



**CARDINAL**  
ENERGY LTD.

**Q3 2021**

**MANAGEMENT DISCUSSION & ANALYSIS**

## MANAGEMENT'S DISCUSSION AND ANALYSIS

This management's discussion and analysis ("MD&A") is a review of operations, financial position and outlook for Cardinal Energy Ltd. ("Cardinal" or the "Company") for the three and nine months ended September 30, 2021 and is dated November 4, 2021. The MD&A should be read in conjunction with Cardinal's unaudited condensed interim consolidated financial statements as at and for the three and nine months ended September 30, 2021 and the audited financial statements for the years ended December 31, 2020 and 2019. 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.

### Non-GAAP Measures

The terms "funds flow", "adjusted funds flow", "adjusted funds flow per share", "adjusted funds flow per diluted share", "adjusted working capital", "development capital expenditures", "free cash flow", "net operating expenses", "netback", "net debt", "net debt to adjusted funds flow", "net bank debt", and "total payout ratio" in this MD&A are not recognized under GAAP. Management believes that in addition to earnings and cash flow from operating activities as defined by GAAP, these terms are useful supplemental measures to evaluate operating performance. Users are cautioned however, that these measures should not be construed as an alternative to earnings or cash flow from operating activities determined in accordance with GAAP as an indication of Cardinal's performance and may not be comparable with the calculation of similar measurements by other entities.

Management utilizes "adjusted funds flow" as a key measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, and capital expenditures. Adjusted funds flow excludes the change in non-cash working capital, transaction costs, and 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. Funds flow excludes the change in non-cash operating working capital. Funds flow and adjusted funds flow are not intended to represent net cash provided by (used in) operating activities calculated in accordance with IFRS. The following table reconciles cash flow from operating activities to funds flow and adjusted funds flow:

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Cash flow from operating activities	37,410	18,950	97	73,148	30,715	138
Change in non-cash working capital	(1,800)	(5,982)	(70)	1,203	(2,749)	(144)
<b>Funds flow</b>	<b>35,610</b>	12,968	175	<b>74,351</b>	27,966	166
Decommissioning expenditures	1,334	238	n/m	4,042	2,253	79
Transaction costs	619	-	n/m	619	-	n/m
<b>Adjusted funds flow</b>	<b>37,563</b>	13,206	184	<b>79,012</b>	30,219	161

"Adjusted funds flow per share" is calculated using adjusted funds flow divided by the weighted average basic shares outstanding adjusted for shares held in treasury.

"Adjusted funds flow per diluted share" is calculated using adjusted funds flow divided by the weighted average diluted shares outstanding adjusted for shares held in treasury.

"Adjusted working capital" is calculated as current liabilities less current assets (adjusted for the warrant liability, fair value of financial instruments, current decommissioning obligation, current lease liabilities, assets held for sale, and liabilities associated with assets held for sale). Adjusted working capital is used by Cardinal to monitor its capital

structure, liquidity, and its ability to fund current operations. The following table reconciles working capital to adjusted working capital:

	As at		
	Sep 30, 2021	Dec 31, 2020	Change %
<b>Working capital</b>	<b>(25,828)</b>	(25,690)	1
Lease liabilities	<b>1,469</b>	1,687	(13)
Decommissioning obligation	<b>4,110</b>	3,280	25
Fair value of financial instruments, net	<b>8,331</b>	6,909	21
Warrant liability	-	3,530	(100)
Liabilities associated with assets held for sale	<b>689</b>	-	-
Assets held for sale	<b>(6,009)</b>	-	-
<b>Adjusted working capital deficiency</b>	<b>(17,238)</b>	(10,284)	68

"Development capital expenditures" represents expenditures on property, plant and equipment (excluding capitalized G&A, other assets and net acquisitions) as shown in the *Capital Expenditures* section below.

"Free cash flow" represents adjusted funds flow less development capital expenditures.

"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 through processing third party volumes.

"Netback" is calculated on a boe basis and is determined by deducting royalties, net operating expenses, and transportation expenses from petroleum and natural gas revenue in accordance with the Canadian Oil and Gas Evaluation ("COGE") Handbook. Netback is utilized by Cardinal to better analyze the operating performance of its petroleum and natural gas assets against prior periods.

The term "net debt" is not recognized under GAAP and is calculated as bank debt plus the principal amount of convertible unsecured subordinated debentures ("convertible debentures"), secured notes and adjusted working capital. Net debt is used by management to analyze the financial position, liquidity and leverage of Cardinal.

"Net debt to adjusted funds flow" is calculated as net debt divided by adjusted funds flow for the trailing twelve month period. The ratio of net debt to adjusted funds flow is used 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 bank debt" is calculated as net debt less the principal amount of convertible debentures and secured notes. Net bank debt is used by management to analyze the financial position, liquidity, leverage and borrowing capacity on Cardinal's bank line.

"Total payout ratio" represents the ratio of the sum of dividends declared plus development capital expenditures divided by adjusted funds flow. Total payout ratio is another key measure to assess Cardinal's ability to fund financing activities, operating activities, and capital expenditures.

### 51-101 Advisory

In accordance with *Standards 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.

## THIRD QUARTER 2021 HIGHLIGHTS

- Increased cash flow from operating activities and adjusted funds flow by 97% and 184%, respectively, compared to the third quarter of 2020;
- Adjusted funds flow increased to \$37.6 million or \$0.23 per diluted share, increases of 49% and 44%, respectively, over the second quarter of 2021;
- Third quarter 2021 free cash flow increased to \$21.0 million or 142% over the third quarter of 2020;
- Continued with our disciplined capital program spending \$17.5 million of capital expenditures which included the drilling of five (4.0 net) wells;
- Reduced net bank debt to \$187.5 million;
- Closed the corporate acquisition of Venturion Oil Limited ("Venturion") adding approximately 2,400 boe/d of production (83% oil);
- Achieved net earnings of \$262.3 million primarily due to impairment reversals of \$218.3 million and a gain on the corporate acquisition of \$21.8 million.

## OPERATIONS

### ACQUISITION

On July 15, 2021, the Company closed the acquisition of Venturion for a purchase price of approximately \$47.6 million (the "Venturion Acquisition"). The consideration consisted of 6.3 million of Cardinal common shares and approximately \$27.5 million of cash. The cash was utilized to repay Venturion's outstanding net debt at closing (including closing costs) with the residual being allocated to the shareholders on a pro-rata basis. The Venturion assets include approximately 2,400 boe/d of production (83% oil) focused in central Alberta and other minor Alberta and British Columbia properties.

### PRODUCTION

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Light oil (bbl/d)	7,485	6,861	9	7,220	7,255	-
Medium / heavy oil (bbl/d)	8,871	7,721	15	8,087	8,051	-
Crude oil (bbl/d)	16,356	14,582	12	15,307	15,306	-
Natural gas (mcf/d)	15,101	13,448	12	14,215	13,562	5
NGL (bbl/d)	600	834	(28)	930	814	14
<b>boe/d</b>	<b>19,473</b>	<b>17,657</b>	<b>10</b>	<b>18,606</b>	<b>18,380</b>	<b>1</b>
<b>% Crude oil and NGL production</b>	<b>87%</b>	<b>87%</b>	<b>-</b>	<b>87%</b>	<b>88%</b>	<b>(1)</b>

Third quarter 2021 production increased 10% over the same period in 2020 due to production added from the Venturion Acquisition partially offset by reduced production from third party facility downtime. NGL production decreased 28% in the third quarter of 2021 compared to the same period in 2020 predominantly due to unplanned third party facility downtime in our North CGU.

Production for the first nine months of 2021 increased 1% over the same period in 2020 due to incremental production from the Venturion Acquisition partially offset by unplanned third party facility downtime production disruptions and the Company electing to defer drilling new wells since the first quarter of 2020 in response to low commodity prices caused by the effects of coronavirus pandemic ("COVID-19"). The Company resumed its drilling activity late in second quarter of 2021.

## PETROLEUM AND NATURAL GAS REVENUE

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Light oil	<b>54,157</b>	28,696	89	<b>139,907</b>	75,444	85
Medium / heavy oil	<b>58,086</b>	29,991	94	<b>142,949</b>	72,604	97
Crude oil	<b>112,243</b>	58,687	91	<b>282,856</b>	148,048	91
NGL	<b>2,277</b>	1,340	70	<b>8,148</b>	3,805	114
Natural gas	<b>5,487</b>	1,955	181	<b>13,656</b>	5,313	157
<b>Petroleum and natural gas revenue</b>	<b>120,007</b>	61,982	94	<b>304,660</b>	157,166	94
<b>Cardinal average prices</b>						
Light oil (\$/bbl)	<b>78.64</b>	45.47	73	<b>70.97</b>	37.95	87
Medium / heavy oil (\$/bbl)	<b>71.18</b>	42.22	69	<b>64.75</b>	32.91	97
Natural gas (\$/mcf)	<b>3.95</b>	1.58	150	<b>3.52</b>	1.43	146
<b>Equivalent (\$/boe)</b>	<b>66.99</b>	38.16	76	<b>59.98</b>	31.21	92
<b>Benchmark prices</b>						
Crude oil - WTI (US \$/bbl)	<b>70.56</b>	40.93	72	<b>64.82</b>	38.32	69
Crude oil - Edmonton light (Cdn \$/bbl)	<b>83.71</b>	49.55	69	<b>75.74</b>	43.58	74
Crude oil - WCS (Cdn \$/bbl)	<b>71.81</b>	42.40	69	<b>65.41</b>	32.98	98
Natural gas - AECO Spot (Cdn \$/gij)	<b>3.65</b>	2.12	72	<b>3.33</b>	1.98	68
Exchange rate - (US/Cdn)	<b>0.79</b>	0.75	5	<b>0.80</b>	0.74	8

Petroleum and natural gas revenue increased 94% in the third quarter of 2021 as compared to the same period in 2020 due to a 76% increase in realized commodity prices combined with increased production. In the third quarter of 2021, the Company's light and medium/heavy oil price increases of 73% and 69%, respectively, approximated the light and medium/heavy oil benchmark price increases of 69% as compared to the same period in 2020. The Company's third quarter 2021 natural gas price increased 150% over the same period in 2020 as compared to the AECO benchmark increase of 72% due to the Company ending its lower priced Chicago based natural gas sales contract in the fourth quarter of 2020.

For the first nine months of 2021, Cardinal's light and medium/heavy realized prices increased proportionately with the associated Edmonton light and WCS benchmarks when compared to the same period in 2020. The Company's natural gas price increased by 146% over the same period in 2020 compared to a 68% increase in the AECO benchmark due to the Company ending its lower priced Chicago based natural gas sales contract in the fourth quarter of 2020.

## FINANCIAL INSTRUMENTS - COMMODITY

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Realized gain/(loss) - commodity contracts	<b>(10,368)</b>	(5,893)	76	<b>(37,884)</b>	5,636	n/m
Unrealized gain/(loss) - commodity contracts	<b>8,273</b>	1,633	n/m	<b>1,673</b>	(4,175)	(140)

Managing the variability in funds flow and adjusted funds flow is an integral component of Cardinal's business strategy. Changing business conditions are monitored regularly and reviewed with our Board of Directors to establish risk management guidelines used by management in carrying out the Company's risk management program. The risk exposure inherent in movements in the price of crude oil, natural gas and foreign exchange rates are proactively managed by Cardinal through the use of derivatives with investment-grade counterparties. The Company considers these derivative contracts to be an effective means to manage cash flow from operating activities and adjusted funds flow.

Cardinal utilizes 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. During the third quarter of 2021, with the commodity contracts acquired from the Venturion Acquisition, Cardinal had a \$10.4 million realized hedging loss due to the significant increase in oil prices experienced during the quarter. In the third quarter, approximately 23% of the Company's oil production was hedged which decreases to approximately 11% of forecasted production in the fourth quarter of 2021.

As of the date of this MD&A Cardinal had the following commodity derivatives, referenced to WTI, WCS, and AECO outstanding:

Commodity	Financial Instrument	Period	Average Volume	Average Strike Price
<b>Crude Oil</b>				
	CDN WTI Swap	Oct - Dec 2021	1,500 bbl/d	\$ 55.83
<b>Natural Gas</b>				
	AECO Swap	Oct - Dec 2021	11,000 gj/d	\$ 2.64
<b>Acquired through Venturion Transaction</b>				
<b>Crude Oil</b>				
	USD WTI Collar	Oct - Dec 2021	750 bbl/d	Floor \$ 50.00 Ceiling \$ 63.20

## ROYALTIES

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Royalties	<b>22,171</b>	8,799	152	<b>52,358</b>	23,137	126
Percent of revenue	<b>18.5%</b>	14.2%	30	<b>17.2%</b>	14.7%	17
\$/boe	<b>12.38</b>	5.42	128	<b>10.31</b>	4.59	125

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 increased during the third quarter and for the first nine months of 2021 as compared to the same periods in 2020 due to the increase in commodity prices. Crown royalty rates are on a sliding scale therefore an increase in pricing generally leads to an increase in royalty rates. In addition, production from the Venturion Acquisition attracts a higher royalty rate as compared with Cardinal's historical corporate royalty rate which has increased the Company's royalties and royalties as a percentage of revenue in the third quarter and first nine months of 2021 as compared to the same periods in 2020.

## NET OPERATING EXPENSES

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Operating expenses	<b>43,057</b>	28,523	51	<b>115,597</b>	90,730	27
Less: Processing and other revenue	<b>(908)</b>	(1,200)	(24)	<b>(2,844)</b>	(2,200)	29
Net operating expenses <sup>(1)</sup>	<b>42,149</b>	27,323	54	<b>112,753</b>	88,530	27
\$/boe	<b>23.53</b>	16.82	40	<b>22.20</b>	17.58	26

(1) See non-GAAP measures.

During the third quarter and first nine months of 2021, net operating expenses per boe increased by 40% and 26%, respectively, over the same periods in 2020 due to higher Alberta electricity costs, increased well reactivations and normalized labor costs. In 2020, in response to COVID-19, Cardinal reduced all non-essential well reactivations and cut salaries and wages of contractors and employees. Early in 2021, well reactivation activity normalized and salaries and wages were restored to pre-pandemic rates. In addition, in the third quarter of 2021, Alberta power rates have significantly increased over the same period in 2020. Reduced supply and increased demand caused Alberta power rates to average over \$100/MWh as compared to approximately \$44/MWh for the same period in 2020. These high power rates have increased our third quarter total Alberta net operating expenses by over \$2.50/boe in comparison to the same period in 2020.

For the first nine months of 2021, increased well reactivations, normalized labor rates and a significant increase in electricity rates have increased the Company's net operating expenses per boe by 26% over the same period in 2020.

## TRANSPORTATION EXPENSES

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Transportation expenses	<b>1,037</b>	556	87	<b>2,028</b>	1,501	35
\$/boe	<b>0.58</b>	0.34	71	<b>0.40</b>	0.30	33

Transportation costs and transportation costs per boe increased in the third quarter and first nine months of 2021 as compared with the same periods in 2020 as the Company's clean oil trucking activity increased from the reactivation of oil production required to be trucked due to lack of pipeline connectivity in certain areas. In addition, the oil and gas production from the Venturion Acquisition attract higher clean oil and gas transportation charges than Cardinal's existing oil and natural gas production.

## NETBACK

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Petroleum and natural gas revenue	<b>66.99</b>	38.16	76	<b>59.98</b>	31.21	92
Royalties	<b>12.38</b>	5.42	128	<b>10.31</b>	4.59	125
Net operating expenses	<b>23.53</b>	16.82	40	<b>22.20</b>	17.58	26
Transportation expenses	<b>0.58</b>	0.34	71	<b>0.40</b>	0.30	33
Netback <sup>(1)</sup>	<b>30.50</b>	15.58	96	<b>27.07</b>	8.74	210

(1) See non-GAAP measures.

Cardinal's third quarter and first nine months of 2021 netback significantly increased as compared to the same periods in 2020 due to higher commodity prices partially offset by higher royalties and net operating and transportation expenses.

## GENERAL AND ADMINISTRATIVE ("G&A")

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Gross G&A	<b>4,887</b>	3,464	41	<b>13,607</b>	12,847	6
Capitalized G&A and overhead recoveries	<b>(1,132)</b>	(807)	40	<b>(3,002)</b>	(2,392)	26
G&A	<b>3,755</b>	2,657	41	<b>10,605</b>	10,455	1
\$/boe	<b>2.10</b>	1.64	28	<b>2.09</b>	2.08	-

In the third quarter of 2021, G&A costs and G&A costs per boe have increased by 41% and 28%, respectively, over the same period in 2020. In response to COVID-19, Cardinal decreased its Board, Executive and office compensation beginning in the second quarter of 2020. In the second quarter of 2021, the Company restored compensation to pre-pandemic levels. In addition, reduced government subsidy grants have increased G&A in the third quarter of 2021

compared to the same period in 2020. Increased capitalized G&A and overhead recoveries are a result of increased capital expenditures in the third quarter of 2021 as compared to the third quarter of 2020.

For the first nine months of 2021, G&A costs were 1% higher than the same period in 2020 as the Company restored its compensation costs to pre-pandemic levels in the second quarter of 2021 combined with decreased government subsidies in the first nine months of 2021 as compared to the same period in 2020. Partially offsetting this increase in gross G&A costs, increased capitalized G&A and overhead recoveries are a result of increased capital expenditures in the first nine months of 2021 as compared to the same period in 2020.

## SHARE-BASED COMPENSATION ("SBC")

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Gross SBC	<b>1,184</b>	794	49	<b>3,139</b>	3,348	(6)
Capitalized SBC	<b>(130)</b>	(131)	(1)	<b>(340)</b>	(403)	(16)
SBC	<b>1,054</b>	663	59	<b>2,799</b>	2,945	(5)
\$/boe	<b>0.59</b>	0.41	44	<b>0.55</b>	0.58	(5)

SBC expense increased in the third quarter of 2021 as compared to the same period in 2020 due to an increase in the grant fair value of restricted awards ("RAs") and performance awards ("PAs") outstanding.

For the first nine months of 2021, outstanding RAs and PAs with a lower average value created a 5% decrease in SBC.

As at September 30, 2021, Cardinal had 3.7 million RAs and 1.5 million PAs outstanding.

## FINANCE

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Interest - bank debt	<b>2,722</b>	2,450	11	<b>8,528</b>	5,948	43
Other finance charges, net	<b>191</b>	288	(34)	<b>982</b>	807	22
Interest - convertible debentures	-	736	(100)	<b>348</b>	1,966	(82)
Interest - secured notes	<b>940</b>	-	-	<b>2,152</b>	-	-
Interest - capital leases	<b>51</b>	74	(31)	<b>162</b>	239	(32)
Accretion	<b>1,939</b>	2,271	(15)	<b>5,725</b>	6,670	(14)
Unrealized foreign exchange (gain) loss	-	-	-	-	(23)	-
Finance	<b>5,843</b>	5,819	0	<b>17,897</b>	15,607	15
\$/boe	<b>3.26</b>	3.58	(9)	<b>3.52</b>	3.10	14
Average bank debt	<b>188,716</b>	209,060	(10)	<b>189,694</b>	205,452	(8)
Interest rate - bank debt	<b>5.7%</b>	4.7%	21	<b>6.0%</b>	3.9%	54

In the third quarter and first nine months of 2021, higher bank fees partially offset by lower average debt levels increased the interest on bank debt by 11% and 43%, respectively, over the same periods in 2020. In addition, for the third quarter and first nine months of 2021 interest on the second lien secured notes was partially offset by reduced interest on the redeemed convertible debentures as described in the Capital Funding section below.

## DEPLETION AND DEPRECIATION ("D&D")

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Depletion and depreciation	<b>19,494</b>	14,333	36	<b>53,761</b>	51,895	4
\$/boe	<b>10.88</b>	8.82	23	<b>10.58</b>	10.30	3



Depletion is calculated based on capital expenditures incurred since inception of the Company, future development costs associated with proved and probable reserves, production rates, and proved and probable 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 and D&D costs per boe increased 36% and 23%, respectively, in the third quarter of 2021 as compared to the same period in 2020 due to a higher property, plant and equipment depletable base from the Company's impairment reversal in the fourth quarter of 2020.

D&D costs increased for the first nine months of 2021 as compared with the same period in 2020 as the depletable base of the Company's property, plant and equipment has increased due to the \$122.7 million impairment reversal recorded in the fourth quarter of 2020.

## IMPAIRMENT AND IMPAIRMENT REVERSAL

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Impairment (impairment reversal)	(218,338)	-	-	(218,338)	343,000	(164)

The Company identified indicators of impairment reversal at September 30, 2021. At September 30, 2021, Cardinal determined that the estimated recoverable amounts of the Alberta Central and Alberta South CGUs exceeded the carrying amounts of \$148.1 million and \$131.1 million, respectively. Accordingly, an aggregate non-cash impairment reversal of \$218.3 million was recorded. The impairment reversal was the result of a recovery of the forecasted oil and gas commodity prices, increased economic stability and corporate market capitalization, and greater certainty in the sustainability of the commodity price increases. The estimated recoverable amounts were based on proved and probable oil and gas reserves as evaluated by the Company's independent third party reserve evaluators as at December 31, 2020 internally updated to September 30, 2021 for production and forward prices at September 30, 2021.

The following table outlines forecasted oil and gas commodity prices and exchange rates used in the Company's impairment test at September 30, 2021. The forecasted oil and gas commodity prices are based on the average used by three independent third party reserve evaluators at September 30, 2021 and are a significant assumption in assessing the estimated recoverable amount.

	WTI (USD \$/bbl) <sup>(1)</sup>	WCS (CAD \$/bbl) <sup>(1)</sup>	AECO (CAD \$/mmbtu) <sup>(1)</sup>	Exchange rate (US/CAD)
2021	\$ 75.17	\$ 79.06	\$ 4.57	0.80
2022	\$ 71.00	\$ 73.00	\$ 3.83	0.80
2023	\$ 67.77	\$ 67.92	\$ 3.25	0.80
2024	\$ 65.57	\$ 65.11	\$ 2.99	0.80
2025	\$ 66.88	\$ 66.41	\$ 3.05	0.80
Thereafter (inflation percentage and exchange rate)	2.0%	2.0%	2.0%	0.80

At March 31, 2020, Cardinal determined that the carrying amounts of the Alberta Central, Alberta South, and Alberta North CGUs exceeded the estimated recoverable amounts of \$131.4 million, \$103.4 million, and \$250.4 million, respectively. Accordingly, an aggregate non-cash impairment loss of \$343.0 million was recorded. The impairment recognized was the result of a significant decline in forecasted oil and gas commodity prices due to oil demand issues caused by COVID-19.

## DEFERRED TAXES

The Company has approximately \$1.5 billion of tax pools (\$1.4 billion are unrestricted) available to be applied against future income for tax purposes. Based on available pools and current commodity prices, 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.

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 started the process of appealing the reassessment and firmly believes it will be successful in defending its position. Although, the Company plans to appeal the reassessment, Cardinal had derecognized these tax assets in the first quarter of 2020.

## EARNINGS (LOSS), CASH FLOW FROM OPERATING ACTIVITIES, ADJUSTED FUNDS FLOW AND PAYOUT RATIOS

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Earnings (loss)	<b>262,326</b>	(4,659)	n/m	<b>245,460</b>	(483,149)	(151)
\$/share						
Basic	<b>1.76</b>	(0.04)	n/m	<b>1.74</b>	(4.26)	(141)
Diluted	<b>1.64</b>	(0.04)	n/m	<b>1.63</b>	(4.26)	(138)
Cash flow from operating activities	<b>37,410</b>	18,950	97	<b>73,148</b>	30,715	138
Adjusted funds flow	<b>37,563</b>	13,206	184	<b>79,012</b>	30,219	161
\$/share						
Basic	<b>0.25</b>	0.12	108	<b>0.56</b>	0.27	107
Diluted	<b>0.23</b>	0.12	92	<b>0.52</b>	0.27	93
Total payout ratio	<b>44%</b>	34%	29	<b>41%</b>	101%	(59)

In the third quarter and first nine months of 2021, impairment reversals, a gain recorded on the Venturion Acquisition and increased oil and natural gas prices have positively impacted the Company's earnings, cash flow from operating activities, and adjusted funds flow. This has been partially offset by increased realized losses on commodity contracts and increased operating costs.

## CAPITAL EXPENDITURES

In the third quarter of 2021, the Company executed a net capital expenditure program of \$17.5 million which included the drilling and completion of five (4.0 net) wells across our asset base in Alberta. In addition, the Company continued with the enhanced oil recovery program with CO<sub>2</sub> injection at Midale, Saskatchewan and improved our facility and pipeline infrastructure in our Central and Southern Alberta areas. The Company also continued with its well reactivation program spending \$2.1 million on recompletions and workovers throughout its operating areas.

	Three months ended			Nine months ended		
	Sep 30, 2021	Sep 30, 2020	Change %	Sep 30, 2021	Sep 30, 2020	Change %
Land	342	315	9	487	435	12
Drilling, completion, and recompletions	9,210	704	n/m	17,650	15,672	13
Equipment, facilities and pipelines	6,980	3,491	100	14,330	10,961	31
Total development capital expenditures <sup>(1)</sup>	16,532	4,510	267	32,467	27,068	20
Capitalized G&A	270	215	26	772	752	3
Other assets	31	17	82	100	119	(16)
Property acquisitions, net <sup>(2)</sup>	694	-	n/m	4,028	-	n/m
Total capital expenditures <sup>(3)</sup>	17,527	4,742	270	37,367	27,939	34

(1) Represents the total of exploration and evaluation and property, plant and equipment expenditures from the statements of cash flows less amounts recorded for capitalized G&A and other assets (included in the table of expenditures above).

(2) Amounts exclude the Venturion Acquisition.

(3) Expenditures exclude expenditures for the decommissioning obligation and non-cash capitalized share-based compensation.

On October 6, 2021, the Company successfully closed the disposition of non-core assets in the Grande Prairie area for total consideration of \$10.5 million, before closing adjustments. In the fourth quarter, the Company plans to accelerate the drilling of four wells initially planned for 2022 in order to secure access to drilling services and replace the sold production. Full year 2021 net capital expenditures are expected to be \$46 million.

## DECOMMISSIONING OBLIGATION

In the third quarter of 2021, the Company spent \$1.3 million on decommissioning obligations and also benefitted from government subsidies received through its service providers and further reduced our future decommissioning obligations by \$0.4 million. The Company acquired decommissioning obligations of \$5.6 million through the Venturion Acquisition, measured on an inflated, discounted basis.

For the first nine months of 2021, Cardinal has completed acquisitions which included \$6.1 million of future asset retirement obligations and incurred \$4.0 million of decommissioning expenditures. In addition, the Company has benefitted from government subsidies through its service providers and reduced future expenditures by \$3.8 million in the first nine months of 2021. In the first nine months of 2021, Cardinal's spending and use of government subsidies has decreased its inactive wellsite and facility decommissioning liability by \$7.8 million.

## WARRANT LIABILITY

On December 30, 2020, as part of a private placement, Cardinal issued 8,122,000 units consisting of one common share and one warrant at \$0.50 per unit for net proceeds of \$4.0 million. At December 31, 2020 the warrants issued were classified as a financial liability as a result of a cashless exercise provision; however, during the first quarter of 2021, all of the warrant holders waived their right to cashless exercise the warrants. As a result, on the date when the warrant holders relinquished their right to cashless exercise, the Company fair valued the warrant liability and recorded the resulting re-measurement expense and reclassified the warrant liability to shareholder's equity.

## LIQUIDITY AND CAPITAL RESOURCES

Capitalization table	As at		
	Sep 30, 2021	Dec 31, 2020	Change %
Net bank debt <sup>(1)</sup>	187,467	202,399	(7)
Convertible debentures	-	28,207	(100)
Secured notes	30,270	16,217	87
Common shares, outstanding	150,331,621	121,348,705	24
Market price at end of period (\$ per share)	\$ 4.18	\$ 0.82	n/m
Market capitalization	628,386	99,506	n/m
Total capitalization	846,123	346,329	144

(1) See non-GAAP measures.

## CAPITAL FUNDING

### *Bank debt*

The Company's reserves-based revolving credit facility of \$225.0 million is comprised of a \$205.0 million syndicated term credit facility and a \$20.0 million non-syndicated operating line credit facility (the "Facilities"). On May 12, 2021, the Facilities were renewed on a revolving basis until May 31, 2022 and a maturity date of May 31, 2023, 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, 2023. 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 September 30, 2021 and remains in compliance at the date of this MD&A or during the period ended.

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.

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.

### *Convertible debentures*

On February 4, 2021, Cardinal issued a notice of redemption for all of the outstanding debentures with a principal amount of \$28.2 million, effective March 11, 2021. Prior to the redemption date, Cardinal issued 22,410,000 common shares upon the conversion of \$28.0 million of principal amount of the debentures representing approximately 99.3% of the outstanding debentures. The redemption of the remaining \$0.2 million principal amount of the 8% debentures was funded through the Company's credit facility.

### *Secured Notes*

On December 30, 2020, Cardinal entered into subscription agreements for a non-brokered private placement of \$16.9 million principal amount of second lien secured notes issued at a 4% discount for net proceeds of \$16.2 million. The proceeds were utilized to repay the maturing 5.5% convertible debentures. As part of the offering, each subscriber was also required to subscribe for a pro rata number of units ("Units") totaling 8,122,000 Units, at a subscription price of \$0.50 per Unit for net proceeds of \$4.0 million. The secured notes bear interest at 12% per annum, with interest compounded and accrued semi-annually and added to the principal amount outstanding, payable on maturity. They mature on June 30, 2022, and contain an extension provision, exercisable by either Cardinal or the holders on 30 days' prior written notice, to extend the maturity date to November 30, 2022.

On July 14, 2021, Cardinal issued \$12.5 million principal amount of subordinated second lien secured notes (the "Notes") which bear interest at 10% per annum and have a three year term (the "Note Financing"). Interest will accrue semi-annually and be added to the principal amount and will be payable on maturity. As part of the Note Financing, Cardinal also agreed to issue one common share purchase warrant for each \$5.00 principal amount of Notes. Each warrant entitles the holder to acquire one common share of Cardinal at an exercise price of \$3.16 per common share for a period of 36 months commencing six months from issue date. The Note Financing was fully funded by insiders of the Company.

## CAPITAL STRUCTURE

Cardinal manages its capital to provide a flexible structure to support production maintenance, capital programs and other operational strategies. 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 and reducing its cost structure.

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 (see non-GAAP measures).

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	
	Sep 30, 2021	Dec 31, 2020
Bank debt	\$ 170,229	\$ 192,115
Secured notes	30,270	16,217
Principal amount of Convertible Debentures	-	28,207
Adjusted working capital deficiency <sup>(1)</sup>	17,238	10,284
Net debt <sup>(1)</sup>	\$ 217,737	\$ 246,823
Cash flow from operating activities	\$ 94,115	\$ 43,525
Change in non-cash working capital	(6,752)	(2,547)
Funds flow <sup>(1)</sup>	\$ 87,363	\$ 40,978
Decommissioning obligation expenditures	4,638	2,849
Transaction costs	619	-
Adjusted funds flow <sup>(1)</sup>	92,620	43,827
Net debt to adjusted funds flow <sup>(1)</sup>	2.4	5.6

(1) See non-GAAP measures

Cardinal's ratio of net debt to adjusted funds flow as at September 30, 2021 was 2.4 to 1, lower than the ratio at December 31, 2020 but still above the Company's targeted range of 2.0 to 1. This ratio has significantly decreased from year-end 2020 due to higher commodity prices and a disciplined capital program. During the first nine months of 2021, the Company has reduced its bank debt position and converted \$28.2 million of convertible debentures into common shares. In addition, despite incurring incremental bank debt from the Venturion Acquisition, Cardinal has decreased its net bank debt by 7% over the balance at December 31, 2020. Under the current commodity price environment, Cardinal expects the net debt to adjusted funds flow ratio to be within its targeted range by the end of 2021.

As discussed below in the *Liquidity* section, the Company currently has available capacity on its Facilities to satisfy its capital and asset retirement obligations for 2021 and beyond and will continue to monitor this ratio and endeavors to return to a level of a 2.0 to 1 target ratio.

## 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 requirements and provide liquidity. Cardinal had sufficient credit capacity to cover its adjusted working capital deficiency of \$17.2 million and continues to have sufficient available capacity as at 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. Present sources of capital are anticipated to be sufficient to satisfy the Company's capital program and decommissioning obligations for the 2021 fiscal year and beyond.

Since the second quarter of 2020, the Company's disciplined capital program and higher commodity prices have provided for increased cash flow from operating activities through the third quarter of 2021. In May 2021, the extension of our Facilities to a May 31, 2023 maturity combined with the settlement of all outstanding convertible debentures has solidified the Company's liquidity position.

## DIVIDENDS

In March 2020, due to the effect of the effect of COVID-19 which caused a collapse in the price of crude oil, Cardinal elected to suspend its dividend. The Company continues to evaluate market conditions to potentially reinstate its dividend in 2022.

## 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.

During the nine months ended September 30, 2021, the trustee purchased 1,095,294 treasury shares (2020 – 303,495) at an average price of \$2.55 (2020 - \$2.31) for the potential settlement of vesting RAs and PAs. For the first nine months of 2021, the Company settled 1,948,872 RAs (2020 – 1,889,544) and 282,123 PAs (2020 – nil) with 1,272,581 treasury shares (2020 – 1,039,406) held by the trustee and a cash payment of \$2.2 million (2020 – \$0.8 million) for withholding taxes. At September 30, 2021, the trustee held a remaining balance of 1,171,837 (December 31, 2020 – 1,349,124) treasury shares.

In the first nine months of 2021, Cardinal granted 1.8 million RAs and 1.0 million PAs to officers, directors and employees pursuant to the Company's bonus award plan.

On December 30, 2020, Cardinal issued 8,122,000 Units consisting of one common share and one warrant at \$0.50 per unit for net proceeds of \$4.0 million.

On July 14, 2021, Cardinal issued one common share purchase warrant for each \$5.00 principal amount of notes issued. Each warrant will entitle the holder to acquire one common share of Cardinal at an exercise price of \$3.16 which is equal to the deemed price of the common shares being issued pursuant to the Venturion Acquisition for a period of 36 months commencing six months from issue date.

<b>Equity Instruments as at</b>	<b>Nov 4, 2021</b>	<b>Sep 30, 2021</b>	<b>Dec 31, 2020</b>
Common shares, issued	151,503,458	151,503,458	122,697,829
Treasury shares	(1,193,820)	(1,171,837)	(1,349,124)
Convertible debentures	-	-	22,565,600
Warrants	10,497,000	10,497,000	8,122,000
RAs	3,735,571	3,731,670	3,992,659
PAs	1,536,246	1,536,246	846,369

## OFF BALANCE SHEET ARRANGEMENTS

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

## CONTRACTUAL OBLIGATIONS

At September 30, 2021, the Company had contractual obligations as follows:

	2021	2022	2023	2024	2025	Thereafter
Trade and other payables	75,080	-	-	-	-	-
Lease liabilities	460	1,489	1,228	73	2	-
Bank debt <sup>(1)</sup>	-	-	170,229	-	-	-
Secured notes	-	20,156	-	16,755	-	-
<b>Total contractual obligations</b>	<b>\$ 75,540</b>	<b>\$ 21,645</b>	<b>\$ 171,457</b>	<b>\$ 16,828</b>	<b>\$ 2</b>	<b>\$ -</b>

(1) Amount excludes interest

## ADDITIONAL INFORMATION

### CRITICAL ACCOUNTING ESTIMATES

There have been no changes in Cardinal's critical accounting estimates in the three and nine months ended September 30, 2021. 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, 2020.

### 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 third quarter of 2021.

### 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

In the fourth quarter, the Company plans to accelerate the drilling of four wells initially planned for 2022 in order to secure access to drilling services and replace the sold production in the Grande Prairie area. Full year net capital expenditures are expected to be \$46 million. At year-end 2021, we are projecting to have \$175 to \$180 million of net debt which will be comprised of \$160 to \$165 million of net bank debt with the remainder being term debt.

## QUARTERLY DATA

	Sep 30, 2021	Jun 30, 2021	Mar 31, 2021	Dec 31, 2020
<b>Production</b>				
Oil (bbl/d)	16,356	14,767	14,781	15,149
Natural gas (mcf/d)	15,101	13,173	14,364	13,653
NGL (bbl/d)	600	986	1,210	1,200
Oil equivalent (boe/d)	19,473	17,949	18,385	18,625
<b>Financial</b>				
Revenue	120,007	99,106	85,547	66,065
Earnings (loss)	262,326	9,095	(25,961)	119,988
Basic per share (\$)	1.76	0.06	(0.20)	1.06
Diluted per share (\$)	1.64	0.06	(0.20)	1.04
Cash flow from operating activities	37,410	22,463	13,275	12,810
Adjusted funds flow <sup>(1)</sup>	37,563	25,300	16,149	13,608
Basic per share (\$)	0.25	0.18	0.12	0.12
Diluted per share (\$)	0.23	0.16	0.12	0.12
Adjusted working capital deficiency <sup>(1)</sup>	17,238	10,662	(12,655)	(10,284)
Total assets	1,053,162	747,248	750,410	749,133
Bank debt	170,229	178,239	188,984	192,115
Principal amount of convertible debentures	-	-	-	28,207
Secured notes	30,270	17,429	16,809	16,217
Total long-term liabilities <sup>(2)</sup>	283,934	275,153	287,370	316,952
Shareholders' equity	679,549	398,147	388,753	372,848
Common shares outstanding, net (000's) <sup>(3)</sup>	150,332	144,172	144,388	121,349
Diluted shares outstanding, net (000's) <sup>(3)</sup>	166,097	157,606	157,891	134,310

	Sep 30, 2020	Jun 30, 2020	Mar 31, 2020	Dec 31, 2019
<b>Production</b>				
Oil (bbl/d)	14,582	14,251	17,093	16,757
Natural gas (mcf/d)	13,448	12,873	14,368	15,459
NGL (bbl/d)	834	772	836	893
Oil equivalent (boe/d)	17,657	17,169	20,323	20,227
<b>Financial</b>				
Revenue	61,982	31,711	63,473	93,272
Earnings (loss)	(4,659)	(27,546)	(450,944)	(15,094)
Basic and diluted per share (\$)	(0.04)	(0.24)	(3.98)	(0.13)
Cash flow from operating activities	18,950	(10,276)	22,041	31,714
Adjusted funds flow <sup>(1)</sup>	13,206	2,065	14,948	28,864
Basic and diluted per share (\$)	0.12	0.02	0.13	0.25
Adjusted working capital deficiency <sup>(1)</sup>	(10,898)	(5,012)	(35,909)	(29,291)
Total assets	633,024	676,560	703,401	1,149,827
Bank debt	204,018	217,206	192,965	173,308
Principal amount of convertible debentures	44,451	44,451	44,931	45,000
Total long-term liabilities <sup>(2)</sup>	102,579	115,559	306,973	284,251
Shareholders' equity	251,859	253,804	280,608	737,902
Common shares outstanding, net (000's) <sup>(3)</sup>	113,496	113,382	113,354	113,657
Diluted shares outstanding, net (000's) <sup>(3)</sup>	118,490	118,712	118,797	118,271

See non-GAAP measures

(2) Includes lease liabilities and decommissioning obligation.

(3) Net of treasury shares



Since the fourth quarter of 2019, production has been relatively consistent but fluctuations in commodity prices have resulted in revenue variances. In the second quarter of 2020, reduced oil demand due to concerns over the effect of COVID-19 has significantly impacted oil production, pricing and revenue. The Company shut-in higher cost production in the second quarter of 2020 and has subsequently brought back on certain production with supporting economics. Reduced production and low commodity prices significantly impacted revenue, cash flow from operating activities and adjusted funds flow in 2020. In the first nine months of 2021, a rapid increase in oil prices created significant realized and unrealized hedging losses which negatively impacted earnings, cash flow from operating activities and adjusted funds flow.

The Company's earnings also fluctuate with non-cash impairment charges and reversals of previous impairments on its assets as shown with a \$23.4 million impairment charge in the fourth quarter of 2019 and an impairment charge of \$343.0 million in the first quarter of 2020. A portion of this impairment charge was reversed in the fourth quarter of 2020 when forecasted oil prices partially recovered which positively impacted earnings by \$122.7 million. In the third quarter of 2021, further strengthening of commodity prices and confidence in the sustainability of price increases allowed the Company to reverse impairments by \$218.3 million. In addition, the Company recorded a gain on the Venturion Acquisition of \$21.8 million. As the Company did not have sufficient certainty regarding future utilization of all of its tax pools, Cardinal derecognized its deferred tax asset and recognized an expense of \$102.9 million in the first quarter of 2020. In the first quarter of 2021, the Company recognized a re-measurement loss on its warrant liability of \$12.9 million.

## 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:

- estimated tax pools, future taxability and future taxable income;
- expectations with respect to the outcome of the CRA dispute;
- plans to manage liquidity and continue to reduce debt;
- 2021 capital expenditure plans;
- year-end 2021 net debt and the components thereof;
- Cardinal's business strategy, goals and management focus;
- Cardinal's dividend 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;
- sources of funds for the Company's operations, capital expenditures, and decommissioning obligations;
- 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; 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 the impact of COVID-19; 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 timing and success of our cost cutting initiatives, the availability and cost of labor and services, the impact of increasing competition, conditions in general economic and financial markets, availability of drilling and related equipment, effects of regulation by governmental agencies, the ability to obtain financing on acceptable terms which are subject to change based on commodity prices, market conditions, and drilling success .

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; impact of COVID-19 and the ability of the Company to carry on operations as contemplated in light of COVID-19; 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 2019, 2020 and 2021 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		CONVENTIONAL		
	CRUDE OIL	HEAVY OIL	NGL	NATURAL GAS	TOTAL (BOE/D)
Q3/21	54%	30%	3%	13%	19,473
Q2/21	56%	26%	6%	12%	17,949
Q1/21	54%	26%	7%	13%	18,385
Q4/20	55%	26%	7%	12%	18,625
Q3/20	56%	27%	5%	12%	17,657
Q2/20	57%	27%	4%	12%	17,169
Q1/20	56%	28%	4%	12%	20,323
Q4/19	56%	27%	4%	13%	20,227
3Q/21	55%	27%	5%	13%	18,606
3Q/20	56%	27%	4%	12%	18,380
Venturion	27%	56%	1%	16%	2,400

## 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
"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