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 months and year ended December 31, 2021 and is dated March 14, 2022. The MD&A should be read in conjunction with Cardinal's audited consolidated financial statements as at and for the years ended December 31, 2021 and 2020. 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.

This MD&A contains certain specified measures consisting of non-GAAP financial measures, capital management measures, non-GAAP financial ratios, and supplementary financial measures. Since these specified financial measures may not have a standardized meaning, they must be clearly defined and, where required, reconciled with their nearest GAAP measure. See “Non-GAAP and Other Financial Measures” for further information on the definition, calculation and reconciliation of these measures.

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.

Climate Reporting Regulations
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. If the Company is not able to meet future sustainability reporting requirements of regulators or current and future expectations of investors, insurance providers, or other stakeholders, its business and ability to attract and retain skilled employees, obtain regulatory permits, licenses, registrations, approvals, and authorizations from various governmental authorities, and raise capital may be adversely affected. The Company continues to monitor progress on these reporting requirements and has not yet quantified the cost to comply with these standards.

ANNUAL AND FOURTH QUARTER 2021 HIGHLIGHTS

- Fourth quarter 2021 production increased 10% over the same period in 2020;
- Petroleum and natural gas revenue increased 113% in the fourth quarter of 2021 as compared to the same period in 2020 due to increased pricing and production while annual 2021 revenue increased 99% over 2020;
- In the fourth quarter of 2021, adjusted funds flow(1) increased 293% to $53.5 million ($0.36 per common share – basic)(1) as compared to the fourth quarter of 2020 as shown below. Adjusted funds flow for 2021 increased to $132.5 million, a 202% increase over 2020;
- Free cash flow(1) increased to $35.4 million in the fourth quarter of 2021 contributing to a fourth quarter net debt(1) reduction of $39.5 million over the third quarter of 2021;
- During 2021, Cardinal reduced its net debt position by $68.6 million or 28% of the balance at the end of 2020;
- Net debt at December 31, 2021 decreased to $178.2 million leading to a net debt to adjusted funds flow ratio(1) of 1.3.

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Cash flow from operating activities	**51,973**	12,810	n/m	**125,121**	43,525	187
Change in non-cash working capital	**(789)**	202	n/m	**414**	(2,547)	(116)
Funds flow	**51,184**	13,012	293	**125,535**	40,978	206
Decommissioning expenditures	**2,260**	596	279	**6,302**	2,849	121
Transaction costs	**51**	-	n/m	**670**	-	n/m
Adjusted funds flow	**53,495**	13,608	293	**132,507**	43,827	202

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

OPERATIONS

ACQUISITION

On July 15, 2021, the Company closed the acquisition of Venturion Oil Limited ("Venturion") for a purchase price of approximately $46 million (the "Venturion Acquisition"). The consideration consisted of 6.3 million of Cardinal common shares and approximately $27.8 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			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Light oil (bbl/d)	**7,509**	6,929	8	**7,293**	7,173	2
Medium / heavy oil (bbl/d)	**9,857**	8,220	20	**8,533**	8,093	5
Crude oil (bbl/d)	**17,366**	15,149	15	**15,826**	15,266	4
Natural gas (mcf/d)	**13,733**	13,653	1	**14,093**	13,585	4
NGL (bbl/d)	**870**	1,200	(28)	**915**	911	-
boe/d	**20,525**	18,625	10	**19,090**	18,442	4
% Crude oil and NGL production	**89%**	88%	1	**88%**	88%	-

Fourth 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 fourth quarter of 2021 compared to the same period in 2020 predominantly due to unplanned third party facility downtime in our North CGU.

Production for 2021 increased 4% over the same period in 2020 due to incremental production from the Venturion Acquisition partially offset by production disruptions from unplanned third party facility downtime 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 which added incremental production in the second half of 2021.

PETROLEUM AND NATURAL GAS REVENUE

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Light oil	**60,202**	28,811	109	**200,108**	104,256	92
Medium / heavy oil	**70,065**	31,943	119	**213,014**	104,546	104
Crude oil	**130,267**	60,754	114	**413,122**	208,802	98
NGL	**3,797**	2,183	74	**11,945**	5,988	99
Natural gas	**6,345**	3,128	103	**20,002**	8,441	137
Petroleum and natural gas revenue	**140,409**	66,065	113	**445,069**	223,231	99
Cardinal average prices						
Light oil ($/bbl)	**87.14**	45.20	93	**75.17**	39.71	89
Medium / heavy oil ($/bbl)	**77.26**	42.24	83	**68.39**	35.29	94
Natural gas ($/mcf)	**5.02**	2.49	102	**3.89**	1.70	129
Equivalent ($/boe)	**74.36**	38.56	93	**63.88**	33.07	93
Benchmark prices						
Crude oil - WTI (US $/bbl)	**77.19**	42.66	81	**67.92**	39.40	72
Crude oil - Edmonton light (Cdn $/bbl)	**93.15**	49.98	86	**80.09**	45.18	77
Crude oil - WCS (Cdn $/bbl)	**78.72**	43.42	81	**68.74**	35.59	93
Natural gas - AECO Spot (Cdn $/gj)	**4.41**	2.50	76	**3.44**	2.11	63
Exchange rate - (US/Cdn)	**0.79**	0.77	3	**0.80**	0.75	7

Petroleum and natural gas revenue increased 113% in the fourth quarter of 2021 as compared to the same period in 2020 due to a 93% increase in realized commodity prices combined with increased production. In the fourth quarter of 2021, the Company's light oil price increase of 93% was greater than the Edmonton light benchmark price increase of 86% due to a portion of the Company's light oil production being priced at Cromer which attracted a higher price during the fourth quarter. During the fourth quarter of 2021, Cardinal's medium / heavy oil price increased 83% over the same period in 2020, which was comparable to the Western Canadian Select ("WCS") benchmark price increase of 81%. The Company's fourth quarter 2021 natural gas price increased 102% over the same period in 2020 as compared to the AECO benchmark increase of 76% due to a portion of the Company's natural gas being sold into the Chicago based market which attracted a higher price in the fourth quarter of 2021.

For 2021, Cardinal's light oil realized price increased more than the Edmonton light benchmark price increase due to the aforementioned higher Cromer based priced oil production while the medium / heavy realized price increased proportionately with the associated WCS benchmark when compared to 2020. The Company's natural gas price increased by 129% over the same period in 2020 compared to a 63% increase in the AECO benchmark due to the Company selling a portion of the natural gas production from the Venturion Acquisition into the Chicago based pricing market which attracted a higher average price in 2021.

FINANCIAL INSTRUMENTS - COMMODITY

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Realized loss - commodity contracts	**(8,951)**	(6,131)	46	**(46,835)**	(495)	n/m
Unrealized gain/(loss) - commodity contracts	**8,331**	(2,418)	n/m	**10,004**	(6,593)	(252)

Managing the variability in cash flow from operating activities, funds flow, and adjusted funds flow is part 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. Movements in the price of crude oil, natural gas and foreign exchange rates are monitored by Cardinal and the financial impact can be managed through the use of derivatives with investment-grade counterparties. The Company considers these derivative contracts to be an effective means to manage variability in cash flow from operating activities, funds flow, and adjusted funds flow.

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. During the fourth quarter of 2021, including the commodity contracts acquired with the Venturion Acquisition, Cardinal had a $9.0 million realized loss on commodity contracts due to the significant increase in oil and natural gas prices experienced during the quarter. With the exception of the two month fixed WCS differential contract below, the Company has elected to remain unhedged for 2022 and beyond due to backwardated commodity pricing curves combined with reduced corporate risk from lower debt levels and forecasted expenditures. The Company will continue to monitor the spot and forward prices as well as expected expenditure levels throughout 2022.

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

Commodity	Financial Instrument	Period	Average Volume	Average Strike Price
Crude Oil	USD WCS Differential Swap	Dec 2022 - Jan 2023	2,500 bbl/d	USD $ (13.50)

ROYALTIES

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Royalties	**27,693**	10,109	174	**80,051**	33,246	141
Percent of revenue	**19.7%**	15.3%	29	**18.0%**	14.9%	21
$/boe	**14.67**	5.90	149	**11.49**	4.93	133

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 fourth quarter and for 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 fourth quarter and for 2021 as compared to the same periods in 2020.

NET OPERATING EXPENSES

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Operating expenses	**42,932**	29,870	44	**158,529**	120,600	31
Less: Processing and other revenue	**(842)**	(1,024)	(18)	**(3,686)**	(3,224)	14
Net operating expenses [1]	**42,090**	28,846	46	**154,843**	117,376	32
$/boe	**22.29**	16.84	32	**22.22**	17.39	28

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

During the fourth quarter of 2021, net operating expenses per boe increased by 32% over the same period 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 fourth 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 114% more than the same period in 2020. These higher power rates have increased our fourth quarter power costs by approximately 59% in comparison to the fourth quarter of 2020.

For 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 28% over the same period in 2020.

TRANSPORTATION EXPENSES

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Transportation expenses	**1,378**	436	216	**3,406**	1,937	76
$/boe	**0.73**	0.25	192	**0.49**	0.29	69

Transportation costs and transportation costs per boe increased in the fourth quarter and for 2021 as compared with the same periods in 2020 as the oil and gas production acquired 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			Year ended		
($/boe)	**Dec 31, 2021**	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Petroleum and natural gas revenue	**74.36**	38.56	93	**63.88**	33.07	93
Royalties	**14.67**	5.90	149	**11.49**	4.93	133
Net operating expenses	**22.29**	16.84	32	**22.22**	17.39	28
Transportation expenses	**0.73**	0.25	192	**0.49**	0.29	69
Netback[1]	**36.67**	15.57	136	**29.68**	10.46	184

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

Cardinal's fourth quarter and 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			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Gross G&A	**5,934**	3,565	66	**19,541**	16,412	19
Capitalized G&A and overhead recoveries	**(1,506)**	(747)	102	**(4,508)**	(3,139)	44
G&A	**4,428**	2,818	57	**15,033**	13,273	13
$/boe	**2.34**	1.64	43	**2.15**	1.97	9

In the fourth quarter of 2021, G&A costs and G&A costs per boe have increased by 57% and 43%, 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, government subsidy grants ended in 2021 which has increased G&A in the fourth quarter of 2021 compared to the same period in 2020. Increased capitalized G&A and overhead recoveries are a result of increased development capital expenditures in the fourth quarter of 2021 as compared to the same period in 2020.

For 2021, G&A costs per boe were 9% higher than 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 2021 as compared to 2020. Partially offsetting this increase in gross G&A costs, increased capitalized G&A and overhead recoveries are a result of increased development capital expenditures in 2021 as compared to 2020.

SHARE-BASED COMPENSATION ("SBC")

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Gross SBC	**1,847**	915	102	**4,986**	4,263	17
Capitalized SBC	**(232)**	(116)	100	**(572)**	(519)	10
SBC	**1,615**	799	102	**4,414**	3,744	18
$/boe	**0.86**	0.47	83	**0.63**	0.55	15

SBC expense increased in the fourth quarter and in 2021 as compared to the same periods in 2020 due to an increase in the grant fair value of restricted bonus awards ("RAs") and performance bonus awards ("PAs") outstanding. In addition, the Company's estimated performance multiplier on vesting awards has increased the share-based compensation for the fourth quarter and full year of 2021 as compared to the same periods in 2020.

As at December 31, 2021, Cardinal had 3.7 million RAs and 1.5 million PAs outstanding.

FINANCE

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Interest - bank debt	**2,098**	2,955	(29)	**10,627**	8,903	19
Other finance expenses, net	**231**	316	(27)	**1,213**	1,123	8
Interest - convertible debentures	**-**	779	(100)	**348**	2,745	(87)
Interest - secured notes	**763**	13	-	**2,915**	13	n/m
Interest - capital leases	**44**	66	(33)	**206**	306	(33)
Accretion	**1,966**	2,137	(8)	**7,690**	8,806	(13)
Unrealized foreign exchange gain	**-**	-	-	**-**	(23)	(100)
Finance	**5,102**	6,266	(19)	**22,999**	21,873	5
$/boe	**3.11**	3.65	(15)	**3.41**	3.24	5
Average bank debt	**166,824**	206,448	(19)	**183,911**	205,702	(11)
Interest rate - bank debt	**5.0%**	5.7%	(12)	**5.8%**	4.3%	35

In the fourth quarter of 2021, lower bank fees combined with lower average debt levels decreased the interest on bank debt by 29% as compared with the same period in 2020. In addition, for the fourth quarter of 2021 interest on the second lien secured notes was partially offset by reduced interest on the redeemed convertible debentures that were redeemed on March 11, 2021 as described in the Capital Funding section below.

For 2021, the Company's bank debt interest increased 19% over 2020 due to higher bank fees partially offset by lower average debt levels as compared to 2020. In 2021, incremental interest on the Company's secured notes was partially offset by reduced interest from the redeemed convertible debentures that were redeemed on March 11, 2021.

DEPLETION AND DEPRECIATION ("D&D")

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Depletion and depreciation	**24,773**	15,185	63	**78,534**	67,080	17
$/boe	**11.91**	8.86	34	**10.94**	9.94	10

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 and D&D costs per boe increased in the fourth quarter and full year of 2021 as compared to the same periods in 2020 due to a higher property, plant and equipment depletable base from the Company’s impairment reversals in the fourth quarter of 2020 and in the third quarter of 2021. This increase was partially offset by increased proved and probable reserves in 2021 which decreased the Company's depletion rate in 2021.

IMPAIRMENT AND IMPAIRMENT REVERSAL

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Impairment (impairment reversal)	**-**	(122,369)	(100)	**(218,338)**	220,631	(199)

At December 31, 2021, the Company completed assessments of internal and external indicators of impairment reversal. As a result, the Company performed an impairment test for its Alberta Central CGU. It was determined that the recoverable amount of the Alberta Central CGU approximated its carrying value and thus no impairment or impairment reversal was recorded.

The estimated recoverable value of the Company’s Alberta Central CGU was estimated as the value in use based on the net present value of before tax cash flows from proved and probable oil and gas reserves estimated by Cardinal’s independent third party reserve evaluator discounted between 12% and 20% depending on the reserve composition. The estimated recoverable amount of the CGU involves significant estimates including the estimate of proved and probable oil and gas reserves and the discount rates. The estimate of proved and probable oil and gas reserves includes significant assumptions related to forecasted oil and gas commodity prices, forecasted production, forecasted operating costs, forecasted royalty costs and forecasted future development costs. In determining the appropriate discount rate, Cardinal considered various characteristics and risks of the assets.

The following table outlines forecasted oil and gas commodity prices and exchange rates used in the Company's impairment test at December 31, 2021. The forecasted oil and gas commodity prices are based on the average price forecasts of three independent third party reserve evaluators at December 31, 2021 and are a significant assumption in assessing the estimated recoverable amount.

	WTI (USD $/bbl)	WCS (CAD $/bbl)	AECO (CAD $/mmbtu)	Exchange rate (US/CAD)
2022	$ 72.83	$ 74.43	$ 3.56	0.80
2023	$ 68.78	$ 69.17	$ 3.20	0.80
2024	$ 66.76	$ 66.54	$ 3.05	0.80
2025	$ 68.09	$ 67.87	$ 3.10	0.80
2026	$ 69.45	$ 69.23	$ 3.17	0.80
Thereafter (inflation percentage and exchange rate)	2.0%	2.0%	2.0%	0.80

At September 30, 2021, the Company identified indicators of impairment reversal for certain CGUs with past impairment. 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, increase in corporate market capitalization, and greater certainty in the sustainability of the commodity price increases.

The estimated recoverable value of the Company's CGUs was estimated as the value in use based on the net present value of before tax cash flows from proved and probable oil and gas reserves estimated by Cardinal's independent third party reserve evaluator internally updated to September 30, 2021 for production and forward prices at September 30, 2021 and discounted between 12% and 20% depending on the reserve composition. The estimated recoverable amount of each CGU involves significant estimates including the estimate of proved and probable oil and gas reserves and the discount rates. The estimate of proved and probable oil and gas reserves included significant assumptions related to forecasted oil and gas commodity prices, forecasted production, forecasted operating costs, forecasted royalty costs and forecasted future development costs. In determining the appropriate discount rate, Cardinal considered various characteristics and risks of the assets.

Impairment reversal is recognized to the extent that impairment had been previously recorded, but are limited to the net book value that would exist had the original impairment never been recorded, including estimates for depletion.

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 price forecasts of three independent third party reserve evaluators at September 30, 2021 and are a significant assumption in assessing the estimated recoverable amount.

	WTI (USD $/bbl)	WCS (CAD $/bbl)	AECO (CAD $/mmbtu)	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

2020:
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 $130.6 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 coronavirus pandemic ("COVID-19").

At December 31, 2020, Cardinal determined that the estimated recoverable amounts of the Alberta Central, Alberta South, and Alberta North CGUs exceeded the carrying amounts of $116.7 million, $90.7 million, and $222.9 million, respectively. Accordingly, an aggregate non-cash impairment reversal of $122.7 million was recorded. The impairment reversal was the result of a partial recovery of the forecasted oil and gas commodity prices, increased economic stability, and certainty in the oil and gas industry. 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.

In 2020, management expensed $0.3 million of exploration and evaluation assets associated with undeveloped land with pending expiries due to no future planned development activities.

DEFERRED TAXES

At December 31, 2021, 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 tax pools, forecasted capital expenditures and forecasted commodity prices at December 31, 2021 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.

		As at December 31		
Tax Pool Balance	**Maximum Annual Claim**	**2021**	2020	Change %
COGPE	10%	**491,696**	522,425	(6)
CEE and non-capital losses	100%	**720,016**	627,724	15
CDE	30%	**149,209**	139,026	7
Undepreciated capital cost	25%	**130,799**	119,788	9
Other	20%	**498**	2,197	(77)
Total		**1,492,218**	1,411,160	6

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 firmly believes it will be successful in defending its position. Although, the Company has appealed the reassessment, Cardinal derecognized these tax pools in the first quarter of 2020.

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

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Earnings (loss)	**38,955**	119,988	(68)	**284,415**	(363,160)	(178)
$/share						
Basic	**0.26**	1.06	(75)	**1.98**	(3.20)	(162)
Diluted	**0.24**	1.04	(77)	**1.84**	(3.20)	(158)
Cash flow from operating activities	**51,973**	12,810	n/m	**125,121**	43,525	187
$/share						
Basic	**0.35**	0.11	218	**0.87**	0.38	129
Diluted	**0.32**	0.11	191	**0.81**	0.38	113
Adjusted funds flow	**53,495**	13,608	293	**132,507**	43,827	202
$/share(1)						
Basic	**0.36**	0.12	200	**0.92**	0.39	136
Diluted	**0.33**	0.12	175	**0.86**	0.39	121
Total payout ratio(1)	**34%**	24%	42	**38%**	77%	(51)

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

In the fourth quarter of 2021, higher commodity prices increased the Company's earnings, cash flow from operating activities and adjusted funds flow. Fourth quarter earnings were lower than the same period in 2020 as there was an impairment reversal of $122.7 million recorded in the fourth quarter of 2020.

In 2021, significantly increased commodity prices have positively impacted the Company's earnings, cash flow from operating activities, and adjusted funds flow. In addition, impairment reversals and gains recorded on acquisitions and dispositions have increased the Company's earnings in 2021. This has been partially offset by increased realized losses on commodity contracts and increased operating costs.

CAPITAL EXPENDITURES

In the fourth quarter of 2021, the Company executed a capital expenditure program of $8.7 million which included the drilling of three (3.0 net) wells and completion of four (4.0 net) wells in Southern Alberta. In addition, the Company continued with the enhanced oil recovery program with CO_2 injection at Midale, Saskatchewan and improved our facility and pipeline infrastructure throughout our asset base. The Company also continued with its well reactivation program spending $2.8 million on recompletions and workovers throughout its operating areas. In the fourth quarter, Cardinal disposed of non-core assets in the Grande Prairie area with associated production of approximately 200 boe/d for net proceeds of $10.4 million.

	Three months ended			Year ended		
	Dec 31, 2021	Dec 31, 2020	Change %	**Dec 31, 2021**	Dec 31, 2020	Change %
Land	**622**	35	n/m	**1,109**	470	136
Drilling, completion, and recompletions	**8,989**	562	n/m	**26,638**	16,234	64
Equipment, facilities and pipelines	**8,499**	2,728	212	**22,829**	13,689	67
Development capital expenditures (1)	**18,110**	3,325	n/m	**50,576**	30,393	66
Capitalized G&A	**567**	233	143	**1,339**	985	36
Other assets	**54**	9	n/m	**154**	128	20
Property dispositions, net(2)	**(10,069)**	-	n/m	**(6,041)**	-	n/m
Capital expenditures(1)	**8,662**	3,567	143	**46,028**	31,506	46

(1) See Non-GAAP and other financial measures
(2) Amounts exclude the Venturion Acquisition.

DECOMMISSIONING OBLIGATION

In the fourth quarter of 2021, the Company spent $2.3 million on decommissioning obligations and disposed of $0.7 million of future decommissioning obligations.

For 2021, Cardinal completed acquisitions which included $6.3 million of future decommissioning obligations and spent $6.3 million of decommissioning expenditures. In addition, the Company has benefitted from government subsidies through its service providers and reduced future expenditures by $4.1 million in 2021. In 2021, Cardinal’s spending and use of government subsidies has decreased its inactive wellsite and facility decommissioning liability by $10.4 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 Dec 31, 2021	Dec 31, 2020	Change %
Net bank debt [1]	**$ 165,647**	$ 202,399	(18)
Convertible debentures	**-**	28,207	(100)
Secured notes	**12,546**	16,217	(23)
Common shares, outstanding	**150,441,686**	121,348,705	24
Market price at end of period ($ per share)	**$ 4.27**	$ 0.82	n/m
Market capitalization	**642,386**	99,506	n/m
	$ 820,579	$ 346,329	137

(1) See Non-GAAP and other financial 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 December 31, 2021 and remains in compliance at the date of this MD&A.

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. On November 25, 2021, Cardinal settled the notes for a payment of $19.2 million which included the principal amount, $1.9 million of accrued interest and a pre-payment fee of $0.4 million.

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.

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			
		Dec 31, 2021		Dec 31, 2020
Bank debt	**$**	**142,412**	$	192,115
Secured notes		**12,546**		16,217
Principal amount of Convertible Debentures		**-**		28,207
Adjusted working capital deficiency[1]		**23,235**		10,284
Net debt [1]	**$**	**178,193**	$	246,823
Cash flow from operating activities	**$**	**125,121**	$	43,525
Change in non-cash working capital		**414**		(2,547)
Funds flow [1]	**$**	**125,535**	$	40,978
Decommissioning obligation expenditures		**6,302**		2,849
Transaction costs		**670**		-
Adjusted funds flow [1]	**$**	**132,507**	$	43,827
Net debt to adjusted funds flow [1]		**1.3**		5.6

(1) See Non-GAAP and other financial measures

Cardinal's ratio of net debt to adjusted funds flow as at December 31, 2021 was 1.3 to 1, which is below the Company's targeted range of 2.0 to 1. This ratio has significantly decreased from year-end 2020 due to higher commodity prices, a disciplined capital expenditure program and the Company's debt reduction strategy. During 2021, the Company has reduced its net bank debt by 18%, converted $28.0 million of convertible debentures into common shares and reduced the amount of the secured notes by 23%. In aggregate, in 2021, Cardinal has reduced its net debt by $68.6 million or 28% while increasing its adjusted funds flow by over 200%. Under the current commodity price environment, Cardinal expects to continue with its debt reduction strategy in 2022.

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 2022 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 $23.2 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 and adjusted funds flow. Present sources of capital are anticipated to be sufficient to satisfy the Company's capital expenditure program and decommissioning obligations for the 2022 fiscal year and beyond.

Since the second quarter of 2020, the Company's disciplined capital expenditure program and higher commodity prices have provided for increased cash flow from operating activities through 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 it’s 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 year ended December 31, 2021, the independent trustee purchased 1,394,358 treasury shares (2020 – 679,436) at an average price of $2.87 (2020 - $1.55) for the potential settlement of vesting RAs and PAs. In 2021, the Company settled 2,009,757 RAs (2020 – 2,089,340) and 282,123 PAs (2020 – nil) with 1,306,710 treasury shares (2020 – 1,146,394) held by the trustee and a cash payment of $2.3 million (2020 – $0.9 million) for withholding taxes. At December 31, 2021, the trustee held a remaining balance of 1,436,772 (December 31, 2020 – 1,349,124) treasury shares.

In 2021, Cardinal granted 1.9 million (2020 – 1.7 million) RAs and 1.0 million (2020 – 0.8 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 per common share, 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.

Equity Instruments as at	Mar 14, 2022	Dec 31, 2021	Dec 31, 2020
Common shares, issued	151,878,458	151,878,458	122,697,829
Treasury shares	(2,284,654)	(1,436,772)	(1,349,124)
Convertible debentures	-	-	22,565,600
Warrants	10,122,000	10,122,000	8,122,000
RAs	3,666,736	3,665,598	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 December 31, 2021, the Company had contractual obligations as follows:

	2022	2023	2024	2025	2026	Thereafter
Trade and other payables	$ 78,216	-	-	-	-	-
Lease liabilities	1,489	1,228	72	2	-	-
Bank debt [1]	-	142,412	-	-	-	-
Secured notes	-	-	16,755	-	-	-
Power purchase commitment	5,382	5,382	4,483	-	-	-
Total contractual obligations	**$ 85,087**	**$ 149,022**	**$ 21,310**	**$ 2**	**$ -**	**$ -**

(1) Amount excludes interest

ADDITIONAL INFORMATION

CRITICAL ACCOUNTING ESTIMATES

Cardinal's significant accounting policies including the use of judgments and key sources of estimation uncertainty are disclosed in note 3 to the December 31, 2021 financial statements. Certain accounting policies require that management make appropriate decisions with respect to the formulation of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Cardinal continuously refines its management and reporting systems to ensure that accurate, timely and useful information is gathered and disseminated. Cardinal’s financial and operating results incorporate certain estimates including the following:

- Estimated accruals for revenues, royalties and operating expenses where actual revenues and costs have not been received;
- Estimated capital expenditures where actual costs have not been received or for projects that are in progress;
- Estimated depletion is based on estimates of oil and gas reserves that Cardinal expects to recover in the future. As a key component in the D&D calculation, the reserve estimates have a significant impact on net earnings and the Company's financial results could differ if there is a revision in our estimate of reserve quantities;
- Estimated future recoverable value of property, plant and equipment and any related impairment charges or recoveries are assessed for impairment when circumstances suggest the carrying amount may exceed its recoverable amount. The recoverable amount calculation requires the use of estimates which are subject to change as new information becomes available. Changes in assumptions used in determining the recoverable amount could affect the carrying value of the related assets;
- Estimated fair values of derivative contracts which are used to manage commodity price and foreign exchange risk on borrowings are determined using valuation models which require assumptions regarding the amount and timing of future cash flows and discount rates. As the Company's assumptions rely on

external market data, the resulting fair value estimates may not be indicative of the amounts realized or settled and are therefore subject to market uncertainty;

- Estimated fair value of warrant liability is calculated based on assumptions including volatility and risk-free interest rate which are external market data, the resulting fair value estimates may not be indicative of the amounts realized or settled and are therefore subject to market uncertainty;
- The decommissioning obligation is based on assumptions which take into consideration current economic factors and experience to date which we believe are reasonable. The actual cost of the Company's decommissioning obligation may change in response to numerous factors; and
- Estimated deferred income tax assets and liabilities are based on current tax interpretations, regulations and legislation which are subject to change. As a result, there are usually a number of tax matters under review and therefore income taxes are subject to measurement uncertainty.

Past estimates are reviewed and analyzed regularly to improve the accuracy of future estimates. New information and changed circumstances may result in actual results or changes to estimate amounts that differ materially from current estimates.

RISKS

Financial Risk

Financial risk is the risk of loss or lost opportunity resulting from financial management and market conditions that could have a positive or negative impact on Cardinal's business. Financial risks the Company is exposed to include: marketing production at an acceptable price given market conditions; finding and producing reserves at a reasonable cost; volatility in market prices for oil and natural gas; fluctuations in foreign exchange and interest rates; stock market volatility; debt service which may limit timing or amount of dividends as well as market price of shares; the continued availability of adequate debt and equity financing and funds flow to fund planned expenditures; sufficient liquidity for future operations; lost revenue or increased expenditures as a result of delayed or denied environmental, safety or regulatory approvals; cost of capital risk to carry out the Company's operations; and uncertainties associated with credit facilities and counterparty credit risk.

Operational Risk

Operational risk is the risk of loss or lost opportunity resulting from operating and capital activities that, by their nature, could have an impact on the Company's ability to achieve objectives. Operational risks that Cardinal is exposed to include: uncertainties associated with estimating oil and natural gas reserves; incorrect assessments of the value of acquisitions and exploration and development programs; failure to realize the anticipated benefits of acquisitions; uncertainties associated with partner plans and approvals; operational matters related to non-operated properties; inability to secure adequate product transportation; delays in business operations, pipeline restrictions, blowouts; unforeseen title defects; increased competition for, among other things, capital, acquisitions of reserves and undeveloped lands; competition for and availability of qualified personnel or management; loss of key personnel; unexpected geological, technical, drilling, construction and processing problems; availability of insurance; competitive action by other companies; the ability of suppliers to meet commitments and risks; and uncertainties related to oil and gas interests and operations on tribal lands.

Safety, Environmental and Regulatory Risks

Safety, environmental and regulatory risks are the risks of loss or lost opportunity resulting from changes to laws governing safety, the environment, royalties and taxation. Safety, environmental and regulatory risks that Cardinal is exposed to include: aboriginal land claims; uncertainties associated with regulatory approvals; uncertainty of government policy changes; the risk of carrying out operations with minimal environmental impact; changes in or adoption of new laws and regulations or changes in how they are interpreted or enforced; obtaining required approvals of regulatory authorities and stakeholder support for activities and growth plans.

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.

Information Systems

Our operations rely heavily on information technology, such as computer hardware and software systems, to properly operate our business. These systems could be damaged, corrupted or interrupted by natural disasters, telecommunications failures, power loss, malicious acts or code, computer viruses, physical or electronic security breaches, user misuse or user error. A system disruption or breach could adversely impact our reputation, financial condition, results of operations and cash flows.

Risk Management

Cardinal is committed to identifying and managing its risks in the near term, as well as on a strategic and longer term basis at all levels in the organization. Issues affecting, or with the potential to affect, our assets, operations and/or reputation, are generally of a strategic nature or are emerging issues that can be identified early and then managed, but occasionally include unforeseen issues that arise unexpectedly and must be managed on an urgent basis.

Cardinal takes a proactive approach to the identification and management of issues that can affect the Company's assets, operations and/or reputation. Specific actions to ensure effective risk management include: employing qualified professional and technical staff; concentrating in a limited number of areas with low cost exploitation and development objectives; utilizing the latest technology for finding and developing reserves; constructing quality, environmentally sensitive and safe production facilities; adopting and communicating sound policies governing all areas of our business; maximizing operational control of drilling and production operations; strategic hedging of commodity prices and foreign exchange rates on borrowings; adhering to conservative borrowing guidelines; and monitoring counterparty creditworthiness.

Additional information regarding risk factors is available in our Annual Information Form, which is available on the SEDAR website at www.sedar.com.

DISCLOSURE CONTROLS AND PROCEDURES

Disclosure controls and procedures ("DC&P"), as defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings* ("NI 52-109"), are designed to provide reasonable assurance that material information required to be disclosed in the Company's annual filings, interim filings or other reports filed, or submitted by the Company under securities legislation is recorded, processed, summarized and reported within the time periods specified under securities legislation and include controls and procedures designed to ensure that information required to be so disclosed is accumulated and communicated to management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure.

The CEO and the CFO have evaluated the effectiveness of Cardinal's disclosure controls and procedures as at December 31, 2021 and have concluded that such disclosure controls and procedures are effective. The assessment was based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO 2013").

INTERNAL CONTROLS OVER FINANCIAL REPORTING

Internal control over financial reporting ("ICOFR"), as defined in NI 52-109, includes those policies and procedures that: a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets of Cardinal; b) are designed to provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS and that receipts and expenditures of the Company are being made in accordance with authorizations of management and Directors of Cardinal; and c) are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

The CEO and the CFO have designed, or caused to be designed under their supervision, internal controls over financial reporting as defined in NI 52-109, in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The CEO and the CFO have evaluated the design and operating effectiveness of Cardinal's ICOFR as at December 31, 2021 and have concluded that such internal controls over financial reporting are designed and operating effectively. The control framework Cardinal's officers used to design the Company's ICOFR is COSO 2013.

There were no changes in Cardinal's ICOFR during the quarter ended December 31, 2021 that materially affected, or are reasonably likely to materially affect, the Company's ICOFR.

Due to their inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation relating to the effectiveness in future periods are subject to the risk that controls may become inadequate as a result of changes in conditions, or that the degree of compliance with policies and procedures may deteriorate. It should also be noted that a control system, including the Company's DC&P and ICOFR, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objective of the control system is met and it should not be expected that the DC&P and ICOFR will prevent all errors or fraud.

OUTLOOK

Cardinal continues to implement its 2022 business plan and budget. The increase in commodity prices has enabled us to continue with our net debt reduction strategy and accelerate our net debt repayment at a rate not envisioned at the start of the year.

Our Board of Directors has approved a marginal increase in our capital expenditure program for 2022. Our initial 2022 budget of $70 to $80 million in capital expenditures and $9 million of decommissioning expenditures spending will be increased by $15 million. Of the increase, approximately $5 million of the additional capital expenditures will be allocated to strategic Clearwater land acquisitions, a portion of which has been spent in the first quarter, and an additional $10 million is forecast to be spent on surface land reclamation and restoration in Alberta and Saskatchewan.

At the beginning of 2022, we set a definitive plan in place to return capital to shareholders. The first phase of this plan is to begin a monthly sustainable dividend once our net bank debt level is below $100 million. At current commodity prices, we expect to reach this target in the second quarter of 2022.

QUARTERLY DATA

	Dec 31, 2021	Sep 30, 2021	Jun 30, 2021	Mar 31, 2021
Production				
Oil (bbl/d)	**17,366**	16,356	14,767	14,781
Natural gas (mcf/d)	**13,733**	15,101	13,173	14,364
NGL (bbl/d)	**870**	600	986	1,210
Oil equivalent (boe/d)	**20,525**	19,473	17,949	18,385
Financial				
Petroleum and natural gas revenue	**140,409**	120,007	99,106	85,547
Earnings (loss)	**38,955**	262,326	9,095	(25,961)
Basic per share ($)	**0.26**	1.76	0.06	(0.20)
Diluted per share ($)	**0.24**	1.64	0.06	(0.20)
Cash flow from operating activities	**51,973**	37,410	22,463	13,275
Total assets	**1,075,828**	1,053,162	747,248	750,410
Bank debt	**142,412**	170,229	178,239	188,984
Secured notes	**12,546**	30,270	17,429	16,809
Total long-term liabilities	**271,529**	283,934	275,153	287,370
Shareholders' equity	**719,232**	679,549	398,147	388,753
Common shares outstanding, net (000's)(1)	**150,442**	150,332	144,172	144,388
Diluted shares outstanding, net (000's)(1)	**165,766**	166,097	157,606	157,891

	Dec 31, 2020	Sep 30, 2020	Jun 30, 2020	Mar 31, 2020
Production				
Oil (bbl/d)	15,149	14,582	14,251	17,093
Natural gas (mcf/d)	13,653	13,448	12,873	14,368
NGL (bbl/d)	1,200	834	772	836
Oil equivalent (boe/d)	18,625	17,657	17,169	20,323
Financial				
Petroleum and natural gas revenue	66,065	61,982	31,711	63,473
Earnings (loss)	119,988	(4,659)	(27,546)	(450,944)
Basic per share ($)	1.06	(0.04)	(0.24)	(3.98)
Diluted per share ($)	1.04	(0.04)	(0.24)	(3.98)
Cash flow from operating activities	12,810	18,950	(10,276)	22,041
Total assets	749,133	633,024	676,560	703,401
Bank debt	192,115	204,018	217,206	192,965
Principal amount of convertible debentures	28,207	44,451	44,451	44,931
Secured notes	16,217	-	-	-
Total long-term liabilities	316,952	102,579	115,559	306,973
Shareholders' equity	372,848	251,859	253,804	280,608
Common shares outstanding, net (000's)(1)	121,349	113,496	113,382	113,354
Diluted shares outstanding, net (000's)(1)	134,310	118,490	118,712	118,797

(1) Net of treasury shares

In the second quarter of 2020, reduced oil demand due to concerns over the effect of COVID-19 significantly impacted oil production, pricing and revenue. The Company shut-in higher cost production in the second quarter of 2020 but in the second half of 2020 and into 2021, has subsequently brought back on production with supporting economics. Reduced production and low commodity prices significantly impacted revenue and cash flow from operating activities in 2020. As prices increased through the latter half of 2020 and in 2021, revenue increased however the Company incurred realized and unrealized hedging losses which negatively impacted earnings and cash flow from operating activities.

The Company's earnings also fluctuate with non-cash impairment charges and reversals of previous impairments on its assets as shown with 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.

ANNUAL DATA

	2021	2020	2019
Production			
Oil (bbl/d)	**15,826**	15,266	16,791
Natural gas (mcf/d)	**14,093**	13,585	15,576
NGL (bbl/d)	**915**	911	932
Oil equivalent (boe/d)	**19,090**	18,442	20,319
Financial			
Petroleum and natural gas revenue	**445,069**	223,231	388,971
Earnings (loss)	**284,415**	(363,160)	(34,340)
Basic per share ($)	**1.98**	(3.20)	(0.30)
Diluted per share ($)	**1.84**	(3.20)	(0.30)
Cash flow from operating activities	**125,121**	43,525	119,979
Adjusted funds flow[(1)]	**132,507**	43,827	121,810
Basic per share ($)	**0.92**	0.39	1.06
Diluted per share ($)	**0.86**	0.39	1.06
Dividends per share ($)	**-**	0.03	0.15
Total assets	**1,075,828**	749,133	1,149,827
Bank debt	**142,412**	192,115	173,308
Principal amount of convertible debentures	**-**	28,207	45,000
Secured notes	**12,546**	16,217	-
Total long-term liabilities	**271,529**	316,952	284,251
Shareholders' equity	**719,232**	372,848	737,902
Weighted average shares - basic (000's)	**143,636**	113,415	115,315
Weighted average shares - diluted (000's)	**154,572**	113,415	115,315

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

In 2020, the Company voluntarily shut-in production in response to the low oil prices experienced due to COVID-19. In 2021 as prices recovered, the Company resumed its well reactivation and drilling program steadily increasing production throughout the year. This has impacted revenue, earnings (loss), cash flow from operating activities and adjusted funds flow which have also varied due to volatility in commodity prices.

Cardinal's earnings (loss) varied significantly due to changes in realized and unrealized gains and losses on commodity contracts, an impairment charge of $23.4 million in 2019, an impairment charge of $220.3 million in 2020 and a reversal of previous impairments of $218.3 million in 2021. In addition, during the first quarter of 2020, the Company derecognized its deferred tax asset resulting in a $102.9 million impact to earnings in 2020.

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.

	Three months ended		Year ended	
	Dec 31, 2021	Dec 31, 2020	**Dec 31, 2021**	Dec 31, 2020
Operating expenses	**42,932**	29,870	**158,529**	120,600
Processing and other revenue	**(842)**	(1,024)	**(3,686)**	(3,224)
Net operating expenses	**42,090**	28,846	**154,843**	117,376

Netback

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

	Three months ended		Year ended	
	Dec 31, 2021	Dec 31, 2020	**Dec 31, 2021**	Dec 31, 2020
Petroleum and natural gas revenue	**140,409**	66,065	**445,069**	223,231
Royalties	**(27,693)**	(10,109)	**(80,051)**	(33,246)
Net operating expenses	**(42,090)**	(28,846)	**(154,843)**	(117,376)
Transportation expenses	**(1,378)**	(436)	**(3,406)**	(1,937)
Netback	**69,248**	26,674	**206,769**	70,672

Capital expenditures

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

Development capital 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 expenditure. The following table reconciles cash flow from investing activities to total capital expenditures to total development capital expenditures.

	Three months ended		Year ended	
	Dec 31, 2021	Dec 31, 2020	**Dec 31, 2021**	Dec 31, 2020
Cash flow from investing activities	**3,540**	3,723	**46,571**	50,748
Change in non-cash working capital	**5,122**	(156)	**15,268**	(19,242)
Corporate acquisition	**-**	-	**(15,811)**	-
Capital expenditures	**8,662**	3,567	**46,028**	31,506
Less:				
Capitalized G&A	**567**	233	**1,339**	985
Other assets	**54**	9	**154**	128
Property acquisitions	**306**	-	**4,334**	-
Proceeds from property dispositions	**(10,375)**	-	**(10,375)**	-
Development capital expenditures	**18,110**	3,325	**50,576**	30,393

Capital Management Measures

Net debt

Management utilizes net debt to analyze the financial position, liquidity and leverage of Cardinal. Net debt is calculated as bank debt plus the principal amount of convertible unsecured subordinated debentures ("convertible debentures"), secured notes and adjusted working capital.

Net bank debt

Management utilizes net bank debt to analyze the financial position, liquidity, leverage and borrowing capacity on Cardinal's bank line. Net bank debt is calculated as net debt less the principal amount of convertible debentures and secured notes.

The following table reconciles bank debt to net bank debt and net debt:

As at		**Dec 31, 2021**		Dec 31, 2020		Dec 31, 2019
Bank debt	**$**	**142,412**	$	192,115	$	173,308
Adjusted working capital deficiency		**23,235**		10,284		29,291
Net bank debt		**165,647**		202,399		202,599
Secured notes		**12,546**		16,217		-
Principal amount of Convertible Debentures		**-**		28,207		45,000
Net debt	**$**	**178,193**	$	246,823	$	247,599

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 the warrant liability, fair value of financial instruments, current decommissioning obligation, and current lease liabilities). The following table reconciles working capital to adjusted working capital:

As at	**Dec 31, 2021**	Dec 31, 2020	Dec 31, 2019
Working capital	**(30,086)**	(25,690)	(84,895)
Liability component of convertible debentures	**-**	-	44,158
Lease liabilities	**1,371**	1,687	1,850
Decommissioning obligation	**5,480**	3,280	6,450
Fair value of financial instruments, net	**-**	6,909	3,146
Warrant liability	**-**	3,530	-
Adjusted working capital deficiency	**(23,235)**	(10,284)	(29,291)

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 change in non-cash working capital.

Adjusted funds flow

Management utilizes adjusted funds flow as a key measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, and capital expenditures. As shown below, adjusted funds flow is calculated as funds flow excluding 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.

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		Year ended	
	Dec 31, 2021	Dec 31, 2020	**Dec 31, 2021**	Dec 31, 2020
Cash flow from operating activities	**51,973**	12,810	**125,121**	43,525
Change in non-cash working capital	**(789)**	202	**414**	(2,547)
Funds flow	**51,184**	13,012	**125,535**	40,978
Decommissioning expenditures	**2,260**	596	**6,302**	2,849
Transaction costs	**51**	-	**670**	-
Adjusted funds flow	**53,495**	13,608	**132,507**	43,827
Total development capital expenditures	**(18,110)**	(3,325)	**(50,576)**	(30,393)
Free cash flow	**35,385**	10,283	**81,931**	13,434

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		Year ended	
	Dec 31, 2021	Dec 31, 2020	**Dec 31, 2021**	Dec 31, 2020
Petroleum and natural gas revenue	**74.36**	38.56	**63.88**	33.07
Royalties	**14.67**	5.90	**11.49**	4.93
Net operating expenses	**22.29**	16.84	**22.22**	17.39
Transportation expenses	**0.73**	0.25	**0.49**	0.29
Netback per boe	**36.67**	15.57	**29.68**	10.46

Net debt to adjusted funds flow

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.

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 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, and capital expenditures 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 for shares held in treasury.

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, and capital expenditures 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 adjusted for shares held in treasury.

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**:**

- 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;
- 2022 capital expenditure plans;
- 2022 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 CRUDE OIL	HEAVY OIL	NGL	CONVENTIONAL NATURAL GAS	TOTAL (BOE/D)
Q4/21	51%	34%	4%	11%	20,525
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
2021	54%	29%	5%	12%	19,090
2020	55%	27%	5%	13%	18,606
2019	56%	27%	4%	12%	18,380
Venturion	27%	56%	1%	16%	2,400
Disposed	16%	-	14%	70%	200

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