CARDINAL
ENERGY LTD.

NEWS RELEASE **MAY 11, 2023**

CARDINAL ENERGY LTD. ANNOUNCES FIRST QUARTER 2023 OPERATING AND FINANCIAL RESULTS

Calgary, Alberta – Cardinal Energy Ltd. ("Cardinal" or the "Company") (TSX: CJ) is pleased to announce its operating and financial results for the first quarter ended March 31, 2023.

FINANCIAL AND OPERATING HIGHLIGHTS FROM THE FIRST QUARTER OF 2023

- Production increased 5% over the same period in 2022 due to ongoing strong base performance and excellent 2022 drilling results across our asset base;
- Adjusted funds flow(1) was $52.3 million which was allocated to capital expenditures(1) of $25.3 million and dividends of $28.7 million;
- Cardinal's net debt(1) has decreased by 47% in the last 12 months closing at $78 million at March 31, 2023;
- Achieved a net debt to adjusted funds flow ratio(1) of 0.2x for the first quarter of 2023;
- In the last 12 months, Cardinal has repaid approximately $69 million of net debt and returned approximately $130 million to shareholders in the form of dividends, treasury share purchases and common share cancellations through our normal course issuer bid ("NCIB"); and
- Drilled four (4.0 net) Clearwater oil wells in the first quarter with initial production coming on in the last week of March and currently producing at rates well above expectations.

(1) See non-GAAP and other financial measures.

The following table summarizes our first quarter financial and operating highlights:

($000's except shares, per share and operating amounts)	Three months ended March 31		
	2023	2022	% Chg
Financial			
Petroleum and natural gas revenue	**134,977**	174,338	(23)
Cash flow from operating activities	**41,089**	50,043	(18)
Adjusted funds flow [(1)]	**52,310**	86,551	(40)
per share - basic	**0.34**	0.58	(41)
per share - diluted	**0.33**	0.53	(38)
Earnings	**16,321**	57,240	(71)
per share - basic	**0.10**	0.38	(74)
per share - diluted	**0.10**	0.35	(71)
Development capital expenditures [(1)]	**23,487**	34,947	(33)
Other capital expenditures [(1)]	**968**	849	14
Acquisitions, net	**872**	-	n/m
Capital expenditures [(1)]	**25,327**	35,796	(29)
Common shares, net of treasury shares (000s)	**157,129**	151,891	3
Dividends declared	**28,742**	-	n/m
Per share	**0.18**	-	n/m
Total Payout ratio [(1)]	**100**	40	150
Bank debt	**45,320**	146,564	(69)
Adjusted working capital deficiency [(1)]	**32,713**	645	n/m
Net debt [(1)]	**78,033**	147,209	(47)
Net debt to adjusted fund flow ratio [(1)]	**0.2**	0.7	(71)
Operating			
Average daily production			
Light oil (bbl/d)	**7,821**	7,578	3
Medium/heavy oil (bbl/d)	**10,380**	9,900	5
NGL (bbl/d)	**863**	804	7
Natural gas (mcf/d)	**15,980**	13,888	15
Total (boe/d)	**21,726**	20,596	5
Netback ($/boe) [(1)]			
Petroleum and natural gas revenue	**69.03**	94.05	(27)
Royalties	**(13.17)**	(18.61)	(29)
Net operating expenses [(1)]	**(25.40)**	(24.35)	4
Transportation expenses	**(0.91)**	(0.62)	47
Netback [(1)]	**29.55**	50.47	(41)
Realized gain on commodity contracts	**0.77**	-	n/m
Interest and other	**(0.69)**	(1.12)	(38)
G&A	**(2.89)**	(2.65)	9
Adjusted funds flow [(1)]	**26.74**	46.70	(43)

(1) See non-GAAP and other financial measures.
n/m - Not meaningful or not calculable

FIRST QUARTER OVERVIEW

First quarter 2023 adjusted funds flow of $52.3 million was 23% lower than the prior quarter primarily due to reduced global oil prices combined with wide Western Canadian Select ("WCS") oil differentials. WCS differentials averaged almost US$25/bbl in the first quarter but have materially decreased in the second quarter averaging approximately US$15/bbl to date. On a per diluted share basis, adjusted funds flow was $0.33 per share while first quarter 2023 free cash flow(1) of $28.8 million was utilized for shareholder returns through our $0.06 per month dividend.

First quarter 2023 net operating expenses per boe were slightly lower than the prior quarter at $25.40/boe due to lower Alberta electricity costs. Although lower than the prior quarter, power costs remain higher than historical levels. To mitigate these high power costs, Cardinal has entered into power contracts that fix the price of about 70% of the Company's average monthly Alberta power usage at an average price of approximately $85/MWh, which is 40% lower than the average price in the first quarter of 2023.

Cardinal's net debt closed the first quarter of 2023 at $78.0 million which included $45.3 million of bank debt and $32.7 million of adjusted working capital deficiency(1). The $45.3 million of bank debt represents drawings of 29% on our $155 million credit facility. The higher debt level as compared to year-end levels was mainly the result of a one-time withholding tax payment of $8.4 million upon the annual vesting of our bonus share awards. Cardinal's net debt to adjusted funds flow ratio remained low at 0.2x. During the first quarter, despite materially higher Canadian interest rates, Cardinal's low debt levels resulted in a 38% reduction in interest and other costs per boe over the same period in 2022.

(1) See non-GAAP and other financial measures.

OPERATIONS

Cardinal's average production increased 445 boe/d compared to Q4 2022 to 21,726 boe/d in the first quarter a result of ongoing optimization of our base production. The Company's capital expenditures were $25.3 million during the quarter. This included drilling another four (4.0 net) successful Clearwater multilateral wells on our lands at Nipisi, upgrading and expanding infrastructure capacity within our asset base, and reactivating and recompleting wells.

Our 2023 Nipisi Clearwater drilling program has yielded exceptional results. Production began in late March with first oil showing up at each well within days. Currently these four wells combined are producing at over 1,000 bbl/d of oil which has pushed current corporate production over 22,000 boe/d. Drilled last winter and on-stream for over a year, our first four (4.0 net) Nipisi Clearwater multilateral wells, delivered a weekly peak average production of a combined 800 boe/d, these wells continued to produce above our forecasts, with current aggregate production of approximately 500 boe/d and have paid out over two times to date. The Company will continue with its measured development pace at Nipisi and expects to proceed with another drilling program here in early 2024.

Our Wainwright Central Alberta Rex multilateral discovery well, drilled and brought on production during the summer of 2022, continues to produce above expectation with current production of approximately 100 boe/d. We significantly expanded our land position here through additional acquisitions in in the first quarter. The Company has identified over 90 potential multi-lateral follow up locations on this trend to develop over the next several years and preparations are being made to resume drilling on this project this summer.

Optimization efforts during the first quarter across our asset base have continued to uphold Cardinal’s top decile base decline rate.

The Company will resume its 2023 drilling program during the second quarter, with programs starting in each of our Wainwright, Bantry, and Midale, Saskatchewan areas in May and June.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE ("ESG")

Cardinal's strong corporate emissions performance has continued in 2023 with ongoing CO_2 sequestration in Saskatchewan and further implementation of projects aimed at reducing emissions from our operations across Alberta. Through our world class Carbon Capture and Sequestration ("CCS") enhanced oil recovery ("EOR") operation at Midale, the Company sequestered approximately 69,000 tonnes of CO_2 equivalent during the first quarter of 2023. This amount of carbon sequestration exceeds our Scope 1 emissions. To date, the Midale CCS EOR project has sequestered 5.5 million tonnes of CO_2 and has reduced oil production decline rates from this project to approximately 3%.

Cardinal's safety record continues to be in the top tier of the industry, as is our regulatory compliance level.

Cardinal will continue with our commitment to reduce our environmental footprint with $23 million in our 2023 budget for asset retirement obligations ("ARO"), more than 2.5 times our required regulatory spend requirements. In the first quarter of 2023, Cardinal spent approximately $4.8 million of this budget. Our environmental footprint is minimized through the use of multi-well padsites for new drilling with only one new lease built for our first quarter drilling program.

Cardinal continues to high grade assets, with minor dispositions of non-core assets, disposing of approximately $4.5 million of undiscounted future ARO liability from interests in 49 (22 net) wells and eight facilities in the first quarter of 2023.

OUTLOOK

The first quarter of 2023 demonstrated once again the strength of our low decline asset base. Despite first quarter drilling activity contributing virtually no production in the quarter as budgeted, our average corporate production saw a modest incline due to last year's drilling activity and optimization efforts.

We will continue to pursue projects and opportunities that increase our sustainability and decrease our corporate risk.

Cardinal looks forward to reporting its second quarter financial and operating results and the drilling results from our Clearwater, Rex, Bantry and Midale, Saskatchewan drilling programs.

On behalf of the Board of Directors, Management and employees we would like to thank our shareholders for their ongoing support.

Note Regarding Forward-Looking Statements

This press release 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 press release speak only as of the date thereof and are expressly qualified by this cautionary statement.

Specifically, this press release contains forward-looking statements relating to: Cardinal's risk mitigation strategies related to power prices; that the Company will resume its 2023 drilling program during the second quarter, with programs starting in each of our Wainwright, Bantry, and Midale, Saskatchewan areas in May and June; Cardinal's intention to continue with its commitment to reduce its environmental footprint with $23 million in its 2023 budget for ARO, Cardinal's intention to continue to improve its sustainability and decrease corporate risk, our business strategies, plans and objectives, that the Company will continue to pursue projects and opportunities that increase our sustainability and decrease its corporate risk; that Cardinal plans to report its second quarter financial and operating results and the drilling results from our Clearwater, Rex, Bantry and Midale, Saskatchewan drilling programs; our 2023 capital program and spending plans, our drilling and completion plans, expectations with respect to ongoing new wells and our drilling inventory, the quality of our asset base and decline rates, our abandonment and reclamation program, plans to upgrade our drilling inventory, plans to operate our assets in a responsible and environmentally sensitive manner.

Forward-looking statements regarding Cardinal are based on certain key expectations and assumptions of Cardinal concerning anticipated financial performance, business prospects, strategies, regulatory developments, current and future commodity prices and exchange rates, effects of inflation, applicable royalty rates, tax laws, industry conditions, availability of government subsidies and abandonment and reclamation programs, 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 timing and success of our cost cutting initiatives and power projects, 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 and drilling success and potential timing delays.

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 market prices for crude oil and natural gas; 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 including abandonment and reclamation 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 press release 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 press release 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.

Supplemental Information Regarding Product Types

This news release includes references to 2023 and 2022 production. The Company discloses crude oil production based on the pricing index that the oil is priced off of. The following table is intended to provide the product type composition as defined by NI 51-101.

	Light/Medium Crude Oil	Heavy Oil	NGL	Conventional Natural Gas	Total (boe/d)
Q1/23	48%	36%	4%	12%	21,726
Q1/22	52%	33%	4%	11%	20,596
Current	48%	36%	4%	12%	22,000
Nipisi 22 peak	-	99%	-	1%	800
Nipisi 22 current	-	93%	-	7%	500
Rex	-	80%	-	20%	100

Non-GAAP and Other Financial Measures

This news release contains certain specified measures consisting of non-GAAP financial measures, capital management measures, non-GAAP financial ratios, and supplementary financial measures. Since these specified financial measures may not have a standardized meaning, they must be clearly defined and, where required, reconciled with their nearest GAAP measure and may not be comparable with the calculation of similar financial measures disclosed by other entities.

Non-GAAP Financial Measures

Net operating expenses

Net operating expenses is calculated as operating expense less processing and other revenue primarily generated by processing third party volumes at processing facilities where the Company has an ownership interest, and can be expressed on a per boe basis. As the Company's principal business is not that of a midstream entity, management believes this is a useful supplemental measure to reflect the true cash outlay at its processing facilities by utilizing spare capacity to process third party volumes. The following table reconciles operating expenses to net operating expenses:

	Three months ended	
	March 31, 2023	March 31, 2022
Operating expenses	**50,841**	46,136
Less: Processing and other revenue	**(1,177)**	(998)
Net operating expenses	**49,664**	45,138

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 deducted by royalties, net operating expenses, and transportation expenses. The following table reconciles petroleum and natural gas revenue to netback:

	Three months ended	
	March 31, 2023	March 31, 2022
Petroleum and natural gas revenue	**134,977**	174,338
Royalties	**(25,742)**	(34,497)
Net operating expenses	**(49,664)**	(45,138)
Transportation expenses	**(1,773)**	(1,154)
Netback	**57,798**	93,549

Capital expenditures and development 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.

Cardinal utilizes development capital expenditures as a measure of capital investment on property, plant and equipment excluding capitalized G&A, other assets and net acquisitions and is compared to the annual budgeted capital expenditures. Other capital expenditures include capitalized G&A and office expenditures. The following table reconciles cash flow from investing activities to total capital expenditures to total development capital expenditures:

	Three months ended	
	March 31, 2023	March 31, 2022
Cash flow from investing activities	**26,062**	25,486
Change in non-cash working capital	**(735)**	10,310
Capital expenditures	**25,327**	35,796
Less:		
Other	**968**	849
Acquisitions, net	**872**	-
Development capital expenditures	**23,487**	34,947

Adjusted working capital deficiency

Management utilizes adjusted working capital to monitor its capital structure, liquidity, and its ability to fund current operations. Adjusted working capital is calculated as current liabilities less current assets (adjusted for the fair value of financial instruments, current decommissioning obligation, and current lease liabilities). The following table reconciles working capital to adjusted working capital:

As at	**March 31, 2023**	March 31, 2022
Working capital deficiency	**39,996**	5,586
Lease liabilities	**1,327**	1,273
Decommissioning obligation	**5,956**	3,577
Fair value of financial instruments, net	**-**	91
Adjusted working capital deficiency	**32,713**	645

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.

The following table reconciles bank debt to net debt:

As at	**March 31, 2023**	March 31, 2022
Bank debt	**45,320**	146,654
Adjusted working capital deficiency	**32,713**	645
Net debt	**78,033**	147,209

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, capital expenditures and shareholder returns. 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.

Free cash flow

Management utilizes free cash flow as a measure to assess Cardinal's ability to generate cash, after taking into account the development capital expenditures, to increase returns to shareholders, repay debt, or for other corporate purposes. As shown below, free cash flow is calculated as adjusted funds flow less development capital expenditures.

The following table reconciles cash flow from operating activities, funds flow, adjusted funds flow, and free cash flow:

	Three months ended	
	March 31, 2023	March 31, 2022
Cash flow from operating activities	**41,089**	50,043
Change in non-cash working capital	**6,462**	32,986
Funds flow	**47,551**	83,029
Decommissioning expenditures	**4,759**	3,522
Adjusted funds flow	**52,310**	86,551
Total development capital expenditures	**(23,487)**	(34,947)
Free cash flow	**28,823**	51,604

Non-GAAP Financial Ratios

Netback per boe

Cardinal utilizes operating netback per boe to assess the Company'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. The following table details the calculation of netback per boe:

	Three months ended	
	March 31, 2023	March 31, 2022
Petroleum and natural gas revenue	**69.03**	94.05
Royalties	**(13.17)**	(18.61)
Net operating expenses	**(25.40)**	(24.35)
Transportation expenses	**(0.91)**	(0.62)
Netback per boe	**29.55**	50.47

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 annualized adjusted funds flow for the applicable period.

Total payout ratio

Cardinal utilizes this ratio as key measure to assess the Company's ability to fund financing activities, operating activities, and capital expenditures. Total payout ratio is calculated as the sum of dividends declared plus development capital expenditures divided by adjusted funds flow trailing twelve month period.

Net operating expenses per boe

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

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, capital expenditures and shareholder returns on a per boe basis. Adjusted funds flow per boe is calculated using adjusted funds flow divided by total production for the applicable period.

Adjusted funds flow per basic share

Cardinal utilizes adjusted funds flow per share as a measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, capital expenditures and shareholder returns on a per basic share basis. Adjusted funds flow per basic share is calculated using adjusted funds flow divided by the weighted average basic shares outstanding.

Adjusted funds flow per diluted share

Cardinal utilizes adjusted funds flow per share as a measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, capital expenditures and shareholder returns on a per diluted share basis. Adjusted funds flow per diluted share is calculated using adjusted funds flow divided by the weighted average diluted shares outstanding.

Supplementary Financial Measures

NI 52-112 defines a supplementary financial measure as a financial measure that: (i) is, or is intended to be, disclosed on a periodic basis to depict the historical or expected future financial performance, financial position or cash flow of an entity; (ii) is not disclosed in the financial statements of the entity; (iii) is not a non-GAAP financial measure; and (iv) is not a non-GAAP ratio. The supplementary financial measures used in this news release are either a per unit disclosure of a corresponding GAAP measure, or a component of a corresponding GAAP measure, presented in the financial statements. Supplementary financial measures that are disclosed on a per unit basis are calculated by dividing the aggregate GAAP measure (or component thereof) by the applicable unit for the period. Supplementary financial measures that are disclosed on a component basis of a corresponding GAAP measure are a granular representation of a financial statement line item and are determined in accordance with GAAP.

Oil and Gas Metrics

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.

"Payout" or "Paid out" means the anticipated or actual netback received from production from a well required to fully pay for all capital spent to drill, complete, equip and tie-in a well.

Initial Production

Any references in this news release 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. Initial production rates may be estimated based on third party estimates or limited data available at the time. While encouraging, readers are cautioned not to place reliance on such rates in calculating the aggregate production for Cardinal. The aggregate 800 boe/d production rate set forth herein as it relates to the Nipisi Clearwater multilateral wells is based on reported production, May 26, 2022 to June 1, 2022 . Such wells have been placed on continuous production for over one year.

Drilling Locations

This news release discloses Cardinal's inventory of 90 potential locations Wainwright Central Alberta Rex of which in respect of Wainwright Central Alberta Rex, two locations are booked proved undeveloped, one net is booked probable undeveloped locations and 87 net are unbooked. The booked locations are derived from the Company's year-end 2022 reserves evaluation by GLJ Ltd. with an effective date of December 31, 2022 and account for drilling locations that have associated proved and/or probable reserves, as applicable. 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. Unbooked locations have been identified by management as an estimation of the Company's 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 all 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 the Company will actually drill wells, including the number and timing thereof is ultimately dependent upon the availability of funding, regulatory approvals, seasonal restrictions, oil and natural gas prices, costs, actual drilling results, additional reservoir information that is obtained and other factors. While a certain number of the unbooked drilling locations have been derisked by drilling existing wells in relative close proximity to such unbooked drilling locations, the majority of other unbooked drilling locations are farther away from existing wells where management has less information about the characteristics of the reservoir and therefore there is more uncertainty 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.

About Cardinal Energy Ltd.

Cardinal works to continually improve its Environmental, Social and Governance profile and operates its assets in a responsible and environmentally sensitive manner. As part of this mandate, Cardinal injects and conserves more carbon than it directly emits making us one of the few Canadian energy companies to have a negative carbon footprint.

Cardinal is a Canadian oil and natural gas company with operations focused on low decline oil in Western Canada.

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