralized materials from third parties in connection with various uranium clean-up requirements. Successful results from these activities would allow the Mill to extend operations well into and beyond 2023. If, at any time, the Company is unable to justify full operation of the Mill, the Company would place uranium, REE and/or vanadium recovery activities at the Mill on standby. While on standby, the Mill would continue to dry and package material from the Nichols Ranch Plant, if operating, and continue to receive and stockpile Alternate Feed Materials for future milling campaigns. Each future milling campaign would be subject to receipt of sufficient mill feed and resulting cash flow that would allow the Company to operate the Mill on a profitable basis or to recover all or a portion of the Mill's standby costs.

Conventional Standby, Permitting and Evaluation Activities

During the year ended December 31, 2021, standby and environmental compliance activities continued at the fully permitted and substantially developed Pinyon Plain Project. The Company plans to continue carrying out engineering, metallurgical testing, procurement and construction management activities at its Pinyon Plain Project. The timing of the Company's plans to extract and process mineralized materials from this Project will be based on the results of the additional evaluation work and

available financing, along with improvements in general market conditions, procurement of suitable sales contracts and/or the establishment of the proposed U.S. Uranium Reserve.

The Company is selectively advancing certain permits at its other major conventional uranium projects, such as the Roca Honda Project, which is a large, high-grade conventional project in New Mexico. The Company is also continuing to maintain required permits at its conventional projects, including the Sheep Mountain Project, La Sal Complex and Whirlwind Project. In addition, the Company will continue to evaluate the Bullfrog Project. Expenditures for certain of these projects have been adjusted to coincide with expected dates of price recoveries based on the Company's forecasts. All of these projects serve as important pipeline assets for the Company's future conventional production capabilities, as market conditions may warrant.

As more generally referenced above, the Company completed the sale of the Tony M, Daneros, Rim and certain other non-core conventional uranium assets to Consolidated Uranium Inc. ("CUR", f/k/a International Consolidated Uranium, Inc., TSX-V:CUR) on October 27, 2021. See Part I, Item 1. *Business Overview: Development of the Business – Major Transactions over the Past Five Years.*

Uranium Sales

During the year ended December 31, 2021, the Company completed no sales of uranium, at its election, but is now actively engaged in pursuing selective long-term uranium sales contracts.

Vanadium Sales

As a result of strengthening Vanadium markets, the Company sold 5,000 pounds of FeV in 2021 at a weighted average price of \$14.74 per pound. The Company expects to sell its remaining finished vanadium product when justified into the metallurgical industry, as well as other markets that demand a higher purity product, including the aerospace, chemical, and potentially the vanadium battery industries. The Company expects to sell to a diverse group of customers in order to maximize revenues and profits. The vanadium produced in the recent pond return campaign was a high-purity vanadium product of 99.6%-99.7% V₂O₅. The Company believes there may be opportunities to sell certain quantities of this high-purity material at a premium to reported spot prices. The Company may also retain vanadium product in inventory for future sale, depending on vanadium spot prices and general market conditions.

Rare Earth Sales

The Company commenced its ramp-up to commercial production of a mixed RE Carbonate in March 2021 and has shipped all of its RE Carbonate produced to-date to Silmet, where it is currently being fed into their separation process. All RE Carbonate produced at the Mill in 2022 is expected to be sold to Neo for separation at Silmet. Until such time as the Company expects to permit and construct its own separation circuits at the Mill, production in future years is expected to be sold to Neo for separation at Silmet and, potentially, to other REE separation facilities outside of the U.S. To the extent not sold, the Company expects to stockpile mixed RE Carbonate at the Mill for future separation and other downstream REE processing at the Mill or elsewhere.

As the Company continues to ramp up its mixed RE Carbonate production and additional funds are spent on process enhancements, improving recoveries, product quality and other optimization, profits from this initiative are expected to be minimal until such time when monazite throughput rates are increased and optimized. However, even at the current throughput rates, the Company is recovering most of its direct costs of this growing initiative, with the other costs associated with ramping up production, process enhancements and evaluating future separation capabilities at the Mill being expensed as development expenditures. Throughout this process, the Company is gaining important knowledge, experience and technical information, all of which will be valuable for current and future mixed RE Carbonate production and expected future production of separated REE oxides and other advanced REE materials at the Mill. As discussed above (see Part I, Item 1. *Business Overview: The Company's Rare Earth Elements Business*), the Company is evaluating installing a full separation circuit at the Mill to produce both "light" and "heavy" separated REE oxides in the coming years, subject to successful licensing, financing, and commissioning and continued strong market conditions, and has hired Carester to support these REE separation initiatives.

The Company also continues to pursue new sources of revenue, including additional Alternate Feed Materials and other sources of feed for the Mill.

COVID-19

The Company continues to respond to the effects of the global COVID-19 pandemic on the Company's business objectives, projections and workforce. To date, although the Company has made operational adjustments since the onset of the pandemic to



ensure its workforce remains protected, the Company has not been required to shut down any operations as a result of COVID-19. None of these operational adjustments have been material to the Company. The Company has evaluated any potential future shutdown of Company production facilities as a result of COVID-19, and has determined that any such shutdown could be accommodated by the Company in a manner consistent with a typical shutdown of Company production facilities as a result of depressed commodity prices. Management believes the Company is well-capitalized and will be able to withstand facility shutdowns or depressed share prices as a result of COVID-19 for at least the next twelve months.

Expiry of All Outstanding Warrants

The Company's warrants issued on September 20, 2016 to acquire Common Shares of the Company at the price of \$2.45 per share, listed on the NYSE American (UUUU-WT), expired on Monday, September 20, 2021. Cash received from the exercise of warrants in 2021 totaled \$9.84 million.

Update on Rare Earth Element Initiative

On March 1, 2021, the Company and Neo Performance Materials Limited (“**Neo**”) announced a new REE production initiative spanning European and North American critical material supply chains. Under an agreement in principle signed on March 1, 2021 and finalized into a definitive agreement in July 2021, Energy Fuels will process natural monazite sands, currently being mined in the state of Georgia by The Chemours Company, into an RE Carbonate at the Mill and ship a portion of the produced RE Carbonate to Neo's rare earth separations facility in Sillamäe, Estonia (“**Silmet**”). Silmet will then process the RE Carbonate into separated REE materials for use in REE permanent magnets and other REE-based advanced materials. On July 7, 2021, the Company announced that the first container (approximately 20 tonnes of product) of an expected 15 containers of mixed RE Carbonate had been successfully produced by Energy Fuels at the Mill and was *en route* to Silmet. This commercial-scale production of RE Carbonate by Energy Fuels from a U.S. mined REE resource positions Energy Fuels as the only company in North America that currently produces a monazite-derived, enhanced REE material. The physical delivery of this product also represents the launch of a new, environmentally responsible REE supply chain that allows for source validation and tracking from mining through to final end-use applications for manufacturers in North America, Europe, Japan, and other nations.

The Company also announced on March 1, 2021 that, in addition to supplying RE Carbonate to Neo, Energy Fuels is evaluating the potential to develop U.S. separation capabilities at the Mill, or nearby, as it works to increase its monazite sand supplies, thereby fully integrating a U.S. rare earth supply chain in the coming years, in addition to supplying RE Carbonate to European markets. On April 27, 2021, the Company announced it had engaged Carester to prepare a scoping study for the development of a solvent extraction REE separation circuit at the Mill utilizing the Mill's existing equipment and infrastructure to the extent applicable, to create a continuous, integrated and optimized REE production sequence. Based in Lyon, France, Carester is a leading global consultant in the production of separated REE products, with expertise in designing, constructing, operating and optimizing REE production facilities globally. Carester's scoping work included an evaluation of the Mill's current monazite leaching process, preparation of an REE separation flow sheet, capital and operating expense estimates, incorporation of new technologies where applicable, and recommendations on equipment vendors. Based on the results of this scoping work, the Company is evaluating installing a full separation circuit at the Mill to produce both “light” and “heavy” separated REE oxides in the coming years, subject to successful licensing, financing, and commissioning and continued strong market conditions, and has hired Carester to support these REE separation initiatives.

During Q1-2022, the Company began commercially separating Lanthanum (La) and Cerium (Ce) on a small scale from its RE Carbonate, using an existing solvent extraction circuit at the Mill. This represents the first commercial level REE separation to occur in the U.S. in many years.

On December 15, 2021, the Company announced the execution of a memorandum of understanding (“**MOU**”) with Nanoscale Powders LLC (“**NSP**”) for the development of a novel technology for the potential production of REE metals, subject to the finalization of definitive agreements. We believe this technology, which was initially developed by NSP, and will be advanced by the Company and NSP working together, has the potential to revolutionize the REE metal making industry by reducing costs of production, reducing energy consumption, and significantly reducing greenhouse gas emissions. Producing REE metals and alloys is a key step in a fully integrated REE supply chain, after commercial production of separated REE oxides and before the manufacture of neodymium iron boron (“**NdFeB**”) magnets used in electric vehicles, wind generation and other clean energy and advanced technologies.

In addition, during 2022, the Company announced the execution of a non-binding MOU for the supply of natural monazite sands from IperionX Limited's (“**IperionX's**”) Titan Project in Tennessee, if and when the project is developed and mined. IperionX's Titan Project covers a large area of heavy mineral sands properties in Tennessee prospective for titanium, zircon, monazite and other valuable minerals such as high-grade silica sand and other refractory minerals. In 2022, the Company also

announced that the U.S. Department of Energy (“DOE”) Office of Fossil Energy and National Energy Technology Laboratory had exercised its option to award Energy Fuels, working with a team from Penn State University, an additional \$1.75 million to complete a feasibility study on the production of REE products from natural coal-based resources, as well as from other materials such as REE-containing ores like the natural monazite sands the Company is currently processing at the Mill. This award follows the DOE providing Energy Fuels a \$150,000 contract in 2020 for the successful completion of a conceptual design for the same initiative, resulting in a total award to Energy Fuels of \$1.9 million.

See “See Part I, Item 1. *Business Overview: The Company’s Rare Earth Elements Business*” for a more detailed discussion of the Company’s REE initiative.

Collaboration with RadTran, LLC on Recovering Medical Isotopes for Advanced Cancer Therapies

On July 28, 2021, the Company announced the execution of a Strategic Alliance Agreement with RadTran, LLC, a technology development company focused on closing critical gaps in the procurement of medical isotopes for emerging TAT cancer therapeutics and other applications. Under this strategic alliance, the Company is evaluating the feasibility of recovering Th-232, and Ra-226 from its existing RE Carbonate and uranium process streams at the Mill and, together with RadTran, is evaluating the feasibility of recovering Ra-228 from the Th-232, Th-228 from the Ra-228 and concentrating Ra-226 at the Mill using RadTran technologies. Recovered Ra-228, Th-228 and Ra-226 would then be sold to pharmaceutical companies and others to produce Pb-212, Ac-225, Bi-213, Ra-224 and Ra-223, which are the leading medically attractive TAT isotopes for the treatment of cancer. Existing supplies of these isotopes for TAT applications are in short supply, and methods of production are costly and currently cannot be scaled to meet the demand created as new drugs are developed and approved. This is a major roadblock in the research and development of new TAT drugs as pharmaceutical companies wait for scalable and affordable production technologies to become available. Under this initiative, the Company has the potential to recover valuable isotopes from its existing process streams, therefore recycling back into the market material that would otherwise be lost to disposal for use in treating cancer. See “Part I, Item 1. *Business Overview: The Company’s Strategic Alliance for the Development of Radioisotopes for Medical Therapeutics*” for a more detailed discussion of this initiative.

Establishment of the San Juan County Clean Energy Foundation

On September 16, 2021, the Company announced its establishment of the San Juan County Clean Energy Foundation, a fund specifically designed to contribute to the communities surrounding the Mill in southeastern Utah. The Company made an initial deposit of \$1 million into the Foundation and anticipates providing ongoing annual funding equal to 1% of the Mill’s future revenues, providing funding to local priorities. The Foundation will focus on supporting education, the environment, health/wellness, and local economic development in the City of Blanding, San Juan County, the White Mesa Ute Community, the Navajo Nation and other area communities.

Sale of Non-Core Assets to Consolidated Uranium Inc.

On October 27, 2021, CUR and the Company jointly announced the closing of a transaction whereby CUR acquired a portfolio of Energy Fuels’ non-core conventional uranium projects located in Utah and Colorado, including the Daneros mine, the Tony M mine (formerly a part of the Bullfrog Project), the Rim mine, the Sage Plain project, and several DOE leases located in Colorado, in consideration for a 19.9% share ownership interest in CUR and other consideration. See “Part I, Item 1. *Business Overview: Development of the Business: Major Transactions over the Past Five Years*” for a more detailed discussion of this transaction.

Filing of Base Shelf Registration Statement and Prospectus Supplements

Effective March 18, 2021, the Company filed a new base shelf registration statement on Form S-3 with the SEC allowing the Company to issue Common Shares, warrants, subscription receipts, preferred shares, debt securities, or any combination of such securities as units, in amounts, and at prices, and on terms to be determined based on market conditions at the time of sale, and as set forth in an accompanying prospectus supplement, for an aggregate offering amount of up to \$300 million during the 36-month period that the statement remains effective. On March 16, 2021, the Company received a receipt for a corresponding base shelf prospectus in Canada for an aggregate offering amount in Canada of up to \$300 million. On April 9, 2021, June 7, 2021, and January 3, 2022 the Company filed prospectus supplements to its effective U.S. registration statement on Form S-3 to sell up to an additional \$33.5 million, \$50 million, and \$50 million respectively, of Common Shares under its ATM program, with sales only being made on the NYSE American at then-prevailing market prices, or any other existing trading market of the common shares in the United States.

Known Trends or Uncertainties

The Company has faced depressed uranium and vanadium prices in previous years which have resulted in the Company having negative cash flows and net losses in previous years. We are not aware at this time of any trends or uncertainties that have had or are reasonably likely to have a material impact on revenues or income of the Company other than (i) continued strengthening of uranium and vanadium prices which could result in the Company selling inventories at increased prices; (ii) the proposed U.S. Uranium Reserve, which if implemented could result in improved uranium sales prices; and (iii) the Company's REE and TAT radioisotope initiatives, which if successful could result in improved results from operations in future years. We are not aware at this time of any events that are reasonably likely to cause a material change in the relationship between costs and revenue of the Company.

Continued Efforts to Minimize Costs

Although the Company is pursuing two exciting new initiatives — its REE and TAT radioisotope initiatives — in addition to its existing uranium and vanadium lines of business, which will likely require the Company to grow certain of its operations, the Company will continue to seek ways to minimize the costs of all of its operations where feasible, while maintaining its critical properties in a state of readiness for potential improvements in market conditions.

Results of Operations

The following table summarizes the results of operations for the years ended December 31, 2021, 2020 and 2019 (in thousands of dollars):

	Years ended December 31,		
	2021	2020	2019
Revenues			
Rare Earth concentrates	\$ 1,385	\$ —	\$ —
Vanadium concentrates	74	—	2,237
Uranium concentrates	—	—	66
Alternate Feed Materials processing and other	1,725	1,658	3,562
Total revenues	3,184	1,658	5,865
Costs and expenses applicable to revenues			
Costs and expenses applicable to Rare Earth concentrates	1,235	—	—
Costs and expenses applicable to Vanadium concentrates	48	—	1,805
Costs and expenses applicable to Uranium concentrates	—	—	63
Costs and expenses applicable to Alternate Feed Materials and other	—	—	2,079
Underutilized capacity production costs applicable to Rare Earth concentrates	531	—	—
Total costs and expenses applicable to revenues	1,814	—	3,947
Impairment of inventories	—	1,644	14,351
Gross profit (loss)	1,370	14	(12,433)
Other operating costs			
Development, permitting and land holding	10,750	4,333	9,180
Standby costs	9,462	4,015	2,584
Accretion of asset retirement obligation	1,284	1,911	1,931
Total other operating costs	21,496	10,259	13,695
Selling, general and administration			
Selling costs	44	38	190
General and administration	15,255	14,344	14,263
Total selling, general and administration	15,299	14,382	14,453
Total operating loss	(35,425)	(24,627)	(40,581)
Gain on disposal of non-core assets (Note 8)	35,733	—	—
Interest expense	(54)	(952)	(1,491)
Other income (loss)	1,194	(2,293)	3,978
Net income (loss)	\$ 1,448	\$ (27,872)	\$ (38,094)
Basic net income (loss) per common share	\$ 0.01	\$ (0.23)	\$ (0.40)
Diluted net income (loss) per common share	\$ 0.01	\$ (0.23)	\$ (0.40)

Results of Operations

Year ended December 31, 2021 compared to year ended December 31, 2020

For the year ended December 31, 2021 the Company recorded net income of \$1.45 million or \$0.01 per share compared with a net loss of \$27.87 million or \$0.23 per share for the year ended December 31, 2020.

For the year ended December 31, 2021, the Company recorded an operating loss of \$35.43 million compared with an operating loss of \$24.63 million for the year ended December 31, 2020.

Revenues

Previously, the Company's revenues from uranium were based on delivery schedules under long-term contracts, which could vary from quarter to quarter. As of December 31, 2018, the Company no longer had any uranium sales contacts. Any future sales of uranium will be subject to sale in the spot market until a time when the Company can agree to terms for long-term sales contracts or potentially pursuant to direct government purchases under the proposed U.S. Uranium Reserve. In the year ended December 31, 2019, the Company initiated the selling of vanadium recovered from Pond Return at the Mill under a Sales and Agency Agreement appointing an exclusive sales and marketing agent for all vanadium pentoxide produced by the Company.

Revenues for the year ended December 31, 2021 totaled \$3.18 million, which were primarily related to fees for mineralized material received from clean-up of a third-party uranium mine and RE Carbonate sales.

Revenues for the year ended December 31, 2020 totaled \$1.66 million, all of which were related to fees for mineralized materials received from clean-up of a third-party uranium mine.

Operating Expenses

Uranium and Vanadium recovered and costs and expenses applicable to revenue

In the year ended December 31, 2021, the Company did not recover any material amount of U_3O_8 from ISR recovery activities or from Alternate Feed Materials at the Mill. In the year ended December 31, 2020, the Company recovered approximately 6,000 pounds of U_3O_8 from ISR recovery activities for the Company's own account and approximately 67,000 pounds of V_2O_5 from Pond Return. The Company recovered approximately 190,500 pounds of U_3O_8 in the year ended December 31, 2020 from the tailings pond solutions and Alternate Feed Materials at the Mill.

Costs and expenses applicable to RE Carbonate revenue for the twelve months ended December 31, 2021 were \$1.24 million, compared with nil for the year ended December 31, 2020. Cost and expenses applicable to V_2O_5 concentrate for the twelve months ended December 31, 2021 were \$0.05 million. The Company did not make any concentrate sales of U_3O_8 and only collected a fee to receive mineralized material from clean-up of a third-party uranium mine for which the Company incurred *de minimis* costs.

In the year ended December 31, 2021, the Company incurred underutilized capacity production costs of \$0.53 million, compared with nil for the year ended December 31, 2020. The underutilized capacity production costs are due to low throughput rates as the Mill ramps-up to commercial-scale production of RE Carbonate. To date, the Mill has focused on producing commercially salable RE Carbonate at low throughput rates and has been very pleased with the resulting product it is shipping to Silmet. The Mill expects to increase its throughput rates as its supplies of monazite sands increase. The Company is in advanced discussions with several sources of natural monazite sands, and once secured, we expect these additional supplies will result in sufficient throughput to reduce underutilized capacity production costs and allow the Company to realize its expected margins on a continuous basis.

Other Operating Costs and Expenses

Development, permitting and land holding

For the year ended December 31, 2021, the Company spent \$10.75 million for development of the Company's properties, primarily due to the development and ramping up of the expected RE Carbonate production program at the Mill, compared to \$4.33 million for the year ended December 31, 2020 for the development of the Company's properties.

While we expect the amounts relative to the items listed above have added future value to the Company, the Company expenses these amounts, in part due to the fact that the Company does not have Proven Mineral Reserves or Probable Mineral Reserves at any of the Company's projects under S-K 1300 or NI 43-101, other than at the Sheep Mountain Project.

Standby costs

The Company's La Sal Project was placed on standby in 2012 as a result of market conditions. In February 2014, the Company placed its Arizona 1 Project on standby. In the beginning of 2018, as well as the beginning of 2020, the Mill operated at lower levels of uranium recovery, including prolonged periods of standby. The Nichols Ranch Project was also placed on standby in early 2020. Costs related to the care and maintenance of the standby mines, along with standby costs incurred while the Mill was operating at low levels of uranium recovery or on standby, are expensed.

For the year ended December 31, 2021, standby costs totaled \$9.46 million compared with \$4.02 million in the prior year. The increase is primarily related to a reduction in recovery activities at the Nichols Ranch Project in conjunction with expenses incurred while the Mill was operating at low levels of uranium recovery.

Accretion

Accretion related to the asset retirement obligation for the Company's properties decreased for the year ended December 31, 2021 to \$1.28 million compared with the prior year of \$1.91 million, primarily due to the Company delaying the timing of estimated reclamation activities at some of its projects.

Selling, General, and Administrative

Selling, general and administrative expenses include costs associated with marketing uranium, corporate, general and administrative costs. Selling, general and administrative expenses consist primarily of payroll and related expenses for personnel, contract and professional services, share-based compensation expense and other overhead expenditures. Selling, general and administrative expenses totaled \$15.30 million for the year ended December 31, 2021 compared to \$14.38 million for the year ended December 31, 2020. For the year ended December 31, 2020, the Company incurred approximately \$1.04 million in one-time management streamlining restructuring expenses.

Impairment of Inventories

For the years ended December 31, 2021 and 2020, the Company recognized nil and \$1.64 million, respectively, in impairment charges related to inventory in order to value such inventory at the lower of cost and net realizable value. The impairment of inventories in 2020 was due to continued lower uranium prices versus our cost to produce at the Nichols Ranch Project.

Interest Expense and Other Income and Expenses

Gain on disposal of non-core assets

For the year ended December 31, 2021, gain on disposal of non-core assets totaled \$35.73 million. On October 27, 2021, the Company and CUR jointly announced that the parties had closed on the sale of certain of Energy Fuels' non-core conventional uranium projects located in Utah and Colorado, including the Daneros Mine, the Tony M Mine, the Rim Mine, the Calliham (Sage Plain) Project and seven DOE lease tracts. As further described in Note 8, the gain of \$35.73 million was recognized as these non-core conventional uranium project assets had no carrying value at the Closing Date.

Interest Expense

Interest expense for the year ended December 31, 2021 was \$0.05 million compared with \$0.95 million in the prior year. The decrease is primarily related to the full redemption of the Convertible Debentures in 2020.

Other income and expense

For the year ended December 31, 2021, other income net of other expenses totaled \$1.19 million. These amounts primarily consist of a \$7.11 million mark-to-market gain on investments accounted for at fair value, DOE award of \$1.90 million, other of \$0.35 million, and interest income of \$0.04 million, offset by a mark-to-market loss on the increase in fair value of warrant liabilities of \$8.08 million and a loss on foreign exchange of \$0.13 million.

For the year ended December 31, 2020, other expenses net of other income totaled \$2.29 million. These amounts primarily consist of a mark-to-market loss on the increase in fair value of warrant liabilities of \$5.44 million, offset by a \$1.84 million mark-to-market gain on investments accounted for at fair value, a gain on foreign exchange of \$0.77 million, a mark-to-market gain on the change in the fair value of the Convertible Debentures of \$0.16 million, interest income of \$0.15 million, and other of \$0.23 million.

RESULTS OF OPERATIONS

Year ended December 31, 2020 compared to year ended December 31, 2019

A comparison of our financial results for the year ended December 31, 2020 and for the year ended December 31, 2019 can be found in the "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Results of Operations" section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed on March 22, 2021.

LIQUIDITY AND CAPITAL RESOURCES

Funding of major cash requirements

The Company's primary short-term and long-term cash requirements are to fund working capital needs and operating expenses (including the Company's contractual lease, decommissioning, and other obligations as described in "Contractual Obligations" below), fund capital expenditures, and fund potential future growth opportunities through ongoing initiatives such as the Company's REE program and TAT radioisotope initiative and through major business and property acquisitions.

The Company expects to be able to fund its working capital and operating expenses, capital expenditures, and currently planned growth initiatives over the next 12 months through available cash balances and product inventory sales, if needed. However, the Company may continue to increase its working capital position in the short-term through issuances of Common Shares in appropriate circumstances. Over the past nine years, the Company has funded major business and property acquisitions with capital provided by issuances of its Common Shares. In 2012, the Company acquired Titan Uranium Inc. and the U.S. Mining Division of Denison Mines Corp., in 2013 acquired Strathmore Minerals Corp., in 2015 acquired Uranerz, and in 2016 acquired Mesteña, each in exchange for newly issued Common Shares.

The Company intends to continue to acquire assets utilizing Common Shares when possible under attractive terms.

The Company is actively focused on its forward-looking liquidity needs, especially in light of the current depressed uranium markets, though recent market trends are promising. If current uranium prices persist for any extended period of time, or the Company's REE and TAT radioisotope initiatives are not successful, the Company will likely be required to raise capital or take other measures to fund its long-term ongoing operations. Significant development activities, such as the development of an REE separation facility at the Mill, would require significant capital expenditures in future years that would require the Company to arrange for financing in advance of planned expenditures. We expect to continue to augment our current financial resources with external financing as our long-term business needs require. We cannot provide any assurance that we will pursue any of these transactions or that we will be successful in completing them on acceptable terms or at all.

Shares issued for cash

On November 5, 2018, the Company filed a prospectus supplement to its then-in-place U.S. shelf registration statement on Form S-3, qualifying for distribution up to \$24.50 million in aggregate Common Shares by way of an "at-the-market" offering (the "ATM"). Then, on the same date, the Company filed a new U.S. shelf registration statement on Form S-3, which thereafter became effective on December 26, 2018, whereby the Company could sell any combination of the "Securities" as defined thereunder in one or more offerings up to an initial aggregate offering amount of \$150.00 million, to take over when the existing Form S-3 was depleted or expired. On May 5, 2019, the existing prospectus supplement expired and was replaced on May 7, 2019 by a new prospectus supplement, qualifying for distribution up to \$24.50 million in aggregate Common Shares under the ATM, pursuant to the new U.S. shelf registration statement. On each of December 31, 2019 and December 31, 2020, the Company filed prospectus supplements to its U.S. shelf registration statement, qualifying for distribution up to \$30.00 million and \$35.00 million, respectively, in additional Common Shares under the ATM. On April 9, 2021, the Company filed a prospectus supplement to its U.S. shelf registration statement, qualifying for distribution up to \$33.50 million in additional Common Shares under the ATM. The Company then filed a U.S. shelf registration statement that went effective on March 18, 2021, whereby the Company may sell any combination of the "Securities" as defined thereunder in one or more offerings having an aggregate offering price of up to \$300.00 million. On June 7, 2021, the Company filed a prospectus supplement to its U.S. shelf registration statement, qualifying for distribution up to \$50.00 million in additional Common Shares under the ATM. Most recently, on January 3, 2022, the Company filed with the SEC a prospectus supplement to its U.S. shelf registration statement, qualifying for distribution up to \$50.00 million in additional Common Shares under the ATM. Sales made pursuant to the above summarized U.S. shelf registration statements and prospectus supplements are made on the NYSE American at then-prevailing market prices, or any other existing trading market of the Common Shares in the United States.

On February 20, 2020, the Company closed a bought deal public offering of Common Shares made pursuant to an underwriting agreement dated February 13, 2020 between the Company and a syndicate of underwriters led by Cantor Fitzgerald & Co. as lead underwriter and sole book-runner, and H.C. Wainwright & Co., LLC, Eight Capital, Haywood Securities Inc. and Roth Capital Partners, LLC (the "Offering"). Pursuant to the Offering, the Company issued an aggregate of 11,300,000 common shares at a price of \$1.47 per share for gross proceeds of \$16.61 million. The Company received net proceeds, after commissions and fees, of \$15.14 million from the Offering (see "Note 12 to the Financial Statements: Capital Stock").

Working capital at December 31, 2021 and future requirements for funds

At December 31, 2021, the Company had working capital of \$143.19 million, including \$112.52 million in cash, \$0.49 million of marketable securities, approximately 691,000 pounds of uranium finished goods inventory and approximately 1,650,000



pounds of vanadium finished goods inventory. The Company believes it has sufficient cash and resources to carry out its business plan for at least the next twelve months.

The Company manages liquidity risk through the management of its working capital and its capital structure.

Cash and cash flows

Year ended December 31, 2021

Cash, cash equivalents and restricted cash were \$132.82 million at December 31, 2021, compared to \$40.99 million at December 31, 2020. The increase of \$91.84 million was due primarily to cash provided by financing activities of \$117.94 million, cash provided by investing activities of \$3.19 million, and the impact of foreign exchange rate fluctuations on cash held in foreign currencies of \$0.01 million, partially offset by cash used in operating activities of \$29.29 million.

Net cash used in operating activities of \$29.29 million is comprised of the net income of \$1.45 million for the period adjusted for non-cash items and for changes in working capital items. Significant items not involving cash were \$3.19 million of depreciation and amortization of property, plant and equipment, share-based compensation expense of \$2.16 million, a \$8.08 million change in warrant liabilities, accretion of ARO of \$1.28 million and unrealized foreign exchange loss of \$0.13 million, offset by gain on disposal of non-core assets of \$35.73 million, other non-cash expenses of \$6.89 million and a revision of asset retirement obligations of \$0.37 million. Other items include an increase in inventories of \$3.22 million, an increase in trade and other receivables of \$1.25 million, and an increase in prepaid expenses and other assets of \$0.26 million, partially offset by an increase in accounts payable and accrued liabilities of \$2.14 million.

Net cash provided by investing activities was \$3.19 million comprised of \$2.55 million cash received from maturities of marketable securities and \$2.00 million cash received from disposal of non-core assets, partially offset by \$1.37 million cash used for the purchase of property, plant and equipment.

Net cash provided by financing activities totaled \$117.94 million consisting of \$106.21 million net proceeds from the issuance of shares under the Company's ATM facility, cash received from exercise of warrants of \$9.84 million, cash received from exercise of stock options of \$2.38 million, and \$0.31 million cash received from non-controlling interest, partially offset by \$0.54 million cash paid to fund employee income tax withholding due upon vesting of restricted stock units and \$0.26 million cash paid to settle and fund employee income tax withholding due upon exercise of stock appreciation rights.

Year ended December 31, 2020

Cash, cash equivalents and restricted cash were \$40.99 million at December 31, 2020, compared to \$32.89 million at December 31, 2019. The increase of \$8.09 million was due primarily to cash provided by financing activities of \$36.58 million, cash provided by investing activities of \$3.58 million, offset by cash used in operating activities of \$32.18 million and loss on foreign exchange on cash held in foreign currencies of \$0.11 million.

Net cash used in operating activities of \$32.18 million is comprised of the net loss of \$27.87 million for the period adjusted for non-cash items and for changes in working capital items. Significant items not involving cash were \$2.70 million of depreciation and amortization of property, plant and equipment, \$1.64 million impairment on inventory, share-based compensation expense of \$2.60 million, a \$5.44 million change in warrant liabilities, ARO accretion of \$1.91 million, offset by a revision of ARO of \$7.85 million, unrealized foreign exchange gain of \$1.05 million, other non-cash expenses of \$0.71 million and a \$0.16 million change in value of the Convertible Debentures. Other items include an increase in inventories of \$6.10 million and a decrease in accounts payable and accrued liabilities of \$3.08 million, partially offset by a decrease in trade and other receivables of \$0.19 million and a decrease in prepaid expenses and other assets of \$0.15 million.

Net cash provided by investing activities was \$3.58 million comprised of \$4.21 million cash received from maturities of marketable securities partially offset by \$0.63 million cash used for the purchase of mineral properties and property, plant and equipment.

Net cash provided by financing activities totaled \$36.58 million consisting of \$52.39 million net proceeds from the issuance of Common Shares from a public offering and the issuance of shares under the Company's ATM facility, \$0.49 million cash received from exercise of stock options, and \$0.13 million cash received from non-controlling interest, partially offset by \$16.02 million to repay loans and borrowings and \$0.42 million cash paid to fund employee income tax withholding due upon vesting of restricted stock units.

Year ended December 31, 2019

Cash, cash equivalents and restricted cash were \$32.89 million at December 31, 2019, compared to \$34.29 million at December 31, 2018. The decrease of \$1.40 million was due primarily to cash provided by financing activities of \$20.36 million, cash

provided by investing activities of \$22.58 million, offset by cash used in operating activities of \$44.38 million and loss on foreign exchange on cash held in foreign currencies of \$0.04 million.

Net cash used in operating activities of \$44.38 million is comprised of the net loss of \$38.09 million for the period adjusted for non-cash items and for changes in working capital items. Significant items not involving cash were \$1.21 million of depreciation and amortization of property, plant and equipment, \$14.35 million impairment on inventory, share-based compensation expense of \$3.77 million, accretion of ARO of \$1.93 million, other non-cash expenses of \$2.31 million, unrealized foreign exchange loss of \$0.08 million, a decrease in prepaid expenses and other assets of \$0.01 million, offset by an increase in inventories of \$18.53 million, an increase in trade and other receivables of \$0.06 million, a decrease in accounts payable and accrued liabilities of \$3.20 million, \$3.73 million change in warrant liabilities, \$0.29 million change in value of the Convertible Debentures, non-cash standby costs of \$1.42 million and changes in deferred revenue of \$2.72 million.

Net cash provided by investing activities was \$22.58 million related to cash received from the sale and maturities of marketable securities.

Net cash provided by financing activities totaled \$20.36 million consisting of \$19.68 million proceeds from the issuance of stock using the Company's ATM offering, \$0.80 million in proceeds from notes payable and \$0.15 million cash received from exercise of stock options, partially offset by \$0.32 million to repay loans and borrowings.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2021.

	Payments Due by Period - \$000				
	Less than 1		More than		
	Total	year	1 - 3 years	3 - 5 years	5 years
Operating lease obligations	\$ 497	\$ 350	\$ 147	—	—
Decommissioning liabilities (undiscounted)	41,335	27	2,298	5,282	33,728
Total contractual obligations	\$ 41,832	\$ 377	\$ 2,445	\$ 5,282	\$ 33,728

The Company entered into commitments with federal and state agencies and private individuals to lease surface and mineral rights. These leases are primarily renewable annually and are expected to total \$1.75 million for the year ended December 31, 2022. The Company has entered into a three-year agreement to purchase natural monazite sands from a third party for its REE program. The Company's obligation under that agreement ranges from \$0.5 million to \$1.6 million per year depending on the quantities of monazite delivered by the third-party.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of these consolidated financial statements in accordance with U.S. GAAP requires the use of certain critical accounting estimates and judgments that affect the amounts reported. It also requires management to exercise judgment in applying the Company's accounting policies. These judgments and estimates are based on management's best knowledge of the relevant facts and circumstances taking into account previous experience. Although the Company regularly reviews the estimates and judgments made that affect these financial statements, actual results may be materially different.

Significant estimates made by management include:

a. Development Stage

While the Company has established the existence of multiple Mineral Resources and extracts and processes saleable uranium from these operations, the Company has only established Proven Mineral Reserves or Probable Mineral Reserves, as defined under SEC S-K 1300, at its Sheep Mountain Project. As a result, the Company is a "Development Stage Issuer" as defined by S-K 1300, as it is engaged in the preparation of Mineral Reserves for extraction on at least one material property.

While in the development stage with its material properties having only Mineral Resources, the Company continues to expense most amounts that would normally be capitalized and subsequently depreciated or depleted over the life of Mineral Reserve-based mining operations. Items such as the construction of wellfields and related header houses, additions to recovery facilities and advancement of properties are expensed in the period incurred. As a result, the Company's consolidated financial statements may not be directly comparable to the financial statements of mining companies in the development stage having multiple Mineral Reserves or in the production stage.



b. Resource and reserve estimates utilized

The Company utilizes estimates of its Mineral Resources and Mineral Reserves based on information compiled by appropriately qualified persons. The information relating to the geological data on the size, depth and shape of the deposits requires complex geological judgments to interpret the data. The estimation of future cash flows related to Mineral Resources and Mineral Reserves is based upon factors such as estimates of future uranium prices, future construction and operating costs along with geological assumptions and judgments made in estimating the size and grade of the resource. Changes in the Mineral Resource and Mineral Reserve estimates may impact the carrying value of mining and recovery assets, goodwill, reclamation and remediation obligations and depreciation and impairment. The Company filed joint S-K 1300/NI 43-101 reports for the following properties in March 2022 to replace the previous NI 43-101 reports: Sheep Mountain, Nichols Ranch, Alta Mesa, Pinyon Plain, Roca Honda, Bullfrog and La Sal. This resulted in the following material adjustments to the Mineral Reserve and Mineral Resource estimates compared to the estimates set out in the Company's Form 10-K for the year ended December 31, 2020:

- Nichols Ranch: the Measured Mineral Resources decreased from 784,000 pounds of U₃O₈ to 41,000 pounds of U₃O₈; the Indicated Mineral Resources increased from 5,501,000 pounds of U₃O₈ to 6,142,000 pounds of U₃O₈; the Inferred Mineral Resources remained essentially unchanged; the total Mineral Resources remained essentially unchanged at approximately 7,359,000 pounds of U₃O₈; and the average grade of the Mineral Resources decreased from 0.112% U₃O₈ to 0.105% U₃O₈;
- Roca Honda: the Measured Mineral Resources remained unchanged at 1,984,000 pounds of U₃O₈; the Indicated Mineral Resources increased from 12,580,00 pounds of U₃O₈ to 15,368,000 pounds of U₃O₈; the Inferred Mineral Resources increased from 11,206,000 pounds of U₃O₈ to 13,842,000 pounds of U₃O₈; the total Mineral Resources increased from 25,770,000 pounds of U₃O₈ to 31,464,000 pounds of U₃O₈; and the average grade of the Mineral Resources decreased slightly from 0.476% U₃O₈ to 0.471% U₃O₈;
- Bullfrog: the Measured Mineral Resources remained unchanged at 0.0 pounds of U₃O₈; the Indicated Mineral Resources increased from 4,670,000 pounds of U₃O₈ to 9,100,000 pounds of U₃O₈; the Inferred Mineral Resources decreased from 5,330,000 pounds of U₃O₈ to 2,010,000 pounds of U₃O₈; the total Mineral Resources increased from 10,000,000 pounds of U₃O₈ to 11,110,000 pounds of U₃O₈; and the average grade of the Mineral Resources decreased from 0.34% U₃O₈ to 0.28% U₃O₈;
- La Sal: the Measured Mineral Resources (uranium) decreased from 3,732,000 pounds of U₃O₈ to 0.0 pounds of U₃O₈; the Indicated Mineral Resources (uranium) decreased from 367,000 pounds of U₃O₈ to 0.0 pounds of U₃O₈; the Inferred Mineral Resources (uranium) increased from 362,000 pounds of U₃O₈ to 4,281,000 pounds of U₃O₈; the total uranium Mineral Resources decreased slightly from 4,461,000 pounds of U₃O₈ to 4,281,000 pounds of U₃O₈; and the average grade of the uranium Mineral Resources increased from 0.17% U₃O₈ to 0.26% U₃O₈;
- La Sal: the Measured Mineral Resources (vanadium) decreased from 19,596,000 pounds of V₂O₅ to 0.0 pounds of V₂O₅; the Indicated Mineral Resources (vanadium) decreased from 1,930,000 pounds of V₂O₅ to 0.0 pounds of V₂O₅; the Inferred Mineral Resources (vanadium) increased from 1,902,000 pounds of V₂O₅ to 17,746,000 pounds of V₂O₅; the total vanadium Mineral Resources decreased from 23,428,000 pounds of V₂O₅ to 17,746,000 pounds of V₂O₅; and the average grade of the vanadium Mineral Resources increased from 0.94% V₂O₅ to 1.08% V₂O₅;
- The Mineral Resources attributed to the properties sold to CUR: the Tony M Mine, Daneros Mine and Rim Mine, (see Part I, Item 1, “*Development of the Business: Major Transactions over the Past Five Years*”), were included in the Company’s Mineral Resource estimates for 2020 but are not included in the Company’s Mineral Resource estimates for 2021.

Mineral Resources reported for non-material properties in 2020 were not covered by the joint S-K 1300/NI-43-101 reports and were therefore not reported in 2021.

The 2022 Mineral Resources reported for Nichols Ranch include the Nichols Ranch Property, the Jane Dough Property, the Hank Property and the North Rolling Pin Property. Previous Mineral Resources (2021 and prior) reported for Nichols Ranch did not include the North Rolling Pin property.

There was no material change to the Mineral Resources/Mineral Reserves associated with Sheep Mountain, or to the Mineral Resources at Alta Mesa or Pinyon Plain.

c. Depreciation of mining and recovery assets acquired

For mining and recovery assets actively extracting and recovering uranium we depreciate the acquisition costs of the mining and recovery assets on a straight-line basis over our estimated lives of the mining and recovery assets. The process of estimating the useful life of the mining and recovery assets requires significant judgment in evaluating and assessing available geological, geophysical, engineering and economic data, projected rates of extraction and recovery, estimated commodity price forecasts and the timing of future expenditures, all of which are, by their very nature, subject to interpretation and uncertainty.

Changes in these estimates may materially impact the carrying value of the Company's mining and recovery assets and the recorded amount of depreciation.

d. Impairment testing of mining and recovery assets

The Company undertakes a review of the carrying values of its mining and recovery assets whenever events or changes in circumstances indicate that their carrying values may exceed their estimated net recoverable amounts determined by reference to estimated future operating results and net cash flows. An impairment loss is recognized when the carrying value of a mining or recovery asset is not recoverable based on this analysis. In undertaking this review, the management of the Company is required to make significant estimates of, among other things, future production and sale volumes, forecasted commodity prices, future operating and capital costs and reclamation costs to the end of the mining asset's life. These estimates are subject to various risks and uncertainties, which may ultimately have an impact on the expected recoverability of the carrying values of mining and recovery assets.

e. Asset retirement obligations

Asset retirement obligations are recorded as a liability when an asset that will require reclamation and remediation is initially acquired. For disturbances created on a property owned that will require future reclamation and remediation the Company records asset retirement obligations for such disturbance when occurred. The Company has accrued its best estimate of its share of the cost to decommission its mining and milling properties in accordance with existing laws, contracts and other policies. The estimate of future costs involves a number of estimates relating to timing, type of costs, mine closure plans, and review of potential methods and technical advancements. Furthermore, due to uncertainties concerning environmental remediation, the ultimate cost of the Company's decommissioning liability could differ from amounts provided. The estimate of the Company's obligation is subject to change due to amendments to applicable laws and regulations and as new information concerning the Company's operations becomes available. The Company is not able to determine the impact on its financial position, if any, of environmental laws and regulations that may be enacted in the future. Additionally, the expected cash flows in the future are discounted at the Company's estimated cost of capital based on the periods the Company expects to complete the reclamation and remediation activities. Differences in the expected periods of reclamation or in the discount rates used could have a material difference in the actual settlement of the obligations compared with the amounts provided.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to risks associated with commodity prices, interest rates and credit. Commodity price risk is defined as the potential loss that we may incur as a result of changes in the market value of uranium, vanadium, and REEs. Interest rate risk results from our debt and equity instruments that we issue to provide financing and liquidity for our business. Credit risk arises from the extension of credit throughout all aspects of our business. Industry-wide risks can also affect our general ability to finance exploration, and development of exploitable resources; such effects are not predictable or quantifiable. Market risk is the risk to the Company of adverse financial impact due to change in the fair value or future cash flows of financial instruments as a result of fluctuations in interest rates and foreign currency exchange rates.

Commodity Price Risk

Our profitability is directly related to the market price of uranium, vanadium and REEs recovered. We may, from time to time, undertake commodity and currency hedging programs, with the intention of maintaining adequate cash flows and profitability to contribute to the long-term viability of the business. We anticipate selling forward in the ordinary course of business if, and when, we have sufficient assets and recovery to support forward sale arrangements, and forward sale arrangements are available on suitable terms. There are, however, risks associated with forward sale programs. If we do not have sufficient recovered product to meet our forward sale commitments, we may have to buy or borrow (for later delivery back from recovered product) sufficient product in the spot market to deliver under the forward sales contracts, possibly at higher prices than provided for in the forward sales contracts, or potentially default on such deliveries. In addition, under forward contracts, we may be forced to sell at prices that are lower than the prices that may be available on the spot market when such deliveries are completed. Although we may employ various pricing mechanisms within our sales contracts to manage our exposure to price fluctuations, there can be no assurance that such mechanisms will be successful. There can also be no assurance that we will be able to enter into term contracts for future sales of uranium, vanadium or RE Carbonate at prices or in quantities that would allow us to successfully manage our exposure to price fluctuations.

All the Company's existing long-term contracts expired following the Company's 2018 deliveries, and all uranium sales after 2018 will be required to be made at spot prices until the Company enters into new long-term contracts at satisfactory prices in the future. Future revenue will be affected by both spot and long-term U₃O₈ price fluctuations which are beyond our control, including: the demand for nuclear power; political and economic conditions; governmental legislation in uranium producing

and consuming countries; and production levels and costs of production of other producing companies. The Company continuously monitors the market to determine its level of extraction and recovery of uranium in the future.

Interest Rate Risk

The Company is exposed to interest rate risk on its cash equivalents, deposits, and restricted cash. The Company does not use derivatives to manage interest rate risk. Our interest income is earned in United States dollars and is not subject to currency risk.

Currency Risk

The foreign exchange risk relates to the risk that the value of financial commitments, recognized assets or liabilities will fluctuate due to changes in foreign currency rates. The Company does not use any derivative instruments to reduce its exposure to fluctuations in foreign currency exchange rates. As the U.S. Dollar is the functional currency of our U.S. operations, the currency risk has been reduced. We maintain a nominal balance in Canadian dollars, resulting in a low currency risk relative to our cash balances.

The following table summarizes, in United States dollar equivalents, the Company's major foreign currency (Cdn\$) exposures as of December 31, 2021 (\$000):

Cash and cash equivalents	\$	737
Accounts payable and accrued liabilities		356
Total	\$	1,093

The table below summarizes a sensitivity analysis for significant unsettled currency risk exposure with respect to our financial instruments as of December 31, 2021 with all other variables held constant. It shows how net income would have been affected by changes in the relevant risk variables that were reasonably possible at that date (\$000).

('000s)	Change for Sensitivity Analysis	Increase (Decrease) in Other Comprehensive Income
Strengthening net earnings	+1% change in US dollar / Cdn\$ \$	14
Weakening net earnings	-1% change in US dollar / Cdn\$ \$	(14)

Credit Risk

Credit risk relates to cash and cash equivalents, trade, and other receivables that arise from the possibility that any counterparty to an instrument fails to perform. The Company primarily transacts with highly rated counterparties and a limit on contingent exposure has been established for any counterparty based on that counterparty's credit rating. As of December 31, 2021, the Company's maximum exposure to credit risk was the carrying value of cash and cash equivalents and trade and note receivables.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

ENERGY FUELS INC.
CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2021
Contents

Reports of Independent Registered Public Accounting Firm (KPMG LLC, Denver, CO, Auditor Firm ID: 185)	150
Financial Statements:	
Consolidated Statements of Operations and Comprehensive Income (Loss) for the years ended December 31, 2021, December 31, 2020 and December 31, 2019	153
Consolidated Balance Sheets at December 31, 2021 and December 31, 2020	154
Consolidated Statements of Changes in Equity for the years ended December 31, 2021, December 31, 2020 and December 31, 2019	155
Consolidated Statements of Cash Flows for the years ended December 31, 2021, December 31, 2020 and December 31, 2019	157
Notes to the Consolidated Financial Statements	159

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors

Energy Fuels Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Energy Fuels, Inc. and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 15, 2022 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a 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 accounts or disclosures to which it relates.

Evaluation of credit adjusted risk free interest rate and inflation rate

As discussed in Note 10 to the consolidated financial statements, the Company recorded an asset retirement obligation (ARO) liability of \$13.6 million as of December 31, 2021. The ARO includes estimates of future costs to decommission its mines and mill. The estimate of future costs involves estimates relating to timing, planned decommissioning activities, the credit adjusted risk free interest rate and the inflation rate.

We identified the evaluation of the credit adjusted risk free interest rate and inflation rate as a critical audit matter. Valuation professionals with specialized skills and knowledge were required to evaluate the

Company's determination of the credit adjusted risk free interest rate and inflation rate as the ARO liability was sensitive to minor changes in these assumptions.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's ARO process, including controls over the Company's determination of the credit adjusted risk free interest rate and inflation rate. We tested the determination of the credit adjusted risk free rate and inflation rate used to develop the ARO liability by inquiring of management and reviewing management's source data and documentation to determine the credit adjusted risk free interest rate and inflation rate. We involved valuation professionals with specialized skills and knowledge who assisted in:

- comparing the Company's determination of the credit adjusted risk free interest rate to a range of credit adjusted risk free interest rates independently developed using publicly available market data
- comparing the Company's determination of the inflation rate to published market data on inflation.

/s/ KPMG LLP

We have served as the Company's auditor since 2017.

Denver, Colorado
March 15, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors

Energy Fuels Inc.:

Opinion on Internal Control Over Financial Reporting

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

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements), and our report dated March 15, 2022 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ KPMG LLP

Denver, Colorado
March 15, 2022

ENERGY FUELS INC.
Consolidated Statements of Operations and Comprehensive Income (Loss)
(Expressed in thousands of U.S. dollars, except per share amounts)

	Years ended December 31,		
	2021	2020	2019
Revenues			
Rare Earth concentrates	\$ 1,385	\$ —	\$ —
Vanadium concentrates	74	—	2,237
Uranium concentrates	—	—	66
Alternate Feed Materials processing and other	<u>1,725</u>	<u>1,658</u>	<u>3,562</u>
Total revenues	<u>3,184</u>	<u>1,658</u>	<u>5,865</u>
Costs and expenses applicable to revenues			
Costs and expenses applicable to Rare Earth concentrates	1,235	—	—
Costs and expenses applicable to Vanadium concentrates	48	—	1,805
Costs and expenses applicable to Uranium concentrates	—	—	63
Costs and expenses applicable to Alternate Feed Materials and other	—	—	2,079
Underutilized capacity production costs applicable to Rare Earth concentrates	531	—	—
Total costs and expenses applicable to revenues	<u>1,814</u>	<u>—</u>	<u>3,947</u>
Other operating costs			
Impairment of inventories	—	1,644	14,351
Development, permitting and land holding	10,750	4,333	9,180
Standby costs	9,462	4,015	2,584
Accretion of asset retirement obligation	1,284	1,911	1,931
Selling costs	44	38	190
General and administration	<u>15,255</u>	<u>14,344</u>	<u>14,263</u>
Total operating loss	<u>(35,425)</u>	<u>(24,627)</u>	<u>(40,581)</u>
Gain on disposal of non-core assets (Note 8)	35,733	—	—
Interest expense	(54)	(952)	(1,491)
Other income (loss)	<u>1,194</u>	<u>(2,293)</u>	<u>3,978</u>
Net income (loss)	<u>1,448</u>	<u>(27,872)</u>	<u>(38,094)</u>
Items that may be reclassified in the future to profit and loss			
Foreign currency translation adjustment	<u>(365)</u>	<u>(681)</u>	<u>(854)</u>
Other comprehensive loss	<u>(365)</u>	<u>(681)</u>	<u>(854)</u>
Comprehensive income (loss)	<u>\$ 1,083</u>	<u>\$ (28,553)</u>	<u>\$ (38,948)</u>
Net income (loss) attributable to:			
Owners of the Company	\$ 1,541	\$ (27,776)	\$ (37,978)
Non-controlling interests	(93)	(96)	(116)
	<u>\$ 1,448</u>	<u>\$ (27,872)</u>	<u>\$ (38,094)</u>
Comprehensive income (loss) attributable to:			
Owners of the Company	\$ 1,176	\$ (28,457)	\$ (38,832)
Non-controlling interests	(93)	(96)	(116)
	<u>\$ 1,083</u>	<u>\$ (28,553)</u>	<u>\$ (38,948)</u>
Basic net income (loss) per common share	<u>\$ 0.01</u>	<u>\$ (0.23)</u>	<u>\$ (0.40)</u>
Diluted net income (loss) per common share	<u>\$ 0.01</u>	<u>\$ (0.23)</u>	<u>\$ (0.40)</u>

See accompanying notes to the consolidated financial statements.

ENERGY FUELS INC.
Consolidated Balance Sheets

(Expressed in thousands of U.S. dollars, except share amounts)

	December 31, 2021	December 31, 2020
ASSETS		
Current assets		
Cash and cash equivalents	\$ 112,517	\$ 20,168
Marketable securities	494	2,247
Trade and other receivables, net of allowance for credit losses of \$223 and \$223, respectively	3,954	1,169
Inventories, net	30,772	27,575
Prepaid expenses and other assets	1,568	1,313
Total current assets	149,305	52,472
Inventories, net	1,368	1,346
Operating lease right of use asset	408	662
Investments accounted for at fair value	38,538	779
Property, plant and equipment, net	21,983	23,621
Mineral properties, net	83,539	83,539
Restricted cash	20,305	20,817
Total assets	\$ 315,446	\$ 183,236
LIABILITIES & EQUITY		
Current liabilities		
Accounts payable and accrued liabilities	\$ 5,764	\$ 3,321
Current portion of operating lease liability	324	289
Current portion of warrant liabilities	—	8,573
Current portion of asset retirement obligation	27	131
Total current liabilities	6,115	12,314
Operating lease liability	145	469
Asset retirement obligation	13,660	12,907
Total liabilities	19,920	25,690
Equity		
Share capital		
Common shares, without par value, unlimited shares authorized; shares issued and outstanding 156,262,199 at December 31, 2021 and 134,311,033 at December 31, 2020	685,903	549,317
Accumulated deficit	(396,271)	(397,812)
Accumulated other comprehensive income	1,943	2,308
Total shareholders' equity	291,575	153,813
Non-controlling interests	3,951	3,733
Total equity	295,526	157,546
Total liabilities and equity	\$ 315,446	\$ 183,236
Commitments and contingencies (Note 18)		

See accompanying notes to the consolidated financial statements.

ENERGY FUELS INC.
Consolidated Statements of Changes in Equity
(Expressed in thousands of U.S. dollars, except share amounts)

	Common Stock		Deficit	Accumulated other comprehensive income	Total shareholders' equity	Non-controlling interests	Total equity
	Shares	Amount					
Balance at December 31, 2018	91,445,066	\$ 469,303	\$ (332,058)	\$ 3,843	\$ 141,088	\$ 3,766	\$ 144,854
Net loss	—	—	(37,978)	—	(37,978)	(116)	(38,094)
Other comprehensive loss	—	—	—	(854)	(854)	—	(854)
Shares issued for cash by at-the-market offering	8,043,365	20,141	—	—	20,141	—	20,141
Share issuance cost	—	(463)	—	—	(463)	—	(463)
Share-based compensation	—	3,771	—	—	3,771	—	3,771
Shares issued for the vesting of restricted stock units	850,150	—	—	—	—	—	—
Shares issued for consulting services	74,781	208	—	—	208	—	208
Shares issued for exercise of warrants	1,450	5	—	—	5	—	5
Shares issued for exercise of stock options	54,805	146	—	—	146	—	146
Shares issued to settle liabilities	266,272	847	—	—	847	—	847
Contributions attributable to non-controlling interest	—	—	—	—	—	46	46
Balance at December 31, 2019	100,735,889	\$ 493,958	\$ (370,036)	\$ 2,989	\$ 126,911	\$ 3,696	\$ 130,607
Net loss	—	—	(27,776)	—	(27,776)	(96)	(27,872)
Other comprehensive loss	—	—	—	(681)	(681)	—	(681)
Shares issued for cash by public offering	11,300,000	16,611	—	—	16,611	—	16,611
Shares issued for cash by at-the-market offering	21,361,784	38,109	—	—	38,109	—	38,109
Share issuance cost	—	(2,330)	—	—	(2,330)	—	(2,330)
Share-based compensation	—	2,598	—	—	2,598	—	2,598
Shares issued for the vesting of restricted stock units	490,453	—	—	—	—	—	—
Cash paid to fund employee income tax withholding due upon vesting of restricted stock units	—	(415)	—	—	(415)	—	(415)
Shares issued for consulting services	120,000	188	—	—	188	—	188
Shares issued for exercise of warrants	200	1	—	—	1	—	1
Shares issued for exercise of stock options	302,707	597	—	—	597	—	597
Contributions attributable to non-controlling interest	—	—	—	—	—	133	133
Balance at December 31, 2020	134,311,033	\$ 549,317	\$ (397,812)	\$ 2,308	\$ 153,813	\$ 3,733	\$ 157,546
Net income	—	—	1,541	—	1,541	(93)	1,448
Other comprehensive loss	—	—	—	(365)	(365)	—	(365)
Shares issued for cash by at-the-market offering	16,627,512	108,653	—	—	108,653	—	108,653
Share issuance cost	—	(2,445)	—	—	(2,445)	—	(2,445)
Share-based compensation	—	2,158	—	—	2,158	—	2,158
Shares issued for exercise of stock options	775,814	2,290	—	—	2,290	—	2,290
Shares issued for the vesting of restricted stock units	478,781	—	—	—	—	—	—
Cash paid to fund employee income tax withholding due upon vesting of restricted stock units	—	(659)	—	—	(659)	—	(659)
Shares issued for exercise of warrants	4,016,023	26,603	—	—	26,603	—	26,603

Shares issued for consulting services	47,393	242	—	—	242	—	242
Shares issued for exercise of stock appreciation rights	5,643	—	—	—	—	—	—
Cash paid to settle and fund employee income tax withholding due upon exercise of stock appreciation rights	—	(256)	—	—	(256)	—	(256)
Contributions attributable to non-controlling interest	—	—	—	—	—	311	311
Balance at December 31, 2021	<u>156,262,199</u>	\$ 685,903	\$ (396,271)	\$ 1,943	\$ 291,575	\$ 3,951	\$ 295,526

See accompanying notes to the consolidated financial statements.

ENERGY FUELS INC.
Consolidated Statements of Cash Flows
(Expressed in thousands of U.S. dollars)

	Years ended December 31,		
	2021	2020	2019
OPERATING ACTIVITIES			
Net income (loss) for the period	\$ 1,448	\$ (27,872)	\$ (38,094)
Items not involving cash:			
Depletion, depreciation and amortization	3,189	2,701	1,213
Share-based compensation	2,158	2,598	3,771
Gain on disposal of non-core assets	(35,733)	—	—
Change in value of Convertible Debentures	—	(156)	(291)
Change in value of warrant liabilities	8,078	5,436	(3,726)
Accretion of asset retirement obligation	1,284	1,911	1,931
Unrealized foreign exchange (gain) loss	129	(1,045)	78
Revision and settlement of asset retirement obligation	(369)	(7,845)	(1,421)
Impairment of inventories	—	1,644	14,351
Other non-cash (income) expenses	(6,893)	(707)	2,314
Changes in assets and liabilities			
Increase in inventories	(3,219)	(6,100)	(18,534)
(Acrease) decrease in trade and other receivables	(1,249)	192	(63)
(Acrease) decrease in prepaid expenses and other assets	(257)	149	12
Increase (decrease) in accounts payable and accrued liabilities	2,140	(3,084)	(3,195)
Changes in deferred revenue	—	—	(2,724)
Net cash used in operating activities	<u>(29,294)</u>	<u>(32,178)</u>	<u>(44,378)</u>
INVESTING ACTIVITIES			
Purchase of property, plant and equipment	(1,368)	(627)	—
Maturities and sales of marketable securities	2,554	4,208	22,575
Disposal of non-core assets	<u>2,000</u>	<u>—</u>	<u>—</u>
Net cash provided by investing activities	<u>3,186</u>	<u>3,581</u>	<u>22,575</u>
FINANCING ACTIVITIES			
Issuance of common shares for cash, net of issuance costs	106,208	52,390	19,678
Proceeds from notes payable	—	—	801
Cash paid to fund employee income tax withholding due upon vesting of restricted stock units	(538)	(415)	—
Cash received from exercise of stock options	2,375	491	146
Cash received from exercise of warrants	9,840	—	5
Cash paid to settle and fund employee income tax withholding due upon exercise of stock appreciation rights	(256)	—	—
Repayment of loans and borrowings	—	<u>(16,015)</u>	<u>(317)</u>
Cash received from non-controlling interest	<u>311</u>	<u>133</u>	<u>46</u>
Net cash provided by financing activities	<u>117,940</u>	<u>36,584</u>	<u>20,359</u>
Effect of exchange rate fluctuations on cash held in foreign currencies	<u>5</u>	<u>107</u>	<u>43</u>
Net change in cash, cash equivalents and restricted cash	<u>91,837</u>	<u>8,094</u>	<u>(1,401)</u>
Cash, cash equivalents and restricted cash, beginning of period	<u>40,985</u>	<u>32,891</u>	<u>34,292</u>
CASH, CASH EQUIVALENTS AND RESTRICTED CASH, END OF PERIOD	\$ 132,822	\$ 40,985	\$ 32,891

Non-cash investing and financing transactions:

Accrued purchase of mineral properties and property, plant and equipment	\$ 182	\$ —	\$ —	\$ —
Issuance of common shares to settle liabilities	—	—	—	847
Issuance of common shares for consulting services	242	188	—	208

Supplemental disclosure of cash flow information:

Net cash paid during the period for:

Interest	\$ 54	\$ 952	\$ 1,491
Warrant liability transferred to equity upon exercise	—	—	2

See accompanying notes to the consolidated financial statements.

ENERGY FUELS INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE THREE YEARS ENDED DECEMBER 31, 2021

(Tabular amounts expressed in thousands of U.S. Dollars except share and per share amounts)

1. THE COMPANY AND DESCRIPTION OF BUSINESS

Energy Fuels Inc. was incorporated under the laws of the Province of Alberta and was continued under the Business Corporations Act (Ontario).

The Company is engaged in uranium extraction, recovery and sales of uranium from mineral properties and the recycling of uranium bearing materials generated by third parties. As a part of these activities the Company also acquires, explores, evaluates and, if warranted, permits uranium properties. The Company's final uranium product, U_3O_8 , is sold to customers for further processing into fuel for nuclear reactors. The Company also produces vanadium, along with uranium at its White Mesa Mill, from certain of its Colorado Plateau properties as market conditions warrant and at times from solutions in its Mill tailings impoundment system. The Mill is also currently ramping up to commercial production of RE Carbonate from various uranium- and REE-bearing ores acquired from 3rd parties, and is additionally evaluating the potential to recover radioisotopes from its existing process streams for use in targeted alpha therapeutics to treat cancer.

The Company is a "development stage issuer" as defined by S-K 1300, as it is engaged in the preparation of Mineral Reserves for the extraction on at least one material property.

Energy Fuels is engaged in conventional and ISR uranium extraction and recovery, along with the exploration, permitting and evaluation of uranium properties in the United States.

Mining activities

Mining activities consist of the Mill, conventional mining projects and two ISR mining projects (complete with two ISR recovery facilities on standby and two wellfields). The conventional projects are located at the Colorado Plateau, Bullfrog, Arizona Strip, and Roca Honda Projects, all of which are in the vicinity of the Mill, in addition to the Sheep Mountain Project located in Wyoming. ISR projects include the Nichols Ranch Project (which includes the Jane Dough Property and the Hank Satellite Plant) located in Wyoming and the Alta Mesa ISR Project (the "**Alta Mesa Project**") located in Texas, both of which are on standby.

At December 31, 2021, other than evaluation work and infrastructure improvements and development at the Company's Pinyon Plain Project, the conventional mining projects in the vicinity of the Mill and Sheep Mountain are on standby, and are being evaluated for continued mining activities and/or are in the process of being permitted. The Mill has completed its most recent vanadium campaign, continues to process third-party uranium-bearing mineralized materials from mining and recycling activities, such as the Mill's alternate feed program, and continues to expand its U.S.-based REE initiatives and develop its cancer therapeutics initiatives.

2. BASIS OF PRESENTATION

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and are presented in thousands of U.S. dollars ("USD"), except for share and per share amounts. Certain footnote disclosures, where indicated, have share prices that are presented in Canadian dollars ("Cdn\$").

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of estimates

The Company's consolidated financial statements have been prepared in accordance with U.S. GAAP. The preparation of the Company's consolidated financial statements requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and the related disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. The more significant areas requiring the use of management estimates and assumptions relate to expectations of the future price of uranium and estimates of recoverable mineral resources that are the basis for future cash flow estimates utilized in assessing fair value for business combinations and



impairment calculations; the determination of whether an acquisition represents a business combination or an asset acquisition; the use of management estimates and assumptions related to environmental, reclamation and closure obligations; marketable securities and derivative instruments; and share-based compensation expense. Actual results may differ significantly from these estimates.

Basis of consolidation

These consolidated financial statements include the accounts of the Company together with subsidiaries controlled by the Company. Intercompany transactions, balances and unrealized gains on transactions between the Company and its subsidiaries are eliminated. The functional currency of the Company's operations is the USD.

Extracting and recovery activities while in the development stage

The Company extracts or recovers mineralized uranium from mining activities, mill tailings pond solutions, and Alternate Feed Materials, resulting in saleable uranium concentrates from its Mill and, when operating, its Nichols Ranch and Alta Mesa ISR Projects. While the Company has established the existence of multiple Mineral Resources and extracts and processes saleable uranium from these operations, the Company has only established proven or probable Mineral Reserves, as defined under SEC S-K 1300, at its Sheep Mountain Project.

While now in a development stage, the Company continues to expense most amounts that would normally be capitalized and subsequently depreciated or depleted over the life of Mineral Reserve-based mining operations on its material properties having only Mineral Resources. Items such as the construction of wellfields and related header houses, additions to recovery facilities and advancement of properties are expensed in the period incurred. As a result, the Company's consolidated financial statements may not be directly comparable to the financial statements of mining companies in the development stage having multiple Mineral Reserves or in the production stage.

The Mill, and certain conventional mining projects in the vicinity of the Mill, and the Nichols Ranch Project (collectively the "**Extracting and Recovery Operations**") were acquired in two unrelated business combinations. These Extracting and Recovery Operations were recorded at fair value on the date of the respective acquisition and included estimated values which included valuing these assets utilizing the Company's estimate of future market prices of uranium and expected recoveries of uranium. The values determined included estimated cash flows associated with value beyond proven and probable reserves to develop, extract and recover the estimated saleable uranium concentrates from these operations.

The fair value of the Extracting and Recovery Operations recorded on the acquisition date is depreciated on a straight-line basis over the estimated useful life of the components of the operation since the Extracting and Recovery Operations do not have proven or probable reserves. Accordingly, all expenditures incurred subsequent to the acquisition dates relating to the preparation of properties for mineral extraction, expansion of or additions to the Extracting and Recovery Operations are expensed as incurred. This includes expenditures relating to activities such as preparing properties for mineral extraction, construction of mine wellfields, header houses and disposal wells, and additions to the recovery facilities are expensed as incurred as no proven or probable reserves have been established for these uranium projects.

Impairment of assets

The Company reviews and evaluates its long-lived assets for impairment when events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Mineral properties are monitored for impairment based on factors such as mineral prices, government regulation and taxation, the Company's continued right to explore the area, exploration reports, assays, technical reports, drill results and its continued plans to fund exploration programs on the property.

At each reporting date, the Company reviews its assets to determine whether there is any indication of impairment. If any such indication exists, the asset is tested for impairment. Impairment losses are recognized in profit or loss.

Recoverability is measured by comparing the undiscounted future net cash flows to the net book value. When the net book value exceeds future net undiscounted cash flows, the fair value is compared to the net book value and an impairment loss may be measured and recorded based on the excess of the net book value over fair value. Fair value for operating mines is determined using a combined approach, which uses a discounted cash flow model for the existing operations and non-operating properties with available cash flow models and a market approach for the fair value assessment of non-operating and exploration properties where no cash flow model is available. Future cash flows are estimated based on quantities of recoverable mineralized material, expected uranium prices (considering current and historical prices, trends and estimates), production levels, operating costs, capital requirements and reclamation costs, all based on life-of-mine plans. In estimating future cash flows, assets are grouped at the lowest level, for which there are identifiable cash flows that are largely independent of future cash flows from other asset groups. The Company's estimates of future cash flows are based on numerous assumptions, and it is possible that actual future cash flows will be significantly different than the estimates, as actual future

quantities of recoverable minerals, uranium prices, production levels, costs and capital are each subject to significant risks and uncertainties.

Cash and cash equivalents

Cash and cash equivalents consist of all cash balances and highly liquid investments with an original maturity of three months or less. Because of the short maturity of these investments, the carrying amounts approximate their fair value. Restricted cash is excluded from cash and cash equivalents and is included in other current or long-term assets, depending on the nature of the restriction. See Note 10 for further discussion of restricted cash.

Marketable securities

Marketable debt securities consist of excess cash invested in U.S. government notes, U.S. government agencies and tradeable certificates of deposits. We have classified and accounted for our marketable debt securities as available-for-sale. After consideration of our risk versus reward objectives, as well as our liquidity requirements, we may sell these debt securities prior to their stated maturities. As we view these securities as available to support current operations, we classify highly liquid securities with maturities beyond 12 months as current assets under the caption marketable securities on the Consolidated Balance Sheet. Subsequent to initial recognition, they are measured at fair value and changes therein, are recognized as a component of other (loss) income in the Consolidated Statements of Operations and Comprehensive Income (Loss).

Marketable equity securities consist of investments in publicly traded equity securities. We have classified and accounted for our marketable equity securities as available for sale. Subsequent to initial recognition, they are measured at fair value and changes therein are recognized as a component of other (loss) income in the Consolidated Statements of Operations and Comprehensive Income (Loss).

Accounts Receivables

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company evaluates its estimate of expected credit losses based on historical experience and current and forecasted future economic conditions for each portfolio of customers. As of December 31, 2021 and 2020, the Company did not have an allowance for expected credit losses for trade accounts receivable.

Investments at fair value

The Company accounts for investments over which the Company exerts significant influence, but not control, over the financial and operating policies through the fair value option of ASC Topic 825 – Financial Instruments. The Company elects the fair value option based on practical expedience, variances in reporting timelines, and cost-benefit considerations. The cost of such investments is measured at the fair value of the assets given up, shares issued, or liabilities assumed at the date of acquisition plus costs directly attributable to the acquisition. Subsequent to initial recognition, they are measured at fair value. The fair value of the investee's Common Shares is measured based on its closing market price. The Company uses the Black-Scholes option pricing model to estimate the fair value of its investment in warrants with the following assumptions: (i) the investee's closing market price on the valuation date, (ii) the risk-free interest rate computed based on the U.S. Treasury yield, (iii) an expected term equal to the remaining contractual term, (iv) a dividend yield of zero, and (v) the expected stock price volatility calculated based on the historical volatility of the Common Shares of the investee. Changes in the fair value of these investments are recognized in Other income (loss) in the Company's Consolidated Statements of Operations and Comprehensive Income (Loss). At December 31, 2021 and 2020, investments at fair value included the Company's 14.8% and 16.5% investment in Virginia Energy Resources Inc. ("Virginia Energy"), respectively, and at December 31, 2021, also included the Company's 19.1% investment in CUR.

Inventories

Expenditures related to the extraction and recovery of uranium concentrates and depreciation of the acquisition cost of the Extracting and Recovery Operations are inventoried as stockpiles and in-process and concentrate inventories.

Stockpiles are comprised of uranium or uranium/vanadium bearing materials that have been extracted from properties and are available for further processing. Extraction costs are added to the stockpile as incurred and removed from the stockpile based upon the average cost per ton of material extracted. The current portion of material in stockpiles represents the amount expected to be processed in the next twelve months.

In-process and concentrate inventories include the cost of the material processed from the stockpile, as well as production costs incurred to extract uranium-bearing fluids from the wellfields, and all costs to recover the uranium into concentrates or process through the Mill. Finished uranium concentrate inventories also include costs of any finished product purchased from the

market. Recovery costs typically include labor, chemical reagents and directly attributable mill and plant overhead expenditures. Materials and other supplies held for use in the recovery of uranium and vanadium concentrates are added to the costs of inventories when consumed in the uranium extraction process.

Inventories are valued at the lower of average cost or net realizable value.

Property, plant and equipment

a. Recognition and measurement

Property, plant and equipment are measured at cost less accumulated depreciation, and any accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, when it is replaced, and the cost of the replacement asset is expensed.

b. Depreciation and amortization

Depreciation and amortization are calculated on a straight-line basis to their estimated residual value over an estimated useful life which ranges from 3 to 15 years depending upon the asset type. When assets are retired or sold, the resulting gains or losses are reflected in current earnings as a component of other income or expense. Residual values, method of depreciation and useful lives of the assets are reviewed at least annually and adjusted if appropriate.

Where straight-line depreciation is utilized, the range of useful lives for various asset classes is generally as follows:

Buildings	12 - 15 years
Storage tanks	15 years
Shop tools and equipment	3 - 5 years
Mining equipment	5 years
Office equipment	4 - 5 years
Furniture and fixtures	5 - 7 years
Light trucks and utility vehicles	5 years

The amortization method, residual values, and useful lives of property, plant and equipment are reviewed annually, and any change in estimate is applied prospectively.

Non-operating assets

Non-operating assets consist of mineral properties and rights, along with data and analyses related to the properties, which are in various stages of evaluation and permitting. Costs to acquire the non-operating assets are capitalized at cost or fair value if such assets were a part of a business combination.

Mining activities for non-operating assets involve the search for minerals, the determination of technical feasibility and the assessment of commercial viability of an identified resource. Expenditures incurred in relation to such mining activities include costs which are directly attributable to researching and analyzing existing exploration data; conducting geological studies, exploratory drilling and sampling; examining and testing extraction and treatment methods; and completing pre-feasibility and feasibility studies. Such expenditures are expensed as incurred.

Mineral properties, that are not held for production, and any related surface access to the minerals generally require periodic payments and/or certain expenditures related to the property in order for the Company to retain its interest in the mineral property (collectively, "**Holding Costs**"). The Company expenses all Holding Costs in the period they are incurred.

Stand-by properties

Stand-by properties are mineral properties that have extracted mineral resources in the past but are currently non-operating or properties which could extract mineral resources in the future. Expenditures related to these properties are primarily related to maintaining the assets and permits in a condition that will allow re-start of the operations or development given appropriate commodity prices. All costs related to stand-by assets are expensed as incurred.

The Mill operates on a campaign basis. When the Mill is not recovering material, all related costs are expensed as incurred.

Leases

The Company accounts for leases under ASU 2016-02 which requires leases to be recognized as assets and liabilities on the balance sheet for the rights and obligations created by all leases with terms of more than 12 months. The Company recognizes in the balance sheet a liability to make lease payments (the lease liability) and the right-of-use asset representing the right to the underlying asset for the lease term. For leases with a term of twelve months or less, the Company has made an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. See Note 15 for further discussion.

Asset retirement obligations

The Company's asset retirement obligations ("ARO") relate to expected mine, wellfield, plant and mill reclamation and closure activities, as well as costs associated with reclamation of exploration drilling. The Company's activities are subject to numerous governmental laws and regulations. Estimates of future reclamation liabilities for ARO are recognized in the period when such liabilities are incurred. These estimates are updated on a periodic basis and are subject to changing laws, regulatory requirements, changing technology and other factors which will be recognized when appropriate. Liabilities related to site restoration include long-term treatment and monitoring costs and incorporate total expected costs net of recoveries. Expenditures incurred to dismantle facilities, restore and monitor closed resource properties are charged against the related ARO.

As the Company has no proven or probable reserves, such costs, discounted to their present value, are expensed as soon as the obligation to incur such costs arises. The present value of AROs is measured by discounting the expected cash flows using a discount factor that reflects the credit-adjusted risk-free rate of interest, while taking into account an inflation rate. The decommissioning liability is accreted to full value over time through periodic accretion charges recorded to operations as accretion expense. The Company adjusts the estimate of the ARO for changes in the amount or timing of underlying future cash outflows. The impact of these adjustments to the ARO amounts are expensed as incurred.

Loans and borrowings

The Company's Convertible Debentures, all of which were redeemed in 2020, are recognized at fair value through the fair value option based on the closing price on the TSX and changes are recognized in earnings as a component of other income (expense). The Company's interest-bearing loans and borrowings are measured at amortized cost using the effective interest method.

Warrant liabilities

The Company issued several tranches of warrants for various equity transactions in 2016 all of which were either settled or expired in 2021 and thus no longer outstanding as of December 31, 2021. The Company accounts for its warrants issued in accordance with the U.S. GAAP accounting guidance under FASB ASC Topic 815 *Derivative and Hedging* ("ASC 815") which requires instruments within its scope to be recorded on the balance sheet as either an asset or liability measured at its fair value, with changes in fair value recognized in earnings. In accordance with ASC 815, the Company has classified the warrants as liabilities. The warrants are subject to re-measurement at each balance sheet date, with any change in fair value recognized as a component of other income (expense), net in the Consolidated Statements of Operations and Comprehensive Income (Loss). The Company estimates the fair value of these warrants using market prices, if available, or the Black-Scholes option pricing model. The Black-Scholes option pricing model is based on the estimated market value of the underlying common stock at the measurement date, the remaining contractual term of the warrant, risk-free interest rates and expected dividends on, and expected volatility of the price of the underlying common stock.

Revenue

a. Sale of goods

Revenue from the sale of mineral concentrates is recognized when it is probable that the economic benefits will flow to the Company and delivery has occurred, title has transferred, the sales price and costs incurred with respect to the transaction can be measured reliably, and collectability is reasonably assured. For uranium concentrates, revenue is typically recognized when delivery is evidenced by book transfer at the applicable uranium storage facility. For vanadium concentrates, revenue is typically recognized when delivery is evidenced by book transfer at the applicable vanadium storage facility. For rare earth concentrates, revenue is typically recognized when delivery of the mixed RE Carbonate material has arrived at the applicable separations facility.

b. Rendering of services

Revenue from the delivery of mineralized material received from the clean-up of a third-party uranium mine or for other Alternate Feed Materials is typically recognized upon delivery to the White Mesa Mill. Revenue from toll milling services is recognized as material is processed in accordance with the specifics of the applicable toll milling agreement. Revenue and unbilled accounts receivable are recorded as related costs are incurred using billing formulas included in the applicable toll milling agreement. Deferred revenues represent proceeds received from processing of toll materials where the Company has not delivered the material to the customer.

Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer, are excluded from revenue.

Share-based compensation

The Company records share-based compensation awards exchanged for employee services at fair value on the date of the grant and expenses the awards in the Consolidated Statements of Operations and Comprehensive Income (Loss) over the requisite employee service period. The fair value of stock options is determined using the Black-Scholes valuation model. The fair value of RSUs is based on the Energy Fuels' stock price on the date of grant. The fair value of SARs with performance conditions is based on a Monte Carlo simulation performed by a third-party valuation firm. Share-based compensation expense related to awards with only service conditions having a graded vesting schedule is recorded on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards, while expense for all other awards are recognized on a straight-line basis. The Company's estimates may be impacted by certain variables including, but not limited to, stock price volatility, employee stock option exercise behaviors, additional stock option grants, estimates of forfeitures, the Company's performance, and related tax impacts.

Foreign currency

Transactions in foreign currencies are translated to the respective functional currency of the Company's subsidiaries and joint ventures at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate as of the reporting date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated to the functional currency at the exchange rate when the fair value was determined. Foreign currency differences are generally recognized in profit or loss. Non-monetary items that are measured based on historical cost in a foreign currency are not translated.

The assets and liabilities of entities whose functional currency is not the U.S. dollar are translated into the U.S. dollar at the exchange rate as of the reporting date. The income and expenses of such entities are translated into the U.S. dollar using average exchange rates for the reporting period. Exchange differences on foreign currency translations are recorded in other comprehensive income (loss). The Company's functional currency is the U.S. dollar.

Income taxes

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities are recorded based on differences between the financial statement carrying values of existing assets and liabilities and their respective income tax bases (temporary differences), and losses carried forward. Deferred income tax assets and liabilities are measured using the enacted tax rates which will be in effect when the temporary differences are likely to reverse. The effect on deferred income tax assets and liabilities of a change in tax rates is included in operations in the period in which the change is enacted.

The Company records a valuation allowance to reduce deferred income tax assets to the amount that is believed more likely than not to be realized. When the Company concludes that all or part of the deferred income tax assets are not realizable in the future, the Company makes an adjustment to the valuation allowance that is charged to income tax expense in the period such determination is made.

Net income (loss) per share

The Company presents basic and diluted income (loss) per share data for its Common Shares, calculated by dividing the income (loss) attributable to common shareholders of the Company by the weighted average number of Common Shares outstanding during the period. Diluted income (loss) per share is determined by adjusting the income (loss) attributable to common shareholders and the weighted average number of Common Shares outstanding for the effects of all potential dilutive instruments.



Recently Adopted Accounting Pronouncements

Non-employee Share-Based Payment

In June 2018, the FASB issued ASU 2018-07, which more closely aligns the accounting for non-employee share-based payment transactions to the guidance for awards to employees except for specific guidance on certain inputs to an option-pricing model and the attribution of cost. The Company adopted this standard effective January 1, 2019 and adoption did not have a significant impact on our net earnings.

Fair Value Measurement

In August 2018, the FASB issued ASU 2018-13, which amended the fair value measurement guidance by removing and modifying certain disclosure requirements, while also adding new disclosure requirements. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty would be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments would be applied retrospectively to all periods presented upon their effective date. The Company adopted this pronouncement effective January 1, 2020.

Income Taxes - Simplifying the Accounting for Income Taxes

In December 2019, the FASB issued ASU 2019-12, "Income Taxes - Simplifying the Accounting for Income Taxes (Topic 740)," which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. ASU 2019-12 will be effective for interim and annual periods beginning after December 15, 2020 (January 1, 2021 for the Company). Early adoption is permitted. The Company has evaluated the impact of the adoption of ASU 2019-12 and it does not have an impact on its consolidated financial statements, and may not have an impact until such a time that the Company incurs income tax expenses.

Financial Instruments - Credit Losses

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326)." The standard replaces the incurred loss impairment methodology under current U.S. GAAP with a methodology that reflects expected credit losses and requires the use of a forward-looking expected credit loss model for accounts receivables, loans, and other financial instruments. The standard requires a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The new standard is effective for non-public companies, and public business entities that meet the definition of a smaller reporting company as defined by the SEC, for interim and annual periods beginning after December 15, 2022. On December 31, 2021, the Company became a large accelerated filer, as defined by the SEC, and, as a result, adopted this guidance effective January 1, 2021. The adoption of the standard did not have a material impact on the Company's consolidated financial statements.

4. MARKETABLE SECURITIES

The following tables summarize our marketable securities by significant investment categories as of December 31, 2021:

	Cost Basis	Gross Unrealized Losses	Gross Unrealized Gains	Fair Value
Marketable equity securities	\$ 756	\$ (262)	\$ —	\$ 494

The following tables summarize our marketable securities by significant investment categories as of December 31, 2020:

	Cost Basis	Gross Unrealized Losses	Gross Unrealized Gains	Fair Value
Marketable equity securities	\$ 824	\$ (418)	\$ 1,841	\$ 2,247

5. RECEIVABLES

	December 31, 2021	December 31, 2020
Trade receivables	\$ 1,858	\$ 385
Other	1,753	441
Notes receivable, net	343	343
	\$ 3,954	\$ 1,169

During the year ended December 31, 2014, the Company received two notes with a combined principal totaling \$1.05 million due in 2018 in connection with the sale of certain assets previously recorded as held for sale. The note with principal totaling \$0.50 million was collected during the year ended December 31, 2018. Alternatively, the note with a principal payment of \$0.55 million due November 7, 2018 was not paid and the Company notified the issuing party (“**Default Party**”) of its default on November 9, 2018. The Company has an allowance for credit losses of \$0.22 million as of December 31, 2021 (2020 - \$0.22 million) against the collectability of this note. The promissory note is secured by all issued and outstanding stock and all of the assets sold to the default party.

The Company has \$1.75 million in Other receivables as of December 31, 2021 with \$1.68 million due from CUR pursuant to the terms of the asset purchase agreement related to the sale of certain non-core conventional uranium projects and resulting deferred cash payments, and pursuant to the terms of the ongoing operating agreement with CUR. Refer to Notes 7 and 8 for further detail related to the Company's transactions with CUR.

6. INVENTORIES

	December 31, 2021	December 31, 2020
Concentrates and work-in-progress ⁽¹⁾	\$ 27,619	\$ 25,768
Inventory of ore in stockpiles	351	241
Raw materials and consumables	4,170	2,912
	\$ 32,140	\$ 28,921
Inventories - by duration		
Current	\$ 30,772	\$ 27,575
Long term - raw materials and consumables	1,368	1,346
	\$ 32,140	\$ 28,921

(1) For the year ended December 31, 2021, the Company recorded an impairment loss of nil in the Consolidated Statement of Operations and Comprehensive Income (Loss) related to concentrates and work in progress inventories (December 31, 2020 - \$1.64 million).

7. INVESTMENTS ACCOUNTED FOR AT FAIR VALUE

Investments accounted for at fair value includes the Company's 14.8% investment in Virginia Energy which was \$6.31 million and \$0.78 million at December 31, 2021 and 2020, respectively. The Company recognized a gain of \$5.59 million related to this investment in Other income (loss) in the Consolidated Statement of Operations and Comprehensive Income (Loss) for the year ended December 31, 2021.

On October 27, 2021, the Company obtained a 19.9% ownership interest in CUR as further described in Note 8. The investment provides the Company the ability to have significant influence, but not control, over CUR's operations. The Company elected the fair value option to account for its investment in CUR Common Shares and warrants. Absent this election, the Company would have been required to account for the investment under the equity method. As of December 31, 2021, the fair value of the Company's investment in CUR is \$32.23 million. The Company recognized a gain of \$0.72 million related to this investment in Other income (loss) in the Consolidated Statement of Operations and Comprehensive Income (Loss) for the year ended December 31, 2021. At December 31, 2021, the Company held a 19.1% ownership interest in CUR.

Pursuant to Rule 4-08(g) of Regulation S-X, the Company is required to disclose summarized financial information of these investees if any of the investment test, asset test, or income test as set forth in that rule equals or exceeds the 10% level,

individually or in the aggregate. As of December 31, 2021, the investment test was met at the 10% significance level for CUR. The summarized financial information for CUR is presented below on a one-quarter lag, which precedes the date of the Company's investment. CUR prepares its financial statements in accordance with International Financial Reporting Standards ("IFRS") and uses Cdn\$ as its reporting currency. As such, the Company has made certain adjustments to CUR's summarized financial information to address differences between IFRS and GAAP that materially impact the summarized financial information and to convert such information to USD.

	September 30, 2021
Current assets	\$ 16,733
Non-current assets	\$ 11,455
Current liabilities	\$ 3,119
Non-current liabilities	\$ 27
	Nine months ended September 30, 2021
Loss from continuing operations, net loss, and net loss attributable to the entity	\$ (3,665)

Pursuant to Rule 3-09 of Regulation S-X, the Company is required to file separate audited financial statements of these investees if either the investment test or income test as set forth in that rule equals or exceeds the 20% level individually. As of December 31, 2021, the income test was met at the 20% significance level for Virginia Energy. The Company will amend this Annual Report on Form 10-K to include the separate audited financial statements of Virginia Energy as an exhibit when they become available. Summarized financial information for Virginia Energy is presented below on a one-quarter lag. Virginia Energy prepares its financial statements in accordance with IFRS. The Company determined that no adjustments to Virginia Energy's summarized financial information were necessary to address differences between IFRS and GAAP that materially impact the summarized financial information.

	September 30, 2021	September 30, 2020	
Current assets	\$ 548	\$ 808	
Non-current assets	\$ 3,753	\$ 2,986	
Current liabilities	\$ 278	\$ 537	
Non-current liabilities	\$ 2	\$ 2	
	Twelve months ended September 30,		
	2021	2020	2019
Loss from continuing operations, net loss, and net loss attributable to the entity	\$ (275)	\$ (20,150)	\$ (279)

8. PROPERTY, PLANT AND EQUIPMENT AND MINERAL PROPERTIES

The following is a summary of property, plant and equipment:

	December 31, 2021			December 31, 2020		
	Cost	Accumulated Depreciation	Net Book Value	Cost	Accumulated Depreciation	Net Book Value
Property, plant and equipment						
Nichols Ranch	\$ 29,210	\$ (18,185)	\$ 11,025	\$ 29,210	\$ (16,150)	\$ 13,060
Alta Mesa	13,626	(4,996)	8,630	13,626	(4,088)	9,538
Equipment and other	15,079	(12,751)	2,328	13,528	(12,505)	1,023
Property, plant and equipment total	\$ 57,915	\$ (35,932)	\$ 21,983	\$ 56,364	\$ (32,743)	\$ 23,621

The net book value for the Nichols Ranch Project includes the value beyond proven and probable Mineral Reserves ascribed to the processing plant, the Nichols Ranch wellfields and the Jane Dough project upon acquisition.

For the year ended December 31, 2021, the Company recorded nil (December 31, 2020 - \$0.51 million) of depreciation expense related to Nichols Ranch that was included in the capitalized costs to inventory on the Consolidated Balance Sheet.

The following is a summary of mineral properties:

	December 31, 2021	December 31, 2020
Mineral properties		
Uranerz ISR properties	\$ 25,974	\$ 25,974
Sheep Mountain	34,183	34,183
Roca Honda	22,095	22,095
Other	1,287	1,287
Mineral properties total	\$ 83,539	\$ 83,539

Disposal of certain properties

On July 15, 2021, the Company and CUR jointly announced the signing of a definitive asset purchase agreement (the “**Agreement**”) for CUR to acquire a portfolio of the Company’s non-core conventional uranium projects located in Utah and Colorado, including the Daneros mine, the Tony M mine, the Rim mine, the Sage Plain project, and several U.S. Department of Energy leases (the “**Sale**”).

On October 27, 2021 (“**Closing Date**”), the parties closed the Sale in accordance with the terms of the Agreement, as a result of which the aforementioned properties and leases were transferred to CUR in exchange for the following consideration:

- \$2,000,000 in cash on the Closing Date;
- the issuance of 11,860,101 Common Shares of CUR, constituting 19.9% of the outstanding CUR Common Shares immediately after the Closing Date, at a price per share of CDN\$2.95 equal to the closing price of the CUR Common Shares on the TSX Venture Exchange (“**TSXV**”) on the last trading day immediately prior to issuance;
- an additional CDN\$3,000,000 in cash payable on or before the 18-month anniversary of the Closing Date (“**Second Payment**”);
- an additional CDN\$3,000,000 in cash payable on or before the 36-month anniversary of the Closing Date (“**Third Payment**” and together with the Second Payment, the “**Deferred Cash Payments**”); and
- the commitment to make production payments on a per-project basis totaling CDN\$5,000,000 as set forth pursuant to individual production payment agreements executed on the Closing Date.

As part of the Agreement, the Company has entered into a mine operating agreement pursuant to which it will act, through its indirect wholly owned subsidiary Energy Fuels Resources (USA) Inc., as Operator to the Sale projects in accordance with a program and budget determined annually, in exchange for which the Company will receive reimbursement for all direct costs in addition to an overhead allocation and management fee. In addition, the Company has entered into a toll milling agreement pursuant to which it will process all ore mined from the properties at the Mill, in exchange for which the Company will receive reimbursement of direct costs in addition to a milling fee. Pursuant to an investor rights agreement, for so long as the Company’s equity ownership in CUR remains at or above 10%, it will be entitled to equity participation rights to maintain its pro-rata equity ownership in the Company and to appoint one nominee to the CUR Board of Directors. The Company’s CEO was appointed to the CUR Board of Directors at the Closing Date.

These non-core conventional uranium project assets had no carrying value at the Closing Date. The Company recognized a gain on the disposal of \$35.73 million at the Closing Date and subsequently derecognized asset retirement obligations of \$0.27 million prior to December 31, 2021 upon being legally released from being the primary obligor under the liabilities. For a period of three years, if CUR issues Common Shares or other securities convertible into Common Shares in a private placement or prospectus offering, the Company has the right to accelerate a portion of the Deferred Cash Payments, in cash or securities, up to a maximum amount equal to the product of (i) the gross proceeds of the financing multiplied by (ii) the Company’s then current cumulative percentage ownership of CUR common stock on a non-diluted basis prior to the completion of the financing (the “**Acceleration Right**”). On November 22, 2021, CUR completed such a financing under which the Company elected its Acceleration Right and received 1,875,085 Common Shares of CUR and 937,542 warrants to purchase Common Shares of

CUR which are exercisable for a period of two years from issuance at a price of Cdn\$4.00. The receipt of these Common Shares and warrants satisfied the Second Payment in full and satisfied Cdn\$1.97 million of the Third Payment.

9. IMPAIRMENTS

Impairment of property, plant and equipment, mineral properties and mineral properties held for sale

The Company conducts a review of potential triggering events for all its mineral properties on a quarterly basis. When events or changes in circumstances indicate that the related carrying amounts may not be recoverable, the Company carries out a review and evaluation of its long-lived assets in accordance with its accounting policy. No impairment of property, plant and equipment, mineral properties and mineral properties held for sale recorded in the years ended December 31, 2021, 2020 and 2019.

10. ASSET RETIREMENT OBLIGATIONS AND RESTRICTED CASH

The following table summarizes the Company's asset retirement obligations:

	December 31, 2021	December 31, 2020
Asset retirement obligation, beginning of period	\$ 13,038	\$ 18,972
Revision of estimate	(235)	(7,845)
Disposal of non-core obligations	(269)	—
Accretion of liabilities	1,284	1,911
Settlements	(131)	—
Asset retirement obligation, end of period	<u>\$ 13,687</u>	<u>\$ 13,038</u>
Asset retirement obligation:		
Current	\$ 27	\$ 131
Non-current	13,660	12,907
Asset retirement obligation, end of period	<u>\$ 13,687</u>	<u>\$ 13,038</u>

The asset retirement obligations of the Company are subject to legal and regulatory requirements. Estimates of the costs of reclamation are reviewed periodically by the Company and the applicable regulatory authorities. The above provision represents the Company's estimate of the present value of future reclamation costs, discounted using credit adjusted risk-free rates ranging from 9.50% to 11.67% and inflation rates ranging from 2.00% to 2.41%. The total undiscounted decommissioning liability at December 31, 2021 is \$41.34 million (2020 - \$41.95 million).

The downward revision of estimate of \$0.24 million for the year ended December 31, 2021 includes net changes in estimated costs, timing and discount rates of future reclamation activities. These revisions were recognized in Development, permitting, and land holding, and Standby costs on the Consolidated Statement of Operations and Comprehensive Income (Loss). The Company derecognized asset retirement obligations of \$0.27 million prior to December 31, 2021 upon being legally released from being the primary obligor under the liabilities and this disposal was recognized in Gain on sale of non-core assets on the Consolidated Statement of Operations and Comprehensive Income (Loss).

The downward revision of estimate of \$7.85 million for the year ended December 31, 2020 includes net changes in the estimated costs, timing and discount rates of future reclamation activities. These revisions were recognized in Development, permitting, and land holding and Standby costs on the Consolidated Statement of Operations and Comprehensive Income (Loss).

The following table summarizes the Company's restricted cash:

	December 31, 2021	December 31, 2020
Restricted cash, beginning of period	\$ 20,817	\$ 20,081
Additional collateral posted	48	768
Refunds of collateral	(560)	(32)
Restricted cash, end of period	<u>\$ 20,305</u>	<u>\$ 20,817</u>

The Company has cash, cash equivalents and fixed income securities as collateral for various bonds posted in favor of the applicable state regulatory agencies in Arizona, Colorado, New Mexico, Texas, Utah and Wyoming, and the U.S. Bureau of Land Management and U.S. Forest Service for estimated reclamation costs associated with the White Mesa Mill, Nichols Ranch, Alta Mesa and other mining properties. Cash equivalents are short-term highly liquid investments with original maturities of three months or less. The restricted cash will be released when the Company has reclaimed a mineral property or restructured the surety and collateral arrangements. See Note 18 for a discussion of the Company's surety bond commitments.

11. LOANS AND BORROWINGS

On July 24, 2012, the Company completed a bought deal public offering of 22,000 floating-rate convertible unsecured subordinated debentures originally maturing June 30, 2017 (the "**Convertible Debentures**") at a price of Cdn\$1,000 per Convertible Debenture for gross proceeds of Cdn\$21.55 million (the "**Offering**"). The Convertible Debentures are convertible into Common Shares at the option of the holder. Interest is paid in cash and in addition, unless an event of default has occurred and is continuing, the Company may elect, from time to time, subject to applicable regulatory approval, to satisfy its obligation to pay interest on the Convertible Debentures, on the date it is payable under the indenture: (i) in cash; (ii) by delivering sufficient Common Shares to the debenture trustee, for sale, to satisfy the interest obligations in accordance with the indenture in which event holders of the Convertible Debentures will be entitled to receive a cash payment equal to the proceeds of the sale of such Common Shares; or (iii) any combination of (i) and (ii).

On August 4, 2016, the Company, by a vote of the debenture holders, extended the maturity date of the Convertible Debentures from June 30, 2017 to December 31, 2020, and reduced the conversion price of the Convertible Debentures from Cdn\$15.00 to Cdn\$4.15 per Common Share of the Company. In addition, a redemption provision was added that enabled the Company, upon giving not less than 30 days' notice to debenture holders, to redeem the Convertible Debentures for cash, in whole or in part at any time after June 30, 2019 but prior to maturity, at a price of 101% of the aggregate principal amount redeemed, plus accrued and unpaid interest (less any tax required by law to be deducted) on such Convertible Debentures up to but excluding the redemption date. In addition, certain other amendments were made to the indenture, as required by the U.S. Trust Indenture Act of 1939, as amended, and with respect to the addition of a U.S. Trustee in compliance therewith, as well as to remove provisions of the indenture that no longer apply, such as U.S. securities law restrictions.

On July 14, 2020, the Company redeemed Cdn\$10.43 million principal amount of the Cdn\$20.86 million Convertible Debentures. The Convertible Debentures were redeemed on that date for an amount equal to 101% of the aggregate principal amount plus accrued and unpaid interest thereon, up to but excluding July 14, 2020 for approximately \$7.78 million. On October 6, 2020, the Company redeemed the remaining Cdn\$10.43 million principal amount of the Cdn\$10.43 million Convertible Debentures then outstanding for approximately \$7.82 million. The Convertible Debentures were redeemed on that date for an amount equal to 101% of the aggregate principal amount, plus accrued and unpaid interest thereon, up to but excluding October 6, 2020. As a result of the final redemption, no Convertible Debentures remain outstanding and the Convertible Debentures have ceased to be listed on the TSX.

The Company currently has no other remaining short- or long-term debt.

The Convertible Debentures were measured at fair value based on the closing price on the TSX (a Level 1 measurement), and changes were recognized in earnings. For the year ended December 31, 2020, the Company recorded a gain on revaluation of Convertible Debentures of \$0.16 million).

12. CAPITAL STOCK

Authorized capital stock

The Company is authorized to issue an unlimited number of Common Shares without par value, unlimited Preferred Shares issuable in series, and unlimited Series A Preferred Shares. The Series A Preferred Shares issuable are non-redeemable, non-callable, non-voting and with no right to dividends. The Preferred Shares issuable in series will have the rights, privileges, restrictions and conditions assigned to the particular series upon the Board of Directors approving their issuance.

Issued capital stock

The significant transactions relating to capital stock issued during 2021, 2020, and 2019 are:

- a) On February 20, 2020, the Company completed a bought deal public offering of 11,300,000 Common Shares at a price of \$1.47 per share. The Company received net proceeds, after commissions and fees, of \$15.14 million.

- b) In the year ended December 31, 2021, the Company issued 16,627,512 Common Shares under the Company's ATM offering for net proceeds of \$106.21 million. In the year ended December 31, 2020, the Company issued 21,361,784 Common Shares under the Company's ATM offering for net proceeds of \$37.25 million. In the year ended December 31, 2019, the Company issued 8,043,365 Common Shares under the Company's ATM for net proceeds of \$19.68 million.

Share Purchase Warrants

The following table summarizes the Company's share purchase warrants denominated in U.S. dollars. These warrants are accounted for as derivative liabilities, as the functional currency of the entity issuing the warrants, Energy Fuels Inc., is Cdn\$.

Month Issued	Expiry Date	Exercise Price \$	Warrants Outstanding	Fair value at December 31, 2021
September 2016 ⁽¹⁾	September 20, 2021	2.45	—	\$ —

- (1) The warrants issued in September 2016 are classified as Level 1 under the fair value hierarchy (Note 19). Each warrant was exercisable until September 20, 2021 and entitled the holder thereof to acquire one common share upon exercise at an exercise price of \$2.45 per common share. These warrants are accounted for as a derivative liability, as the functional currency of the entity issuing the warrant is Cdn\$.

On March 14, 2019, 2,328,925 warrants issued in March 2016 expired un-exercised.

On September 20, 2021, 149,807 warrants issued in September 2016 expired un-exercised.

13. BASIC AND DILUTED INCOME (LOSS) PER COMMON SHARE

The following is a reconciliation of weighted average Common Shares outstanding for the years ended December 31, 2021, 2020, 2019, respectively:

	Years ended December 31,		
	2021	2020	2019
Issued shares at beginning of period	134,311,033	100,735,889	91,445,066
Effect of stock options exercised	474,072	12,934	45,040
Effect of shares issued for settlement of vesting of restricted stock units	443,364	452,932	786,746
Effect of shares issued for settlement of exercises of stock appreciation rights	2,316	—	—
Effect of shares issued for exercise of share purchase warrants	1,737,981	—	1,057
Shares issued for consulting services	35,933	74,672	46,067
Effect of shares issued to settle liabilities	—	—	141,525
Effect of shares issued in public offerings	9,899,825	19,891,709	3,199,866
Weighted average common shares outstanding	146,904,524	121,168,136	95,665,367

Basic and diluted income (loss) per common share

The calculation of basic and diluted income (loss) per share after adjustment for the effects of all potential dilutive Common Shares, calculated as follows:

	Years ended December 31,		
	2021	2020	2019
Net income (loss) attributable to owners of the Company	\$ 1,541	\$ (27,776)	\$ (37,978)
Basic weighted average common shares outstanding	146,904,524	121,168,136	95,665,367
Dilutive impact of stock options, restricted stock units, and warrants	2,816,593	—	—
Diluted weighted average common shares outstanding	149,721,117	121,168,136	95,665,367
Basic net income (loss) per common share	\$ 0.01	\$ (0.23)	\$ (0.40)
Diluted net income (loss) per common share	\$ 0.01	\$ (0.23)	\$ (0.40)

For the three years ended December 31, 2021, 2020 and 2019, 0.06 million, 6.87 million and 6.97 million stock options, restricted stock units, and warrants, respectively, and the potential conversion of the Convertible Debentures have been excluded from the calculation of diluted net income (loss) per common share as their effect would have been anti-dilutive. In addition, the Company excluded stock appreciation rights of 1.67 million, 1.72 million, and 2.17 million for the three years ended December 31, 2021, 2020, and 2019, respectively as they are contingently issuable based on specified market prices of the Company's stock which were not achieved as of the end of each period.

14. SHARE-BASED PAYMENTS

The Company, under the 2021 Amended and Restated Omnibus Equity Incentive Compensation Plan (the “Compensation Plan”), maintains an equity incentive plan for directors, executives, eligible employees and consultants. Equity incentive awards include employee stock options, RSUs and SARs. The Company issues new shares of common stock to satisfy exercises and vesting under its equity incentive awards. At December 31, 2021, a total of 15,626,220 Common Shares were authorized for equity incentive plan awards.

Employee Stock Options

The Company, under the Compensation Plan, may grant stock options to directors, executives, employees and consultants to purchase Common Shares of the Company. The exercise price of the stock options is set as the higher of the Company’s closing share price on the day before the grant date and the five-day VWAP ending on the day before the grant date. Stock options granted under the Compensation Plan generally vest over a period of two years or more and are generally exercisable over a period of five years from the grant date, such period not to exceed 10 years. The value of each option award is estimated at the grant date using the Black-Scholes Option Valuation Model.

The fair value of the stock options granted under the Compensation Plan for the years ended December 31, 2021, 2020 and 2019 was estimated at the date of grant, using the Black-Scholes Option Valuation Model, with the following weighted average assumptions:

	Years ended December 31,		
	2021	2020	2019
Risk-free interest rate	0.44 %	1.27 %	2.62 %
Expected life (in years)	5.0 years	4.6 years	5.0 years
Expected volatility	61.96 %	61.81 % *	59.38 % *
Expected dividend yield	0 %	0 %	0 %
Weighted average grant date fair value	\$ 2.06	\$ 0.82	\$ 1.54

* Expected volatility is measured based on the Company’s historical share price volatility over a period equivalent to the expected life of the stock options.

The summary of the Company’s stock options at December 31, 2021, 2020 and 2019, respectively, and the changes for the fiscal periods ending on those dates, are presented below:

	Range of Exercise Prices	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Intrinsic Value
Outstanding, December 31, 2018	<u>\$1.70 - \$15.61</u>	1,732,754	\$ 3.84		
Granted	2.92	296,450	2.92		
Exercised	1.70 - 2.92	(54,805)	2.27		
Forfeited	1.70 - 7.42	(342,866)	3.94		
Expired	6.97	(144,100)	6.97		
Outstanding, December 31, 2019	<u>\$1.70 - \$15.61</u>	1,487,433	\$ 3.43		
Granted	1.76 - 3.06	711,414	1.77		
Exercised	1.70 - 2.92	(302,707)	1.97		
Forfeited	1.70 - 5.18	(188,541)	3.26		
Expired	4.12 - 5.22	(98,512)	\$ 4.40		
Outstanding, December 31, 2020	<u>\$1.70 - \$15.61</u>	1,609,087	\$ 2.91		
Granted	3.89 - 8.41	169,310	3.99		
Exercised	1.70 - 7.42	(775,814)	2.95		
Forfeited	1.76 - 5.91	(8,048)	3.16		
Expired	1.70 - 15.61	(51,653)	8.14		
Outstanding, December 31, 2021	<u>\$1.70 - \$8.41</u>	942,882	\$ 2.79	2.50	\$ 4,565
Exercisable, December 31, 2021	<u>\$1.70 - \$7.14</u>	729,565	\$ 2.83	2.22	\$ 3,504

In the year ended December 31, 2021, the Company issued 775,814 shares upon exercise of stock options at an average exercise price of \$2.95 with an intrinsic value of \$2.88 million. The Company received cash proceeds related to stock option exercises of \$2.38 million during the year ended December 31, 2021.

In the year ended December 31, 2020, the Company issued 302,707 shares upon exercise of stock options at an average exercise price of \$1.97 with an intrinsic value of \$0.42 million. The Company received cash proceeds related to stock option exercises of \$0.49 million during the year ended December 31, 2020.

In the year ended December 31, 2019, the Company issued 54,805 shares upon exercise of stock options at an average exercise price of \$2.27 with an intrinsic value of \$0.05 million. The Company received cash proceeds related to stock option exercises of \$0.15 million during the year ended December 31, 2019.

The summary of the Company's non-vested stock options at December 31, 2021, 2020 and 2019, respectively, and the changes for the fiscal periods ending on those dates, are presented below:

	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested, December 31, 2018	297,044	\$ 1.06
Granted	296,450	1.54
Vested	(356,626)	1.27
Forfeited	(13,487)	1.59
Non-vested, December 31, 2019	223,381	\$ 1.32
Granted	711,414	0.82
Vested	(508,630)	0.94
Forfeited	(22,175)	0.96
Non-vested, December 31, 2020	403,990	\$ 0.94
Granted	169,310	2.06
Vested	(351,934)	1.23
Forfeited	(8,049)	1.60
Non-vested, December 31, 2021	213,317	\$ 1.34

Restricted Stock Units

The Company grants RSUs to directors, executives and eligible employees. Awards for executives and eligible employees are determined as a target percentage of base salary and generally vest over three years. Prior to vesting, holders of RSUs generally do not have voting rights. The RSUs are subject to forfeiture risk and other restrictions. Upon vesting, the employee is entitled to receive one share of the Company's common stock for each RSU at no additional payment. During the year ended December 31, 2021, the Company's Board of Directors issued 0.44 million RSUs under the Compensation Plan (2020 – 0.74 million, 2019 - 0.73 million).

The summary of the Company's non-vested RSUs at December 31, 2021, 2020 and 2019, respectively, and the changes for the fiscal periods ending on those dates, are presented below:

	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested, December 31, 2018	1,580,187	\$ 1.99
Granted	731,435	2.91
Vested	(862,378)	2.00
Forfeited	(133,708)	2.40
Non-vested, December 31, 2019	1,315,536	\$ 2.45
Granted	740,998	1.65
Vested	(746,477)	2.45
Forfeited	(216,001)	2.13
Non-vested, December 31, 2020	1,094,056	\$ 1.98
Granted	441,241	3.89
Vested	(635,233)	1.94
Forfeited	—	—
Non-vested, December 31, 2021	900,064	\$ 2.94

The total intrinsic value and fair value of RSUs that vested and were settled for equity in the year ended December 31, 2021 was \$2.67 million (2020 - \$1.21 million, 2019 - \$2.51 million).

Stock Appreciation Rights

During the year ended December 31, 2019, the Company's Board of Directors issued 2.20 million SARs under the Compensation Plan (2021 and 2020 - nil) with a fair value of \$1.25 per SAR. These SARs are intended to provide additional long-term performance-based equity incentives for the Company's senior management. The SARs are performance based because they only vest upon the achievement of performance goals designed to significantly increase shareholder value.

Each SAR granted entitles the holder to receive, upon a valid exercise, payment from the Company in cash or Common Shares (at the sole discretion of the Company) in an amount representing the difference between the fair market value ("FMV") of the Company's Common Shares on the date of exercise and \$2.92 (the closing market price or "Grant Price" at the time of grant). Fair Market Value as used herein means the closing price of the Shares on the TSX or the NYSE American on the trading day immediately prior to the date of exercise. The term of the SARs grant is five years, with SARs vesting only upon the achievement of the following performance goals: as to one-third of the SARs granted, automatically upon the 90-calendar-day volume weighted average price ("VWAP") of the Company's Common Shares on the NYSE American equaling or exceeding \$5.00 for any continuous 90-calendar-day period; as to an additional one-third of the SARs granted, automatically upon the 90-calendar-day VWAP of the Company's Common Shares on the NYSE American equaling or exceeding \$7.00 for any continuous 90-calendar-day period; and as to the final one-third of the SARs granted, automatically upon the 90-calendar-day VWAP of the Company's Common Shares on the NYSE American equaling or exceeding \$10.00 for any continuous 90-calendar-day period. Further, notwithstanding the foregoing vesting schedule, no SARs were able to be exercised by the holder for an initial period of one year from the Date of Grant; the date first exercisable being January 22, 2020. The first two tranches of these vesting performance goals were met during the year ended December 31, 2021.

The summary of the Company's SARs at December 31, 2021, 2020 and 2019, respectively, and the changes for the fiscal periods ending on those dates, are presented below:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Intrinsic Value
Outstanding, December 31, 2018	—	\$ —	—	
Granted	2,195,994	2.92		
Exercised	—	—		
Forfeited	(30,485)	2.92		
Expired	—	—		
Outstanding, December 31, 2019	2,165,509	\$ 2.92		
Granted	—	—		
Exercised	—	—		
Forfeited	(444,886)	2.92		
Expired	—	—		
Outstanding, December 31, 2020	1,720,623	\$ 2.92		
Granted	—	—		
Exercised	(48,201)	2.92		
Forfeited	—	—		
Expired	—	—		
Outstanding, December 31, 2021	1,672,422	\$ 2.92	2.06	\$ 7,877
Exercisable, December 31, 2021	1,098,873	\$ 2.92	2.06	\$ 5,176

In the year ended December 31, 2021, the Company issued 5,643 shares and paid cash of \$0.26 million upon the exercise of 48,201 SARs with a total intrinsic value of \$0.31 million.

The summary of the Company's non-vested SARs at December 31, 2021, 2020 and 2019, respectively, and the changes for the fiscal periods ending on those dates, are presented below:

	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested December 31, 2018	<u>—</u>	<u>—</u>
Granted	2,195,994	1.25
Vested	<u>—</u>	<u>—</u>
Forfeited	<u>(30,485)</u>	<u>1.25</u>
Non-vested December 31, 2019	<u>2,165,509</u>	<u>\$ 1.25</u>
Granted	<u>—</u>	<u>—</u>
Vested	<u>—</u>	<u>—</u>
Forfeited	<u>(444,886)</u>	<u>1.25</u>
Non-vested December 31, 2020	<u>1,720,623</u>	<u>\$ 1.25</u>
Granted	<u>—</u>	<u>—</u>
Vested	<u>(1,147,074)</u>	<u>1.27</u>
Forfeited	<u>—</u>	<u>—</u>
Non-vested December 31, 2021	<u>573,549</u>	<u>\$ 1.19</u>

The components of share-based compensation are as follows:

	Years ended December 31,		
	2021	2020	2019
Recognized expense			
Stock options	\$ 323	\$ 555	\$ 453
RSU awards ⁽¹⁾	1,562	1,272	2,006
SARs	273	771	1,312
Total recognized expense	<u>\$ 2,158</u>	<u>\$ 2,598</u>	<u>\$ 3,771</u>

(1) The fair value of the RSUs granted under the Compensation Plan for the years ended December 31, 2021, 2020 and 2019, was estimated at the date of grant, using the stated market price.

At December 31, 2021, there were \$0.06 million, \$0.68 million and nil of unrecognized compensation costs related to the unvested stock options, RSU awards and SARs, respectively, to be recognized over a weighted average period of 1.13 years, 1.67 years, and zero years, respectively.

15. LEASES

The Company's leases are primarily for office space, the largest being an office building lease for the Company's Lakewood, Colorado corporate offices. As of December 31, 2021, this lease has a remaining term of approximately 17 months and includes an option to extend the lease for one five-year term. Certain of our other leases include variable payments for lessor operating expenses that are not included within right-of-use ("ROU") assets and lease liabilities in the Consolidated Balance Sheets. The Company's lease agreements do not contain any material residual value guarantees or restrictive covenants.

Beginning January 1, 2019, operating ROU assets and operating lease liabilities are recognized based on the present value of lease payments over the lease term at commencement date. Operating leases in effect prior to January 1, 2019 were recognized at the present value of the remaining payments on the remaining lease term as of January 1, 2019. Because most of the Company's leases do not provide an explicit rate of return, the Company's incremental secured borrowing rate based on lease term information available at the commencement date of the lease will be used in determining the present value of lease payments. For purposes of calculating operating lease liabilities, lease terms may be deemed to include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. The Company's operating lease expense is recognized on a straight-line basis over the lease term and is recorded in General and Administration expenses. Short-term leases, which have an initial term of 12 months or less, are not recorded in the Consolidated Balance Sheets.

Total lease cost includes the following components:

	Years ended December 31,		
	2021	2020	2019
Operating leases	\$ 308	\$ 339	\$ 381
Short-term leases	324	297	297
Sublease income	—	—	(56)
Total lease expense	\$ 632	\$ 636	\$ 622

The weighted average remaining lease term and weighted average discount rate were as follows:

	Years ended December 31,		
	2021	2020	2019
Weighted average remaining lease term of operating leases	1.4 years	2.4 years	3.3 years
Weighted average discount rate of operating leases	9.0 %	9.0 %	9.0 %

Supplemental cash flow information related to leases was as follows:

	Years ended December 31,		
	2021	2020	2019
Operating cash flow information:			
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 343	\$ 367	\$ 333
Future minimum payments of operating lease liabilities as of December 31, 2021 are as follows:			
Years ending December 31:			
2022			\$ 350
2023			147
2024			—
2025			—
2026			—
Thereafter			—
Total lease payments			\$ 497
Less: Interest			(28)
Present value of lease liabilities	\$ 469		

16. INCOME TAXES

For financial reporting purposes, income before taxes includes the following components:

	Years ended December 31,		
	2021	2020	2019
Canada	\$ (7,549)	\$ (10,407)	\$ (4,174)
Foreign	8,997	(17,465)	(33,920)
Total	\$ 1,448	\$ (27,872)	\$ (38,094)

A reconciliation of income tax expense and the product of accounting income before income tax, multiplied by the combined Canadian federal and provincial income tax rate (the rate applicable to the Canadian parent company) is as follows:

	Years ended December 31,		
	2021	2020	2019
Income (Loss) before income taxes	\$ 1,448	\$ (27,872)	\$ (38,094)
Combined federal and provincial rate	26.50 %	26.50 %	26.50 %
Expected income tax recovery	\$ 384	\$ (7,385)	\$ (10,095)
Share-based compensation	(89)	565	985
Other non-deductible/non-taxable items	159	1,985	(376)
Unrecognized deferred tax assets	(454)	4,835	9,486
Income tax expense	\$ —	\$ —	\$ —

The components of the net deferred tax assets and liabilities as of December 31, 2021 and 2020 are as follows:

	Years ended December 31,	
	2021	2020
Deferred tax assets		
Inventories	\$ 6,380	\$ 7,051
Short-term investments	209	209
Operating loss carry forwards	101,345	95,060
Capital loss carry forwards	914	843
Deferred revenue and other	1,520	2,057
Mineral properties and deferred costs, United States	18,682	24,794
Mineral properties and deferred costs, Canada	1,884	1,760
Asset retirement obligations	3,627	3,455
Property, plant and equipment	942	1,806
Total deferred tax assets	\$ 135,503	\$ 137,035
Less: valuation allowance	(135,503)	(137,035)
Net deferred tax assets	\$ —	\$ —

At December 31, 2021, and 2020, the Company recorded a valuation allowance against the net deferred tax assets for the above related items in the financial statements as management did not consider it more likely than not that the Company will be able to realize the deferred tax assets in the future.

The following table summarizes the changes to the valuation allowance:

For the Years Ended December 31,	Balance			Balance End of Period
	Beginning of Period	Additions (a)	Deductions (b)	
2021	\$ 137,035	\$ 6,653	\$ (8,185)	\$ 135,503
2020	\$ 131,554	\$ 7,140	\$ (1,659)	\$ 137,035

- a) The 2021 additions to the valuation allowance result from additional losses incurred and increases to other tax assets such as reclamation obligations. Management does not feel these additions meet the more-likely-than-not criterion for recognition.
- b) The 2021 reductions to the valuation allowance result primarily from the decreases to other tax assets such as property, plant and equipment and mineral properties.

The following table summarizes the Company's capital losses and net operating losses as of December 31, 2021 that can be applied against future taxable profit.

Country	Type	Amount	Expiry Date
Canada	Non-capital losses	\$ 49,737	2027 - 2039
Canada	Allowable capital losses	3,450	None
Canada	Investment tax credits	1,254	2023-2027
United States	Pre-2018 net operating losses	292,139	2026-2036
United States	Post-2017 net operating losses	40,562	None
United States	US Excess Interest Carryforward	11	None

Under Section 382 of the Internal Revenue Code of 1986, ("IRC Section 382"), a corporation that undergoes an ownership change is subject to limitations on its use of pre-change tax attributes and carryforwards to offset future taxable income. The Company has determined that as a result of previous changes in ownership, approximately \$75 million in net operating losses will never be utilized as a result of these limitations and the remaining net operating losses are not expected to be utilized.

In addition, as a result of the Tax Cuts and Jobs Act, United States net operating loss carryforwards generated after December 31, 2017, are limited to usage at 80% of taxable income and will be permitted to be carried forward indefinitely.

Utilization of the Canadian loss carry forwards will be subject to the Acquisition of Control Rules in any year as a result of previous changes in ownership.

The Company files income tax returns in the US federal and various state jurisdictions with varying statutes of limitations. The Company's NOL from all years may be subject to adjustment for three or four years following the year in which utilized. We do not anticipate that any potential tax adjustments will have a significant impact on our financial position or results of operations.

Company policy is to include interest and penalties related to uncertain tax positions in the income tax expense line on the financial statements. However, as of December 31, 2021 the Company does not have any uncertain tax positions.

17. SUPPLEMENTAL FINANCIAL INFORMATION

The components of revenues are as follows:

The Company had two major customers to which its sales for the year were as follows: 2021 - \$1.57 million; \$1.39 million (2020 (one major customer) - \$1.55 million); (2019 (four major customers) - \$2.72 million; \$0.77 million; \$0.75 million; \$0.74 million).

The Company's revenues by country of customer for the current year were as follows: 2021 - \$1.72 million - U.S.; \$1.39 million - Estonia; \$0.08 million - Other (2020 - \$1.66 million - U.S.) (2019 - \$5.80 million - U.S.; \$0.07 million - Other).

The Company did not have any deferred revenue at December 31, 2021, 2020 and 2019.

The components of trade receivables are as follows:

The Company had two major customers for which there were outstanding trade receivables as of December 31, 2021 as follows: \$1.39 million; \$0.37 million (as of December 31, 2020 (one major customer) - \$0.35 million).

The Company's trade receivables by country of customer as of December 31, 2021 were as follows: \$0.47 million - U.S., \$1.39 million - Estonia (as of December 31, 2020: \$0.39 million - U.S.).

In December of 2020, the Company entered into a three-year supply agreement with The Chemours Company ("Chemours") to acquire natural monazite sands from the Chemours' Offerman Mineral Sand Plant in Georgia for processing at the Mill for the production of a marketable mixed RE carbonate as well as recovery of contained uranium, which is currently the Company's only RE carbonate feed supplier. However, the Company is currently actively engaged in discussions to secure its own sources of monazite sands or other/additional REE bearing deposits.

The components of other income (loss) are as follows:

	Years ended December 31,		
	2021	2020	2019
Interest income	\$ 44	\$ 153	\$ 482
Change in value of investments accounted for at fair value	7,106	1,835	(153)
Change in value of warrant liabilities	(8,078)	(5,436)	3,726
Change in value of Convertible Debentures	—	155	291
Foreign exchange gain (loss)	(128)	767	(46)
Department of Energy awards ⁽¹⁾	1,900	—	—
Other	350	233	(322)
Other income (loss)	\$ 1,194	\$ (2,293)	\$ 3,978

(1) See Part II, Item 7 "Outlook: Update on Rare Earth Element Initiative."

The components of accounts payable and accrued liabilities are as follows:

	December 31, 2021	December 31, 2020
Accounts payable	\$ 3,038	\$ 1,108
Payroll liabilities	1,988	1,512
Other accrued liabilities	738	701
Accounts payable and accrued liabilities	\$ 5,764	\$ 3,321

18. COMMITMENTS AND CONTINGENCIES

General legal matters

Other than routine litigation incidental to our business, or as described below, the Company is not currently a party to any material pending legal proceedings that management believes would be likely to have a material adverse effect on our financial position, results of operations or cash flows.

White Mesa Mill

In 2013, the Ute Mountain Ute Tribe filed a Petition to Intervene and Request for Agency Action challenging the Corrective Action Plan approved by the State of Utah Department of Environmental Quality ("UDEQ") relating to nitrate contamination in the shallow aquifer at the Mill. The challenge is currently being evaluated and may involve the appointment of an administrative law judge ("ALJ") to hear the matter. The Company does not consider this action to have any merit. If the petition is successful, the likely outcome would be a requirement to modify or replace the existing Corrective Action Plan. At this time, the Company does not believe any such modification or replacement would materially affect its financial position, results of operations or cash flows. However, the scope and costs of remediation under a revised or replaced Corrective Action Plan have not yet been determined and could be significant.

The UDEQ renewed in January 2018, then reissued with minor corrections in February 2018, the Mill's radioactive materials license (the "**Mill License**") for another ten years and the Groundwater Discharge Permit (the "**GWDP**") for another five years, after which further applications for renewal of the Mill License and GWDP will need to be submitted. During the review period for each application for renewal, the Mill can continue to operate under its existing Mill License and GWDP until such time as the renewed Mill License or GWDP is issued.

In 2018, the Grand Canyon Trust, Ute Mountain Ute Tribe and Uranium Watch (collectively, the "**Mill Plaintiffs**") served Petitions for Review challenging UDEQ's renewal of the Mill License and GWDP and Requests for Appointment of an ALJ, which they later agreed to suspend pursuant to a Stipulation and Agreement with UDEQ, effective June 4, 2018. The Company and the Mill Plaintiffs held multiple discussions over the course of 2018 and 2019 in an effort to settle the dispute outside of any judicial proceeding. In February 2019, the Mill Plaintiffs submitted to the Company their proposal for reaching a settlement agreement. The proposal remains under consideration by the Company. The Company does not consider these challenges to have any merit and, if a settlement cannot be reached, intends to participate with UDEQ in defending against the challenges. If the challenges are successful, the likely outcome would be a requirement to modify the renewed Mill License and/or GWDP. At

this time, the Company does not believe any such modification would materially affect its financial position, results of operations or cash flows.

On August 26, 2021, the Ute Mountain Ute Tribe filed a Petition to Intervene and Petition for Review challenging the UDEQ's approval of Amendment No. 10 to the Mill License, which expanded the list of Alternate Feed Materials that the Mill is authorized to accept and process for its source material content. Then, on November 18, 2021, the Tribe filed its Request for Appointment of an ALJ, followed shortly thereafter by a stay on the request in accordance with a Stipulation and Agreement between the Tribe, UDEQ and Company. The Company does not consider this action to have any merit. If the stay is lifted, an ALJ is appointed and the petition is successful, the likely outcome would be a requirement to modify or revoke the Mill License amendment. At this time, the Company does not believe any such modification or revocation would materially affect its financial position, results of operations or cash flows.

Pinyon Plain Project

In March 2013, the Center for Biological Diversity, the Grand Canyon Trust, the Sierra Club and the Havasupai Tribe (the "**Pinyon Plaintiffs**") filed a complaint in the U.S. District Court for the District of Arizona (the "**District Court**") against the U.S. Forest Service ("**USFS**") and the USFS Forest Supervisor for the Kaibab National Forest (together, the "**Defendants**") seeking an order (a) declaring that the USFS failed to comply with environmental, mining, public land, and historic preservation laws in relation to our Pinyon Plain Project (formerly known as the Canyon Project), (b) setting aside any approvals regarding exploration and mining operations at the Pinyon Plain Project, and (c) directing operations to cease at the Pinyon Plain Project and enjoining the USFS from allowing any further exploration or mining-related activities at the Pinyon Plain Project until the USFS fully complies with all applicable laws. In April 2013, the Pinyon Plaintiffs filed a Motion for Preliminary Injunction, which was later denied by the District Court. In April 2015, the District Court issued its final ruling on the merits in favor of the Defendants and the Company and against the Pinyon Plaintiffs on all counts. The Pinyon Plaintiffs appealed the District Court's ruling on the merits to the United States Ninth Circuit Court of Appeals (the "**Ninth Circuit**") and filed motions for an injunction pending appeal with the District Court. Those motions for an injunction pending appeal were denied by the District Court on May 26, 2015. Thereafter, the Pinyon Plaintiffs filed urgent motions for an injunction pending appeal with the Ninth Circuit, which were denied on June 30, 2015.

The hearing on the merits was held at the Ninth Circuit on December 15, 2016, which resulted in a favorable ruling for the Defendants a year later. The Pinyon Plaintiffs petitioned the Ninth Circuit for a rehearing *en banc* and, on October 25, 2018, the Ninth Circuit panel withdrew its prior opinion and filed a new opinion, which affirmed the prior opinion with one exception to the District Court's decision. The Ninth Circuit panel reversed itself on its prudential standing analysis as applied to the fourth claim on "valid existing rights," having initially determined that the Pinyon Plaintiffs lacked standing under the General Mining Law of 1872 (the "**Mining Law**"). The panel remanded the claim back to the District Court to hear on the merits, with the Pinyon Plaintiffs alleging that the USFS did not consider all relevant costs in analyzing whether the Company satisfied the Mining Law's "prudent person test" in its mineral examination and, thus, erred in concluding that the Company has valid existing rights to operate the Pinyon Plain Mine on lands otherwise subject to a 2012 U.S. Department of Interior withdrawal from location and entry.

On May 22, 2020, after the matters were briefed, the District Court issued its final order in favor of the Defendants, which the Pinyon Plaintiffs thereafter appealed to the Ninth Circuit. In December 2020, the Pinyon Plaintiffs filed their Appellant's Opening Brief with the Ninth Circuit and, in April 2021, the Defendants filed their respective Answering Briefs. Oral arguments were held remotely on August 30, 2021. On February 22, 2022, the Ninth Circuit filed its Opinion in favor of the USFS and the Company. The Pinyon Plaintiffs have the right to request a hearing *en banc* by the Ninth Circuit, or request a hearing on this matter in front of the U.S. Supreme Court. If the Pinyon Plaintiffs successfully appeal the matter at a rehearing *en banc* with the Ninth Circuit or successfully appeal the Ninth Circuit's decision at the U.S. Supreme Court, the Company may be required to maintain the Pinyon Plain Project on standby pending resolution of the matter. Such a prolonged delay of mining activities could have a significant impact on our future operations.

Daneros Mine

On October 27, 2021, the Company sold the Daneros mine to CUR, in addition to a number of its other non-core conventional uranium assets (see Part I, Item 1, "*Development of the Business – Major Transactions over the Past Five Years*").

Mineral Property Commitments

The Company enters into commitments with federal and state agencies and private individuals to lease mineral rights. These leases are renewable annually, and annual renewal costs are expected to total \$1.75 million for the year ended December 31, 2022.

Surety Bonds

The Company has indemnified third-party companies to provide surety bonds as collateral for the Company's ARO. The Company is obligated to replace this collateral in the event of a default and is obligated to repay any reclamation or closure costs due. As of December 31, 2021, the Company has \$20.31 million posted against an undiscounted ARO of \$41.34 million (December 31, 2020 - \$20.82 million posted against an undiscounted ARO of \$41.95 million).

Commitments

The Company is contractually obligated under a non-material Sales and Agency Agreement appointing an exclusive sales and marketing agent for all vanadium pentoxide produced by the Company.

19. FAIR VALUE ACCOUNTING

Assets and liabilities measured at fair value on a recurring basis

The following tables set forth the fair value of the Company's assets and liabilities measured at fair value on a recurring basis (at least annually) by level within the fair value hierarchy as of December 31, 2021. As required by accounting guidance, 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 utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

- Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
- Level 2 - Quoted prices in markets that are not active, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability; and
- Level 3 - Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

Our financial instruments include cash and cash equivalents, restricted cash, accounts receivable, accounts payable and current accrued liabilities. These instruments are carried at cost, which approximates fair value due to the short-term maturities of the instruments. Allowances for doubtful accounts are recorded against the accounts receivable balance to estimate net realizable value. The fair value of the Company's Convertible Debentures are measured at fair value based on the closing price on the TSX (a Level 1 measurement) and changes are recognized in other income (expense). The Company's investments in marketable equity securities which are exchange traded and are valued using quoted market prices in active markets and as such are classified within Level 1 of the fair value hierarchy. The Company's investments in marketable debt securities which are exchange-traded and are valued using quoted prices of a pricing service and as such are classified within Level 2 of the fair value hierarchy. The Company's investments accounted for at fair value consisting of Common Shares are valued using quoted market prices in active markets and as such are classified within Level 1 of the fair value hierarchy. The Company's investments accounted for at fair value consisting of warrants are valued using the Black-Scholes option model based on observable inputs and as such are classified within Level 2 of the hierarchy. The Company's warrants are classified as liabilities. The warrants are subject to re-measurement at each balance sheet date, with any change in fair value recognized as a component of other income (expense), net in the Consolidated Statements of Operations and Comprehensive Income (Loss). The warrants issued in September 2016 are classified as Level 1 under the fair value hierarchy using quoted market prices in active markets.

As of December 31, 2021 and 2020, the fair values of cash and cash equivalents, restricted cash, short-term deposits, receivables, accounts payable and accrued liabilities approximate their carrying values because of the short-term nature of these instruments.

December 31, 2021	Level 1	Level 2	Level 3	Total
Investments accounted for at fair value (Note 7)	\$ 37,407	\$ 1,131	\$ —	\$ 38,538
Marketable equity securities (Note 4)	494	—	—	494
	\$ 37,901	\$ 1,131	\$ —	\$ 39,032

December 31, 2020	Level 1	Level 2	Level 3	Total
Investments accounted for at fair value (Note 7)	\$ 779	\$ —	\$ —	\$ 779
Marketable equity securities (Note 4)	2,247	—	—	2,247
Warrant liabilities (Note 12)	(8,573)	—	—	(8,573)
	\$ (5,547)	\$ —	\$ —	\$ (5,547)

There were no transfers into or out of Level 3 during the year ended December 31, 2021.

20. REVENUErecognition AND CONTRACTS WITH CUSTOMERS

All revenue recognized is a result of contracts with customers either through sales contracts or Alternate Feed Agreements.

As of December 31, 2018, the Company had one customer contract with material performance obligations remaining. The Company had not delivered material from its toll processing activities to the customer. The material was delivered in the first half of 2019 and the Company recognized \$2.74 million.

The Company's long-term contracts expired following the Company's 2018 deliveries, and all uranium sales after 2018 will be required to be made at spot prices until the Company enters into new long-term contracts at satisfactory prices in the future. Revenue beyond our current contracts will be affected by both spot and long-term U₃O₈ price fluctuations which are beyond our control, including: the demand for nuclear power; political and economic conditions; governmental legislation in uranium producing and consuming countries; and production levels and costs of production of other producing companies, as well as fluctuations in the price of vanadium and the price of REEs, both of which are beyond the Company's control.

21. RELATED PARTY TRANSACTIONS

On May 17, 2017, the Board of Directors of the Company appointed Robert W. Kirkwood and Benjamin Eshleman III to the Board of Directors of the Company.

Mr. Kirkwood is a principal of the Kirkwood Companies, including Kirkwood Oil and Gas LLC, Wesco Operating, Inc., and United Nuclear LLC ("United Nuclear"). United Nuclear, owns a 19% interest in the Company's Arkose Mining Venture while the Company owns the remaining 81%. The Company acts as manager of the Arkose Mining Venture and has management and control over operations carried out by the Arkose Mining Venture. The Arkose Mining Venture is a contractual joint venture governed by a venture agreement dated as of January 15, 2008 entered into by Uranerz Energy Corporation, a wholly owned, indirectly held subsidiary of the Company ("Uranerz") and United Nuclear (the "Venture Agreement").

United Nuclear contributed \$0.31 million, \$0.13 million and \$0.05 million to the expenses of the Arkose Joint Venture based on the approved budget for the years ended December 31, 2021, 2020 and 2019.

On June 1, 2021, Uranerz renewed its Casper, Wyoming-based Office Lease Agreement with Metro, Inc. where Mr. Kirkwood acts as General Manager. The term is for a period of 12 months with rent in the amount of \$15,000 paid in \$1,250 monthly increments. The original Office Lease Agreement was entered into by the parties on June 1, 2020, for a period of 12 months, with rent in the amount of \$12,000 paid in \$1,000 monthly increments.

Mr. Benjamin Eshleman III is President of Mesteña LLC, which became a shareholder of the Company through the Company's acquisition of Mesteña Uranium, L.L.C (now Alta Mesa LLC) and certain of its affiliates (collectively, the "Acquired Companies") in June 2016. Pursuant to the purchase agreement, the Alta Mesa Properties held by the Acquired Companies are subject to a royalty of 3.125% of the value of the recovered U₃O₈ from the Alta Mesa Properties sold at a price of \$65.00 per pound or less, 6.25% of the value of the recovered U₃O₈ from the Alta Mesa Properties sold at a price greater than \$65.00 per pound up to and including \$95.00 per pound, and 7.5% of the value of the recovered U₃O₈ from the Alta Mesa Properties sold

at a price greater than \$95.00 per pound. The royalties are held by Mr. Eshleman and his extended family. In addition, Mr. Eshleman and certain members of his extended family are parties to surface use agreements that entitle them to surface use payments from the Acquired Companies in certain circumstances. The Alta Mesa Properties are currently being maintained on care and maintenance to enable the Company to restart operations as market conditions warrant, and as such, no royalty payments were made during the years ended December 31, 2021 or 2020. The Company makes surface use payments on an annual basis to Mr. Eshleman and his immediate family members. The Company paid \$0.3 million and \$0.3 million, respectively, in surface use payments during the years ended December 31, 2021 and 2020.

On October 27, 2021, the Company began providing services to CUR under the mine operating agreement described in Note 8. Amounts earned during the year ended December 31, 2021 and due to the Company from CUR at December 31, 2021 were less than \$0.1 million. The Company provided no services to CUR under the toll milling agreement during the year ended December 31, 2021.

22. SUBSEQUENT EVENTS

Issuance of Stock Options, RSUs, and SARs

On January 25, 2022, the Company granted 0.10 million non-incentive stock options with an exercise price of \$6.47 per share, 0.33 million RSUs, and 0.83 million SARs at a grant price of \$6.47 per share, to its employees and directors. The stock options carry a five-year life and vest as follows: 50% on January 25, 2023; and 50% on January 25, 2024. The RSUs vest as follows: 50% on January 27, 2023; 25% on January 27, 2024; and 25% on January 27, 2025. The SARs have a term of five years vesting only upon the achievement of the following performance goals: as to one-third of the SARs granted, automatically upon the 90-calendar-day VWAP of the Company's Common Shares on the NYSE American equaling or exceeding US\$12.00 for any continuous 90-calendar-day period; as to an additional one-third of the SARs granted, automatically upon the 90-calendar-day VWAP of the Company's Common Shares equaling or exceeding US\$14.00 for any continuous 90-calendar-day period; and as to the final one-third of the SARs granted, automatically upon the 90-calendar-day VWAP of the Company's Common Shares equaling or exceeding US\$16.00 for any continuous 90-calendar-day period. Further, notwithstanding the foregoing vesting schedule, no SARs are able to be exercised by the holder for an initial period of one year from the date of grant; the date first exercisable being January 25, 2023.

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

As of the end of the period covered by this Annual Report on Form 10-K, an evaluation was carried out under the supervision of and with the participation of the Company's management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a – 15(e) and Rule 15d – 15(e) under the Exchange Act). Based on that evaluation, the CEO and the CFO have concluded that as of the end of the period covered by this Annual Report on Form 10-K, the Company's disclosure controls and procedures were effective in ensuring that: (i) information required to be disclosed by the Company in reports that it files or submits to the SEC under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in applicable rules and forms; and (ii) material information required to be disclosed in its reports filed under the Exchange Act is accumulated and communicated to its management, including its CEO and CFO, as appropriate, to allow for accurate and timely decisions regarding required disclosure.

It should be noted that while the CEO and CFO believe that the Company's disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that the Company's disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. The Company's management has employed a framework consistent with Exchange Act Rule 13a-15(c), to evaluate the Company's internal control over financial reporting described below. 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.

The senior executive officers, including the Company's CEO and CFO, conducted an evaluation of the effectiveness, design and operation of the Company's internal control over financial reporting as of December 31, 2021, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion on this evaluation. Based on this evaluation, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2021 and no material weaknesses were discovered.

The effectiveness of our assessment of internal control over financial reporting as of December 31, 2021 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

During the year ended December 31, 2021, there were no changes in the Company's internal control over financial reporting that materially affected, or are likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information relating to this item will be included in the proxy statement for our 2022 Annual Meeting of Shareholders and is incorporated by reference in this report.

ITEM 11. EXECUTIVE COMPENSATION

Information relating to this item will be included in the proxy statement for our 2022 Annual Meeting of Shareholders and is incorporated by reference in this report.

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

Information relating to this item will be included in the proxy statement for our 2022 Annual Meeting of Shareholders and is incorporated by reference in this report.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE INTEREST OF MANAGEMENT & OTHERS IN MATERIAL TRANSACTIONS

Information relating to this item will be included in the proxy statement for our 2022 Annual Meeting of Shareholders and is incorporated by reference in this report.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information relating to this item will be included in the proxy statement for our 2022 Annual Meeting of Shareholders and is incorporated by reference in this report.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Documents Filed as Part of This Report.

(1) Financial Statements

- Report of Independent Registered Public Accounting Firm
- Consolidated Statements of Operations and Comprehensive Income (Loss) for the years ended December 31, 2021, 2020 and 2019
- Consolidated Balance Sheets at December 31, 2021 and 2020
- Consolidated Statements of Changes in Equity for the years ended December 31, 2021, 2020 and 2019
- Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019
- Notes to the Consolidated Financial Statements

(2) Financial Statement Schedules

Schedules are omitted and are not applicable or not required, or the required information is shown in the financial statements or notes thereto.

(3) Exhibits

Where an exhibit is filed by incorporation by reference to a previously filed registration statement or report, such registration statement or report is identified in parentheses.

Exhibit No. Document Description

3.1	Articles of Continuance dated September 2, 2005 (1)
3.2	Articles of Amendment dated May 26, 2006 (2)
3.3	By-laws (3)
4.1	Shareholder Rights Plan between Energy Fuels Inc. and American Stock Transfer & Trust Company, LLC dated March 18, 2021 (4)
4.2	Description of the Company's Securities Registered Under Section 12 of the Securities Exchange Act of 1934
10.1	Consulting Agreement between Energy Fuels Inc. and Liviakis Financial Communications, Inc. dated March 29, 2018 and effective October 1, 2017 (5)
10.2	October 2018 Amended and Restated Consulting Agreement between Energy Fuels Inc. and Liviakis Financial Communications, Inc. dated October 1, 2018 (6)
10.3	October 2019 Second Extension to Consulting Agreement between Energy Fuels Inc. and Liviakis Financial Communications, Inc. dated October 1, 2019 (7)
10.4	October 2020 Third Extension to Consulting Agreement between Energy Fuels Inc. and Redwood Empire Financial Communications Inc. ("Redwood"), including its assignment and assumption from Liviakis Financial Communications, Inc. to Redwood, entered into with Energy Fuels Inc. on October 1, 2020 (8)
10.5	October 2021 Fourth Extension to Consulting Agreement between Energy Fuels Inc. and Redwood Empire Financial Communications Inc., dated March 18, 2021 and effective as of October 1, 2021 (9)
10.6	Uranerz Energy Corporation 2005 Nonqualified Stock Option Plan, as amended and restated as of June 2011 (10)
10.7	Amended and Restated Shareholder Rights Plan Agreement between Energy Fuels Inc. and AST Trust Company (Canada), dated March 29, 2018 and effective as of May 30, 2018 by shareholder vote (11)
10.8	2021 Omnibus Equity Incentive Compensation Plan, as amended and restated as of March 18, 2021 (12)
10.9	Form of Indemnity Agreement between Energy Fuels Inc. and its officers and directors (13)
10.10	Employment Agreement by and between Energy Fuels Inc. and Mark Chalmers dated March 18, 2021 (14)
10.11	Employment Agreement by and between Energy Fuels Inc. and David C. Frydenlund dated March 18, 2021 (15)
10.12	Employment Agreement by and between Energy Fuels Inc. and Curtis Moore dated October 6, 2017 (16)

Exhibit No. Document Description

10.13	Employment Agreement by and between Energy Fuels Inc. and Dee Ann Nazarenus dated September 1, 2020 (17)
10.14	Employment Agreement by and between Energy Fuels Inc. and Scott Bakken dated September 1, 2020 (18)
10.15	Sales Agreement by and among Energy Fuels Inc., Cantor Fitzgerald & Co., H.C. Wainwright & Co., LLC and Roth Capital Partners, LLC, dated May 6, 2019 (19)
21.1	An organizational chart showing Energy Fuels Inc.'s direct and indirect subsidiaries
23.1	Consent of KPMG LLP
23.2	Consent of Grant A. Malensek
23.3	Consent of Jeremy Scott Collyard
23.4	Consent of Phillip E. Brown
23.5	Consent of David M. Robson
23.6	Consent of Mark B. Mathisen
23.7	Consent of Travis Boam
23.8	Consent of Douglas L. Beahm
23.9	Consent of Daniel Kapostasy
23.10	Consent of Terence McNulty
23.11	Consent of Jeffrey Woods
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Exchange Act
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Exchange Act
32.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(b) of the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(b) of the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
95.1	Mine Safety Disclosure
96.1	"Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg Counties, Texas, USA," dated December 31, 2021 (20)

Exhibit No. Document Description

96.2	<u>"Preliminary Feasibility Study for the Sheep Mountain Project, Fremont County, Wyoming, USA," dated December 31, 2022 (21)</u>
96.3	<u>"Technical Report on the Pinyon Plain Project, Coconino County, Arizona, USA," dated February 22, 2022 (22)</u>
96.4	<u>"Technical Report on the Roca Honda Project, McKinley County, New Mexico, USA," dated February 22, 2022 (23)</u>
96.5	<u>"Technical Report on the Bullfrog Project, Garfield County, Utah, USA," dated February 22, 2022 (24)</u>
96.6	<u>"Technical Report on the Nichols Ranch Project, Campbell and Johnson Counties, Wyoming USA," dated February 22, 2022 (25)</u>
96.7	<u>"Technical Report on the La Sal Project, San Juan County, Utah, USA," dated February 22, 2022 (26)</u>
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.
(1)	Incorporated by reference to Exhibit 3.1 of Energy Fuels' Form F-4 filed with the SEC on May 8, 2015.
(2)	Incorporated by reference to Exhibit 3.2 of Energy Fuels' Form F-4 filed with the SEC on May 8, 2015.
(3)	Incorporated by reference to Exhibit 3.3 of Energy Fuels' Form F-4 filed with the SEC on May 8, 2015.
(4)	Incorporated by reference to Appendix B of Energy Fuels' Schedule 14A filed with the SEC on April 2, 2021.
(5)	Incorporated by reference to Exhibit 1.1 to Energy Fuels' Form 8-K filed on April 3, 2018.
(6)	Incorporated by reference to Exhibit 14.16 to Energy Fuels' Form 10-Q filed with the SEC on November 5, 2018.
(7)	Incorporated by reference to Exhibit 10.10 to Energy Fuels' Form 10-K filed with the SEC on March 17, 2020.
(8)	Incorporated by reference to Exhibit 10.10 to Energy Fuels' Form 10-Q filed with the SEC on November 2, 2020.
(9)	Incorporated by reference to Exhibit 10.11 to Energy Fuels' Form 10-Q filed with the SEC on May 13, 2021.
(10)	Incorporated by reference to Exhibit 4.2 to Energy Fuels' Form S-8 filed on June 24, 2015.
(11)	Incorporated by reference to Exhibit 4.1 to Energy Fuels' Form 8-K filed on June 1, 2018.
(12)	Incorporated by reference to Appendix A to Energy Fuels' Schedule 14A filed on April 2, 2021.
(13)	Incorporated by reference to Exhibit 10.4 to Energy Fuels' Form 10-K filed with the SEC on March 15, 2016.
(14)	Incorporated by reference to Exhibit 10.9 to Energy Fuels' Form 10-K filed with the SEC on March 22, 2021.
(15)	Incorporated by reference to Exhibit 10.10 to Energy Fuels' Form 10-K filed with the SEC on March 22, 2021.
(16)	Incorporated by reference to Exhibit 10.4 to Energy Fuels' Form 10-Q filed with the SEC on November 2, 2020.
(17)	Incorporated by reference to Exhibit 10.5 to Energy Fuels' Form 10-Q filed with the SEC on November 2, 2020.
(18)	Incorporated by reference to Exhibit 10.6 to Energy Fuels' Form 10-Q filed with the SEC on November 2, 2020.
(19)	Incorporated by reference to Exhibit 10.1 to Energy Fuels' Form 10-Q filed with the SEC on August 5, 2019.
(20)	Incorporated by reference to Exhibit 99.1 to Energy Fuels' Form 8-K filed on March 11, 2022.
(21)	Incorporated by reference to Exhibit 99.7 to Energy Fuels' Form 8-K filed on March 11, 2022.
(22)	Incorporated by reference to Exhibit 99.5 to Energy Fuels' Form 8-K filed on March 11, 2022.
(23)	Incorporated by reference to Exhibit 99.6 to Energy Fuels' Form 8-K filed on March 11, 2022.
(24)	Incorporated by reference to Exhibit 99.2 to Energy Fuels' Form 8-K filed on March 11, 2022.
(25)	Incorporated by reference to Exhibit 99.4 to Energy Fuels' Form 8-K filed on March 11, 2022.
(26)	Incorporated by reference to Exhibit 99.3 to Energy Fuels' Form 8-K filed on March 11, 2022.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

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

ENERGY FUELS INC.

By: /s/ Mark S. Chalmers

Mark S. Chalmers, President & Chief Executive Officer

Principal Executive Officer

Date: March 15, 2022

In accordance with the Securities Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Per: /s/ Mark S. Chalmers

Mark S. Chalmers, President & Chief Executive Officer

(Principal Executive Officer) and Director

Date: March 15, 2022

Per: /s/ David C. Frydenlund

David C. Frydenlund, Chief Financial Officer

(Principal Financial Officer)

Date: March 15, 2022

Per: /s/ Sarai C. Luksch

Sarai C. Luksch, Chief Accounting Officer & Controller

Date: March 15, 2022

Per: /s/ J. Birks Bovaird

J. Birks Bovaird, Director

Date: March 15, 2022

Per: /s/ Benjamin Eshleman III

Benjamin Eshleman III, Director

Date: March 15, 2022

Per: /s/ Ivy V. Estabrooke

Ivy V. Estabrooke, Director

Date: March 15, 2022

Per: /s/ Barbara A. Filas

Barbara A. Filas, Director

Date: March 15, 2022

Per: /s/ Bruce D. Hansen

Bruce D. Hansen, Director

Date: March 15, 2022

Per: /s/ Dennis L. Higgs

Dennis L. Higgs, Director

Date: March 15, 2022

Per: /s/ Robert Kirkwood

Robert Kirkwood, Director

Date: March 15, 2022

Per: /s/ Alexander Morrison

Alexander Morrison, Director

Date: March 15, 2022