CARDINAL
ENERGY LTD.

Q2 2023

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, 2023 and is dated July 27, 2023. 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, 2023 and the audited financial statements as at and for the year ended December 31, 2022. 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.

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 for Disclosure of 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 as prescribed by the International Accounting Standards Board 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 2023 HIGHLIGHTS

- Average production volumes of 21,047 boe/d were negatively impacted by approximately 700 boe/d due to short-term shut-in production associated with forest fires in northern Alberta in the second quarter. All shut-in volumes are now back online;
- Adjusted funds flow(1) increased 7% over the first quarter of 2023 due to narrower Western Canadian Select ("WCS") differentials;
- Decreased net debt(1) by 2% over the prior quarter leading to a net debt to adjusted funds flow ratio(1) of 0.3x;
- Closed the disposition of non-core undeveloped land with minimal production and associated decommissioning liabilities for proceeds of $10 million;
- Brought onstream our four Nipisi Clearwater wells that were drilled in the first quarter of 2023 with combined current rates over 975 boe/d, approximately 30% higher than our offsetting 2022 pad initial production rates;
- Drilled six (4.6 net) successful wells in our Midale, Saskatchewan area and one (1.0 net) well in southern Alberta .

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Cash flow from operating activities	**61,220**	120,210	(49)	**102,309**	170,253	(40)
Change in non-cash working capital	**(9,102)**	4,065	n/m	**(2,640)**	37,051	(107)
Funds flow (1)	**52,118**	124,275	(58)	**99,669**	207,304	(52)
Decommissioning expenditures	**4,072**	4,062	-	**8,831**	7,584	16
Adjusted funds flow	**56,190**	128,337	(56)	**108,500**	214,888	(50)

(1) See Non-GAAP and other financial measures

OPERATIONS

PRODUCTION

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Light oil (bbl/d)	**7,651**	8,252	(7)	**7,736**	7,917	(2)
Medium / heavy oil (bbl/d)	**10,034**	10,515	(5)	**10,206**	10,209	-
Crude oil (bbl/d)	**17,685**	18,767	(6)	**17,942**	18,126	(1)
Natural gas (mcf/d)	**16,038**	15,511	3	**16,009**	14,704	9
NGL (bbl/d)	**689**	928	(26)	**775**	866	(11)
boe/d	**21,047**	22,280	(6)	**21,385**	21,443	-
% Crude oil and NGL production	**87%**	88%	(1)	**88%**	89%	(1)

Second quarter 2023 production decreased 6% over the same period in 2022 mainly due to the impact of Alberta forest fires in the second quarter of 2023 and fewer new well start-ups in 2023 year to date. Oil and natural gas production was negatively impacted in many of the Company's northern Alberta areas for approximately half of the second quarter. Cardinal estimates production was impacted by approximately 700 boe/d or 3.2% of the Company's quarterly production due to the forest fires. Partially offsetting this decrease, the Company's successful first quarter 2023 Clearwater drilling program at Nipisi added new oil production throughout the second quarter.

For the first six months of 2023, production was consistent with the same period in 2022 as the impact from the second quarter forest fires combined with the disposition of approximately 300 bbl/d of non-core heavy oil production in the fourth quarter of 2022 was offset with new production from the Company's successful 2022 and first quarter 2023 drilling programs.

PETROLEUM AND NATURAL GAS REVENUE

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Light oil	**60,351**	97,559	(38)	**122,646**	172,292	(29)
Medium / heavy oil	**70,858**	115,633	(39)	**135,375**	205,096	(34)
Crude oil	**131,209**	213,192	(38)	**258,021**	377,388	(32)
NGL	**2,162**	5,107	(58)	**5,361**	9,032	(41)
Natural gas	**3,682**	10,618	(65)	**8,648**	16,835	(49)
Petroleum and natural gas revenue	**137,053**	228,917	(40)	**272,030**	403,255	(33)
Cardinal average prices						
Light oil ($/bbl)	**86.67**	129.92	(33)	**87.60**	120.24	(27)
Medium / heavy oil ($/bbl)	**77.60**	120.85	(36)	**73.29**	110.99	(34)
Natural gas ($/mcf)	**2.52**	7.52	(66)	**2.98**	6.33	(53)
Equivalent ($/boe)	**71.56**	112.91	(37)	**70.28**	103.90	(32)
Benchmark prices						
Crude oil - WTI (US $/bbl)	**73.78**	108.41	(32)	**74.95**	101.35	(26)
Crude oil - Edmonton light (Cdn $/bbl)	**95.19**	137.81	(31)	**97.26**	126.71	(23)
Crude oil - WCS (Cdn $/bbl)	**78.76**	122.10	(35)	**74.04**	111.55	(34)
Natural gas - AECO Spot (Cdn $/mcf)	**2.49**	7.35	(66)	**2.88**	6.08	(53)
WCS Differential to WTI (US $/bbl)	**(15.14)**	(12.79)	18	**(20.01)**	(13.67)	46
Exchange rate - (US/Cdn)	**0.74**	0.78	(5)	**0.74**	0.79	(6)

Petroleum and natural gas revenue decreased 40% in the second quarter of 2023 compared to the same period in 2022 due to a 37% decrease in realized commodity prices combined with decreased production. In the second quarter of 2023, the Company's realized light oil, medium/heavy oil, and natural gas price decreases were all comparable with the respective Edmonton light and WCS oil and AECO natural gas benchmark price decreases.

For the first six months of 2023, petroleum and natural gas revenue decreased 33% due to a 32% decrease in commodity prices. The decrease in the Company's realized average prices was comparable to the decrease in the respective benchmark prices.

FINANCIAL INSTRUMENTS – COMMODITY

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Realized gain on commodity contracts	**-**	-	-	**1,510**	-	n/m
Unrealized (loss) gain on commodity contracts	**(448)**	1,111	(140)	**(1,981)**	1,020	(294)

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.

With the exception of fixed WCS fixed differential contracts as shown below, the Company remains unhedged. Cardinal will continue to monitor the spot and forward prices as well as expected expenditure levels going forward.

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

Type of instrument	Remaining term	Average quantity		Average strike price
USD WCS Basis Swap	July 1, 2023 - December 31, 2023	500	bbl/d	USD $ (15.00)
USD WCS Basis Swap	October 1, 2023 - December 31, 2023	500	bbl/d	USD $ (16.00)
USD WCS Basis Swap	August 1, 2023 - January 31, 2024	500	bbl/d	USD $ (15.00)

ROYALTIES

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Royalties	**25,567**	46,306	(45)	**51,309**	80,803	(37)
Percent of revenue	**18.7%**	20.2%	(7)	**18.9%**	20.0%	(6)
$/boe	**13.35**	22.84	(42)	**13.26**	20.82	(36)

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.

Royalties as a percentage of revenue decreased during the second quarter and first six months of 2023 as compared to the same periods in 2022 due to certain oil production from new wells which receive a lower crown royalty rate until initial production payouts are achieved. In addition, lower commodity pricing experienced in the second quarter and first six months of 2023 attracts a lower royalty rate on a sliding scale basis for certain crown royalty wells. Lower production from areas affected by the forest fires which historically attracted a higher crown royalty rate also contributed to the Company's lower royalty rate in the second quarter and first six months of 2023 as compared to the same periods in 2022.

NET OPERATING EXPENSES

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Operating expenses	**48,273**	47,201	2	**99,114**	93,337	6
Less: Processing and other revenue	**(1,095)**	(1,191)	(8)	**(2,272)**	(2,189)	4
Net operating expenses (1)	**47,178**	46,010	3	**96,842**	91,148	6
$/boe (1)	**24.63**	22.69	9	**25.02**	23.49	7

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

During the second quarter of 2023, net operating expenses per boe increased by 9%, over the same period in 2022, due to inflationary pressures on field services combined with lower production due to the impact of forest fires. In addition, in the second quarter of 2023, the average power price in Alberta increased by approximately 30% over the same period in 2022 to average almost $160/MWh. This was partially mitigated as in 2023, Cardinal fixed the price on approximately 70% of our estimated Alberta power usage at an average price of approximately $85/MWh which is 47% lower than the average Alberta power price experienced in the second quarter of 2023.

For the first six months of 2023, operating costs per boe have increased 7% over the same period in 2022 due to inflationary pressures on services combined with higher fuel and power costs which have raised operating costs in 2023.

TRANSPORTATION EXPENSES

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Transportation expenses	**2,047**	1,767	16	**3,820**	2,921	31
$/boe	**1.07**	0.87	23	**0.99**	0.75	32

Transportation expenses and transportation expenses per boe increased in the second quarter and first six months of 2023 as compared with the same periods in 2022 as new oil production from wells drilled in our North area in 2022 and early 2023 is currently trucked, increasing the Company's clean oil trucking expenses.

NETBACK

	Three months ended			Six months ended		
($/boe)	**Jun 30, 2023**	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Petroleum and natural gas revenue	**71.56**	112.91	(37)	**70.28**	103.90	(32)
Royalties	**(13.35)**	(22.84)	(42)	**(13.26)**	(20.82)	(36)
Net operating expenses	**(24.63)**	(22.69)	9	**(25.02)**	(23.49)	7
Transportation expenses	**(1.07)**	(0.87)	23	**(0.99)**	(0.75)	32
Netback [1]	**32.51**	66.51	(51)	**31.01**	58.84	(47)

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

Cardinal's second quarter and first six months of 2023 netback decreased as compared to the same periods in 2022 due to lower commodity prices and higher net operating and transportation expenses partially offset by reduced royalties.

GENERAL AND ADMINISTRATIVE ("G&A")

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Gross G&A	**6,256**	5,730	9	**13,657**	12,421	10
Capitalized G&A and overhead recoveries	**(1,747)**	(1,165)	50	**(3,492)**	(2,936)	19
G&A	**4,509**	4,565	(1)	**10,165**	9,485	7
$/boe	**2.35**	2.25	4	**2.63**	2.44	8

In the second quarter and first six months of 2023, G&A costs per boe have increased over the same periods in 2022 due to higher compensation costs and additional staffing to accommodate Cardinal's increased activity. In the first quarter of the year, the Company generally incurs additional one-time annual costs which elevated the G&A costs per boe in the first half of 2023.

SHARE-BASED COMPENSATION ("SBC")

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Gross SBC	**2,336**	1,753	33	**4,802**	3,392	42
Capitalized SBC	**(298)**	(200)	49	**(584)**	(390)	50
SBC	**2,038**	1,553	31	**4,218**	3,002	41
$/boe	**1.06**	0.77	38	**1.09**	0.77	42

SBC expense increased in the second quarter and first half of 2023 compared to the same periods in 2022 due to an increase in the grant date fair value of restricted bonus awards ("RA") and performance bonus awards ("PA") outstanding. In addition, the Company's estimated performance multiplier on vesting awards has increased the share-based compensation for the first half of 2023 as compared to the same period in 2022. Partially offsetting this increase is a reduction in the amount of RAs and PAs outstanding in 2023 compared to 2022.

As at June 30, 2023, Cardinal had 1.9 million RAs and 1.0 million PAs outstanding.

FINANCE

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Interest - bank debt	**1,256**	1,633	(23)	**2,273**	3,439	(34)
Other finance charges, net	**268**	263	2	**551**	497	11
Interest - secured notes	**-**	-	-	**-**	361	(100)
Interest - capital leases	**38**	36	6	**80**	74	8
Accretion	**1,944**	2,090	(7)	**4,097**	4,175	(2)
Finance	**3,506**	4,022	(13)	**7,001**	8,546	(18)
$/boe	**1.83**	1.98	(8)	**1.31**	2.20	(40)
Average bank debt	**63,400**	122,456	(48)	**57,925**	137,599	(58)
Interest rate - bank debt	**7.9%**	5.3%	49	**7.9%**	5.0%	58

In the second quarter and first half of 2023, lower bank fees due to the Company's strong financial ratios combined with lower average bank debt levels decreased the interest on bank debt as compared with the same periods in 2022. The Company also repaid all of the outstanding second lien secured notes late in the first quarter of 2022 which reduced finance costs in the first half of 2023 as compared to the same period in 2022.

These decreases have been partially offset by increased interest rates throughout 2022 and 2023 where the Bank of Canada has increased prime borrowing rates from 2.45% in early 2022 to 7.2% in July of 2023.

DEPLETION AND DEPRECIATION ("D&D")

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Depletion and depreciation	**25,391**	27,462	(8)	**50,384**	52,273	(4)
$/boe	**13.26**	13.55	(2)	**13.02**	13.47	(3)

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 decreased in the second quarter and first six months of 2023 as compared to the same periods in 2022 due to increased 2022 year-end proved plus probable reserve bookings partially offset by an increase in the depletable base of Cardinal's property, plant and equipment due to the reversal of previous impairments in the fourth quarter of 2022.

DEFERRED TAXES

At June 30, 2023, the Company has approximately $1.3 billion of tax pools ($1.2 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, 2023 from the average of three independent third party reserve evaluators, Cardinal does not expect to pay current income taxes until 2026 or beyond. Any potential taxes payable beyond 2026 would be affected by commodity prices, capital expenditures and production volumes.

In the third quarter of 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			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Earnings	**27,719**	98,586	(72)	**44,040**	155,826	(72)
$ per share						
Basic	**0.18**	0.64	(72)	**0.28**	1.03	(73)
Diluted	**0.17**	0.63	(73)	**0.28**	1.00	(72)
Cash flow from operating activities	**61,220**	120,210	(49)	**102,309**	170,253	(40)
$ per share						
Basic	**0.39**	0.78	(50)	**0.65**	1.12	(42)
Diluted	**0.38**	0.77	(51)	**0.64**	1.09	(41)
Adjusted funds flow	**56,190**	128,337	(56)	**108,500**	214,888	(50)
$ per share(1)						
Basic	**0.35**	0.84	(58)	**0.69**	1.42	(51)
Diluted	**0.35**	0.82	(57)	**0.68**	1.38	(51)
Total payout ratio(1)	**105%**	26%	n/m	**102%**	32%	219

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

In the second quarter and first half of 2023, lower commodity prices decreased the Company's earnings, cash flow from operating activities and adjusted funds flow as compared with the same periods in 2022.

CAPITAL EXPENDITURES

In the second quarter of 2023, the Company spent $20.4 million on capital expenditures which included the drilling and completion of six (4.6 net) wells at our Midale, Saskatchewan area and one (1.0 net) well in southern Alberta. The Company continued with its well reactivation program spending $2.3 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. In the second quarter, Cardinal closed the disposition of non-core undeveloped land and associated liabilities for $10 million in our northern Alberta area.

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Land	**336**	1,746	(81)	**782**	4,382	(82)
Geological and geophysical	**-**	6	(100)	**-**	30	(100)
Drilling, completion, and recompletions	**15,257**	15,208	-	**26,525**	35,807	(26)
Equipment, facilities and pipelines	**14,274**	8,058	77	**26,047**	19,746	32
Development capital expenditures (1)	**29,867**	25,018	19	**53,354**	59,965	(11)
Capitalized G&A	**366**	335	9	**1,174**	1,119	5
Other assets	**124**	185	(33)	**284**	250	14
Acquisitions, net	**(10,000)**	-	n/m	**(9,128)**	-	n/m
Capital expenditures(1)	**20,357**	25,538	(20)	**45,684**	61,334	(26)

(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 of Cardinal common shares valued at $7.35 per share. The E&E assets consist of long-term development projects in Saskatchewan that the Company will continue to evaluate in the future. Subsequent to the acquisition, Cardinal incurred $0.3 million of expenditures on the assets and $0.1 million of capitalized G&A.

DECOMMISSIONING OBLIGATION

In the second quarter of 2023, the Company spent $4.1 million on decommissioning obligations. For the first six months of 2023, Cardinal has spent $8.8 million on decommissioning expenditures and closed the sales of non-core assets which included the disposition of $1.4 million of decommissioning obligations.

LIQUIDITY AND CAPITAL RESOURCES

Capitalization table	As at Jun 30, 2023	Dec 31, 2022	Change %
Net debt	**$ 76,269**	$ 62,672	22
Common shares, outstanding	**158,513,052**	155,756,621	2
Market price at end of period ($ per share)	**$ 6.58**	$ 7.62	(14)
Market capitalization	**1,043,016**	1,186,865	(12)
	$ 1,119,285	$ 1,249,537	(10)

CAPITAL FUNDING

Bank debt

The Company's reserve-based revolving credit facility of $155 million is comprised of a $135.0 million syndicated term credit facility and a $20.0 million non-syndicated operating line credit facility (the "Facilities"). The Facilities are available on a revolving basis until May 31, 2024 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, 2025.

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. As the available lending limit of the Facilities is based on the syndicate's interpretation of the Company's reserves and future commodity prices and costs, 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, 2023.

Advances under the Facilities are available by way of either prime rate loans, which bear interest at the banks' prime lending rate plus 1.75% to 5.25%, and bankers' acceptances, which are subject to fees and margins ranging from 2.75% 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, 2023.

Secured Notes

On July 14, 2021, Cardinal issued $12.5 million principal amount of subordinated second lien secured notes (the "Notes") which accrued interest at 10% per annum with a three year term. Interest accrued semi-annually and was added to the principal amount paid upon maturity or on the repayment date. On March 31, 2022, Cardinal settled the Notes for a payment of $13.7 million, which included the principal amount, $0.9 million of accrued interest and a prepayment fee of $0.3 million.

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, 2023	Dec 31, 2022
Bank debt	**$ 53,158**	$ 31,280
Adjusted working capital deficiency[1]	**23,111**	31,392
Net debt	**$ 76,269**	$ 62,672
Cash flow from operating activities	**$ 269,319**	$ 337,263
Change in non-cash working capital	**(33,781)**	5,910
Funds flow	**$ 235,538**	$ 343,173
Decommissioning obligation expenditures	**20,857**	19,610
Adjusted funds flow	**$ 256,395**	$ 362,783
Net debt to adjusted funds flow [1]	**0.3**	0.2

(1) See Non-GAAP and other financial measures

Cardinal's ratio of net debt to adjusted funds flow as at June 30, 2023 was 0.3 to 1, which is well below the Company's targeted range of 1.0 to 1. This ratio has decreased over the two years due to higher commodity prices, a disciplined capital expenditure program and the Company's debt reduction strategy.

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 2023 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 $23.1 million as of June 30, 2023 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 currently available Facilities combined with anticipated cash flow from operating activities and adjusted funds flow. At current commodity prices, present sources of capital are anticipated to be sufficient to satisfy the Company's capital expenditure program and decommissioning obligations and dividend payments for the 2023 fiscal year and beyond.

DIVIDENDS

	Three months ended			Six months ended		
	Jun 30, 2023	Jun 30, 2022	Change %	**Jun 30, 2023**	Jun 30, 2022	Change %
Dividends declared	**29,058**	8,161	256	**57,800**	8,161	608
Dividends declared per share	**$ 0.180**	$ 0.050	260	**$ 0.360**	$ 0.050	620

In May 2022, Cardinal's Board of Directors approved the reinstatement of the Company's dividend beginning in June 2022 at $0.05 per common share per month. Beginning in the fourth quarter of 2022, Cardinal increased the Company's dividend to $0.06 per common share per month.

During the three months ended June 30, 2023, $29.1 million or $0.18 per common share (2022 – $8.2 million or $0.05 per common share) of dividends were declared, of which $19.1 million was paid in cash and $10.0 million was recognized as a liability at June 30, 2023. The dividend payable was settled on July 14, 2023.

During the first six months of 2023, $57.8 million or $0.36 per common share (2022 – $8.2 million or $0.05 per common share) of dividends were declared, of which $47.8 million was paid in cash and $10.0 million was recognized as a liability at June 30, 2023.

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 2023, the Company settled the vesting of 0.7 million (2022 – 0.6 million) PAs and 1.3 million RAs (2022 – 1.9 million) with 1.4 million (2022 – 1.6 million) treasury shares held by the trustee and a payment of $8.5 million (2022 - $10.5 million) for withholding taxes. At June 30, 2023, the trustee held a remaining balance of 1.1 million treasury shares.

In the first six months of 2023, Cardinal granted 1.0 million (2022 – 0.8 million) RAs and 0.5 million (2022 – 0.4 million) PAs to officers, directors and employees pursuant to the Company's bonus award plan.

On June 28, 2023, the Company announced that the Toronto Stock Exchange ("TSX") had accepted the Company's intention to renew its normal course issuer bid ("NCIB"). Pursuant to the NCIB, the Company is permitted to purchase up to 12,062,372 common shares representing approximately 10% of its public float as of June 16, 2023 over a twelve month period commencing June 30, 2023. In 2023, Cardinal has not purchased any common shares as compared to 3,724,156 common shares were repurchased in 2022 for cancellation at an average price of $7.05 per common share.

Equity Instruments as at	Jul 27, 2023	Jun 30, 2023	Dec 31, 2022
Common shares, issued	159,638,699	159,638,699	158,276,302
Treasury shares	(1,125,647)	(1,125,647)	(2,519,681)
RAs	1,935,308	1,935,308	2,359,191
PAs	1,043,259	1,043,259	1,327,923

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, 2023, the Company had contractual obligations as follows:

	2023	**2024**	**2025**	**2026**	**2027**	**Thereafter**
Trade and other payables	$ 80,210	-	-	-	-	-
Dividend payable	10,038	-	-	-	-	-
Lease liabilities	961	999	916	448	427	1,324
Bank debt (1)	-	-	53,158	-	-	-
Power purchase commitment (2)	7,086	13,195	8,674	8,674	8,674	-
Total contractual obligations	**$ 98,295**	**$ 14,194**	**$ 62,748**	**$ 9,122**	**$ 9,101**	**$ 1,324**

(1) Amount excludes interest.

(2) Amounts represents the portion of the Company's power cost that has been fixed

ADDITIONAL INFORMATION

CRITICAL ACCOUNTING ESTIMATES

There have been no changes in Cardinal's critical accounting estimates in the three and six months ended June 30, 2023. Further information on the Company's critical accounting policies and estimates can be found in the notes to the annual financial statements and MD&A for the year ended December 31, 2022.

INTERNAL CONTROLS UPDATE

Cardinal is required to comply with National Instrument 52-109 "Certification of Disclosure on 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 have materially affected, or are 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 2023.

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

With the reactivation of all production down from the northern Alberta wildfires and the majority of our 2023 drilling program expected to come onstream during the third quarter, current production volumes are approximately 22,000 boe/d based on field estimates. Our first two wells in both Wainwright on the Rex play and in Southern Alberta on the Ellerslie development are finished drilling and look encouraging. In both areas we have two additional wells to drill as part of our 2023 program. Initial productivity from our first two producing wells at Midale is on forecast with the third well planned to come on stream in August.

QUARTERLY DATA

	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Production				
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
Per share ($)	**0.18**	0.18	0.18	0.15
Common shares outstanding, net (000's)(1)	**158,513**	157,129	155,757	155,737
Diluted shares outstanding, net (000's)(1)	**161,492**	160,165	159,444	159,487

	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021
Production				
Oil (bbl/d)	18,767	17,478	17,366	16,356
Natural gas (mcf/d)	15,511	13,888	13,733	15,101
NGL (bbl/d)	928	804	870	600
Oil equivalent (boe/d)	22,280	20,596	20,525	19,473
Financial				
Petroleum and natural gas revenue	228,917	174,338	140,409	120,007
Earnings (loss)	98,586	57,240	38,955	262,326
Basic per share ($)	0.64	0.38	0.26	1.76
Diluted per share ($)	0.63	0.35	0.24	1.64
Cash flow from operating activities	120,210	50,043	51,973	37,410
Total assets	1,130,750	1,122,348	1,075,828	1,053,162
Bank debt	66,956	146,564	142,412	170,229
Secured notes	-	-	12,546	30,270
Total long-term liabilities	181,207	263,711	271,529	283,934
Shareholders' equity	850,617	763,396	719,232	679,549
Dividends declared	8,161	-	-	-
Per share ($)	0.05	-	-	-
Common shares outstanding, net (000's)(1)	159,143	151,891	150,442	150,332
Diluted shares outstanding, net (000's)(1)	162,915	164,990	165,766	166,097

(1) Net of treasury shares

In 2021, as the Company began its recovery from the reduced activity due to COVID-19, production was restored and commodity prices increased lifting petroleum and natural gas revenue. As prices increased through 2021, revenue increased however the Company incurred realized and unrealized hedging losses which negatively impacted earnings and cash flow from operating activities. In 2022, continued strong commodity prices and reduced realized and unrealized hedging losses have increased earnings and cash flow from operating activities. In the second quarter of 2022, commodity prices were highest in the year and subsequently decreased in the back half of 2022 and into 2023.

The Company's earnings also increased with non-cash impairment reversals of previous impairments on its assets as shown with a reversal of previous impairments in the third quarter of 2021 where the Company reversed impairments by $218.3 million. In the third and fourth quarter of 2022, the Company also recorded net impairment reversals of $46.4 million. In the third quarter of 2021, the Company recorded a gain on the Venturion Acquisition of $21.8 million. 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.

NON-GAAP AND OTHER FINANCIAL MEASURES

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		Six months ended	
	Jun 30, 2023	Jun 30, 2022	**Jun 30, 2023**	Jun 30, 2022
Operating expenses	**48,273**	47,201	**99,114**	93,337
Less: Processing and other revenue	**(1,095)**	(1,191)	**(2,272)**	(2,189)
Net operating expenses	**47,178**	46,010	**96,842**	91,148

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. The following table reconciles petroleum and natural gas revenue to netback:

	Three months ended		Six months ended	
	Jun 30, 2023	Jun 30, 2022	**Jun 30, 2023**	Jun 30, 2022
Petroleum and natural gas revenue	**137,053**	228,917	**272,030**	403,255
Royalties	**(25,567)**	(46,306)	**(51,309)**	(80,803)
Net operating expenses	**(47,178)**	(46,010)	**(96,842)**	(91,148)
Transportation expenses	**(2,047)**	(1,767)	**(3,820)**	(2,921)
Netback	**62,261**	134,834	**120,059**	228,383

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 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 to total development capital expenditures.

	Three months ended		Six months ended	
	Jun 30, 2023	Jun 30, 2022	**Jun 30, 2023**	Jun 30, 2022
Cash flow from investing activities	**30,825**	37,194	**56,887**	62,680
Change in non-cash working capital	**(10,110)**	(11,656)	**(10,845)**	(1,346)
Exploration and evaluation expenditures	**(358)**	-	**(358)**	-
Capital expenditures	**20,357**	25,538	**45,684**	61,334
Capitalized G&A	**(366)**	(335)	**(1,174)**	(1,119)
Other assets	**(124)**	(185)	**(284)**	(250)
Acquisitions, net	**10,000**	-	**9,128**	-
Development capital expenditures	**29,867**	25,018	**53,354**	59,965

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, 2023**	Dec 31, 2022
Working capital deficiency	**29,877**	39,919
Lease liabilities	**(1,206)**	(1,487)
Decommissioning obligation	**(5,112)**	(8,573)
Fair value of financial instruments	**(448)**	1,533
Adjusted working capital deficiency	**23,111**	31,392

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, 2023**	Dec 31, 2022
Bank debt	**53,158**	31,280
Adjusted working capital deficiency	**23,111**	31,392
Net debt	**76,269**	62,672

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 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		Six months ended	
	Jun 30, 2023	Jun 30, 2022	**Jun 30, 2023**	Jun 30, 2022
Cash flow from operating activities	**61,220**	120,210	**102,309**	170,253
Change in non-cash working capital	**(9,102)**	4,065	**(2,640)**	37,051
Funds flow	**52,118**	124,275	**99,669**	207,304
Decommissioning expenditures	**4,072**	4,062	**8,831**	7,584
Adjusted funds flow	**56,190**	128,337	**108,500**	214,888
Total development capital expenditures	**(29,867)**	(25,018)	**(53,354)**	(59,965)
Free cash flow	**26,323**	103,319	**55,146**	154,923

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		Six months ended	
	Jun 30, 2023	Jun 30, 2022	**Jun 30, 2023**	Jun 30, 2022
Petroleum and natural gas revenue	**71.56**	112.91	**70.28**	103.90
Royalties	**(13.35)**	(22.84)	**(13.26)**	(20.82)
Net operating expenses	**(24.63)**	(22.69)	**(25.02)**	(23.49)
Transportation expenses	**(1.07)**	(0.87)	**(0.99)**	(0.75)
Netback per boe	**32.51**	66.51	**31.01**	58.84

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 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 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 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;
- current and future production levels;
- 2023 capital expenditure plans;
- 2023 net debt and the components thereof;
- future drilling intentions;
- 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, foreign exchange risk on borrowings 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;
- plans to continue to evaluate the Company's long-term development projects in Saskatchewan;
- 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;
- Cardinal's outlook for 2023, including its capital and decommissioning expenditure budget, dividend budget 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 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 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 and 2023 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)
Q2/23	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
Q2/22	49%	35%	4%	12%	22,280
Q1/22	52%	33%	4%	11%	20,596
Q4/21	51%	34%	4%	11%	20,525
Q3/21	54%	30%	3%	13%	19,473
1H/23	46%	38%	4%	12%	21,385
1H/22	53%	32%	4%	11%	21,443
Wildfires impact	88%	-	9%	3%	700
Nipisi 2023	97%	-	-	3%	975
Current production	47%	38%	3%	12%	22,000

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