### **Corporate Presentation**

September 2023





#### St. Lawrence Lowlands, Quebec

Seeking value for nationalization of a giant natural gas discovery

NORTH AMERICA

### G We

#### Western Alberta

Condensate-rich Montney resource play with attractive economics

#### **G** SE Saskatchewan/SW Manitoba

Proven Torquay/Spearfish tight oil production with strong netbacks

### **O** Utah

Scope 3 zero hub and large oil resource through strategic interest in Red Leaf

#### Kingdom of Jordan

Significant oil shale deposit being assessed for commercial development



### Financial and operational overview

For the three months ended June 30, 2023

#### Operating and Financial Results

Funds Flow from Operations (\$)	\$ 5.3 million
Working Capital Surplus (\$)	\$ 28 million
Credit Facility (undrawn) (\$)	\$ 16 million

#### Capitalization and Liquidity



OUESTERRE

Production (boe/d)1,978Oil + Liquids Weighting59%Revenue (\$/boe)59.46Operating Netback (\$/boe)34.37

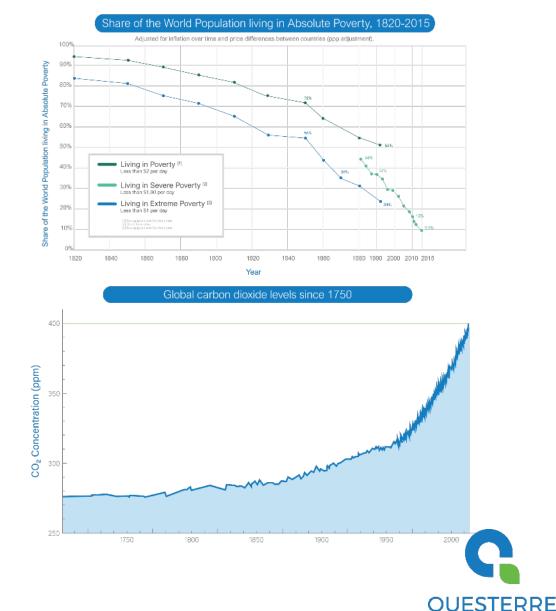
All financial amounts in C\$. Please refer to Financial Statements and Management's Discussion and Analysis for three and six months ended June 30, 2023 filed on SEDAR+.

### Clean Tech Energy is the future

We believe true sustainability means maintaining human progress and protecting our ecosystem at the same time

The solution is developing hydrocarbons responsibly with existing and new clean tech to transform our energy usage Zero-emission hubs using new carbon tech including sequestration are emerging globally with private and government support

Questerre has been at the forefront of integrating these technologies into its projects



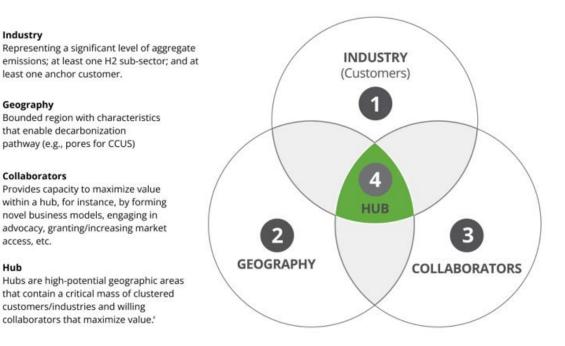
### Net-zero industrial hubs are the future

- Integrated sites utilizing clean energy (hydrogen) while transporting emissions for storage or recycling
  - Turn these services into utilities like water electricity, etc.
- Establish centres of excellence or megacentres that develop new carbon tech to recycle CO<sub>2</sub> into high value products
- Wax processing facility provides both a source of carbon dioxide and hydrogen

#### The Hub Concept<sup>1</sup>

Industry

Hub





## St. Lawrence Lowlands



### Impending energy shortage creates opportunity

- Energy transition policies driving projected power shortages in Canada, including Quebec, in next few years
- Impacting Quebec's ability to attract new investment
  - Loss of \$13 billion Volkswagen battery plant to • Ontario due in part to lack of insufficient electricity supply – Quebec Energy Minister
- Government of Quebec seeks proposals for pilot projects
  - Questerre submitted application for carbon • storage test

#### **Big Power Shortfall Looms After Quebec Wooed US With Cheap Hydro**

Surging demand may spur producer of North America's cheapest electricity to build more dams, risking ire of environmentalists

#### Local Business / Business

#### Hard choices will have to be made, energy minister warns Quebecers

"Our surpluses have melted like glaciers under the sun of climate change," Energy Minister Pierre Fitzgibbon says

Published May 19, 2023 · Last updated May 22, 2023 · 4 minute read





nergy Minister Pierre Fitzgibbon answers questions following his speech to the Chamber f Commerce of Metropolitan Montreal on Friday. PHOTO BY JOHN MAHONEY /Montreal Gazette

The era of large energy surpluses is over, Quebec's energy minister says.



### Impending energy shortage creates opportunity

- Provincial utility, Hydro-Quebec, looking at options including nuclear energy
- Quebec Clean Gas a shovel-ready and scalable solution to the electricity crisis
  - Backup power for peak periods to eliminate curtailments and price spikes
  - Capacity to provide as much power as Churchill Falls
    for decades
  - Frees up high value hydro-electricity for local consumption and exports
  - Cost effective solution to provide heat for industrial use

#### NEWS » POLICY

#### Nuclear energy: Hydro-Québec could reactivate Gentilly-2

The new CEO of the state-owned company wants to know if a recommissioning of the Bécancour nuclear power plant is imaginable

#### Renewables / Energy

#### Hydro-Québec's looming power shortage seen threatening climate goals

*Experts doubt the utility can meet demand at home and abroad without serious compromises* 

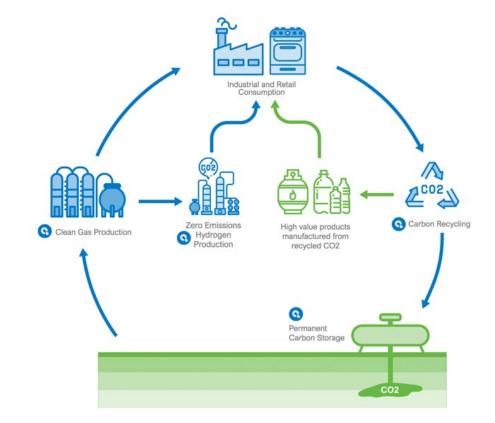
#### Marisa Coulton

Published Jul 13, 2023 • Last updated Jul 13, 2023 • 7 minute read



### Seeking full value for a giant discovery

- GLJ assessment of 7 Tcf of gas risked contingent (1.6 Tcf) and prospective (5.4 Tcf) resources<sup>(1)</sup>
  - 2020 evaluation with 50% chance of development was 1.6 Tcf with NPV-10 of ~\$1.0 billion (best estimate contingent resources only)<sup>(2)</sup>
  - Potential to meet up to 50% of Germany's natural gas imports from Russia or 1.5 Bcf/d<sup>(3)</sup>
  - Does not include value of carbon storage rights
- Full cycle zero-emissions project design including carbon recycling and storage, zero-emissions hydrogen production and Clean Gas production – Scope 3 zero
- Supportive stakeholders including First Nations, local towns, trade unions and farmers
  - Only 13% of Quebecers oppose development based on October 2021 Leger polling



- (1) See Annual Information Form for the year ended December 31, 2020, and dated March 24, 2021, under the Corporation's profile at www.sedarplus.ca. There is no certainty that any portion of the prospective resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources. See "GLJ Resource Report" under Forward Looking Information.
- (2) An estimate of risked net present value of future net revenue of contingent and prospective resources is preliminary in nature and is provided to assist the reader in reaching an opinion on the merit and likelihood of the company proceeding with the required investment. It includes contingent resources and prospective resources that are considered too uncertain with respect to the chance of development and chance of discovery, respectively, to be classified as reserves. There is uncertainty that the risked net present value of future net revenue will be realized.
- (3) https://www.reuters.com/business/energy/how-dependent-is-germany-russian-gas-2022-03-08/ Assumes all resource estimates are correct, are actually discovered and it is commercially and legally viable to produce.





### Next steps

- Assessing Government interest in Clean Gas, hydrogen and carbon storage as a solution to the energy shortage
- Pursuing claim for unjust enrichment and breach of contract against Government
  - All outstanding claims to be managed by a single judge at the Quebec Superior Court with next hearing in October 2023
  - Expert witness report on damage valuation being prepared
  - Stay on all default notices granted by Justice
- Working with stakeholders to protect their legal rights



### Oil Shale Utah & Kingdom of Jordan



### Strategic investment in Red Leaf

A Scope 3 zero industrial park anchor tenant

- A wax processing facility in a niche oilproducing basin with a grandfathered environmental permit
- Over 30 patents issued for an economic process to produce oil from shale with integrated carbon capture
- Applying technology to over 7 billion barrels of unrisked discovered resource in Kingdom of Jordan<sup>(1)</sup> and significant oil resource in Utah

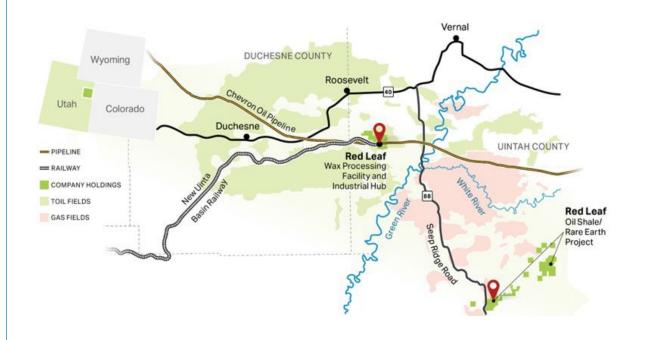




<sup>(1)</sup> There is no certainty that it will be commercially viable to produce any portion of the resources. Please reference the Annual Information Form for the year ended December 31, 2016, and dated March 24, 2017, as filed under the Corporation's profile on www.sedarplus.ca. Millcreek Resource Assessment effective September 30, 2016. See "Forward-Looking Information" and "Resource Disclosure".

### Utah Mega Site – Uinta Basin

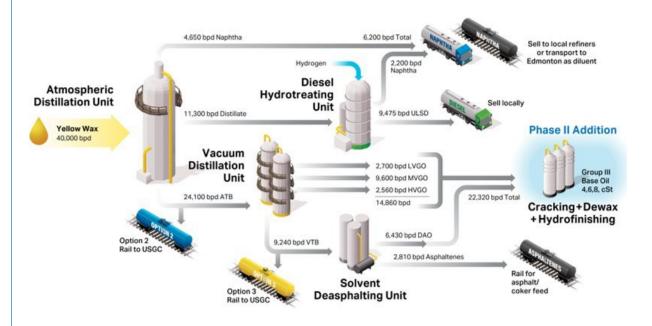
- Recently acquired 7,000 acres of surface rights in oil-producing Uinta Basin in Utah
- Utah Department of Air Quality permit for a 40,000 bbl/d project
- Acreage is at end of the proposed Uinta Basin Railway to transport oil to markets on US Gulf Coast and ~40 miles from oil shale permits
- Working with key government and community stakeholders including Native tribe to develop processing facility and rail loading as part of Scope 3 zero emissions industrial park





### Wax processing facility anchors zero-emissions hub

- Processing local waxy crudes for high value low sulfur diesel and lubricant feedstocks
- Integral to unlocking growth in the basin currently producing ~120,000 bbl/d and constrained by egress<sup>(1)</sup>
  - Collaborating with largest basin producers on supplying crude and purchasing finished product
- Wax facility would be the anchor tenant for a Scope 3 zero emission industrial park on company land in the heart of the rapidly growing Uinta Basin





### New technology incorporates carbon capture

- Technology redesign to reduce capital costs and improve environmental footprint
  - Red Leaf estimates capital and operating costs reduced to ~US\$30/bbl with new process
  - CO<sub>2</sub> production combined with carbon capture and sequestration
  - Global engineering firm, Hatch, sees 'clear path to commercialization for technology'
- Potential for co-production of rare earth elements as a by-product
  - Essential commodity for green energy, defence and technology markets



### Oil Shale Acreage

Assessing high yield acreage in Jordan

- Best estimate of unrisked discovered petroleum initially in place of 7.8 billion barrels<sup>(1)</sup>
- Favorable regulatory environment with first 470MW oil shale power plant on production in Q2 2023
- Assessing redesigned Red Leaf technology for Jordan acreage

Continuing concession negotiations



EGYPT SAUDI ARABIA AQABA MICU ACCE age

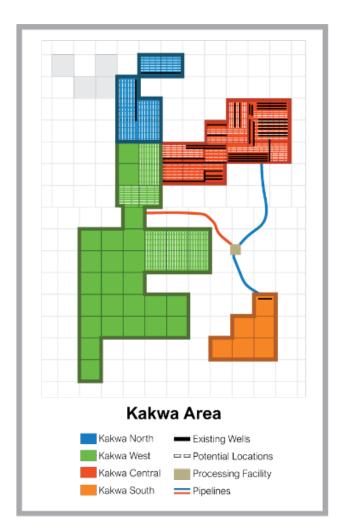
<sup>(1)</sup> There is no certainty that it will be commercially viable to produce any portion of the resources. Please reference the Annual Information Form for the year ended December 31, 2016, and dated March 24, 2017, as filed under the Corporation's profile on www.sedarplus.ca. Millcreek Resource Assessment effective September 30, 2016. See "Forward-Looking Information" and "Resource Disclosure".





### Commodity prices driving development plans

- Operators exercising capital discipline by maintaining pace of development within cash flow
- Current Kakwa production of ~1,600 boe/d could double if drilling ramps up
  - Peak production of up to 5,000 boe/d based on proved and probable undeveloped locations <sup>(1)</sup>
- Seeking to maintain production and cash flow





(1) Based on forecasted production of total proved and probable reserves from Kakwa from the McDaniel Reserve Report effective December 31, 2022. See McDaniel Reserve Report under Forward Looking Information.



### Outlook

- Pursue political and business solution in Quebec for energy crisis
  - Assist partners including First Nations in protecting their rights
- Advance Scope 3 zero emissions energy hubs as solution for sustainable development
- Continue to participate in additional drilling based on prices



### MANAGEMENT AND BOARD



### **Board of Directors**

Michael Binnion, President & Chief Executive Officer

#### Bjorn Inge Tonnessen, Chairman

- Oil & Gas E&P experience & former senior equity research analyst
- Former CEO & President, Edge Petroleum AS
- Former CEO & President, Spike Exploration AS, now part of Var Energi

#### **Mireille Fontaine**

- Lawyer with corporate finance practice
- o Partner, BCF Business Law, a Quebec-based law firm

#### Hans Jacob Holden

- Corporate finance experience
- Former Business Development, AF Gruppen, civil engineering and construction company
- o Formerly Corporate Finance at Pareto Securities

#### Dennis Sykora, Chairman of Audit Committee

- Chartered Accountant and Lawyer
- Oil & gas experience primarily with service sector and international operations

### Management

Michael Binnion, President & Chief Executive Officer John Brodylo, VP Exploration (Nexen) Peter Coldham, VP Engineering (Chevron) Jason D'Silva, Chief Financial Officer (CanArgo, Flowing) Rick Tityk, VP Land (Hunt Oil)



### FORWARD LOOKING INFORMATION



This presentation contains certain forward–looking information and statements within the meaning of applicable securities laws. The use of any of the words "expect", "anticipate", "continue", "estimate", "may", "will", "project", "should", "believe", "plans", "intends", "outlook", "strategy", "potential", "forward", "defer" and similar expressions are intended to identify forward-looking information or statements. In particular, but without limiting the forgoing, this presentation may contain forward-looking information and statements pertaining to the following: seeking full value for Questerre's natural gas discovery in Quebec; assessment of Quebec government interest in hydrogen and carbon storage as a solution to the energy shortage; working with stakeholders in Quebec to protect their legal rights; Red Leaf working with stakeholders to develop the processing facility and rail-loading as part of the Scope 3 zero emissions industrial park in the Uintah Basin, the potential of net-zero industrial hubs; technology redesign by Red Leaf to reduce capital and operating costs and reduce the environmental footprint; the potential for co-production of rare earth elements as a by-product; corporate strategy, developing hydrocarbons responsibly, potential to meet 50% of Germany's natural gas imports from Russia, support in Quebec for local natural gas development, pursuing a claim for unjust enrichment and breach of contract against the Government of Quebec; the pursuit of a political and business solution in Quebec for the energy crisis; resource estimates, oil and gas reserves, industry consolidation, drilling plans, production potential in Kakwa, seeking to maintain production and cash flow from Kakwa, the 40,000 bbl/d refinery project, the proposed Unita Basin Railway, assessing redesigned Red Leaf technology for Jordan acreage and continuing concession negotiations in Jordan.

Certain information, including information set out under the heading Financial and operational overview", is "financial outlook" within the meaning of applicable securities laws. Financial outlook has been prepared by Management to provide readers with disclosure regarding the Corporation's reasonable expectations as to the anticipated results of its proposed business activities for 2023 and beyond. Readers are cautioned that this financial outlook is based upon numerous assumptions, including the assumptions discussed herein and may not be appropriate for other than indicative purposes. The actual results of operations and the resulting financial results will likely vary from the amounts set forth in the analysis presented in this presentation, and such variation may be material.

Questerre and its management believe that the financial outlook information herein has been prepared on a reasonable basis, reflecting the best estimates and judgments, and represent, to the best of management's knowledge and opinion, Questerre's expected expenditures and results of operations. However, because this information is highly subjective and subject to numerous risks including the risks discussed herein, it should not be relied on as necessarily indicative of future results. Except as required by applicable Canadian securities laws, Questerre undertakes no obligation to update any such financial outlook information.

The recovery and reserve estimates of Questerre's reserves and resources provided herein are estimates only and there is no guarantee that the estimated reserves or resources will be recovered. In addition, forward-looking statements or information are based on a number of material factors, expectations or assumptions of Questerre which have been used to develop such statements and information, but which may prove to be incorrect. Although Questerre believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because Questerre can give no assurance that such expectations will prove to be correct.

In addition to other factors and assumptions which may be identified herein, assumptions have been made regarding, among other things: the timing and extent of capital programs by Questerre and its partners in Alberta, the scale and scope of its investment in Red Leaf and developments with Red Leaf and its assets, the impact of increasing competition; the general stability of the economic and political environment in which Questerre operates; the timely receipt of any required regulatory approvals; the ability of Questerre to obtain qualified staff, equipment and services in a timely and cost efficient manner; drilling results; the ability of the operator of the projects in which Questerre has an interest in to operate the field in a safe, efficient and effective manner; the ability of Questerre to obtain financing on acceptable terms; field production rates and decline rates; the ability to replace and expand oil and natural gas reserves through acquisition, development and exploration; the timing and cost of pipeline, storage and facility construction and expansion and the ability of Questerre to secure adequate product transportation; future commodity prices; currency, exchange and interest rates; regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which Questerre operates; and the ability of Questerre to successfully market its oil and natural gas products.

Past performance of Questerre or other entities referred to in this presentation is shown for illustrative purposes only, does not guarantee future results of Questerre and is not meant to forecast, imply or guarantee the future performance of Questerre, which will vary.



The forward-looking information and statements included in this presentation are not guarantees of future performance and should not be unduly relied upon. Such information and statements, including the assumptions made in respect thereof, involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information or statements including, without limitation: changes in commodity prices; changes in the demand for or supply of Questerre's products; unanticipated operating results or production declines; changes in tax or environmental laws, royalty rates or other regulatory matters; changes in development plans of Questerre or by party operators of Questerre's properties; increased debt levels or debt service requirements; inaccurate estimation of Questerre's oil and gas reserve volumes; limited, unfavorable or a lack of access to capital markets; increased costs; a lack of inadequate insurance coverage; the impact of competitors; and certain other risks detailed from time-to-time in Questerre's public disclosure documents, (including, without limitation, those risks identified in this presentation and Questerre's Annual Information Form).

The forward-looking information and statements contained in this presentation speak only as of the date of this presentation, and Questerre does not assume any obligation to publicly update or revise any of the included forward-looking statements or information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

#### Oil & Gas Advisories

A boe conversion ratio of six thousand cubic feet per barrel (6 mcf/bbl) of natural gas to barrels of oil equivalent is based upon an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency for the individual products at the wellhead. Such disclosure of boe's may be misleading, particularly if used in isolation. Additionally, given the value ratio based on the current price of crude oil compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion ratio at 6:1 may be misleading as an indication of value.

#### **Reserves Disclosure**

#### McDaniel Reserve Report

McDaniel & Associates Consultants Ltd. ("McDaniel"), independent petroleum engineers of Calgary, Alberta prepared an Evaluation of Oil & Gas Reserves dated March 1, 2023 (the "McDaniel Reserve Report") which evaluation is effective December 31, 2022. The McDaniel Reserve Report is in respect of Questerre's conventional oil and gas properties and excludes its assets in the Quebec Lowlands and its oil shale assets to which no reserves are currently assigned.

The McDaniel Reserve Report was prepared in accordance with the standards contained in the COGE Handbook and the reserves definitions contained in National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities. The reserve estimates of crude oil, NGLs and natural gas reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual crude oil, NGLs and natural gas reserves may be greater than or less than the estimates provided herein. All of the Company's crude oil, NGLs and natural gas reserves are located in Canada. The estimates of reserves for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation.

The process of estimating reserves is complex. It requires significant judgments and decisions based on available geological, geophysical, engineering and economic data. These estimates may change substantially as additional data from ongoing development activities and production performance becomes available and as economic conditions impacting oil and gas prices and costs change. The reserve estimates contained herein are based on current production forecasts, commodity prices and economic conditions. Estimates made are reviewed and revised, either upward or downward, as warranted by the new information. Revisions are often required due to changes in well performance, commodity prices, economic conditions and governmental restrictions. Although every reasonable effort is made to ensure that reserve estimates are accurate, reserve estimation is an inferential science. Questerre's actual production, revenues, taxes, development and operating expenditures with respect to its reserves may vary from such estimates of reserves. Furthermore, recent production data from wells drilled and placed on production or wells recently equipped with gas lift facilities in the Kakwa area may result in changes to the estimates of reserves. Furthermore, recent production data from wells that may be worked over in the Antler area could also result in changes to the estimates of reserves data from wells that may be worked over in the Antler area could also result in changes to the operator's drilling programs, both on an operated and non-operated basis, may also result in changes to reserve estimates. As the majority of Questerre's reserves in the Kakwa joint venture acreage are currently non-operated, any changes to the operator's drilling program could impact reserve estimates. Questerre may amend the allocation of capital investment of areas of operation, particularly Kakwa and Antler based on results and commodity prices.



#### **Millcreek Report**

In October 2016, Questerre commissioned an independent assessment of its oil shale resources in Jordan (the "Millcreek Report"). The Millcreek Report was conducted by Millcreek Mining Group, an independent qualified reserves evaluator, as defined by NI 51-101 with an effective date of September 30, 2016. The assessment was prepared in accordance with NI 51-101 and the COGE Handbook. The assessment indicated a best estimate of discovered petroleum initially in place of between 7.8 billion barrels to 12.2 billion barrels. Given the preliminary nature of the Millcreek Report, it does not contain any estimates regarding the timing or cost to obtain commercial development nor has Questerre finalized the specific technology to be used. For more information, please refer to Questerre's press release dated October 27, 2016 and Questerre's Annual Information Form dated March 24, 2017 available on its website at www.questerre.com or on SEDAR+ at www.sedarplus.ca.

Questerre is in the process of completing a conceptual study, however, at this time, given the preliminary nature of the Jordan Resource Assessment, it does not contain any estimates regarding the timing or cost to obtain commercial development nor has Questerre finalized the specific recovery technology to be used. Questerre is conducting an economic feasibility analysis, which involves assessing multiple retorting processes, including two processes that have been proven at commercial scale. Also under evaluation is the Eco-Shale process. In conjunction with the assessment of retorting processes, Questerre has commissioned and finalized three engineering studies for the mining, preparation of ore and upgrading of the produced oil and other products. Questerre anticipates incorporating the results from these studies in a subsequent update of the Jordan Resource Assessment. DPIIP and UPIIP are the most specific assignable categories of resources at this time given the preliminary nature of the Jordan Resource Assessment, the nature of recovery of the hydrocarbons by means of mining and that a program of work to determine commercial viability using established technology has not yet been completed.

#### **Resource Disclosure**

Questerre's resources are located in Canada, in the Province of Quebec, and in Jordan. Unless otherwise indicated, all volumes of Questerre's resources presented herein are on an unrisked basis, meaning that they have not been adjusted for the chance of commerciality, and all volumes are presented on a gross basis, meaning Questerre's working interest before deduction of royalties and without including any royalty interests of Questerre.

The estimates of Questerre's resources provided herein are estimates only and there is no guarantee that the estimated resources will be recovered. Actual resources may be greater than or less than the estimates provided herein and variances could be material. With respect to Questerre's discovered resources (including contingent resources), there is uncertainty that it will be commercially viable to produce any portion of the resources. With respect to Questerre's undiscovered resources (including prospective resources), there is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources. Please see "Risk Factors" Page 27 in the Annual Information Form dated March 23, 2023.

#### GLJ Resource Report (St, Lawrence Lowlands, Quebec)

Questerre engaged GLJ Ltd. ("GLJ") to prepare the GLJ Resource Report, an independent resource assessment of its 1.2 million gross (1 million net acres) in the St. Lawrence Lowlands, Quebec that have potential for the Upper Utica Shale effective December 31, 2020 in a report dated March 17, 2021 (the "GLJ Resource Report"). The GLJ Resource Report was prepared in accordance with NI 51-101 and the standards contained in the COGE Handbook. The GLJ Resource Report did not include any of the Corporation's other properties. All anticipated results disclosed herein were prepared by GLJ, which is an independent qualified reserves evaluator. For more information, please refer to Appendix "A" of Questerre's Annual Information Form for the year ended December 31, 2020 and dated March 24, 2021 available on its website at www.questerre.com or on SEDAR+ at www.sedarplus.ca.

The GLJ Report used probabilistic methods to generate low, best and high estimates of total petroleum initially in place ("TPIIP"), both discovered and undiscovered. Recoverable Contingent and Prospective Resources over Questerre's acreage were estimated by analogy and based on available well data over the Quebec Utica and public data from US Utica and Marcellus shale plays. The evaluation consisted of the Upper Utica which includes the Indian Castle and Dolgeville members as well as the Flat Creek. The Flat Creek, the lower most member, was only evaluated to estimate undiscovered petroleum initially-in-place ("UPIIP"). No recoverable resources were assigned to the Flat Creek given the lack of test data showing established technology can support commercial development at this time.

The GLJ Report is based on the results from several vertical and horizontal wells on Questerre's acreage that have all encountered pay in the Utica. Test data from these wells in conjunction with offset development and studies of the analogous US Utica supports the prospective commercial development of these resources. Significant positive factors relevant to the estimate of Questerre's resources include the importation of all natural gas consumed in Quebec creating demand for local production, premium realized pricing due to the transportation costs associated with importing natural gas for comparison, production test data from Questerre's existing wells and the development of the analogous Utica shale in the United States. Significant negative factors include the limited number of wells on Questerre's acreage, lack of a developed service sector providing uncertainty regarding estimates of capital and operating costs, developing hydrocarbon regulations and environmental legislation and the requirement to comparison acceptability for oil and gas operations. While Questerre believes it will have sufficient financial capability to fund its share of costs associated with the development program in the Quebec Resource Assessment, it may not have access to the necessary capital when required.

# QUESTERRE

#### **Questerre Energy Corporation**

1650 AMEC Place 801 Sixth Avenue SW Calgary, Alberta T2P 3W2 Canada Tel: +1.403.777.1185 / Fax: +1.403.777.1578 www.questerre.com info@questerre.com