CARDINAL
ENERGY LTD.

Q2 2024
MANAGEMENT DISCUSSION & ANALYSIS

MANAGEMENT'S DISCUSSION AND ANALYSIS

This management's discussion and analysis ("MD&A") is a review of the operations, financial position and outlook for Cardinal Energy Ltd. ("Cardinal" or the "Company") for the three and six months ended June 30, 2024 and is dated August 1, 2024. This MD&A should be read in conjunction with Cardinal's unaudited interim condensed financial statements as at and for the three and six months ended June 30, 2024 and the audited financial statements as at and for the year ended December 31, 2023. Financial data presented has been prepared in accordance with International Financial Reporting Standards ("IFRS" or, alternatively, "GAAP"), unless otherwise indicated. Certain prior period amounts have been reclassified to conform to current period presentation. Additional information relating to Cardinal, including Cardinal's Annual Information Form for the year ended December 31, 2023, is available on SEDAR+ at www.sedarplus.ca and Cardinal's website at www.cardinalenergy.ca.

All figures in tables are stated in thousands of Canadian dollars (except operational and per share amounts or as noted).

DESCRIPTION OF BUSINESS

Cardinal is engaged in the acquisition, development, optimization and production of crude oil and natural gas in the provinces of Alberta, British Columbia and Saskatchewan.

51-101 Advisory

In accordance with S*tandards of Disclosure for Oil and Gas Activities* ("NI 51-101"), natural gas volumes have been converted to barrels of oil equivalent using a conversion rate of six thousand cubic feet of natural gas to one barrel of oil. This ratio is based on an energy equivalency conversion method primarily applicable at the burner tip. It does not represent a value equivalency at the wellhead and is not based on either energy content or current prices. The term "boe" is useful for comparative measures and observing trends, it does not accurately reflect individual product value and may be misleading, particularly if used in isolation. Based on the current price of crude oil to natural gas, using a 6:1 conversion ratio may be misleading as an indication of value.

This MD&A contains forward-looking information and statements along with certain measures, consisting of non-GAAP financial measures, capital management measures, non-GAAP financial ratios and supplementary financial measures, which do not have any standardized meaning in accordance with IFRS and therefore may not be comparable with the calculation of similar financial measures disclosed by other entities. Refer to our advisory on forward-looking information and statements and a summary of our specified financial measures at the end of the MD&A.

Climate Reporting Regulations and Estimation Uncertainty

Climate and emission related reporting standards are constantly evolving. The International Sustainability Standards Board has issued an IFRS Sustainability Disclosure Standard with the goal to develop sustainability disclosure standards that are globally consistent, comparable and reliable. The Canadian Securities Administrators have also issued a proposed National Instrument 51-107 *Disclosure of Climate-related Matters* which details the additional reporting requirements for Canadian Public Companies. The Company continues to monitor progress on these reporting requirements and has not yet quantified the cost to comply with these standards.

SECOND QUARTER 2024 HIGHLIGHTS

- Second quarter production of 22,376 boe/d increased by 6% compared to the same period in 2023 due to strong drilling results and recovery from the negative impact of wildfires on the second quarter of 2023;
- Revenue increased 24% in the second quarter of 2024 compared to the same period in 2023 due to increased production and higher realized oil prices;
- Adjusted funds flow(1) of $81.8 million or $0.51 per diluted share increased by 46% compared to the second quarter of 2023;
- Net debt(1) at June 30, 2024 decreased 17% over the balance at March 31, 2024 to $99.2 million, a reduction of $20.5 million in the second quarter, reducing the net debt to adjusted funds flow ratio(1) to 0.4x; and
- Cardinal's previously announced steam-assisted gravity drainage ("SAGD") project in its Reford, Saskatchewan operating area continued to progress on time and on budget.

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Cash flow from operating activities	**71,463**	61,220	17	**110,827**	102,309	8
Change in non-cash working capital	**8,904**	(9,102)	(198)	**18,041**	(2,640)	n/m
Funds flow (1)	**80,367**	52,118	54	**128,868**	99,669	29
Decommissioning expenditures	**1,460**	4,072	(64)	**5,765**	8,831	(35)
Adjusted funds flow	**81,827**	56,190	46	**134,633**	108,500	24

(1) See Non-GAAP and other financial measures

OPERATIONS

PRODUCTION

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Light oil (bbl/d)	**7,516**	7,651	(2)	**7,397**	7,736	(4)
Medium / heavy oil (bbl/d)	**11,757**	10,034	17	**11,396**	10,206	12
Crude oil (bbl/d)	**19,273**	17,685	9	**18,793**	17,942	5
Natural gas (mcf/d)	**13,752**	16,038	(14)	**14,453**	16,009	(10)
NGL (bbl/d)	**811**	689	18	**832**	775	7
boe/d	**22,376**	21,047	6	**22,034**	21,385	3
% Crude oil and NGL production	**90%**	87%	3	**89%**	88%	1

Second quarter 2024 production increased by 6% compared to the same period in 2023 primarily driven by the Company's successful first quarter 2024 drilling program which added new oil production. The decreased natural gas production was a result of strategic shut ins due to the depressed price of natural gas during the second quarter of 2024. The second quarter of 2023 was negatively impacted by the Alberta wildfires, volumes that have been fully recovered since the third quarter of 2023.

For the first six months of 2024, production was 3% higher than the same period in 2023 due to the Company's production additions from the first quarter of 2024 drilling program combined with the incremental production from the Mitsue/Buffalo Lake Acquisition that took place during the fourth quarter of 2023. The production volumes from the second quarter of 2023 were negatively impacted by the Alberta wildfires.

PETROLEUM AND NATURAL GAS REVENUE

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Light oil	**69,793**	60,351	16	**128,175**	122,646	5
Medium / heavy oil	**95,003**	70,858	34	**170,135**	135,375	26
Crude oil	**164,796**	131,209	26	**298,310**	258,021	16
NGL	**2,913**	2,162	35	**5,998**	5,361	12
Natural gas	**1,644**	3,682	(55)	**5,271**	8,648	(39)
Petroleum and natural gas revenue	**169,353**	137,053	24	**309,579**	272,030	14
Cardinal average prices						
Light oil ($/bbl)	**102.05**	86.67	18	**95.21**	87.60	9
Medium / heavy oil ($/bbl)	**88.80**	77.60	14	**82.03**	73.29	12
Natural gas ($/mcf)	**1.31**	2.52	(48)	**2.00**	2.98	(33)
Equivalent ($/boe)	**83.17**	71.56	16	**77.20**	70.28	10
Benchmark prices						
Crude oil – WTI (US $/bbl)	**80.57**	73.78	9	**78.77**	74.95	5
Crude oil – Edmonton Light (Cdn $/bbl)	**105.33**	95.19	11	**98.77**	97.26	2
Crude oil – WCS (Cdn $/bbl)	**91.64**	78.76	16	**84.70**	74.04	14
Natural gas – AECO Spot (Cdn $/mcf)	**1.19**	2.49	(52)	**1.86**	2.88	(35)
WCS Differential to WTI (US $/bbl)	**(13.61)**	(15.14)	(10)	**(16.46)**	(20.01)	(18)
Exchange rate (US/Cdn)	**0.73**	0.74	(1)	**0.74**	0.74	-

Petroleum and natural gas revenue increased 24% in the second quarter of 2024 compared to the same period in 2023 due to a 16% increase in realized commodity prices combined with increased medium/heavy oil and NGL production. In the second quarter of 2024, the Company's realized light oil price increased by 18% over the same period in 2023 which was higher than the Edmonton light oil benchmark increase due to a portion of Cardinal's light oil production attracting a Cromer price which was higher in the second quarter of 2024. Cardinal's second quarter 2024 realized medium/heavy oil price increase was comparable with the increase in the Western Canadian Select ("WCS") oil benchmark price as compared to the same period in 2023. The second quarter 2024 decrease in realized natural gas price was comparable to the decrease in the AECO natural gas benchmark as compared to the same period in 2023. The completion of the Trans Mountain ("TMX") pipeline expansion in the second quarter of 2024 narrowed WCS differentials due to increased pipeline capacity.

For the first six months of 2024, petroleum and natural gas revenue increased 14% compared to the same period in 2023 due to a 10% increase in realized commodity prices combined with a 3% production increase. In the first half of 2024, the Company's realized light oil benchmark increased by 9% over the same period in 2023 which was higher than the Edmonton light oil benchmark increase due to a portion of the Company's light oil production attracting a Cromer price which was higher in the first half of 2024. In the six months ended June 30, 2024 Cardinal's realized medium/heavy oil price and natural gas price changes tracked their respective benchmark price changes compared with 2023. The completion of the TMX pipeline expansion narrowed WCS differentials due to increased pipeline capacity.

FINANCIAL INSTRUMENTS - COMMODITY

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Realized (loss) gain on commodity contracts	**(38)**	-	-	**81**	1,510	(95)
Unrealized gain (loss) on commodity contracts	**2,899**	(448)	n/m	**1,973**	(1,981)	(200)

Cardinal has historically utilized a variety of derivatives including swaps, collars and puts to protect against downward commodity price movements and foreign exchange fluctuations and avoids entering into more complex derivative structures. Contracts settled in the period result in realized gains or losses based on the market price compared to the contract price. Changes in the fair value of the contracts, as measured at the balance sheet date, are reported as unrealized gains or losses in the period as the forward markets for commodities and currencies fluctuate and as new contracts are executed. For commodities, Cardinal's risk management program allows for hedging a forward profile of three years, of up to 75% of average forecasted 12 months of gross production and up to 50% and 30% of the following 12 and 24 months, respectively.

The Company has fixed the WCS differential for certain months in 2024, however, has elected to remain unhedged to WTI oil prices. The Company will continue to monitor the spot and forward prices as well as expected expenditure levels in 2024.

As of the date of this MD&A, Cardinal had the following commodity derivative contracts outstanding:

Type of instrument	Remaining term	Average volume	Average strike price
USD WCS Differential Swap	July 2024 – September 2024	6,000 bbl/d	USD $ (12.13)
USD WCS Differential Swap	October 2024 – December 2024	2,000 bbl/d	USD $ (14.00)

ROYALTIES

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Royalties	**31,213**	25,567	22	**57,001**	51,309	11
Percent of revenue	**18.4%**	18.7%	(2)	**18.4%**	18.9%	(3)
$/boe	**15.33**	13.35	15	**14.21**	13.26	7

Royalties are either paid or taken in kind and are owed to land and mineral rights owners and to provincial governments. The terms of the land and mineral rights owner agreements and provincial royalty regimes impact Cardinal's overall corporate royalty rate.

During the three and six months ended June 30, 2024 royalties as a percentage of revenue decreased 2% and 3%, respectively, compared to the same periods in 2023 due to certain oil production from new wells receiving a lower Crown royalty rate until initial production payouts are achieved.

NET OPERATING EXPENSES

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Operating expenses	**49,939**	48,273	3	**102,628**	99,114	4
Less: Processing and other revenue	**(1,785)**	(1,095)	63	**(2,810)**	(2,272)	24
Net operating expenses [(1)]	**48,154**	47,178	2	**99,818**	96,842	3
$/boe [(1)]	**23.65**	24.63	(4)	**24.89**	25.02	(1)

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

During the second quarter of 2024, net operating expenses per boe decreased by 4% over the same period in 2023, primarily due to decreased power prices and 6% increased production. In the second quarter of 2024, the average power price in Alberta decreased by approximately 72% over the same period in 2023 to average approximately $45/MWh.

For the first six months of 2024, net operating expenses per boe have remained consistent with the same period in 2023 due to lower Alberta power prices being offset by higher well servicing and workover costs.

TRANSPORTATION EXPENSES

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Transportation expenses	**2,340**	2,047	14	**4,519**	3,820	18
$/boe	**1.15**	1.07	7	**1.13**	0.99	14

Transportation expenses and transportation expenses per boe increased in the three and six months ended June 30, 2024 as compared with the same periods in 2023 as new oil production from wells drilled in our North area in 2023 and the first quarter of 2024 is currently trucked, increasing the Company's clean oil trucking expenses. This has been partially offset by lower gas transportation costs due to decreased natural gas production.

NETBACK

	Three months ended June 30,			Six months ended June 30,		
($/boe)	**2024**	2023	%	**2024**	2023	%
Petroleum and natural gas revenue	**83.17**	71.56	16	**77.20**	70.28	10
Royalties	**(15.33)**	(13.35)	15	**(14.21)**	(13.26)	7
Net operating expenses	**(23.65)**	(24.63)	(4)	**(24.89)**	(25.02)	(1)
Transportation expenses	**(1.15)**	(1.07)	7	**(1.13)**	(0.99)	14
Netback (1)	**43.04**	32.51	32	**36.97**	31.01	19

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

Cardinal's three and six months ended June 30, 2024 netback increased by 32% and 19%, respectively, as compared to the same periods in 2023 due to higher commodity prices and lower net operating expenses, partially offset by higher royalties and transportation expenses.

GENERAL AND ADMINISTRATIVE ("G&A")

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Gross G&A	**6,761**	6,256	8	**14,236**	13,657	4
Capitalized G&A and overhead recoveries	**(1,337)**	(1,747)	(23)	**(3,082)**	(3,492)	(12)
G&A	**5,424**	4,509	20	**11,154**	10,165	10
$/boe	**2.66**	2.35	13	**2.78**	2.63	6

In the second quarter and first six months of 2024, G&A costs per boe have increased compared to the same periods in 2023 due to additional staffing and software costs required to accommodate Cardinal's increased activity.

SHARE-BASED COMPENSATION ("SBC")

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Gross SBC	**2,656**	2,336	14	**5,285**	4,802	10
Capitalized SBC	**(417)**	(298)	40	**(761)**	(584)	30
SBC	**2,239**	2,038	10	**4,524**	4,218	7
$/boe	**1.10**	1.06	4	**1.13**	1.09	4

SBC expense increased in the second quarter and first half of 2024 compared to the same periods in 2023 due to an increase in the grant date fair value of restricted bonus awards ("RA") and performance bonus awards ("PA") outstanding. Partially offsetting this increase is a reduction in the amount of RAs and PAs outstanding in 2024 compared to 2023.

As at June 30, 2024, Cardinal had 1.8 million RAs and 0.9 million PAs outstanding.

FINANCE

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Interest – bank debt	**2,115**	1,256	68	**3,798**	2,273	67
Other finance charges, net	**175**	268	(35)	**606**	551	10
Interest – capital leases	**67**	38	76	**131**	80	64
Accretion	**2,262**	1,944	16	**4,497**	4,097	10
Finance	**4,619**	3,506	32	**9,032**	7,001	29
$/boe	**2.27**	1.83	24	**2.25**	1.31	72
Average bank debt	**102,057**	63,400	61	**91,558**	57,925	58
Interest rate – bank debt	**8.3%**	7.9%	5	**8.3%**	7.9%	5

In the second quarter and first half of 2024, higher interest rates combined with higher average debt levels increased the interest on bank debt by 68% and 67%, respectively, as compared with the same periods in 2023. Increased capital activity is forecasted throughout 2024 which is expected to periodically increase the Company's average debt levels and its interest on bank debt, depending on commodity prices.

DEPLETION AND DEPRECIATION ("D&D")

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Depletion and depreciation	**26,890**	25,391	6	**52,262**	50,384	4
$/boe	**13.21**	13.26	-	**13.03**	13.02	-

Depletion is calculated based on capital expenditures incurred since inception of the Company, forecasted future development costs associated with proved and probable reserves, production rates and the estimates of proved and probable oil and gas reserves. In addition to depletion, Cardinal records depreciation on other capital equipment and right-of-use assets not directly associated with proved and probable reserves.

D&D costs per boe remained consistent in the second quarter and first six months of 2024 as compared to the same periods in 2023 as increased 2023 year-end proved plus probable reserves were offset by an increase in the depletable base of Cardinal's property, plant and equipment.

DEFERRED TAXES

At June 30, 2024, the Company has approximately $1.2 billion of tax pools ($1.1 billion are unrestricted) available to be applied against future income for tax purposes. Based on available tax pools, forecasted capital expenditures and forecasted commodity prices at June 30, 2024 from the average of three independent third-party reserve evaluators, Cardinal does not expect to pay current income taxes until 2027 or beyond. Any potential taxes payable beyond 2027 would be affected by commodity prices, capital expenditures and production volumes.

In 2021, Cardinal received a reassessment notice from the Canada Revenue Agency ("CRA") wherein the CRA reduced certain non-capital loss tax pools of approximately $192 million carried forward in the tax return filed for the year ended December 31, 2015. Cardinal disagrees with CRA's position and has appealed the reassessment and will continue defending its position. Although, the Company has appealed the reassessment, Cardinal has derecognized these tax pools.

EARNINGS, CASH FLOW FROM OPERATING ACTIVITIES, ADJUSTED FUNDS FLOW AND PAYOUT RATIO

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Earnings	**40,650**	27,719	47	**57,401**	44,040	30
$ per share						
Basic	**0.26**	0.18	44	**0.36**	0.28	29
Diluted	**0.25**	0.17	47	**0.36**	0.28	29
Cash flow from operating activities	**71,463**	61,220	17	**110,827**	102,309	8
$ per share						
Basic	**0.45**	0.39	15	**0.70**	0.65	8
Diluted	**0.45**	0.38	18	**0.69**	0.64	8
Adjusted funds flow	**81,827**	56,190	46	**134,633**	108,500	24
$ per share (1)						
Basic	**0.51**	0.35	46	**0.85**	0.69	23
Diluted	**0.51**	0.35	46	**0.84**	0.68	24
Total payout ratio (1)	**59%**	105%	(44)	**81%**	102%	(21)

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

In the second quarter and first half of 2024, higher commodity prices and production levels have increased Cardinal's earnings, cash flow from operating activities and adjusted funds flow compared with the same period in 2023.

CAPITAL EXPENDITURES

In the second quarter of 2024, the Company spent $19.5 million on capital expenditures which included the drilling and completion of one (0.8 net) well at our Midale, Saskatchewan area. The Company continued with its well reactivation program spending $4.1 million on recompletions and workovers throughout its operating areas. Cardinal also constructed new facilities and upgraded existing infrastructure across our asset base and continued with the enhanced oil recovery program with CO_2 injection at Midale.

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Land	**1,227**	336	265	**2,567**	782	228
Geological and geophysical	**149**	-	-	**179**	-	-
Drilling, completion and recompletions	**7,855**	15,257	(49)	**30,733**	26,525	16
Equipment, facilities and pipelines	**9,528**	14,274	(33)	**17,654**	26,047	(32)
Development capital expenditures (1)	**18,759**	29,867	(37)	**51,133**	53,354	(4)
Capitalized G&A	**314**	366	(14)	**977**	1,174	(17)
Other assets	**444**	124	258	**349**	284	23
Acquisitions, net	**-**	(10,000)	-	**-**	(9,128)	-
Capital expenditures (1)	**19,517**	20,357	(4)	**52,459**	45,684	15

(1) See Non-GAAP and other financial measures

EXPLORATION AND EVALUATION ("E&E") EXPENDITURES

During the second quarter of 2023, the Company acquired E&E assets of $10.0 million with associated decommissioning obligations of $0.2 million through the issuance of 1,362,397 Cardinal common shares valued at $7.35 per share.

In the first quarter of 2024, Cardinal entered into an agreement with a third party for the engineering, fabrication and field construction of the Reford, Saskatchewan central processing facility, including the first SAGD well pad. For the three and six months ended June 30, 2024, the Company has incurred $10.8 million and $26.9 million, respectively, in E&E expenditures on thermal development, including facility construction and reservoir delineation, which continues to progress on time and on budget.

DECOMMISSIONING OBLIGATION

In the second quarter of 2024, the Company continued to reduce its environmental footprint and spent $1.5 million on decommissioning obligations bringing the total spend for the first six months of 2024 to $5.8 million.

LIQUIDITY AND CAPITAL RESOURCES

	As at				
Capitalization table		**Jun 30, 2024**		Dec 31, 2023	%
Net debt (1)	**$**	**99,217**	$	83,650	19
Common shares, outstanding		**159,177,648**		158,095,048	1
Market price at end of period ($ per share)	**$**	**6.70**	$	6.28	7
Market capitalization		**1,066,490**		992,837	7
	$	**1,165,707**	$	1,076,487	8

(1) See Non-GAAP and other financial measures

CAPITAL FUNDING

Bank debt

The Company's reserve-based revolving credit facility of $200.0 million is comprised of a $175.0 million syndicated term credit facility and a $25.0 million non-syndicated operating line credit facility (the "Facilities"). The Facilities are available on a revolving basis until May 31, 2025 and may be extended for a further 364 day period, subject to approval by the syndicate. If not extended, the Facilities will cease to revolve, the applicable margins will increase by 0.5% and all outstanding advances will be repayable on May 31, 2026.

The available lending limits of the Facilities are reviewed semi-annually based on the syndicate's interpretation of the Company's reserves, future commodity prices and costs, therefore, there can be no assurance that the amount of the Facilities will not decrease at the next scheduled review. On a redetermination date, lenders could reduce the borrowing base to below amounts drawn, in which case, any short fall would have to be repaid within 60 days. The next scheduled review date will be on or before November 30, 2024.

Advances under the Facilities are available by way of prime rate loans, which bear interest at the banks' prime lending rate plus 2.00% to 5.25%, and CORRA and/or SOFR loans, which are subject to fees and margins ranging from 3.00% to 6.25%. Interest and standby fees on the undrawn amounts of the Facilities depend upon certain ratios. The Facilities are secured by a general security agreement over all of the Company's assets. There are no financial covenants related to the Facilities, provided that Cardinal is not in default of the terms of the Facilities. Cardinal was in compliance with the terms of the Facilities at June 30, 2024.

CAPITAL STRUCTURE

Cardinal manages its capital to provide a flexible structure to support production maintenance, capital programs, other operational strategies and shareholder returns. Maintaining a strong financial position enables Cardinal to enhance business opportunities and supports Cardinal's strategy of providing shareholder return through growth of the business, reducing its cost structure and dividend payments.

One of the key measures that the Company utilizes in evaluating its capital structure is the credit available from the Facilities in relation to the Company's budgeted capital expenditure program and the ratio of net debt to adjusted funds flow.

To manage its capital structure, Cardinal considers its net debt to adjusted funds flow ratio, its capital expenditures program, the current level of credit available from the Facilities, the level of credit that may be attainable due to changes in petroleum and natural gas reserves and new equity if available on favourable terms. The Company prepares an annual capital expenditure budget, which is monitored monthly and updated as necessary.

	Twelve months ended	
	Jun 30, 2024	Dec 31, 2023
Bank debt	**$ 77,904**	$ 44,920
Adjusted working capital deficiency [1]	**21,313**	38,730
Net debt	**$ 99,217**	$ 83,650
Cash flow from operating activities	**$ 238,779**	$ 230,261
Change in non-cash working capital	**20,955**	274
Funds flow	**$ 259,734**	$ 230,535
Decommissioning obligation expenditures	**20,097**	23,163
Adjusted funds flow	**$ 279,831**	$ 253,698
Net debt to adjusted funds flow [1]	**0.4**	0.3

(1) See Non-GAAP and other financial measures

Cardinal's ratio of net debt to adjusted funds flow as at June 30, 2024 was 0.4 to 1, which increased over the level at December 31, 2023 but below the Company’s targeted range of 1.0 to 1. This ratio increased as the Company has started and continues the development of its first SAGD project. Cardinal expects this ratio will continue to fluctuate as the project requires significant up-front capital until it comes onstream which is currently expected in the second half of 2025.

As discussed below in the *Liquidity* section, the Company currently has available capacity on its Facilities to satisfy its capital expenditure and asset retirement obligations for 2024 and beyond.

LIQUIDITY

The Company relies on cash flow from operating activities, the unused portion of the Facilities and equity and debt issuances to fund its capital expenditure requirements and provide liquidity. Cardinal had sufficient credit capacity to cover its adjusted working capital deficiency of $21.3 million at June 30, 2024 and continues to have excess capacity as of the date of this MD&A.

The Company believes that it is well positioned to take advantage of its internally developed opportunities funded through its available Facilities combined with anticipated cash flow from operating activities and adjusted funds flow. At current commodity price levels, present sources of capital are anticipated to be sufficient to satisfy the Company's capital expenditure program, decommissioning obligations and dividend payments for the 2024 fiscal year and beyond.

DIVIDENDS

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	%	**2024**	2023	%
Dividends declared	**29,116**	29,058	-	**58,151**	57,800	1
Dividends declared per share	**$ 0.18**	$ 0.18	-	**$ 0.36**	$ 0.36	-

During the three months ended June 30, 2024, the Company declared dividends of $29.1 million ($0.18 per common share) (2023 – $29.1 million and $0.18 per common share), of which $19.1 million (2023 – $19.1 million) was paid in cash and $10.0 million (2023 – $10.0 million) was recognized as a liability at June 30, 2024. The dividend payable was settled on July 15, 2024.

During the first six months of 2024, $58.2 million ($0.36 per common share) (2023 – $57.8 million and $0.36 per common share) of dividends were declared, of which $48.1 million (2023 – $47.8 million) was paid in cash and $10.0 million (2023 – $10.0 million) was recognized as a liability at June 30, 2024.

SHARE CAPITAL

The Company has a bonus award plan whereby RAs and PAs may be granted to directors, officers, employees and other service providers. In the case of PAs, the award value is adjusted for a payout multiplier which can range from 0.0 to 2.0 and is dependent on the performance of the Company relative to pre-defined corporate performance measures for a particular period. Awards are adjusted for dividends declared, either with a cash payment or incremental common shares, and may be settled in cash, common shares issued from treasury or common shares acquired by an independent trustee in the open market for such purposes.

In the first half of 2024, upon the vesting of 1.0 million (2023 – 1.3 million) RAs and 0.6 million (2023 – 0.7 million) PAs, when taking into account the performance multiplier for PAs, the Company issued 1.0 million (2023 – 1.4 million) treasury shares and made payments totalling $6.2 million (2023 – $8.5 million) for withholding taxes.

In the first six months of 2024, Cardinal granted 1.0 million (2023 – 1.0 million) RAs and 0.5 million (2023 – 0.5 million) PAs to officers, directors, employees and service providers pursuant to the Company's bonus award plan.

Equity instruments as at	Aug 1, 2024	Jun 30, 2024	Dec 31, 2023
Common shares, issued	**159,713,166**	159,713,166	159,638,699
Treasury shares	**(535,518)**	(535,518)	(1,543,651)
RAs	**1,717,649**	1,763,410	1,844,379
PAs	**931,301**	931,301	1,043,259

OFF BALANCE SHEET ARRANGEMENTS

Cardinal does not have any special purpose entities nor is it a party to any material arrangements that would be excluded from the balance sheet.

CONTRACTUAL OBLIGATIONS

At June 30, 2024, the Company had contractual obligations as follows:

	2024	2025	2026	2027	2028	Thereafter
Trade and other payables	86,219	-	-	-	-	-
Dividend payable	10,028	-	-	-	-	-
Lease liabilities	1,008	1,901	1,204	532	490	912
Bank debt (1)	-	-	77,904	-	-	-
Thermal facility construction and engineering	30,170	56,380	-	-	-	-
Power purchase commitment (2)	6,726	11,904	11,904	11,904	-	-
Total contractual obligations	**134,151**	**70,185**	**91,012**	**12,436**	**490**	**912**

(1) Amount excludes interest.
(2) Amounts represents the portion of the Company’s power cost that has been fixed.

ADDITIONAL INFORMATION

MATERIAL ACCOUNTING ESTIMATES

There have been no changes in Cardinal’s material accounting estimates in the three and six months ended June 30, 2024. Further information on the Company’s material accounting policies and estimates can be found in the notes to the annual financial statements and MD&A for the year ended December 31, 2023.

INTERNAL CONTROLS UPDATE

Cardinal is required to comply with National Instrument 52-109 “Certification of Disclosure in Issuers' Annual and Interim Filings". The certificate requires that Cardinal disclose in the interim MD&A any change in the Company's internal control over financial reporting ("ICOFR") that occurred during the period that has materially affected, or is reasonably likely to materially affect Cardinal's ICOFR. As of the date of this MD&A Cardinal confirms that there have been no such changes in Cardinal's ICOFR during the second quarter of 2024.

ENVIRONMENTAL RISKS

The oil and gas industry has a number of environmental risks and hazards and is subject to regulation by all levels of government. Environmental legislation includes, but is not limited to, operational controls, site restoration requirements and restrictions on emissions of various substances produced in association with oil and natural gas operations. Compliance with such legislation could require additional expenditures and a failure to comply may result in fines and penalties which could, in the aggregate and under certain unlikely assumptions, become material.

Operations are continuously monitored to minimize the environmental impact and capital is allocated to reclamation and other activities to mitigate the impact on the areas in which we operate.

OUTLOOK

The second quarter of 2024 continued to demonstrate the strength of Cardinal's low-decline asset base. Despite the curtailment of approximately 250 boe/d of natural gas production due to the current natural gas pricing environment in the second quarter, production increased 3% over the prior quarter due to our low-decline asset base and strong first quarter drilling results.

Cardinal will continue to pursue projects and opportunities that increase our sustainability and decrease our corporate risk. The Company's commitment to the Reford SAGD project will be fundamental in extending corporate reserve life and enhancing long-term sustainability. The project continues to progress on schedule and on budget.

In addition to the development of the Reford SAGD project, Cardinal is continuing to build on its successful 2024 development program across its conventional asset base. In the first half of 2024, Cardinal drilled nine of the 21 planned conventional development wells in 2024. The remaining development program will target multi-lateral wells in central and southern Alberta, producing and injection wells in Midale, Saskatchewan, and light oil development in northern Alberta.

QUARTERLY DATA

	Jun 30, 2024	Mar 31, 2024	Dec 31, 2023	Sep 30, 2023
Production				
Crude oil (bbl/d)	**19,273**	18,312	18,666	18,433
Natural gas (mcf/d)	**13,752**	15,155	15,644	15,696
NGL (bbl/d)	**811**	854	891	823
Oil equivalent (boe/d)	**22,376**	21,692	22,164	21,872
Financial				
Petroleum and natural gas revenue	**169,353**	140,226	148,042	169,533
Earnings	**40,650**	16,751	20,388	39,170
Basic ($ per share)	**0.26**	0.11	0.13	0.25
Diluted ($ per share)	**0.25**	0.10	0.13	0.24
Cash flow from operating activities	**71,463**	39,364	69,305	58,647
Total assets	**1,238,645**	1,227,723	1,187,852	1,174,322
Bank debt	**77,904**	86,786	44,920	44,106
Total long-term liabilities	**213,540**	208,699	160,649	139,091
Shareholders' equity	**919,406**	905,323	920,688	929,481
Dividends declared	**29,116**	29,035	28,975	29,032
Dividends declared ($ per share)	**0.18**	0.18	0.18	0.18
Common shares outstanding, net (000s) [(1)]	**159,178**	159,101	158,095	158,306
Diluted shares outstanding, net (000s) [(1)]	**161,872**	161,842	160,983	161,249

	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Production				
Crude oil (bbl/d)	17,685	18,201	17,942	18,329
Natural gas (mcf/d)	16,038	15,980	15,222	15,095
NGL (bbl/d)	689	863	802	870
Oil equivalent (boe/d)	21,047	21,726	21,281	21,715
Financial				
Petroleum and natural gas revenue	137,053	134,977	154,894	179,441
Earnings	27,719	16,321	113,865	32,996
Basic ($ per share)	0.18	0.10	0.73	0.21
Diluted ($ per share)	0.17	0.10	0.71	0.21
Cash flow from operating activities	61,220	41,089	68,248	98,325
Total assets	1,154,055	1,143,805	1,155,013	1,060,734
Bank debt	53,158	45,320	31,280	42,167
Total long-term liabilities	138,454	128,596	120,418	114,115
Shareholders' equity	918,478	908,314	925,370	837,857
Dividends declared	29,058	28,742	28,699	23,996
Dividends declared ($ per share)	0.18	0.18	0.18	0.15
Common shares outstanding, net (000s) [(1)]	158,513	157,129	155,757	155,737
Diluted shares outstanding, net (000s) [(1)]	161,492	160,165	159,444	159,487

(1) Net of treasury shares

In 2022, strong commodity prices increased earnings and cash flow from operating activities. The Company's earnings also increased with a non-cash impairment reversal of a previous impairment on its assets in Central Alberta of $64.3 million in the fourth quarter of 2022. Cardinal also recognized $9.7 million of a deferred tax reduction in the fourth quarter of 2022 due to the recognition of its deferred tax asset. Since the first quarter of 2023, production had been relatively consistent and commodity prices gradually improved throughout the year. In the second quarter of 2023, the Company recognized a gain on disposition of non-core undeveloped land assets of $9.9 million and recognized a deferred tax expense of $8.6 million resulting in a deferred tax liability of $3.3 million. In the first quarter of 2024, increased capital and E&E expenditures have increased the Company's bank debt. In the second quarter of 2024, oil prices increased allowing the Company to continue E&E expenditures on its Reford SAGD project as well as reduce bank debt.

NON-GAAP AND OTHER FINANCIAL MEASURES

Non-GAAP Financial Measures

Net operating expenses
Net operating expenses are calculated as operating expenses 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 June 30,		Six months ended June 30,	
	2024	2023	**2024**	2023
Operating expenses	**49,939**	48,273	**102,628**	99,114
Less: Processing and other revenue	**(1,785)**	(1,095)	**(2,810)**	(2,272)
Net operating expenses	**48,154**	47,178	**99,818**	96,842

Netback
Cardinal utilizes netback as a key performance indicator 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. The following table reconciles petroleum and natural gas revenue to netback:

	Three months ended June 30,		Six months ended June 30,	
	2024	2023	**2024**	2023
Petroleum and natural gas revenue	**169,353**	137,053	**309,579**	272,030
Royalties	**(31,213)**	(25,567)	**(57,001)**	(51,309)
Net operating expenses	**(48,154)**	(47,178)	**(99,818)**	(96,842)
Transportation expenses	**(2,340)**	(2,047)	**(4,519)**	(3,820)
Netback	**87,646**	62,261	**148,241**	120,059

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 are calculated as cash flow from investing activities excluding change in non-cash working capital and exploration and evaluation expenditures.

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.

The following table reconciles cash flow from investing activities to total capital expenditures and to total development capital expenditures:

	Three months ended June 30,		Six months ended June 30,	
	2024	2023	**2024**	2023
Cash flow from investing activities	**32,507**	30,825	**78,344**	56,887
Change in non-cash working capital	**(2,176)**	(10,110)	**997**	(10,845)
E&E expenditures	**(10,814)**	(358)	**(26,882)**	(358)
Capital expenditures	**19,517**	20,357	**52,459**	45,684
Capitalized G&A	**(314)**	(366)	**(977)**	(1,174)
Other assets	**(444)**	(124)	**(349)**	(284)
Acquisitions, net	**-**	10,000	**-**	9,128
Development capital expenditures	**18,759**	29,867	**51,133**	53,354

Capital Management Measures

Adjusted working capital
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 fair value of financial instruments, current decommissioning obligation and current lease liabilities).

The following table reconciles working capital to adjusted working capital:

As at	Jun 30, 2024	Dec 31, 2023
Working capital deficiency	**28,688**	49,077
Less current portion of:		
Lease liabilities	**1,595**	1,370
Decommissioning liabilities	**7,857**	9,081
Fair value of financial instruments	**(2,077)**	(104)
Adjusted working capital deficiency	**21,313**	38,730

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	Jun 30, 2024	Dec 31, 2023
Bank debt	**77,904**	44,920
Adjusted working capital deficiency	**21,313**	38,730
Net debt	**99,217**	83,650

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 collection, 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 development capital expenditures, 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 June 30,		Six months ended June 30,	
	2024	2023	**2024**	2023
Cash flow from operating activities	**71,463**	61,220	**110,827**	102,309
Change in non-cash working capital	**8,904**	(9,102)	**18,041**	(2,640)
Funds flow	**80,367**	52,118	**128,868**	99,669
Decommissioning expenditures	**1,460**	4,072	**5,765**	8,831
Adjusted funds flow	**81,827**	56,190	**134,633**	108,500
Total development capital expenditures	**(18,759)**	(29,867)	**(51,133)**	(53,354)
Free cash flow	**63,068**	26,323	**83,500**	55,146

Non-GAAP Financial Ratios

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. The following table details the calculation of netback per boe:

	Three months ended June 30,		Six months ended June 30,	
	2024	2023	**2024**	2023
Petroleum and natural gas revenue	**83.17**	71.56	**77.20**	70.28
Royalties	**(15.33)**	(13.35)	**(14.21)**	(13.26)
Net operating expenses	**(23.65)**	(24.63)	**(24.89)**	(25.02)
Transportation expenses	**(1.15)**	(1.07)	**(1.13)**	(0.99)
Netback per boe	**43.04**	32.51	**36.97**	31.01

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 trailing twelve-month period.

Total payout ratio

Cardinal utilizes this ratio as a 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 for the applicable 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 basic 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 diluted 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 MD&A 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.

FORWARD LOOKING STATEMENTS

This MD&A contains certain forward-looking statements and forward-looking information (collectively referred to herein as "forward-looking statements") within the meaning of applicable Canadian securities laws. All statements other than statements of present or historical fact are forward-looking statements. Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "believe", "plan", "intend", "objective", "continuous", "ongoing", "estimate", "expect", "may", "will", "project", "should", or similar words suggesting future outcomes. In particular, this MD&A contains forward-looking statements relating, but not limited to**:**

- plans to monitor climate reporting requirements;
- estimated tax pools, future taxability and future taxable income;
- expectations with respect to the outcome of the CRA dispute;
- 2024 capital expenditure plans;
- 2024 net debt and the components thereof;
- Cardinal's business strategy, goals and management focus;
- Cardinal's dividend and NCIB plans;
- targeted net debt to adjusted funds flow ratio and plans to monitor this ratio;
- Cardinal's risk management strategy including the mitigation of our exposure to commodity price risk, medium crude oil differentials and the benefits to be obtained therefrom;
- Plans to monitor spot and forward prices and expenditure plans as part of Cardinal’s risk management strategy;

- sources of funds for the Company's operations, capital expenditures, decommissioning obligations and dividend payments;
- plans to minimize the environmental impact of our operations;
- abandonment and reclamation spending plans including the timing thereof;
- anticipated costs of compliance with environmental legislation;
- future liquidity and the Company's access to sufficient debt and equity capital;
- Cardinal's asset base;
- expectations regarding the business environment, industry conditions, future commodity prices and differentials;
- Cardinal's capital management strategies;
- expectations with respect to the SAGD project;
- Cardinal's outlook for 2024, including anticipated production, development program, extending corporate reserve life, enhancing long-term sustainability and potential other uses for corporate funds; and
- treatment under governmental and other regulatory regimes and tax, environmental and other laws.

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, applicable royalty rates, tax laws, production shut-ins, 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 increasing competition, the impact of cost increases as a result of inflationary pressures, or otherwise, 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.

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; determinations by OPEC and other countries as to production levels; 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 government 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 MD&A 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 therefrom. Readers are cautioned that the foregoing lists of factors are not exhaustive. These forward-looking statements are made as of the date of this MD&A 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 MD&A includes references to 2022, 2023 and 2024 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)
Q2/24	**48%**	**38%**	**4%**	**10%**	**22,376**
Q1/24	51%	33%	4%	12%	21,692
Q4/23	50%	34%	4%	12%	22,164
Q3/23	45%	39%	4%	12%	21,872
Q2/23	45%	39%	3%	13%	21,047
Q1/23	48%	36%	4%	12%	21,726
Q4/22	49%	35%	4%	12%	21,281
Q3/22	49%	35%	4%	12%	21,715
1H/24	**50%**	**35%**	**4%**	**11%**	**22,034**
1H/23	46%	38%	4%	12%	21,385

Frequently Used Terms

Term or abbreviation	
"bbl"	Barrel(s)
"bbl/d"	Barrel(s) per day
"boe"	Barrel(s) of oil equivalent
"boe/d"	Barrel(s) of oil equivalent per day
"CO_2"	Carbon dioxide
"COGE Handbook"	Canadian Oil and Gas Evaluation Handbook
"GJ"	Gigajoule
"gj/d"	Gigajoule(s) per day
"m" preceding a volumetric measure	1,000 units of the volumetric measure
"mcf"	Thousand cubic feet
"mcf/d"	Thousand cubic feet per day
"NGL"	Natural gas liquids
"n/m"	Not meaningful ie. absolute value greater than 300%
"US"	United States
"USD"	United States dollars
"WCS"	Western Canadian Select
"WTI"	West Texas Intermediate