



Corporate Presentation

May 2024 | TSXV: LOU OTCQB: PSHIF

Corporate Summary

Lucero is a *Pure Play North Dakota Bakken / Three Forks* Company

10,100 boe/d / **10,300** boe/d

2024E average /exit production

> **30** net (at Dec 2023)

Undrilled Locations

~C**\$4** million

Negligible ARO

41 mmboe / **56** mmboe (at Dec 2023)

TP Reserves / P+P Reserves

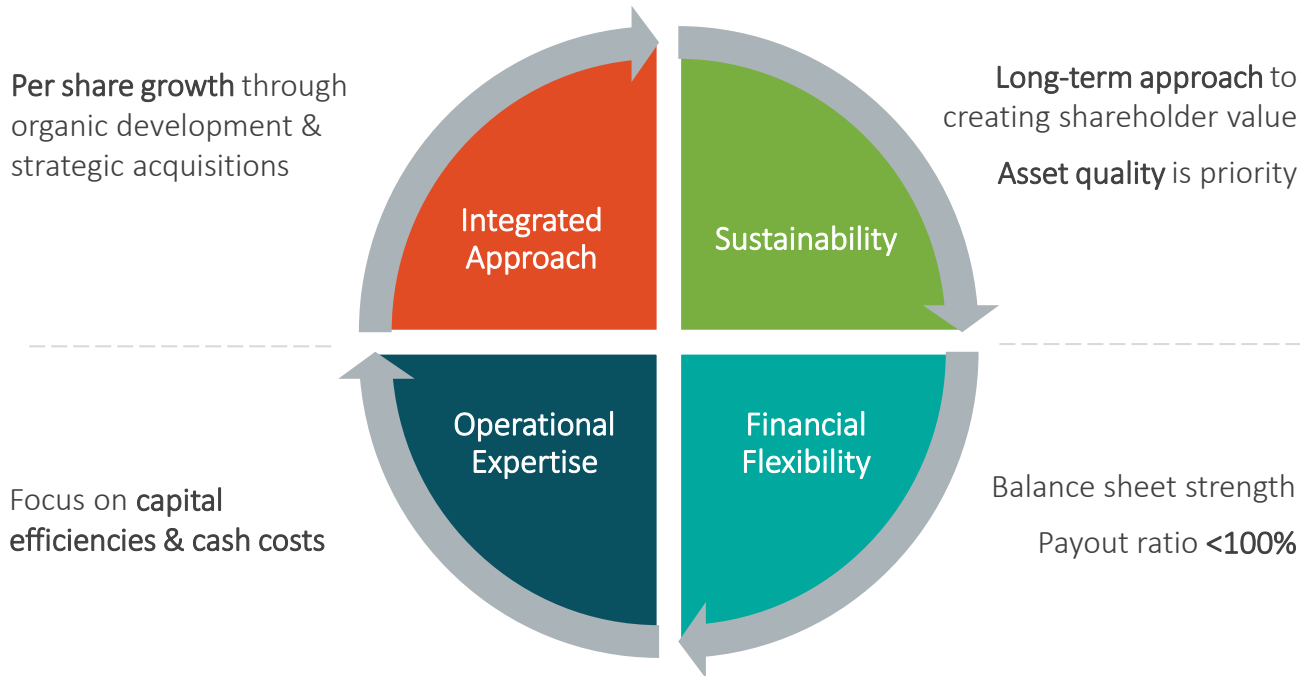
Basic / Fully Diluted Shares Outstanding	646 / 714 million
Market Cap	Approx. C\$400 million
Working capital	C\$71 million ¹
Enterprise Value	Approx. C\$329 million

¹ As of Mar 31, 2024.



Proven Strategy

Proven and repeatable strategy to generate value and consolidate/develop the play with a consistent approach throughout the cycle

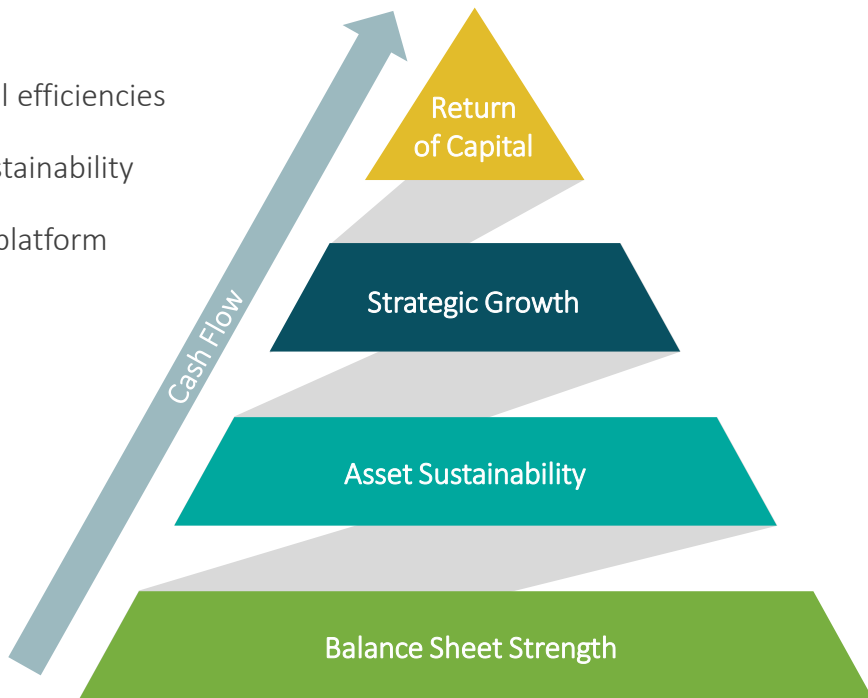


Strategic Priorities

Free cash flow with commitment to high quality assets and maintaining financial flexibility

Managing a Cyclical Business

- ✓ Balance sheet strength is key
- ✓ Focus on asset quality / capital efficiencies
- ✓ Manage decline profile for sustainability
- ✓ Maintain and expand growth platform using free cash flow
- ✓ Return of capital is an allocation decision



Ideal Asset Platform

Focused, high-netback light oil

The Heart of the Bakken Play

Assets focused in the **most prolific** part of North Dakota Bakken / Three Forks with **97%** of acreage held by production and development opportunities in the core of the play

Stable Oil Weighted Base Production

Sustainable 2024E production to average **~10,100 boe/d** with **~80% light oil & liquids** weighting, **~30% decline rate** and industry leading low carbon intensity profile

High Impact Economic Drilling Inventory

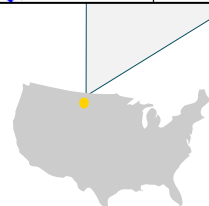
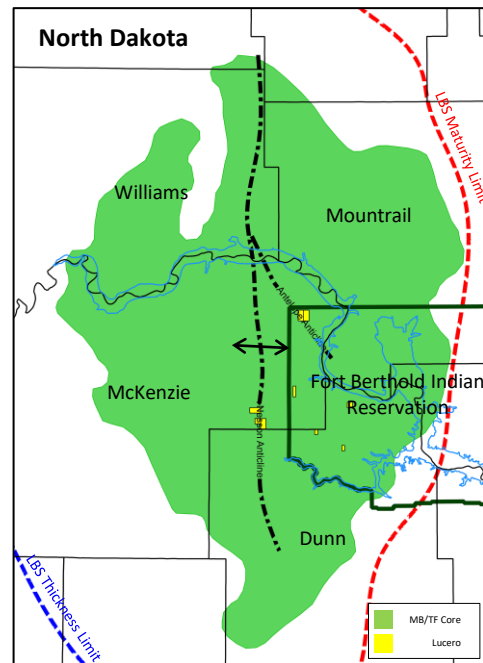
> 600 boe/d IP365 type curve forecast generates **< 1 year payout** at \$50 WTI with a significant resource in place, averaging **200 feet of over-pressured** reservoir

Sustainable Free Cash Flow Generation

With a de-risked inventory and a **corporate breakeven < US\$50 WTI**, current production generates a sustainable free cash flow base

Consolidation Opportunities

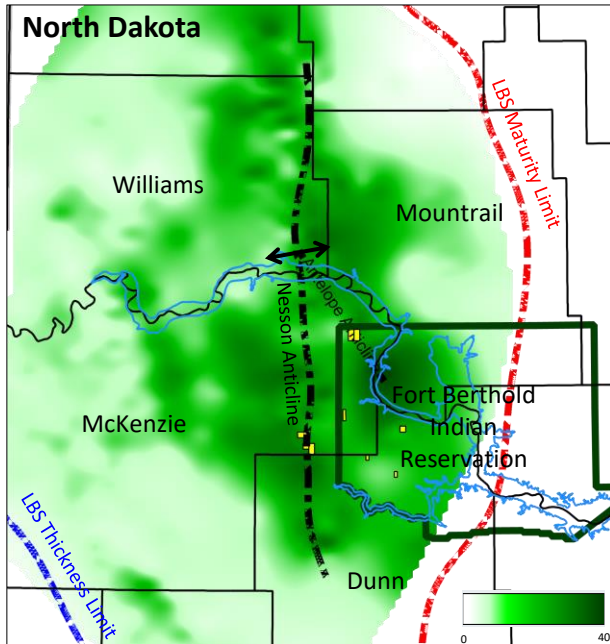
> 1mm boe/d of current production and **~4.3 Billion bbls** of undiscovered, technically recoverable oil in surrounding areas provide consolidation and growth prospects



High Quality Acreage

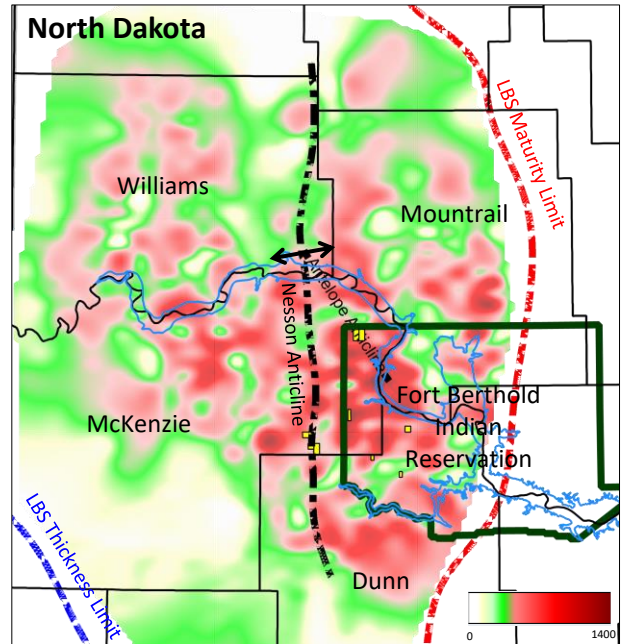
Sizeable drilling inventory and acreage situated in heart of the Bakken / Three Forks

Bakken/Three Forks OIP (MMBo/sec)



Situated in the heart of the play...

Bakken/Three Forks IP365 (bopd)

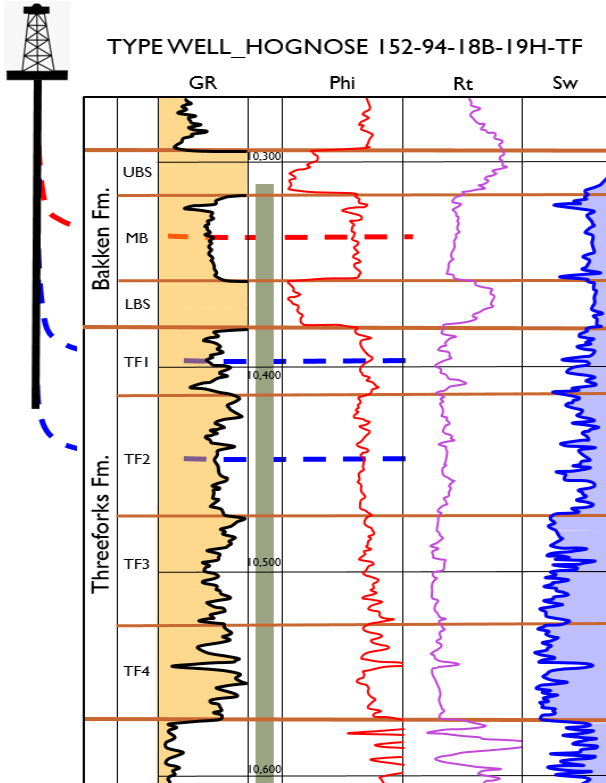


...and surrounded by the **most** productive wells in the basin.



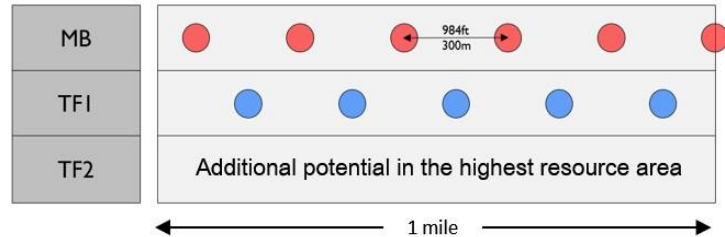
Significant Resource Development

Stacked pay serves as a multiplier for drilling locations



Reservoir Attributes	Bakken	Three Forks
Lithology	Dolomitic Siltstone and Shale	Silty Dolomite and Limestone
Average Depth	10,300'	10,400'
Average Thickness	100'	100' (TF1 + TF2)
Porosity	5-9%	3-8%
Water Saturation	20-30%	30-50%
Permeability	.001-1 mD	.0001-1 mD
Pressure Gradient	.70 -.76 psi/ft.	.70 -.76 psi/ft.
TM _{ax}	430-445° C	-
TOC	5-18%	-
Gravity	40-43° API	40-43° API

Winerack development pattern 640 and 1280 acre DSU

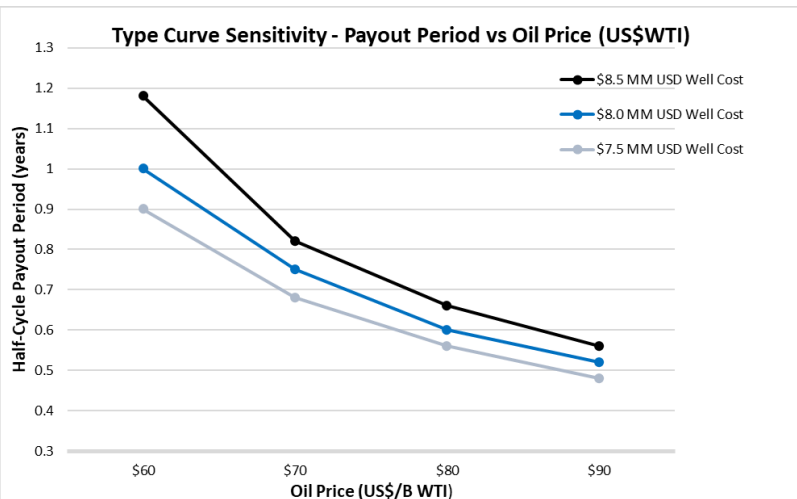


~11 wells per drill spacing unit, 6 MB and 5 TF1



Cash Flow Engine

Robust economics for a sustainable free cash flow model



Single Well Economics	US\$70 WTI	US\$80 WTI	US\$90 WTI
DCET Capital (US\$m)	\$8.0	\$8.0	\$8.0
IP365 (boepd)	635	635	635
Reserves (mdbl)	750	750	750
Production Adds (US\$/boepd)	\$12,598	\$12,598	\$12,598
Reserve Adds (US\$/boe)	\$10.20	\$10.16	\$10.12
NPV10 (US\$m)	\$14.6	\$18.6	\$22.3
P/I	1.8	2.2	2.7
ROR (%)	>170%	>200%	>200%
Payout (years)	0.7	0.6	0.5
Recycle Ratio	>4x	>5x	>5x

Breakeven 10% IRR = <US\$35 WTI



2024 Capital Program

Aligns with long-term objectives of achieving **per share growth** while maintaining financial flexibility

US\$65 million

2024 Capital Program

10,100 boe/d¹

2024E Average Production

10,300 boe/d¹

2024E Exit Production

- ✓ **Maximizing free cash flow** within a sustainable and modest organic growth model
- ✓ Investing in light oil opportunities offering **higher rates of return and lower risk**
- ✓ **Creating operational & financial flexibility**: drilling 6 (4.9 net) wells, of which 4 (3.0 net) will be completed during the year, leaving 2 (1.9 net) wells for completion in 2025. Additionally, completing 2 (1.7 net) DUCs from 2023.
- ✓ **Maintaining sustainability** by managing a production decline profile of ~30%, minimizing required maintenance capital
- ✓ **Investing in infrastructure** to drive efficiencies and mitigate environmental impacts



¹ Approx. 60% light oil, 20% NGL, 20% conventional natural gas.

See *Slide Notes* and *Advisory Statements* at the end of this presentation

Sustainability & Resilience

Continuing to prioritize financial & strategic optionality in 2024

Financial Flexibility to Capitalize on Opportunities

~C\$100 million¹

Working capital
(YE 2024E)

< \$50 WTI

Free Cash Flow
Breakeven

C\$29 million¹

Free Cash Flow
(2024E)

	2024E¹
Cash Flow (\$mm) ²	C\$117
Exploration & Development Expenditures (\$mm)	(C\$88)
Free Cash Flow (\$mm)	C\$29
Payout Ratio	75%

¹ Forecast based on assumed 2024 averages of: WTI US\$75, NYMEX HH US\$2.00, FX 0.74.

² For cash flow sensitivity: see *Slide Notes* on slide 17.



Investment Summary

Positioned for Disciplined Growth



Pure-Play U.S. Bakken/Three Forks

- World-class resource
- Focused asset base
- Light oil weighted
- Industry-leading development economics
- Constructive business environment



Sustainable Business

- Significant free cash flow
- Strong balance sheet
- Modest maintenance capital requirements
- Reliable runway of high-quality drilling prospects



Experienced, Proven Team

- Strong track record of executing proven strategy in the Williston Basin
- Capital allocation prudence
- Financial discipline
- Efficient operators



Investment & Upside

- Predictable, low risk asset base
- Extensive consolidation opportunities
- Long term, sustainable business plan
- Track record of value creation

Commitment to ESG Principles



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Netherland, Sewell & Associates Inc.

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Bank of Montreal
Royal Bank of Canada
National Bank of Canada
ATB Financial

Investor Relations

5 Quarter Investor Relations, Inc.

Transfer Agent

Odyssey Trust Company

Legal Counsel

Burnet, Duckworth & Palmer LLP (Calgary)
Bryan Cave Leighton Paisner (Denver)

Analyst Coverage

BMO Capital Markets
Canaccord Genuity
CIBC World Markets
Cormark Securities Inc.
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National Bank Financial
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Raymond James Ltd.
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Board of Directors

M. Bruce Chernoff (Chairman)

Brett Herman

David Rain

Gary Reeves

Jacob Roorda

Dale O. Shwed

Management Team

Brett Herman

President & CEO

Jason Skehar

Chief Operating Officer

Marvin Tang

Vice President Finance & CFO

Anthony Baldwin

Vice President Business Development

Sandy Brown

Vice President Geosciences

Kristine Lavergne

Vice President Engineering





Appendix

Guidance & Modeling Assumptions¹

PRODUCTION

2024

Annual average	10,100 boe/d ²
Exit (Q4 2024 average)	10,300 boe/d ²

CASH FLOW

Annual average royalty rate	19%
Annual opex & transportation	C\$10.50/boe
Annual average production taxes	10% of revenue after royalties
Annual G&A	C\$2.00/boe
Annual realized oil price differential to US\$WTI	Minus US\$2.00/bbl

SUSTAINABILITY

Capital budget	US\$65 million (~C\$88 million ³)
Corporate production decline	33%

¹ Guidance & modeling assumptions herein are approximate.

² Approx. 60% light oil, 20% NGLs, 20% conventional natural gas.

³ Converted at US\$1.00 = C\$1.35.



Slide Notes

Slide 2

- *TP Reserves* and *P+P Reserves* refers to “Total Proved Reserves” and “Proved + Probable Reserves”, respectively, and are based on independent reserves evaluation prepared by Netherland Sewell & Associates effective Dec 31, 2023; see Advisory Statements.
- *Market Cap* is calculated as 646 million basic shares outstanding, multiplied by Lucero’s closing share price of \$0.63 per share on May 8, 2024.
- *Enterprise Value* is calculated as market capitalization less working capital.
- *ARO* refers to “asset retirement obligations” or “decommissioning obligation” and is inflated and discounted as presented in the Company’s financial statements as at March 31, 2024; for more information, see Lucero’s Q1 2024 financial statements available at www.luceroCorp.com.
- Of the “>30 net undrilled locations” identified herein, 18 are proved locations, 8 are probable locations and the remaining are unbooked locations.
- *2024E average production* of 10,100 boe/d and *2024E exit production* of 10,300 boe/d are comprised of approx. 60% light oil, 20% NGL and 20% conventional natural gas.

Slide 3

- *Payout ratio* is a non-GAAP measure and represents exploration & development expenditures divided by cash flow; see Non-GAAP Measures in Advisory Statements.

Slide 5

- “4.3 Billion bbls of undiscovered, technically recoverable oil in surrounding areas” is from information prepared and publicly disclosed by the U.S. Geological Survey (“USGS”), a scientific agency of the United States government. Source USGS publication: “Assessment of Undiscovered Continuous Oil Resources in the Bakken and Three Forks Formations of the Williston Basin Province, North Dakota and Montana, 2021”.

Slide 8

- “*Breakeven 10% IRR*” refers to breakeven internal rate of return and based on half cycle economics; see Advisory Statements for more information.
- *P/I* refers to profit to investment ratio, which is calculated as a project’s NPV10 divided by DCET capital.
- Single well economics are reflective of half cycle economics and is not the same as resulting corporate economics.

Slide 10

- *Working Capital*, *Cash Flow*, and *Free Cash Flow* are non-GAAP measures; see Non-GAAP Measures in Advisory Statements for more information.
- “~C\$100 million Working capital” is before any unrealized NCIB or acquisition spending.
- Cash flow sensitivity: +/- US\$1 WTI: C\$2.2 million; +/- US\$0.10 HH: C\$0.3 million; +/- 0.01 FX (C\$/US\$): C\$1.2 million.
- *Payout ratio* is a non-GAAP measure and represents exploration & development expenditures divided by cash flow; see Non-GAAP Measures in Advisory Statements.



ADVISORY STATEMENTS

Forward-looking Statements

Certain information set forth in this presentation, including (among other things): Lucero's development inventory and opportunities, business plans and intentions, annual average and exit production expectations, budgeted exploration and development expenditures, expected results from wells following a "type curve", drilling spacing assumptions, corporate valuations, NCIB purchase intentions and the Company's guidance and modeling assumptions, including the potential set forth therein, may constitute forward-looking statements under applicable securities laws and necessarily involve substantial known and unknown risks and uncertainties. In addition, statements relating to "reserves" are deemed to be forward-looking as they involve the implied assessment, based on certain estimates and assumptions, that the reserves described exist in the quantities predicted or estimated and can be profitably produced in the future. These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond Lucero's control, including without limitation, risks associated with oil and gas exploration, development, exploitation, production, marketing and transportation, loss of markets, volatility of commodity prices, volatility in production rates, environmental risks, inability to obtain drilling rigs or other services, capital expenditure costs, including drilling, completion and facility costs, unexpected decline rates in wells, wells not performing as expected, delays resulting from or inability to obtain required third party and regulatory approvals, ability to access sufficient capital from internal and external sources, inability to access gas transportation and processing infrastructure, the impact of general economic conditions in Canada, the United States and overseas, industry conditions, changes in laws and regulations (including the adoption of new environmental laws and regulations) and changes in how they are interpreted and enforced, increased competition, the lack of availability of qualified personnel or management, fluctuations in foreign exchange or interest rates, and the uncertainty of estimates and projections of production, costs and expenses. Management believes there is a reasonable basis for the forward-looking statements contained in this presentation, however, certain or all of the forgoing assumptions may prove to be untrue.

Lucero's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits that the Company will derive therefrom. All subsequent forward-looking statements, whether written or oral, attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by these cautionary statements. Additional information on these and other factors that could affect Lucero's operations and financial results are included in reports on file with Canadian securities regulatory authorities and may be accessed through the SEDAR website (www.sedar.com). The forward-looking statements contained in this document are made as at the date of this presentation and Lucero does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

Non-GAAP Measures: Within this presentation, any references made to "operating netback", "operating netback prior to hedging", "net debt", "working capital", "net debt/(working capital) to cash flow", "payout ratio", "exploration & development expenditures", "cash flow" and "free cash flow", which are not defined by GAAP and therefore may not be comparable to performance measures presented by others. Operating netback represents revenue, plus or minus any realized gain or loss on financial derivatives, less royalties, production taxes, operating costs and transportation expense. The operating netback is then divided by the working interest production volumes to derive the operating netback on a per Boe basis. Operating netback prior to hedging represents operating netback prior to any realized gain or loss on financial derivatives. Net debt/(working capital) represents total liabilities (excluding decommissioning obligation, lease liabilities, deferred tax liabilities and any financial derivative liability) less current assets. Net debt/(working capital) to cash flow represents net debt or working capital, as the case may be, divided by cash flow. Payout ratio represents exploration & development expenditures divided by cash flow. Cash flow represents cash flow from operating activities prior to finance expense and changes in non-cash working capital. The Company believes that cash flow provides useful information to the reader in that it measures the Company's ability to generate funds to service its debt and other obligations and to fund its operations, without the impact of changes in non-cash working capital which can vary based solely on timing of settlement of accounts receivable and accounts payable. Free cash flow is a non-GAAP measure which should not be considered an alternative to, or more meaningful than, cash flow from operating activities as determined in accordance with GAAP. Free cash flow is presented to assist management and investors in analyzing performance by the Company as a measure of financial liquidity and the capacity of the Company to repay debt and pursue other corporate objectives. Free cash flow equals cash flow less exploration & development expenditures. Management believes that in addition to net income (loss) and cash flow from operating activities, operating netback, net debt/(working capital), net debt/(working capital) to cash flow, cash flow and free cash flow are useful supplemental measures as they assist in the determination of the Company's operating performance, leverage and liquidity. Operating netback is commonly used by investors to assess performance of oil and gas properties and the possible impact of future commodity price changes on energy producers. Investors should be cautioned, however, that these measures should not be construed as an alternative to either net income (loss) or cash flow from operating activities, which are determined in accordance with GAAP, as indicators of the Company's performance.

Analogous Information: In this presentation, Lucero has provided certain information on the production rate of a well on properties adjacent to the Company's acreage which is "analogous information" as defined by applicable securities laws. This analogous information is derived from publicly available information sources which the Company believes are predominantly independent in nature. Some of this data may not have been prepared by qualified reserves evaluators or auditors and the preparation of any estimates may not be in strict accordance with Canadian Oil & Gas Evaluation Handbook. Regardless, estimates by engineering and geotechnical practitioners may vary and the differences may be significant. Lucero believes that the provision of this analogous information is relevant to Lucero's activities and forecasting, given its property ownership in the area; however, readers are cautioned that there is no certainty that the forecasts provided herein based on analogous information will be accurate.

Initial Production Rates: Any references in this presentation to well-flow test results, initial production rates, and/or initial production rates over a period of 365 days ("**IP365**") are useful in confirming the presence of hydrocarbons, however, such test results and rates are not determinative of the rates at which such wells will continue production and decline thereafter. While encouraging, readers are cautioned not to place reliance on such test results and rates in calculating the aggregate production for the Company. Well-flow test results and initial production rates may be estimated based on other third party estimates or limited data available at the time. Well-flow test result data should be considered to be preliminary until a pressure transient analysis and/or well-test interpretation has been carried out. In all cases in this presentation, well-flow test results and initial production results are not necessarily indicative of long-term performance of the relevant well or fields or of ultimate recovery of hydrocarbons.

Drilling Locations: This presentation may disclose drilling locations in two categories: (i) proved and probable locations; and (ii) unbooked locations. Proved plus probable drilling locations set forth herein are based on the Company's most recent independent reserves evaluation as prepared by Netherland, Sewell & Associates Inc. ("**NSAI**") as of December 31, 2023. Unbooked locations are internal estimates based on the Company's prospective acreage and an assumption as to the number of wells that can be drilled per section based on industry practice and internal review. Unbooked locations do not have attributed reserves or resources. Unbooked locations have been identified by management as an estimation of our multi-year drilling activities based on evaluation of applicable geologic, seismic, engineering, production and reserves information. There is no certainty that the Company will drill any unbooked drilling locations and if drilled there is no certainty that such locations will result in additional oil and gas reserves, resources or production. The drilling locations on which we actually drill wells will ultimately depend upon the availability of capital, regulatory approvals, seasonal restrictions, oil and natural gas prices, costs, actual drilling results, additional reservoir information that is obtained and other factors. While certain of the unbooked drilling locations may have been derisked by drilling existing wells in relative close proximity to such unbooked drilling locations, management has less certainty whether wells will be drilled in such locations and if drilled there is more uncertainty that such wells will result in additional oil and gas reserves, resources or production.



ADVISORY STATEMENTS, CONTINUED

BOE. Where amounts are expressed on a barrel of oil equivalent ("**Boe**") basis, natural gas volumes have been converted to Boe using a ratio of 6,000 cubic feet of natural gas to one barrel of oil (6 Mcf: 1 Bbl). This Boe conversion ratio is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6 Mcf: 1 Bbl, utilizing a conversion ratio at 6 Mcf: 1 Bbl may be misleading as an indication of value. In this presentation, mboe refers to thousands of barrels of oil equivalent.

Company Interests. Company interest means, in relation to the Company's interest in production and reserves, the Company's working interest (operating and non-operating) before the deduction of royalties payable and including such entity's royalty interest in production and reserves. Where volumes of reserves have been presented, they have been presented as company working interest, gross of royalties unless otherwise indicated. Where volumes of production have been presented, they have been presented as company working interest, gross of royalties, except where otherwise noted. Company net revenue interests is the share of production to the Company after all burdens, such as royalties and overriding royalties, have been deducted from the Company's working interest. Relative price deck used by NSAI in their reserves evaluation has/will be disclosed within our 2023 Annual Information Form available on our SEDAR+ profile. There is no assurance that the forecast prices and cost assumption will be attained and variances could be material. The recovery and reserve estimates of our tight oil and shale gas reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual tight oil and shale gas reserves may be greater than or less than the estimates provided herein. It should not be assumed that the discounted future revenue estimated by NSAI represents the fair market value of the reserves.

Forward Looking Financial Information: This presentation contains future-oriented financial information and financial outlook information (collectively, "**FOFI**") about the Company's prospective results of operations, cash flows, net debt, and components thereof, all of which are subject to the same assumptions, risk factors, limitations, and qualifications as set forth in the above paragraphs, including the assumptions set forth in the slide entitled "*Guidance and Modelling Assumptions*". FOFI contained in this corporate presentation was made as of the date of this corporate presentation and was provided for the purpose of providing further information about the Company's future business operations, the Company disclaims any intention or obligation to update or revise any FOFI contained in this corporate presentation, whether as a result of new information, future events or otherwise, unless required pursuant to applicable cautioned that the FOFI contained in this corporate presentation should not be used for purposes other than for which it is disclosed herein. Additionally, readers are advised that historical results, growth and transactions described in this presentation may not be reflective of future results, growth and transactions with respect to the Company.

Reserves Disclosures. Estimates pertaining to the Company's reserves and the net present value of future net revenue attributable thereto are based upon the independent engineering evaluation of the crude oil, natural gas liquids and natural gas reserves of the Company prepared by NSAI, the Company's independent reserves evaluator, as at December 31, 2023, which is prepared in accordance NI 51-101 and the COGE Handbook. The estimates pertaining to reserves provided in this presentation are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual reserves and the estimated number of potential undeveloped drilling locations to which reserves have been attributed, may be greater than or less than the estimates provided in this presentation and the differences may be material. The estimates of reserves and future net revenue 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. Estimates of net present value of future net revenue attributable to the Company's reserves do not represent fair market value and there is uncertainty that the net present value of future net revenue will be realized. There is no assurance that the forecast price and cost assumptions applied by NSAI in evaluating Lucero's reserves will be attained and variances could be material. The reserves information contained in this presentation should be reviewed in conjunction with the annual information form of the Company for the year ended December 31, 2023 which is available on SEDAR, and contains important additional information regarding the independent reserve evaluation that was conducted by NSAI and a description of, and important information about, the reserves terms used in this presentation.

Notice To U.S. Readers. The Company's reserves information contained in this presentation has generally been prepared in accordance with Canadian disclosure standards, which are not comparable in all respects to United States disclosure standards. Reserves categories such as "proved reserves" and "probable reserves" may be defined differently under Canadian requirements than the definitions contained in the United States Securities and Exchange Commission ("SEC") rules. In addition, under Canadian disclosure requirements and industry practice, royalties and production are reported using gross volumes, which are volumes prior to deduction of royalty and similar payments. The practice in the United States is to report reserves and production using net volumes, after deduction of applicable royalties and similar payments. Canadian disclosure requirements require that forecasted commodity prices be used for reserves evaluations, while the SEC mandates the use of an average of first day of the month price for the 12 months prior to the end of the reporting period.

Selected Definitions

"**COGE Handbook**" means the Canadian Oil and Gas Evaluation Handbook maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter), as amended from time to time.

"**DDCs**" means wells that have been drilled but have not yet undergone completion activities.

"**ESG**" means Environmental, Social, and Governance.

"**IRR**" means Internal Rate of Return and is a measure used to compare the profitability of an investment and represents the discount rate at which the net present value of costs equals the net present value of the benefits.

"**NI 51-101**" means National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities.

"**reserves**" are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on: (i) analysis of drilling, geological, geophysical and engineering data; (ii) the use of established technology; and (iii) specified economic conditions, which are generally accepted as being reasonable. Reserves are classified according to the degree of certainty associated with the estimates.

"**proved reserves**" or ("**1P reserves**") are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.

"**probable reserves**" or ("**2P reserves**") are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves or ("**P+P reserves**").

Certain Abbreviations:

• bbl	means barrel	• MMboe	means million barrels of oil equivalent
• boe/d	means barrel of oil equivalent per day	• MM	means millions
• EUR	means estimated ultimate recovery	• IP365	means 365 day average initial production rate



