CARDINAL
ENERGY LTD.

TSX: CJ

Low Decline
Disciplined Growth

Q3 Results, Sask Thermal Entry, 2024 Budget

Our Business

Cash Flow

- Amount of capital required to maintain our assets and keep production flat
- Amount of capital required to fulfill our commitment to operating our business in a responsible manner
- Capital available to our shareholders
  - Increase the value of the business through debt reduction, cost reductions and ***disciplined growth***
  - Return capital directly to shareholders through dividends
  - Long term opportunity to use our NCIB to consolidate value for shareholders

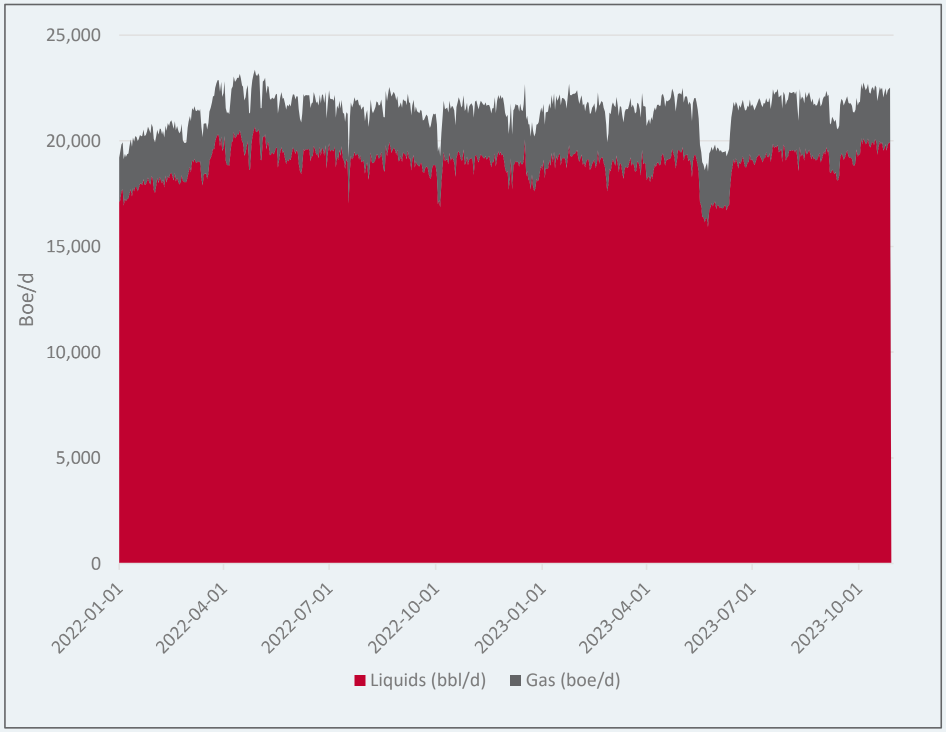
Please see "Advisory"

Q3 Results

	2022 Annual	Budget 2023	Q1 2023	Q2 2023	Q3 2023
Adjusted Funds Flow ($MM)	$363	$270	$52.3	$56.2	$81.2
Capital Expenditures ($MM)	$120	$97	$25.3	$20.4	$30.2
ARO Expenditures ($MM)	$20	$23	$4.8	$4.1	$5.4
Dividend Rate per month per share	$0.05 - $0.06	$0.06	$0.06	$0.06	$0.06
Production (boe/d)	21,471	22,000	21,726	21,047	21,872
Net Debt (end of period, $MM)	$63	$50	$78	$76	$62
Production Mix (Oil/NGLs/Natural Gas)	84%/4%/12%	84%/4%/12%	84%/4%/12%	84%/3%/13%	84%/4%/12%
WTI Average ($US/bbl)	$94.23	$80.00	$76.13	$73.78	$82.26

Please see "Advisory"

Corporate Production



- Current production >22,000 boe/d
- Majority of production under established water flood and/or CO_2 recovery schemes
- Base decline less than 10%
  - Large OOIP properties continue to outperform
  - Successful optimization initiatives across asset base
- Limited drilling required to maintain production

Year	Net Drills
2019	14
2020	9
2021	9
2022	25
2023	18
2024 Budget	22

Please see "Advisory"

2023 Plan - $120 MM Capital / $23 MM ARO

	2023 Budget	*2023 Q3 YTD*
Development	*$43 MM*	*$40 MM*
Drill, Complete, Equip and Tie In (17.6 net wells)		
Optimization	*$23 MM*	*$16 MM*
Well Optimization – workovers, pump optimization		
Waterflood Optimization, reactivations		
CO_2 Purchases		
Maintenance and Other	*$31 MM*	*$28 MM*
Facility Maintenance		
Pipeline Maintenance		
Facility Turnarounds		
Corporate		*($8 MM)*
ARO Expenditures	*$23 MM*	*$14 MM*
Additions to 2023 Plan		
2H Acquisitions	*$25 MM*	
Thermal Assessment and land acquisitions	*$5 MM*	

- Focused drilling program designed to expand inventory
- Continue to optimize existing production to reduce decline
- Continue to invest in maintenance capital to further improve base production reliability
- Dispose of non-core assets
- Continue acceleration of liability reduction initiatives
- *Consolidation of low decline oil units*
- *Disposition of non-core assets*
- *Assessment of SAGD growth potential*

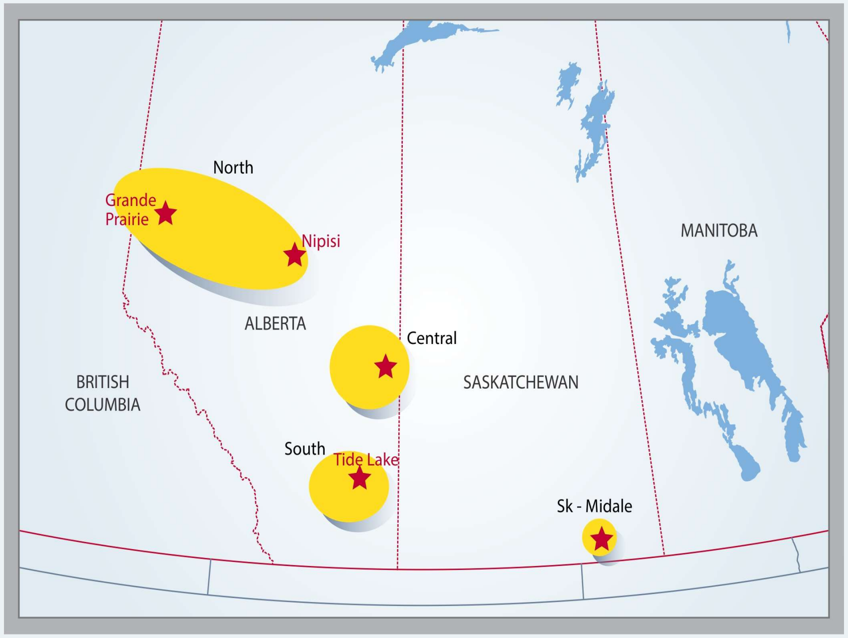
Please see "Advisory"

2023 Development Drilling Program – *Update*

Success Across all Districts

- 19 (17.6 net) new wells planned. 15 producers, 3 injectors, 1 drilling. Current production ~1800 boe/d (1)

- North
  - Nipisi Clearwater 4 well multilateral pad drilled in Q1, on-stream April 2023 producing 30% above expectations
  - Drilling Heart River exploratory well – spud Q4 2023
- South
  - Four 3-leg multilateral drill program complete
  - Optimizing long term inventory



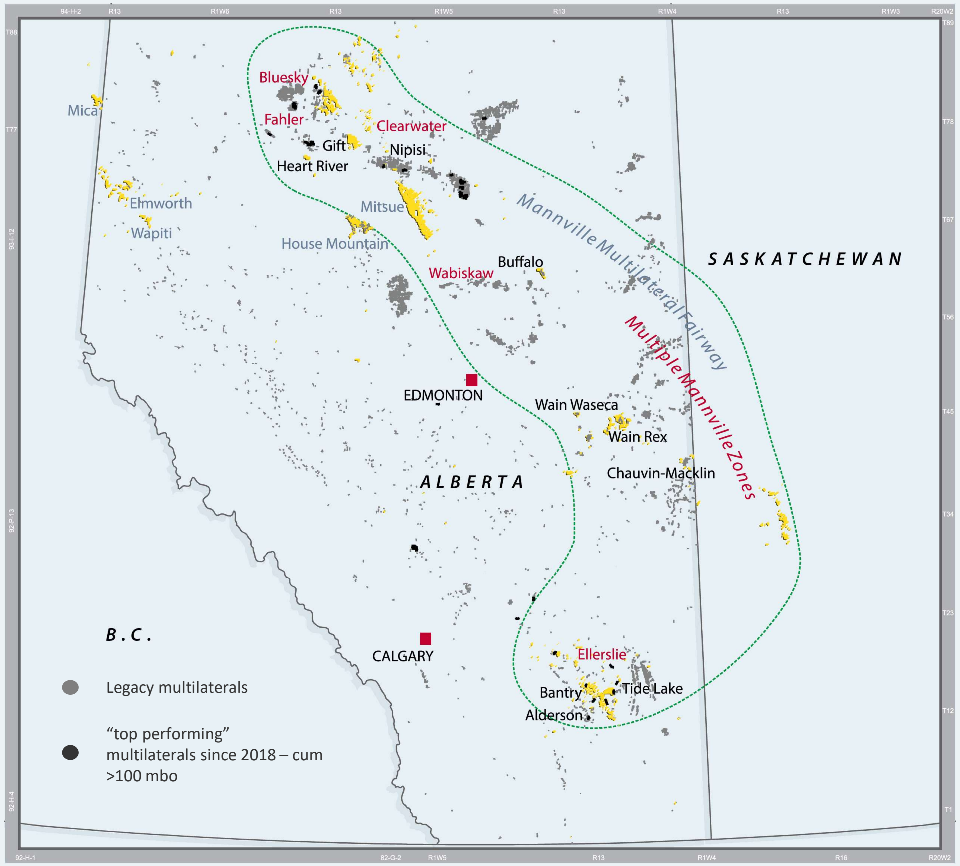
- Central
  - 4 well program following up 2022 Wainwright Rex multilateral discovery all onstream
- Midale
  - 3 producers on stream
  - 3 injectors targeting long term local improvement in recovery factor all on-stream

Large diverse inventory to maintain base production

Please see "Advisory"

(1) Average production for the week ending Oct 23, 2023

Mannville Multi-Lateral Focus



North - Clearwater/Fahler/Wabiskaw *(up to 65 future locations)*

- Nipisi – 8 ML wells drilled to date, continue development in 2024
- Buffalo – 10 ML wells drilled to date on property, up to 25 locations
- Heart River/Gift – 2025+ potential development

Central – Mannville stack *(over 100 future locations)*

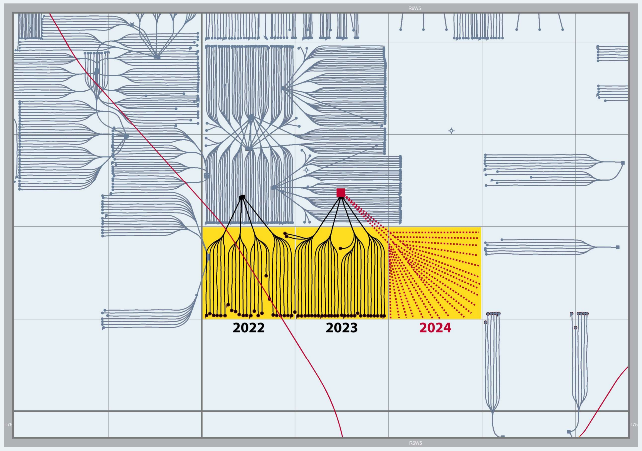
- Wainwright Rex – 5 ML wells drilled to date, apply 2023 learnings, continue development, over 80 potential locations
- Chauvin – Macklin Channels – 1 exceptional ML well drilled in 2021, 10+ potential locations, defined by legacy vertical wells
- Wainwright Waseca – large resource in place on CJ lands, 2025 assessment pending

South – Ellerslie focus *(30-40 future locations)*

- Tide Lake – 11 ML wells drilled since 2018, 30+ potential locations
- Alderson – 2 ML wells drilled in 2023, 5+ potential locations
- Bantry – assessment ongoing

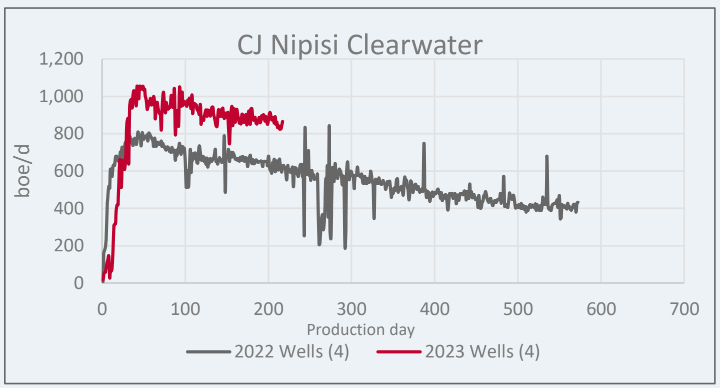
Drilling Mannville multilaterals since 2018
Large inventory across multiple portions of the play fairway established

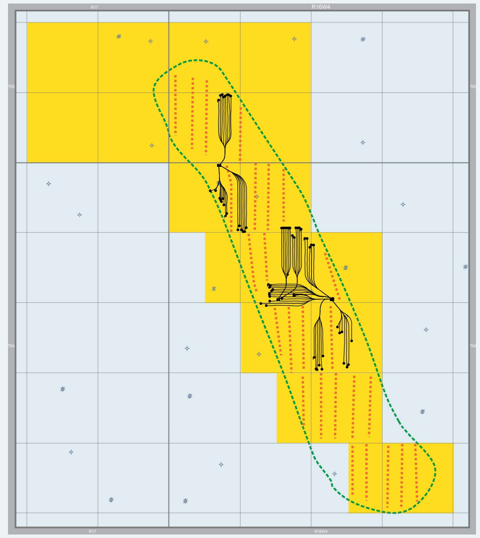
Clearwater : Nipisi, Heart River, Buffalo



Nipisi

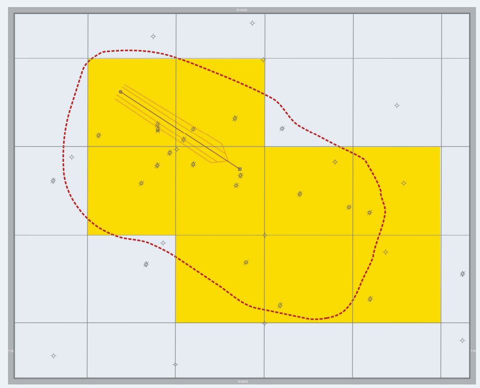
- Acquired 2018
- 8 multilaterals drilled
- Completing development with 3 fan wells in 2024
- 2023 wells producing at ~30% higher rates than very successful 2022 wells





Buffalo

- Acquired Q4 2023
- 10 multilaterals drilled to date
- Up to 25 future locations
- 2 wells planned for 2024



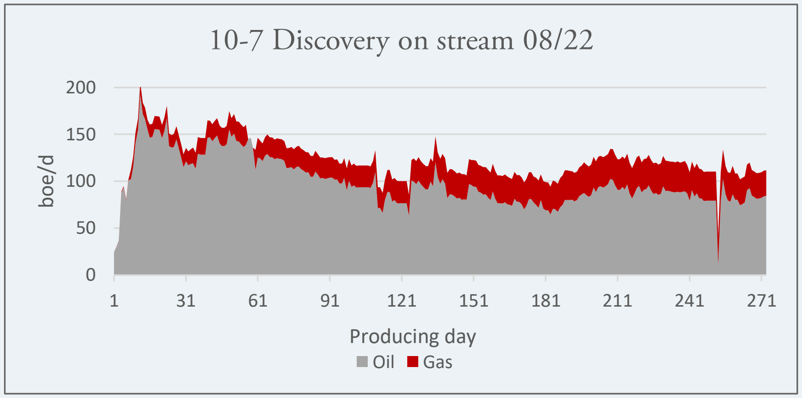
Heart River

- Acquired thru land sales
- Directly south of BTE Peavine
- Drilling initial 6 leg multilateral
- 10-12 future locations with success

Please see "Advisory"

Central – Wainwright Rex

- Estimated 200 MM barrels original oil in place[1], ~20° API
- Q1 23 consolidated land position (green)
- Adds up to 90 multi-laterals to inventory (3 wells booked at year end)
- Existing infrastructure in place
- 4 well drilling program complete
  - Testing inter-lateral spacing, lateral length, pool boundaries
  - 2 wells currently producing 80-200 boepd, remaining 2 cleaning up



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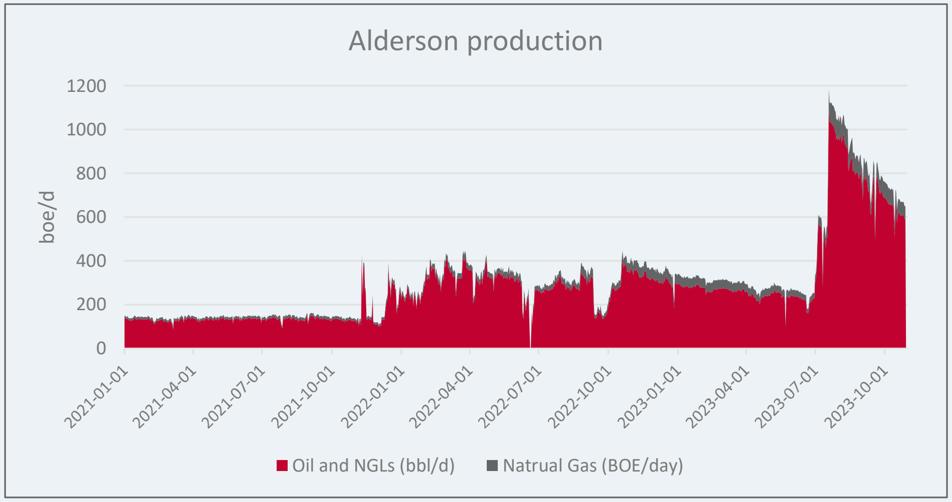
(1) Cardinal internal estimate

Ellerslie – Alderson, Southern Alberta

- Alderson - 0% royalty lands
  - New area for multilateral application
  - 2 wells drilled in Q3 extending boundaries of existing developed Ellerslie pool – up to 6 follow ups identified
  - Overlying Glauc channel also prospective
  - Optimizing use of existing infrastructure



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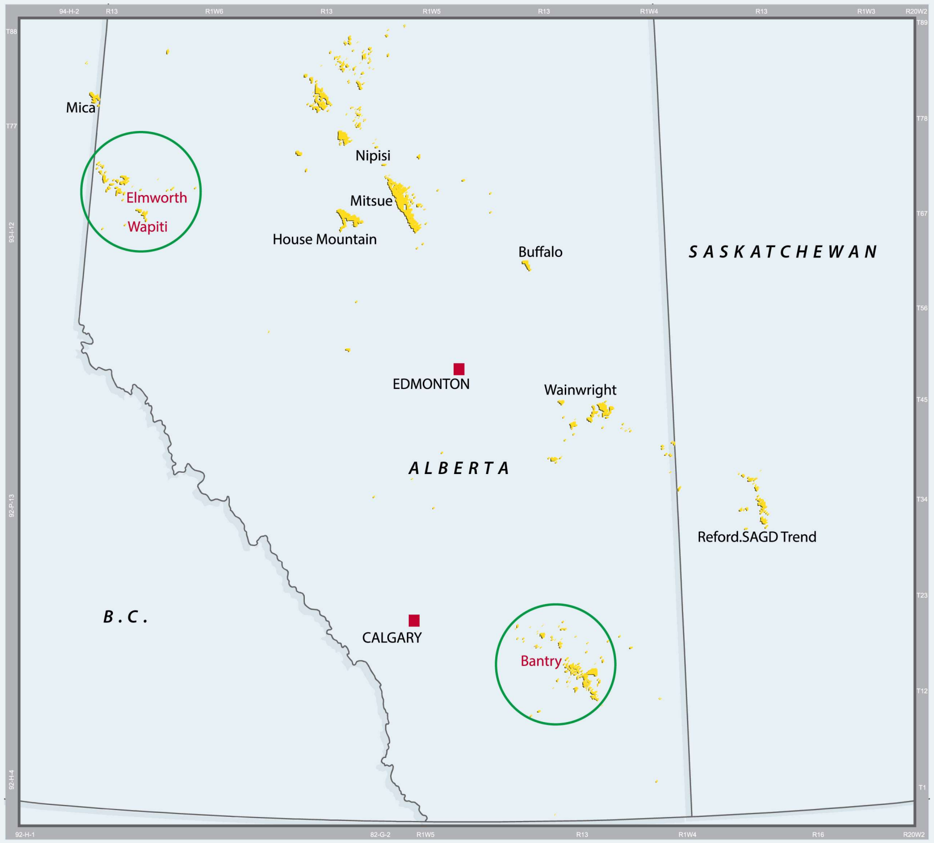
Multi-Leg Horizontals



North – Dunvegan light oil *(over 40 potential locations)*

- Elmworth – 13 wells drilled since 2017
- Wapiti – first test well planned in 2024, competitor activity offsetting

South – Glauc Channel, Ellerslie medium oil *(15+ potential locations)*

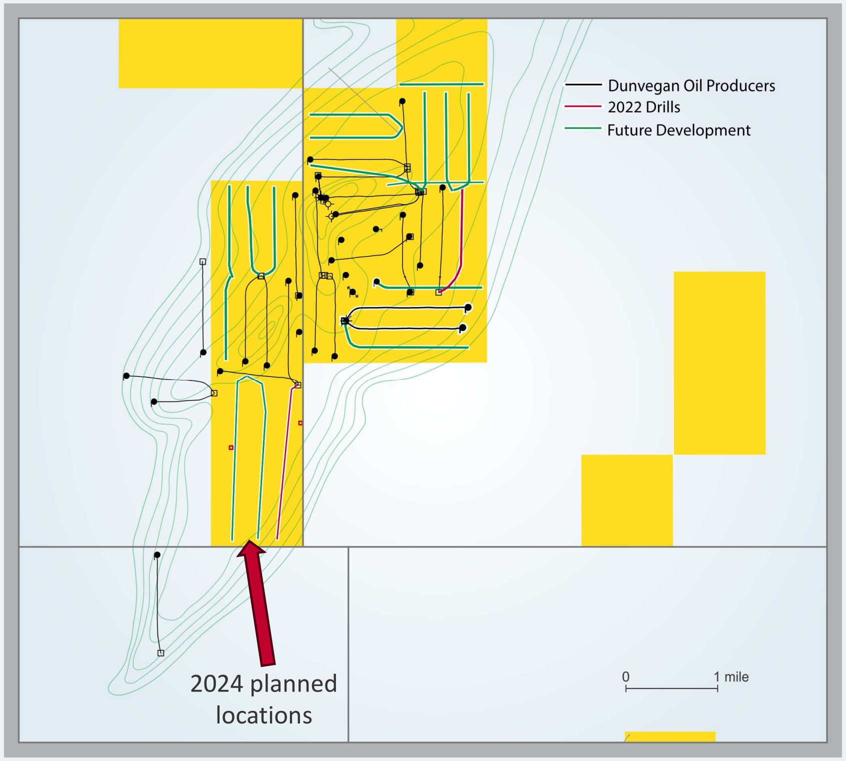
- Glauc channels – continue select development ongoing since 2014
- Ellerslie – focus in areas with lower reservoir quality than on multilateral portion of play, monitor competitor activity

Well established development inventory
Exploratory upside

Please see "Advisory"

GP - Dunvegan

Elmworth



Elmworth

- Well defined light oil pool
- 13 Cardinal operated multifrac horizontals since 2017
- Infrastructure in place
- 2 wells planned for 2024, multiple follow ups defined

Wapiti

- Dunvegan channel trend defined by legacy verticals
- Successful competitor drills along trend
- Initial CJ joint well planned for 2024
- Multiple follow ups with success

Please see "Advisory"

Optimization Assets – EOR and Waterflood

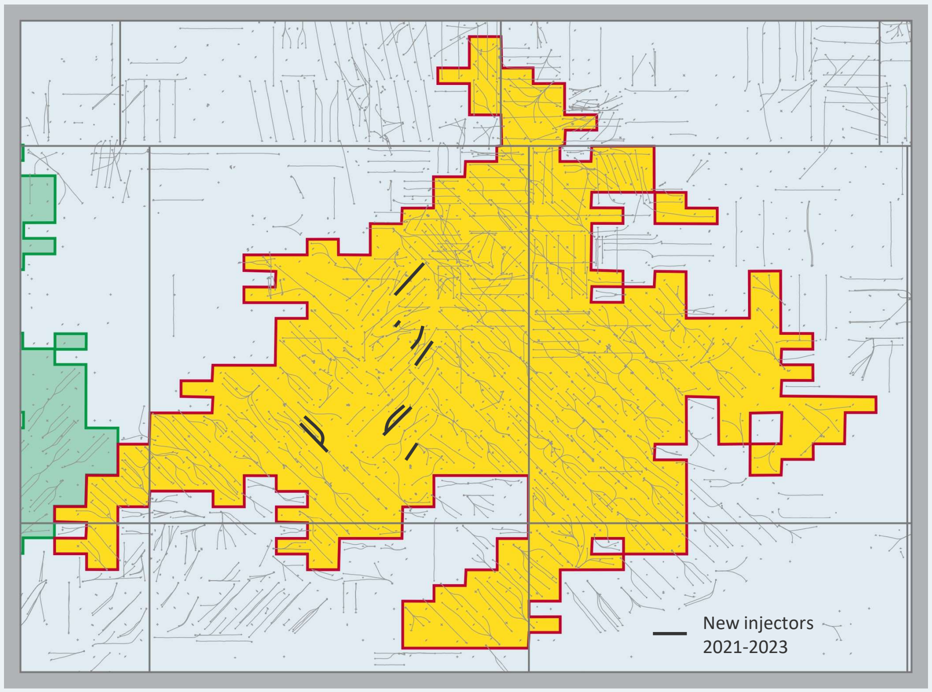
Development drilling potential and flood optimization

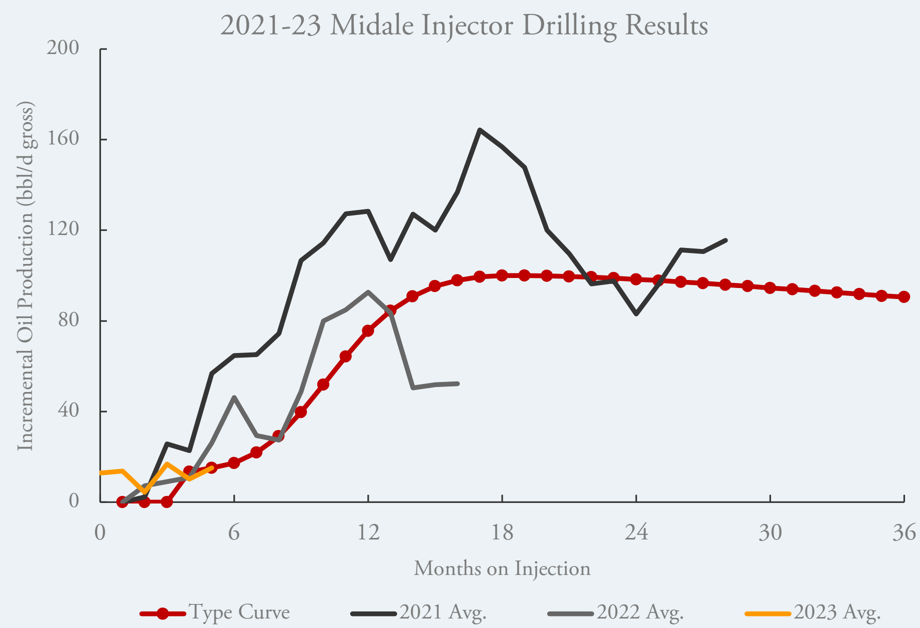
- House Mountain – 2024 Q4 extended reach horizontal
- Midale – 4 wells budgeted in 2024, material long term inventory of over 200 locations
- Mica – potential 2025 infill drilling

Primary flood optimization assets

- Wainwright base – long life low decline medium oil
- Mitsue – long life, low decline light oil

Midale - Injectors





Performing well above expectation, primarily on waterflood

- Type Curve Payout: ~17 Months
- Actual Average Payout: ~ 9 months

Please see "Advisory"

2024 Budget Highlights

	2024 Annual
Adjusted Funds Flow ($MM)	$290
Capital Expenditures ($MM)	
Conventional	$116
Thermal	$69
ARO Expenditures ($MM)	$20
Dividend Rate per month per share	$0.06
Production (boe/d)	22,250-22,750
Production Mix (Oil/NGLs/Natural Gas)	84%/4%/12%
Price Assumptions	
WTI ($USD/bbl)	$79
WTI-WCS ($USD/bbl) annual average	-$16.50
AECO ($CAD/mcf)	$2.65

- Development drilling focus to maintain base production
- Continue to optimize water floods to reduce decline
- Continue capital investments for long term base production reliability
- Begin Reford thermal development
- Maintain higher than required ARO expenditure levels

Please see "Advisory"

Assumptions and Sensitivities

Pricing Assumptions

		2024 Budget
WTI	$ US/bbl	79.00
WCS Differential	$ US/bbl	(16.50)
MSW Differential	$ US/bbl	(2.50)
Fx rate	US/CAD	0.74
AECO	$CAD/mcf	2.65

Annualized Sensitivities

	Adjusted Funds Flow ($ mm)
Δ US$1 WTI	8.0
Δ US$1 WCS Differential	5.0
Δ US$1 MSW Differential	1.5
Δ $0.01 Fx rate	4.0

Please see "Advisory"

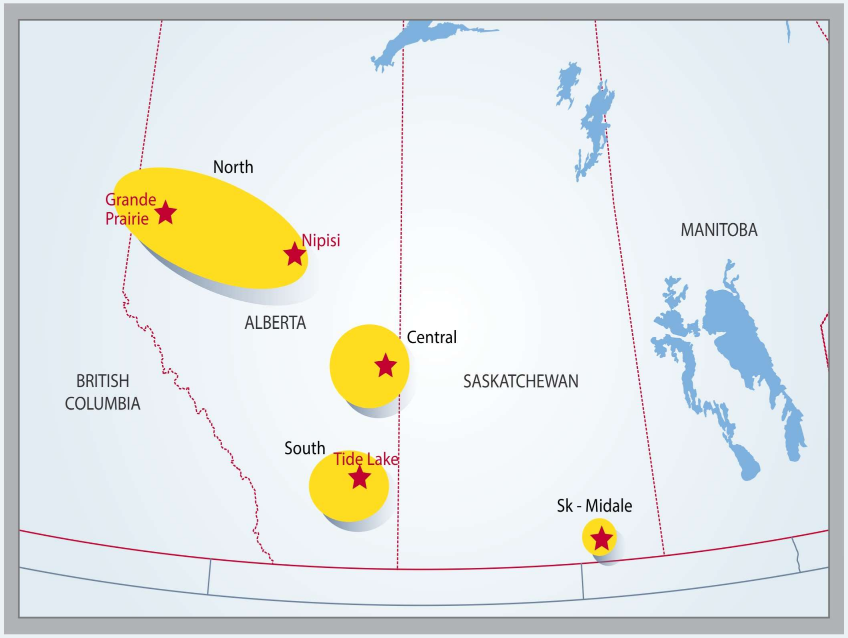
2024 Capital/ARO Plan

		2024 Budget
CONVENTIONAL	**Development**	*$60 MM*
	Drill, Complete, Equip and Tie In (24 gross wells)	
	Optimization	*$16 MM*
	Well Optimization, Water flood optimization, CO_2 Purchases	
	Maintenance and Other	*$40 MM*
	Facility and Pipeline Maintenance, Turnarounds, Corporate	
THERMAL	**Reford SAGD Project**	*$69 MM*
	Finalize engineering of first CPF, Shop Fabrication, Earth Works and Pilings	
ARO EXPENDITURES	Well abandonments (~70), Facility decommissioning, Pipeline abandonments, Reclamation, *over 2x required spend*	*$20 MM*

2024 Budget – Conventional

24 Conventional development wells
Continue flood optimization

- North
  - Clearwater
    - Nipisi 3 multilateral fan wells
    - Buffalo 2 multilateral horizontals
    - Heart River / Gift monitor CJ and competitor 2023 results
  - Grande Prairie Dunvegan
    - Elmworth 2 hz multifrac wells
    - Wapiti 1 joint multifrac well
  - House Mountain
    - 1 development well scheduled for Q4
- South
  - 6 Ellerslie multilaterals
  - 1 Glauc channel multifrac



- Central
  - 4 well Wainwright Rex drilling program
  - Further consolidate Mannville multi-lateral opportunities
  - Continue water flood optimization
- Midale
  - 4 well development (producers + injectors)
  - Optimize water and CO_2 injection

Please see "Advisory"

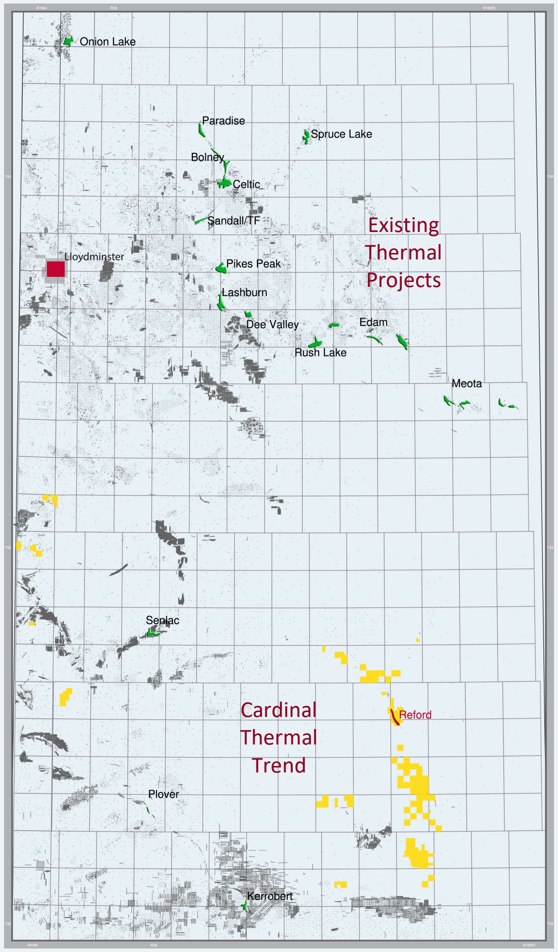
Saskatchewan Thermal Trend

Well established SAGD developments east of Lloydminster

- 17 projects producing ~150,000 bbls/d in Saskatchewan
- Initially defined by legacy conventional heavy oil drilling providing significant control to define channel trends and oil accumulations

Cardinal Thermal Trend

- Acquired thru Broadview asset acquisition Q2 2023 and land sales
- Broadview, led by former BlackPearl executives, had established position over 8 year period
- Area is characterized as one of the least explored portions of the western Canadian sedimentary basin
- Despite low drilling density multiple thick channel heavy oil deposits encountered



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Why for CJ

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- 6,000-10,000 bopd project size - risk appropriate for our Company
- "Off the shelf" proven SAGD technology available at fixed pricing giving certainty around project economics and timeline
- Large talent pool of professionals with previous development and production experience available
- Supportive Provincial regulatory environment
- Year-round land access on paved roads within existing utility infrastructure
- Multiple access points for product sales including third party sales points, Cardinal owned facilities and rail options
- Established water source, no use of surface water in the development of these projects
- Potential natural gas power generation on site eliminates exposure to fluctuating electrical prices
- Cardinal has nearly 1,000,000 tonnes of potential and verified CO_2 emissions reductions in Saskatchewan from our CO_2 sequestration project to offset future greenhouse gas emissions associated with the SAGD operation
- Low operating costs which will lower Cardinal's overall operating cost structure in the future.

Adds material growth opportunity, fits decline profile, reduces corporate operating costs, increases long term sustainability and free cash flow

Please see "Advisory"

Saskatchewan Thermal Heavy Oil History & Advantages

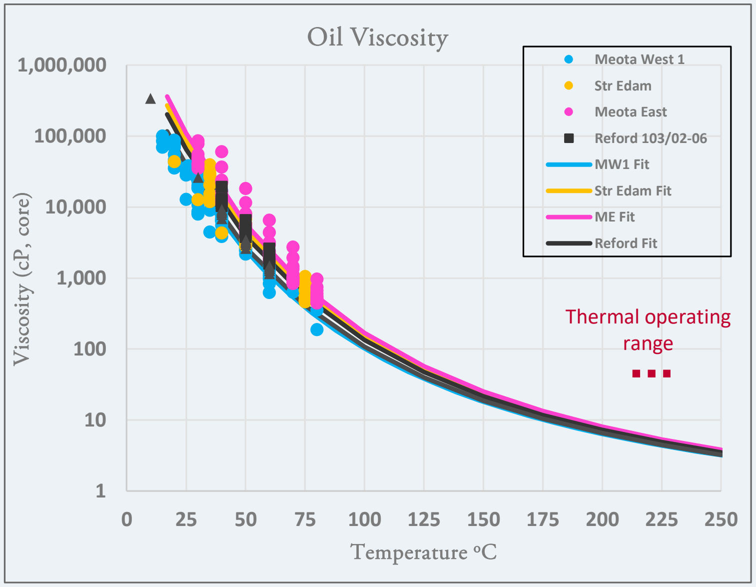
Saskatchewan advantages include:

- Surface Access = Lower CAPEX
- Existing Infrastructure = Marketing Optionality
- Oil Quality = Better Wellhead Price
- Lower Royalties = Strong Project Economics
- Supportive Regulatory Regime = Project Assurance
- Proven SAGD Technology = Timeline Certainty

Please see "Advisory"

Reservoir Comparison

		Dee Valley	Edam	Edam East	Edam West	Meota East	Meota West	Paradise Hills	Pikes Peak	Rush Lake	Sandall	Spruce Lake	*Reford*
Operator		CVE	SRC	CVE	CVE	SRC	SRC	CVE	CVE	CVE	CVE	CVE	*CJ*
Year on stream		2019	2016	2016	2016	2018	2020	2012	2007	2011	2014	2020	*2026*
Target Zone		Waseca	Lloyd	GP	Sparky	Colony	Lloyd, Waseca	Colony	Waseca	GP	McLaren	Waseca	*Waseca*
Project Nameplate	bopd	10,000	8,000	10,000	5,000	10,000	10,000	5,000	12,000	24,000	5,000	10,000	*6,000*
Depth	m	470	480	450	440	460	530	475	500	480	450	475	*620*
Estimated average thickness	m	17	13	18	15	11	14	13	18	22	16	19	*15*
Average porosity	%	32-34%											
Oil saturation	%	75-85%											
Kmax	mD	8200	6500	6900	4500	4500	6900	10400	4200	4500	5800	5500	*7000*
Oil Gravity	API	12	11.5	n/a	12	10	10	12.5	12	12	12	10	*9*
Impairment Zones		bottom water	bottom water	bottom water		bottom water	bottom water	bottom water/ top gas	bottom water/ top gas	bottom water	bottom water / top gas	bottom water	*bottom water*



Reford trend shows comparable reservoir and oil quality characteristics to existing developed Saskatchewan thermal heavy oil projects

Please see "Advisory"

Cardinal Thermal Heavy Oil Trend

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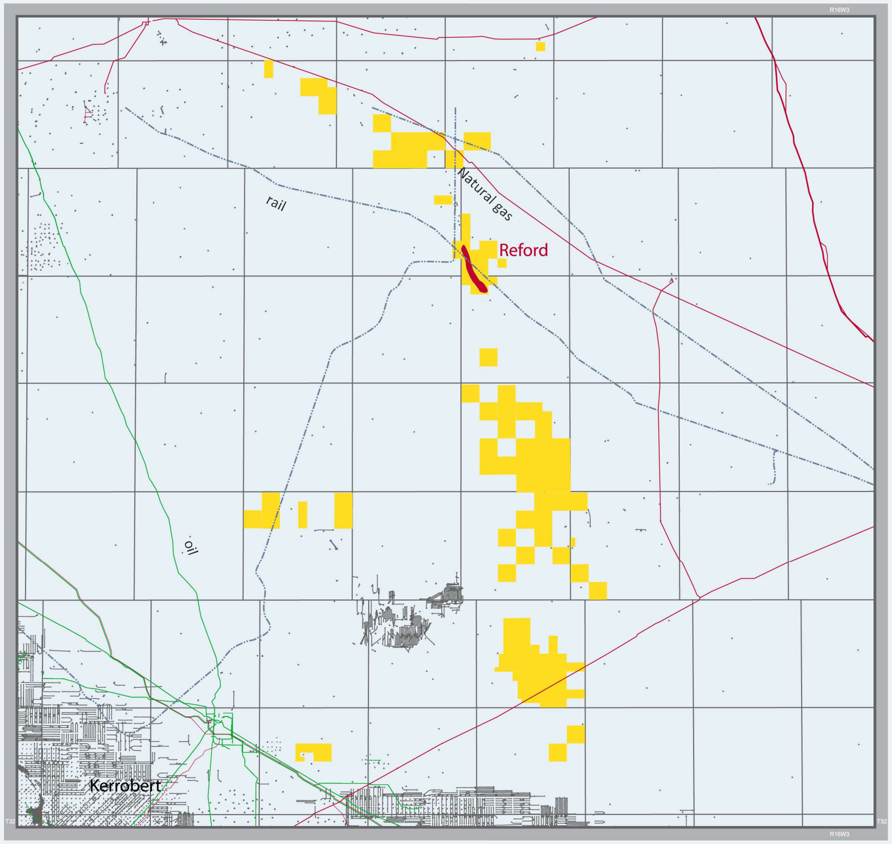
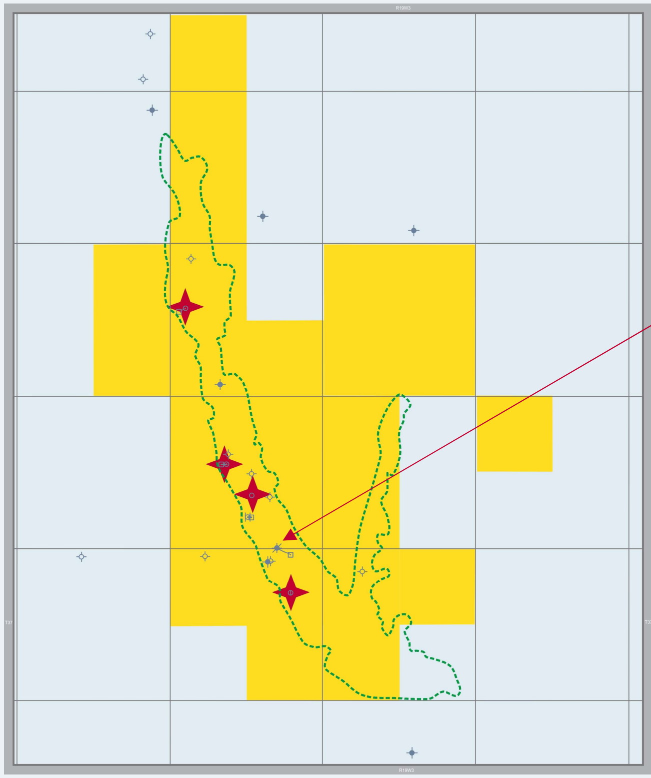
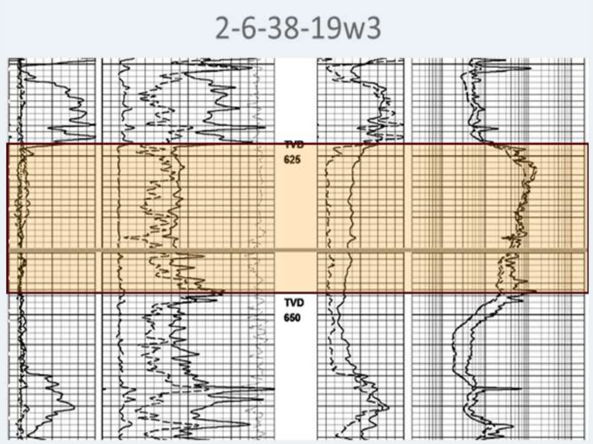


- Waseca channel trend is the primary SAGD target with numerous heavy oil intersections
- Land position (>45,000 acres) established primarily through acquisition of Broadview Energy assets in Q2 2023
- Currently 3 potential (6,000 -10,000 bbls/d) SAGD sites identified
  - All have existing vertical well penetrations and 3D seismic coverage assisting in resource definition
- Well established infrastructure in place including:
  - Road and rail networks
  - Transgas natural gas pipelines
  - Oil sales pipelines
- Conventional heavy oil prospectivity under assessment

Please see "Advisory"

Reford Waseca Channel





Q4 2023 assessment wells

Waseca channel trend

- Defined resource
  - 9 legacy verticals
  - 4 assessment wells drilled Q4 2023
  - 3D seismic across land base
  - Channel isopach up to 35m
  - Oil column up to 20m
  - Channel width 500-800m
  - Porosity 30%+
- 100% working interest land established on core of oil accumulation
- Target depth ~650m

Reford Thermal Estimated Cost Breakdown

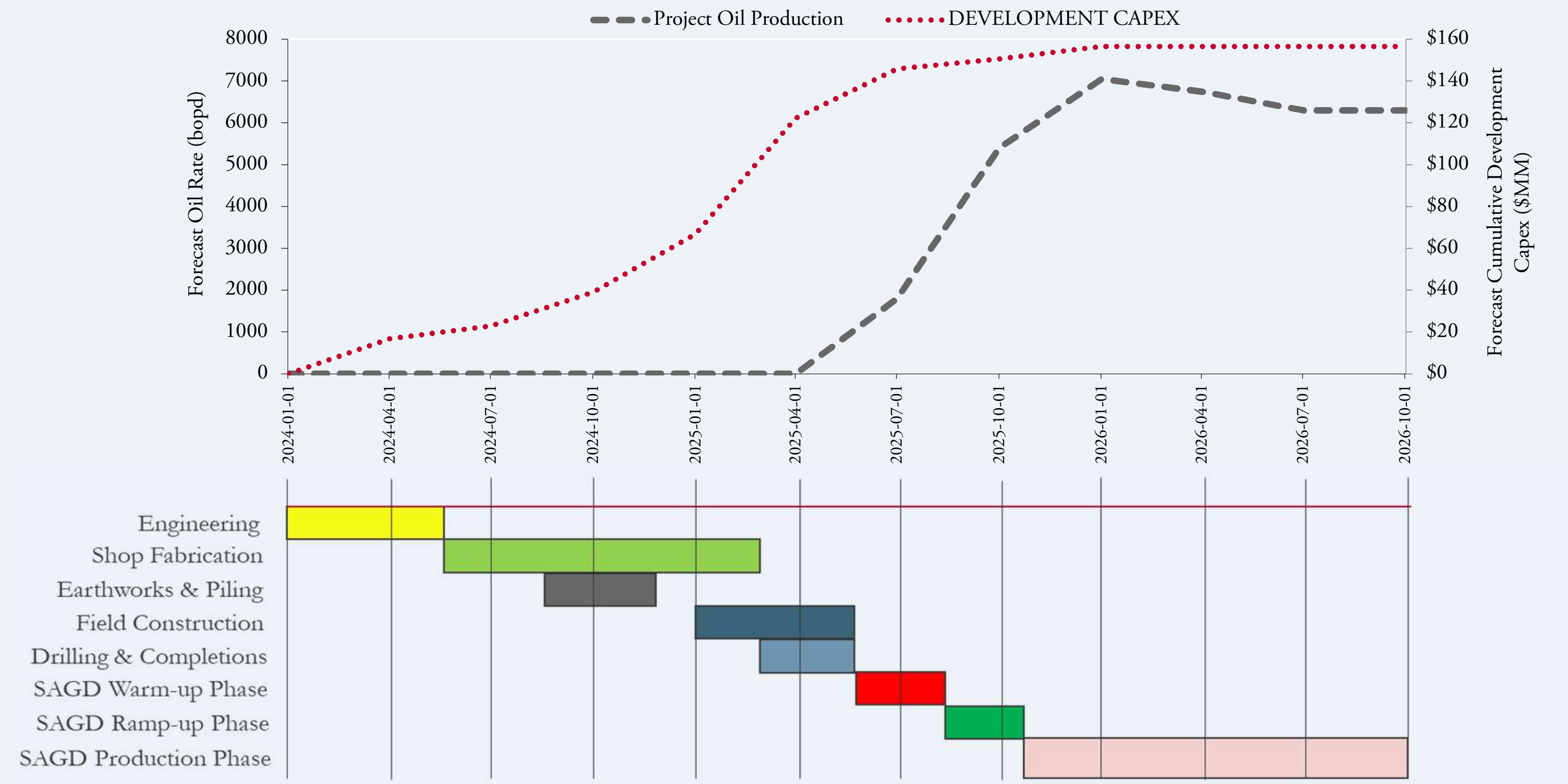
Project Type	% of Project Cost
Central Processing Facility	64%
SAGD Well Pads	
Above Ground Flowlines	
Pump Station	
Drilling & Completions	24%
Civil Site Grading	2%
Source Water Wells	6%
Source Water Flowlines	
Raw Water Pipelines	
Salt Water Disposal Well Pad Facility	2%
Fuel Gas Pipeline	
Utilities - Natural Gas	2%
Utilities - Power	
Utilities - Communications	

$155 million initial development estimate

- Standardized development approach
- Modularized facilities that are shop fabricated reducing field construction and improving the quality of workmanship
- Cost and schedule are reduced by over 25% compared to traditional projects
- Lump sum approach offers cost and schedule certainty
- Scope of work is well known with the stock plant philosophy
- Similar components used between plants for maintenance and optimization

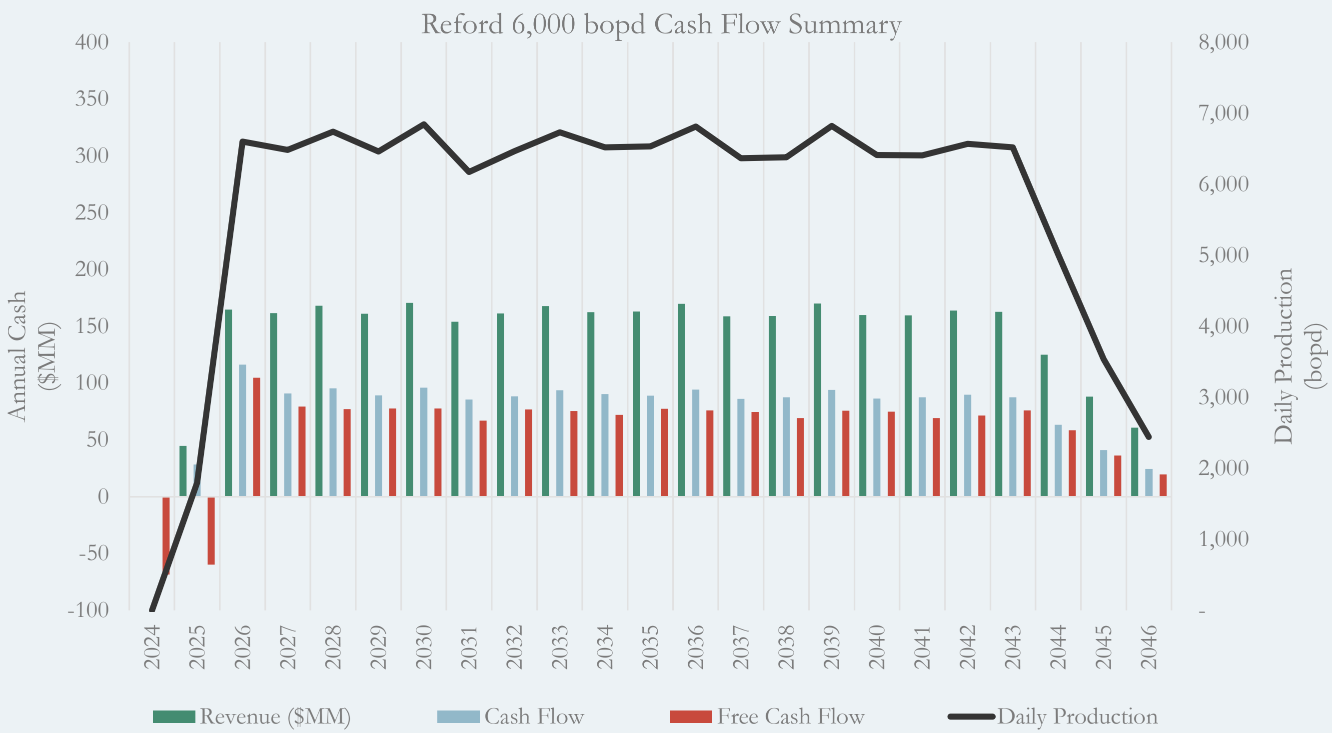
Please see "Advisory"

Reford Thermal Project Timeline



Please see "Advisory"

Reford - Economics



- Project payout within 18 months initial production
- Cum. free cash flow of $1.4 Billion over 20 years
- NPV10 of $456 MM
- PIR of 182%
- IRR of 52%
- Initial Project CAPEX of $155 MM
  Sustaining CAPEX of $291.1 MM
  Total Project F&D of $9.39/bbl
- Strong demand for Neat Bit (i.e.. undiluted bitumen)
  Reford location provides marketing optionality

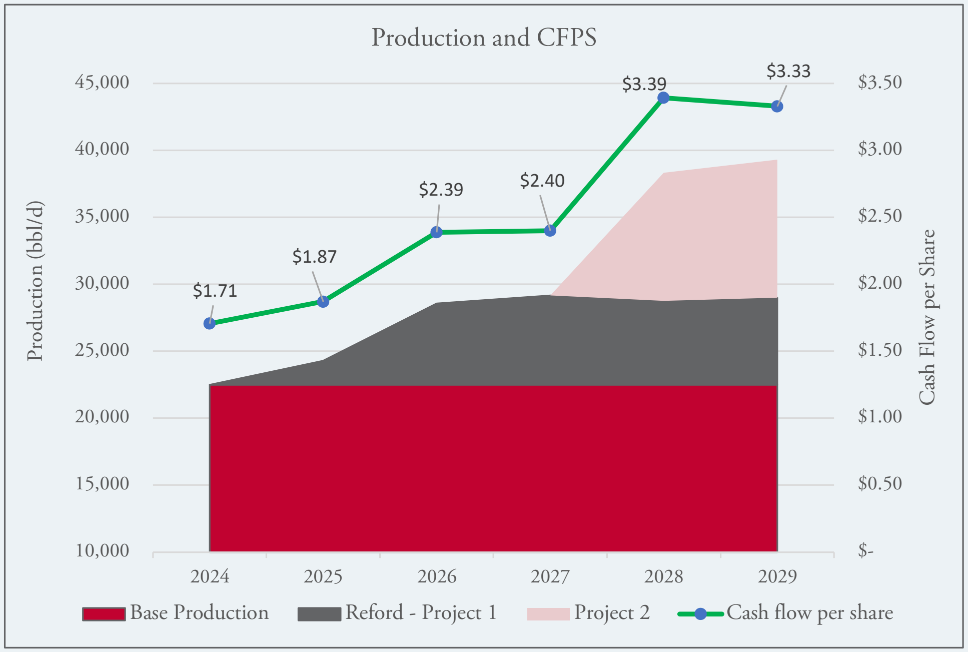
Economic Model Assumptions:

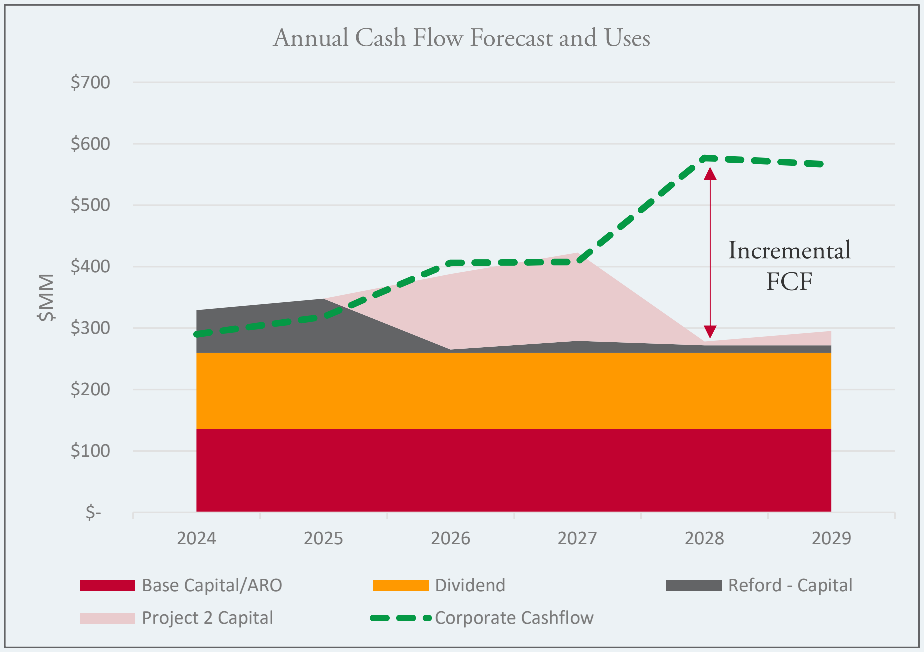
- WTI flat at $79/bbl USD
- WCS diff. flat at $16.50/bbl USD
- AECO flat at $3.00/MMBtu

Potential to sustain 6,000 bopd for up to 20 years

Please see "Advisory"

Cardinal – 2024-2029 Preliminary Plan





- ❑ Maintain base production
- ❑ Add material, sustainable, long term growth wedge
  - Reford 2024 FID, mid 25 first steam, late 25 first production
  - Project #2 2025 FID, late 26 first steam, mid 27 first production
  - Project #3 to follow

- ❑ Further improvement to long-term sustainability
- ❑ Potential for material long-term growth in free cash flow
- ❑ Ability to fund within existing balance sheet while maintaining current dividend

Current Yield ~9.5%, forecasted average annual growth (2024-2027) ~14% = ~23% projected annual return

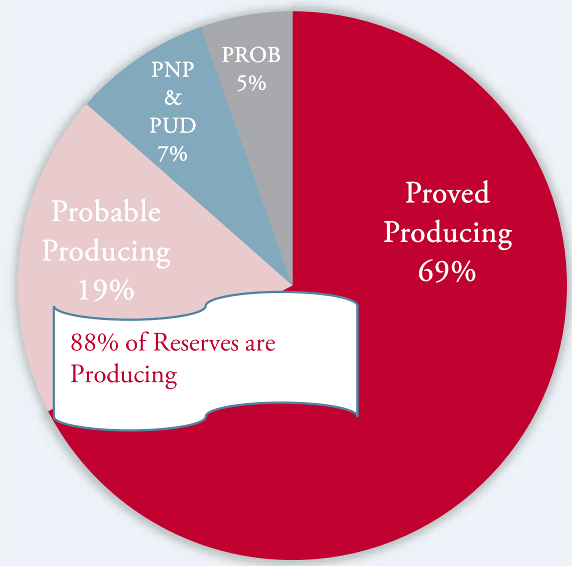
Please see pricing assumptions in "Advisory"

2022 Year End Reserves

Year End 2022	MMBOE [1]	NPVBT10 [2][3] (MM)	FD&A ($/boe)	Recycle Ratio [4]
Proved Producing	77.7	$1,353	$12.03	4.1
Total Proved	85.4	$1,434	$12.03	4.1
Total Proved plus Probable	113.2	$1,784	$11.40	4.3

(1) Reserves include light & medium, heavy, natural gas and natural gas liquids – see Advisory.
(2) Before Tax Net Present Value of Future net Revenue discounted at 10% based on 3 Consultant's Average (3CA) as of January 1, 2023, with 2023 WTI reference price of US$80.33/bbl.
(3) Total ADR (Abandonment, Decommissioning, Reclamation) is included in the reserves report, as it is best practice stated in the COGE Handbook.
(4) See Advisory.

- Top tier 2022 results
  - Performance driven by both strong base production optimization and better than forecast drilling results
  - Cardinal 3 average year PDP FD&A $8.61/boe
- Large inventory of unbooked locations
- 2022 vs 2021
  - 22% increase in PDP reserves per debt adjusted share
  - 51% increase in PDP PV10 per share



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Focusing on a Sustainable Future – ESG Focus

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Environment

- CO_2 injection exceeds Scope 1 emissions
- Accelerating ARO activity
- Minimizing footprint through multi-leg and pad development drilling

Social

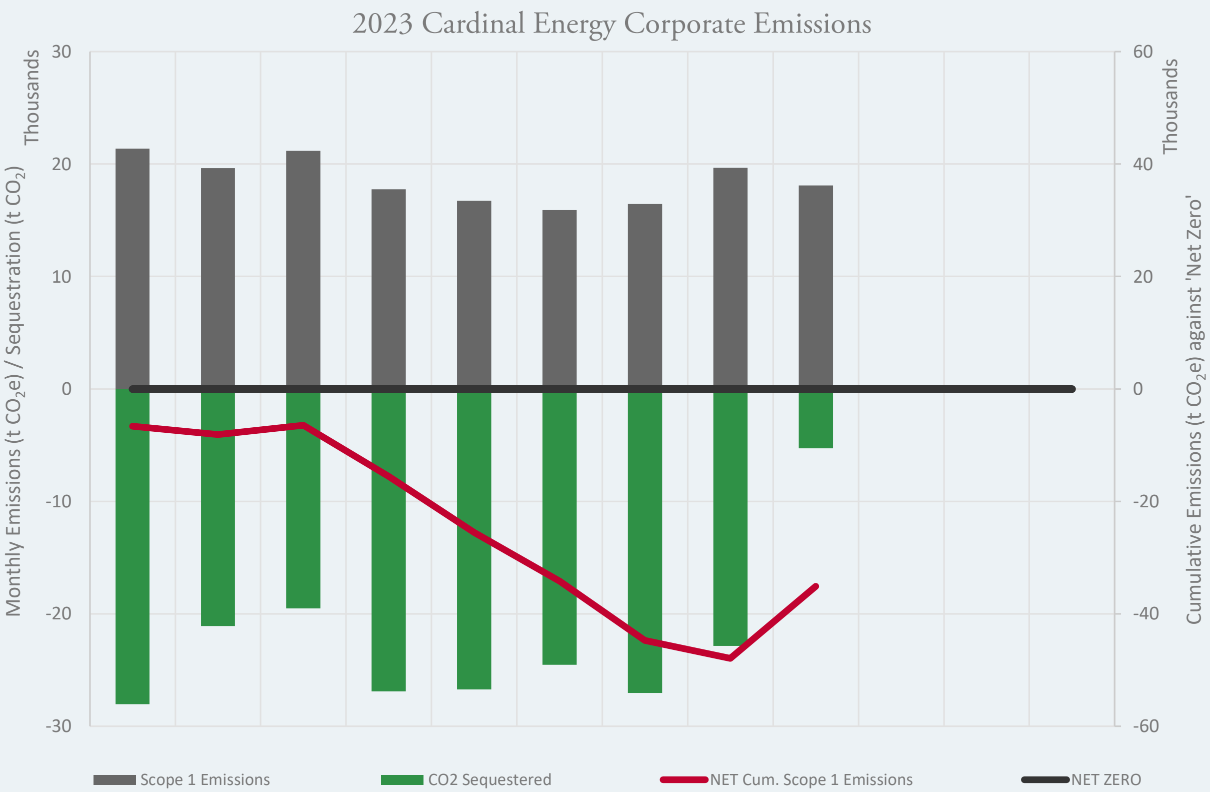
- Indigenous Engagement & Support
- Sponsorships
- Standing with Ukraine >$90,000 Employee and director donations in Q1
- Community Involvement
  - Midale Fire Hall

Governance

- Corporate Governance
- Diversity
- Executive Compensation tied to performance
- 0 lost time injuries

CO_2 injection exceeds Scope 1 emissions

Net Negative Carbon Emissions



- ❑ Differentiated from our Peers
- ❑ Negative Corporate Net Scope 1 CO_2e Emissions
- ❑ Midale, Sask CO_2 EOR project operation for more than 10 years
  - ~200,000 tonnes sequestered 2023 YTD
  - Over 5.6 million tonnes sequestered to date
  - Large remaining storage capacity and expansion potential

Please see "Advisory"

Responsible Asset Retirement

- Cardinal has committed to a robust asset retirement program:
  - well abandonments (100 well program for 2023)
  - decommissioning of facilities and pipelines
  - site reclamation (more than 60 sites in 2023)
- Cardinal continues to exceed the regulatory required spend by > 2x.
- The nature of Cardinal's low decline, long-life assets helps provide sufficient funds to adequately address Cardinal's asset retirement obligations (ARO) well into the future.
- Non-core dispositions continue to reduce our ARO.

Assets Retired between 2019-2023 to date

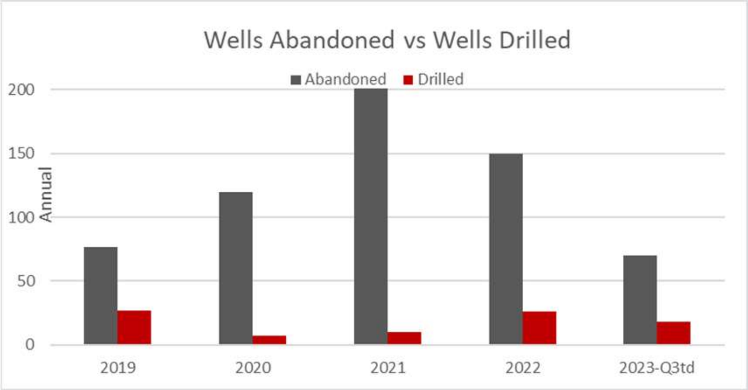
618
Wells Abandoned

703
Pipeline Segments Abandoned

65
Facilities Decommissioned

Minimizing our Surface Footprint

- Since 2020, Cardinal abandoned 9x more wells than drilled.
- Use of long-reach or multiple horizontal legs and multi-well pad sites minimizes our surface footprint.



Please see "Advisory"

Overview

Current Yield ~9.5%, forecasted average annual growth (2024-2027) ~14% = ~23% projected annual return

Drilling Inventories

- Established significant 5-20+ year drilling inventories in each operating area.

Reduce Business Risk

- Less business risk by reducing debt to 0.2x cashflow.

Focus on ARO

- Significant focus on being good stewards of our land use, supporting sustainability with substantial ARO budgets.

Grow the Company

- Working on acquisitions / dispositions and internal projects to increase the size of the Company with a focus on improving sustainability in a low oil price environment.

Please see "Advisory"

Tax Pools

Tax Pool Balance ($ MM)	YE 2022	YE 2021
COGPE	454	492
CEE and non-capital losses	533	720
CDE	167	149
Undepreciated capital cost & other	134	131
Total	1288	1492

- Based on available tax pools, forecasted capital expenditures and forecasted commodity prices at December 31, 2022 from the average of three independent third party reserve evaluators, Cardinal does not expect to pay current income taxes until 2026 or beyond.

Please see "Advisory"

Inventory Identified for the Long Term

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	Potential Locations (Gross)				
District	Tier 1	Tier 2	2023 Drilling Program	Current Focus	Long Term Opportunities
South	23	63	4	Expanding Ellerslie multi-lateral development at Tide Lake and Alderson	Continue to expand multilateral applications to other zones/areas Targeted hz multi frac development
Central	70	97	4	Rex multi-laterals at Wainwright	Additional multi-lateral potential across asset base
North	28	159	5	Clearwater multi-laterals at Nipisi Dunvegan Hz multi-frac at GP	Clearwater at Heart River and Gift, expansion of Dunvegan development, optimization of House Mountain and Mitsue fields
SK-Midale	60	140+	6	Optimizing EOR development	Expanding EOR development
TOTAL	181	459	19	~10 years of tier 1 inventory identified	Substantial long term potential inventory available to sustain production

- Tier 1 inventory are locations directly offsetting existing production or in broader areas with both existing production and significant vertical well control providing a high degree of confidence in resource boundaries
- Tier 2 locations are essentially those contingent on success of Tier 1 drilling

Please see "Advisory"

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Note Regarding Forward Looking Statements

This presentation contains forward-looking statements and forward-looking information (collectively "forward-looking information") within the meaning of applicable securities laws relating to Cardinal's plans and other aspects of Cardinal's anticipated future operations, management focus, objectives, strategies, financial, operating and production results. Forward-looking information typically uses words such as "anticipate", "believe", "project", "expect", "goal", "plan", "intend", "may", "would", "could" or "will" or similar words suggesting future outcomes, events or performance. The forward-looking statements contained in this presentation speak only as of the date thereof and are expressly qualified by this cautionary statement.

Specifically, this presentation contains forward-looking statements relating to: our business goals, strategies, plans and objectives, future budgets, (including expenditure types and dividend amounts) drilling inventory and future locations, estimated two year payout, expected future drilling and operating costs, production decline rates, expected realized pricing, the benefits of our risk management program, future free cash flow, future dividends and share buybacks, plans to increase sustainability and reduce risk by, among other things, improving our ability to replace production, lowering operating costs and increasing netbacks, and by reducing debt, ARO exposure (an ARO reductions), carbon capture and related strategies, and reliance on third parties and variable costs, our capital budget and the allocation thereof, our drilling and optimization plans, targeted debt to cash flow, plans with respect to use of future free cash flow, plans to develop current E&E assets in Saskatchewan including expected costs, production capability, economic returns, timing and other matters related thereto.

Forward-looking statements regarding Cardinal are based on certain key expectations and assumptions of Cardinal concerning anticipated financial performance, business prospects, strategies, regulatory developments, production curtailments, current and future commodity prices and exchange rates, applicable royalty rates, tax laws, future well production rates and reserve volumes, future operating costs, the performance of existing and future wells, the success of our exploration and development activities, the sufficiency and timing of budgeted capital expenditures in carrying out planned activities, the availability and cost of labor and services, the impact of competition, conditions in general economic and financial markets, availability of drilling and related equipment, effects of regulation by governmental agencies, the ability to obtain financing on acceptable terms which are subject to change based on commodity prices, market conditions, drilling success and potential timing delays.

In addition, information and statements relating to reserves are deemed to be forward-looking statements, as they involve implied assessment, based on certain estimates and assumptions, that the reserves described exist in quantities predicted or estimated, and that the reserves can be profitably produced in the future.

These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond Cardinal's control. Such risks and uncertainties include, without limitation: the impact of general economic conditions; volatility in commodity prices and differentials; power costs; industry conditions; currency fluctuations; imprecision of reserve estimates; liabilities inherent in crude oil and natural gas operations; environmental risks; incorrect assessments of the value of acquisitions and exploration and development programs; competition from other producers; the lack of availability of qualified personnel, drilling rigs or other services; changes in income tax laws or changes in royalty rates and incentive programs relating to the oil and gas industry; changes in curtailment programs; hazards such as fire, explosion, blowouts, and spills, each of which could result in substantial damage to wells, production facilities, other property and the environment or in personal injury; and ability to access sufficient capital from internal and external sources.

Management has included the forward-looking statements above and a summary of assumptions and risks related to forward-looking statements provided in this presentation in order to provide readers with a more complete perspective on Cardinal's future operations and such information may not be appropriate for other purposes. Cardinal'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 Cardinal will derive there from. Readers are cautioned that the foregoing lists of factors are not exhaustive. These forward-looking statements are made as of the date of this presentation and Cardinal disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws.

This presentation contains future-oriented financial information and financial outlook information (collectively, "FOFI") about our prospective results of operations, cash flows, adjusted funds flow, capital expenditures and components thereof, all of which are subject to the same assumptions, risk factors, limitations, and qualifications as set forth in the above paragraphs. FOFI contained in this presentation were made as of the date hereof and is provided for the purpose of describing our anticipated future business operations. We disclaim any intention or obligation to update or revise any FOFI contained in this presentation, whether as a result of new information, future events or otherwise, unless required pursuant to applicable law. Readers are cautioned that the FOFI contained in this presentation should not be used for purposes other than for which it is disclosed herein.

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Oil and Gas Advisories

The term "boe" or barrels of oil equivalent may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 Mcf: 1 bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Additionally, given that the value ratio based on the current price of crude oil, as compared to natural gas, is significantly different from the energy equivalency of 6:1; utilizing a conversion ratio of 6:1 may be misleading as an indication of value.

Any references in this presentation to initial production rates are useful in confirming the presence of hydrocarbons, however, such 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 rates in calculating the aggregate production for Cardinal.

Cardinal has used a number of oil and gas metrics herein which do not have standardized meanings and therefore may be calculated differently from the metrics presented by other oil and gas companies. Such metrics include "payout", "IRR" and "NPV10". Payout means the anticipated years of production from a well required to fully pay for the drilling completion and tie in (or equivalent) of such wells. IRR means the before tax rate of return of a well (before giving effect to any taxes) or the discount rate required to arrive at a net present value equal to zero. The Company uses IRR as a measure of return on capital investment. NPV10 means net present value, before tax discounted at 10%.

These oil and gas metrics do not have any standardized meanings or standard methods of calculation and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. As such, they should not be used to make comparisons. Cardinal management uses these oil and gas metrics for its own performance measurements and to provide investors with measures to compare Cardinal's performance over time; however, such measures are not reliable indicators of Cardinal's future performance, which may not compare to Cardinal's performance in previous periods, and therefore should not be unduly relied upon.

Production & Product Type Information

References to petroleum, crude oil and natural gas liquids ("NGLs"), natural gas and average daily production in this presentation refer to the light and medium crude oil, heavy oil, conventional natural gas and NGLs product types, as applicable, as defined in National Instrument 51-101 ("NI51-101").

	Slide	Light/Medium Crude Oil	Heavy Oil	NGLs	Conventional Natural Gas	Total (boe/d)
Q3/23	3	45%	39%	3%	13%	21,872
Q2/23	3	45%	39%	3%	13%	21,047
Current Corporate	4	45%	40%	4%	12%	>22,000
Current New Well	6	36%	63%	-	1%	1,800
Wainwright Rex	9	-	92%	-	8%	80-200

Reserve & Product Type Information

References to petroleum, crude oil, natural gas and natural gas liquids ("NGLs") reserves in this presentation refer to the light and medium crude oil, heavy oil, conventional natural gas and NGLs product types, as applicable, as defined in National Instrument 51-101 ("NI51-101").

	Light and Medium Oil	Heavy Oil	NGLs	Conventional Natural Gas	Total (MMBOE)
Proved Producing	56%	32%	3%	9%	77.6
Total Proved	58%	30%	3%	9%	85.3
Proved plus Probable	58%	30%	3%	9%	113.0
Tide Lake YE 22 EUR	-	89%	-	11%	varied

"FD&A costs" are calculated as the sum of development costs plus net acquisition costs plus the change in FDC for the period when appropriate, divided by the change in reserves within the applicable reserves category, inclusive of changes due to acquisitions and dispositions. "Recycle ratio" is calculated by dividing operating netback for 2022 of $49.30/boe by F&D costs per boe or FD&A costs per boe for the year. Reserve Life Index ("RLI") is calculated by dividing the applicable reserves by 2022 fourth quarter production of 21,281 boe/d. "Debt adjusted" basic outstanding shares of 164.0 million were calculated by dividing the year-end net debt of approximately $63 million by the closing price of our common shares on the Toronto Stock Exchange at December 31, 2022 of $7.62/share and adding this to the basic outstanding shares. "Three year average PDP FD&A" is calculated using three-year total capital costs including the change in FDC and reserve additions for the PDP reserves on a weighted average basis. Original Oil in Place ("OOIP") means Discovered Petroleum Initially in Place ("DPIIP"). DPIIP is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The recoverable portion of DPIIP includes production, reserves and Resources Other Than Reserves (ROTR). OOIP/DPIIP and potential recovery rate estimates are based on current recovery technologies. There is significant uncertainty as to the ultimate recoverability and commercial viability of any of the resource associated with OOIP/DPIIP, and as such a recovery project cannot be defined for a volume of OOIP/DPIIP at this time.

Drilling Locations

This presentation discloses years of drilling inventory which reflects a combination of booked proved and probable locations derived from GLJ's reserves evaluation effective December 31, 2022 and account for drilling locations that have associated proved and/or probable reserves, as applicable and unbooked locations refer to locations assigned to internally estimated reserves potential and are not otherwise included in the GLJ reserves evaluation divided by average future forecast drilling activity.

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The following tables provide a detailed breakdown of the current Cardinal net drilling locations included in this presentation:

		Booked at Year-end 2022		
	Total Drilling Inventory	Proved Locations	Probable Locations	Unbooked Locations
Slide 7 – Clearwater	65	-	-	65
Slide 7,8 – Buffalo	25	-	-	25
Slide 8 - Heart River	12	-	-	12
Slide 7 - Mannville Stack	100+	2	1	100+
Slide 7 – Ellerslie	40+	1	-	40+
Slide 9 - Wainwright Rex	90	2	1	87
Slide 10 - Alderson	6	-	-	6
Slide 11 - Dunvegan	40	3	-	37
Slide 11 - South / Glauc	15	-	8	7
Slide 13 - Midale	200	13	9	178

	TIER 1 Booked at Year-end 2022				TIER 2 Booked at Year-end 2022			
	Potential Locations	Proved Locations	Probable Locations	Unbooked Locations	Potential Locations	Proved Locations	Probable Locations	Unbooked Locations
South District	23	8	4	11	63	6	4	53
Central District	70	2	1	47	97	0	0	97
North District	28	10	1	17	159	7	0	152
Midale	60	13	9	38	140	0	0	140

Cardinal 2024-2029 Preliminary Plan

Flat pricing assumed through out period

WTI	$79 USD
WTI-WCS	-$16.50 USD
AECO	$2.65/GJ

Non-GAAP and other measures

Throughout this presentation and in other materials disclosed by the Company, Cardinal employs certain measures to analyze its financial performance, financial position, and cash flow. These non-GAAP financial measures, non-GAAP ratios, capital management measures and supplementary financial measures as further described herein are not standardized financial measures under IFRS and may not be comparable to similar financial measures disclosed by other issuers. The non-GAAP and other financial measures should not be considered to be more meaningful than GAAP measures which are determined in accordance with IFRS, such as net earnings (loss), cash flow from operating activities, and cash flow used in investing activities, as indicators of Cardinal's performance. See "Non-GAAP and Other Financial Measures" in the Company's MD&A as at and for the three and nine months ended September 30, 2023 for an explanation of each measure noted below, as well as a detailed calculation and reconciliation to each of their most directly comparable IFRS measure.

Netback

Cardinal utilizes netback as key performance indicator and is utilized by Cardinal to better analyze the operating performance of its petroleum and natural gas assets against prior periods. Netback is calculated as petroleum and natural gas revenue deducting royalties, net operating expenses, and transportation expenses.

Capital expenditures

Cardinal utilizes capital expenditures as a measure of capital investment on property, plant and equipment compared to the annual budgeted capital expenditure. Capital expenditures is calculated as cash flow from investing activities excluding change in non-cash working capital and corporate acquisition.

Net debt

Management utilizes net debt to analyze the financial position, liquidity and leverage of Cardinal. Net debt is calculated as bank debt plus adjusted working capital.

Funds flow

Management utilizes funds flow as a useful measure of Cardinal's ability to generate cash not subject to short-term movements in non-cash operating working capital. As shown below, funds flow is calculated as cash flow from operating activities excluding the change in non-cash working capital.

Adjusted funds flow

Management utilizes adjusted funds flow as a key measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, and capital expenditures. As shown below, adjusted funds flow is calculated as funds flow excluding decommissioning expenditures since Cardinal believes the timing of payment or incurrence of these items involves a high degree of discretion and variability. Expenditures on decommissioning obligations vary from period to period depending on the maturity of the Company's operating areas and availability of adjusted funds flow and are viewed as part of the Company's capital budgeting process.

Future Estimates of Adjusted Funds Flow Forecast, Capital Expenditure Estimate and Free Cash Flow

Future estimates of adjusted funds flow, capital expenditures are forward looking non-GAAP financial measures that are not disclosed by other issuers. Please see "Non-GAAP and Other Financial Measures" in the September 30, 2023 MD&A for an explanation of how such measures provide useful information and for what purposes management uses these measures and a quantitative reconciliation of the historical non-GAAP financial measure to the most similar applicable financial measure. There is no significant difference between the non-GAAP financial measure that are forward-looking information and the equivalent historical non-GAAP financial measures.

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Netback per boe

Cardinal utilizes netback per boe to assess Cardinal's operating performance of its petroleum and natural gas assets on a per unit of production basis. Netback per boe is calculated as netback divided by total production for the applicable period.

Net debt to adjusted funds flow ratio

Cardinal utilizes net debt to adjusted funds flow to measure the Company's overall debt position and to measure the strength of the Company's balance sheet. Cardinal monitors this ratio and uses this as a key measure in making decisions regarding financing, capital expenditures and shareholder returns. Net debt to adjusted funds flow is calculated as net debt divided by adjusted funds flow for the applicable period annualized.

Adjusted funds flow per boe

Cardinal utilizes adjusted funds flow per boe as a measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, and capital expenditures on a per boe basis. Adjusted funds flow per boe is calculated using adjusted funds flow divided by total production for the applicable period.

Forward Looking Financial Information

This presentation, including in respect of Company's guidance for 2023 as well as forecasted adjusted funds flow, capital expenditure and free cash flow may contain future oriented financial information ("FOFI") within the meaning of applicable securities laws. The FOFI has been prepared by management to provide an outlook of the Company's activities and results. The FOFI has been prepared based on a number of assumptions including the assumptions discussed and disclosed above and elsewhere in this presentation, including the slide entitled "Assumptions and Sensitivities". Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on FOFI. The Company's actual results, performance or achievement could differ materially from those expressed in, or implied by, these FOFI, or if any of them do so, what benefits the Company will derive therefrom. The Company has included the FOFI in order to provide readers with a more complete perspective on the Company's future operations and such information may not be appropriate for other purposes. The Company disclaims any intention or obligation to update or revise any FOFI statements, whether as a result of new information, future events or otherwise, except as required by law.

Market, Independent Third Party and Industry Data

Certain market, independent third party and industry data contained in this presentation is based upon information from government or other independent industry publications and reports or based on estimates derived from such publications and reports. Government and industry publications and reports generally indicate that they have obtained their information from sources believed to be reliable, but Cardinal has not conducted its own independent verification of such information. This presentation also includes certain data derived from independent third parties. While Cardinal believes this data to be reliable, market and industry data is subject to variations and cannot be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey. Cardinal has not independently verified any of the data from independent third party sources referred to in this presentation or ascertained the underlying assumptions relied upon by such sources.