



CARDINAL
ENERGY LTD.

2022
FINANCIAL STATEMENTS

MANAGEMENT'S REPORT

Management is responsible for the preparation of the accompanying financial statements. The financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and include certain estimates that reflect management's best estimates and judgments. Management has determined such amounts on a reasonable basis in order to determine that the financial statements are presented fairly in all material respects.

Management is responsible for the integrity of the financial information. Internal control systems are designed and maintained to provide reasonable assurance that assets are safeguarded from loss or unauthorized use and to produce reliable accounting records for financial reporting purposes.

KPMG LLP has audited the financial statements. Their examination included such tests and procedures, as they considered necessary, to provide reasonable assurance that the financial statements are presented fairly in accordance with International Financial Reporting Standards.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board exercises this responsibility through the Audit Committee, with assistance from the Reserves Committee in connection with the annual evaluation of our petroleum and natural gas reserves. The Audit Committee meets regularly with management and the independent auditors to ensure that management's responsibilities are properly discharged, to review the financial statements and recommend that the financial statements be presented to the Board of Directors for approval. The Audit Committee also considers the independence of the external auditors and reviews their fees.

The Board of Directors has approved the information contained in the financial statements based on the recommendation of the Audit Committee.

signed "*M. Scott Ratushny*"
M. Scott Ratushny
Chief Executive Officer

signed "*Shawn Van Spankeren*"
Shawn Van Spankeren
Chief Financial Officer

March 13, 2023



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INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Cardinal Energy Ltd.

Opinion

We have audited the financial statements of Cardinal Energy Ltd. (the "Company"), which comprise:

- the balance sheet as at December 31, 2022 and December 31, 2021
- the statement of earnings and comprehensive earnings for the years then ended
- the statement of changes in shareholders' equity for the years then ended
- the statement of cash flows for the years then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2022 and December 31, 2021, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "*Auditor's Responsibilities for the Audit of the Financial Statements*" section of our auditor's report.

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2022. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have determined the matters described below to be the key audit matters to be communicated in our auditor's report.

Assessment of the impact of estimated proved and probable oil and gas reserves on property, plant and equipment ("PP&E").

Description of the matter

We draw attention to note 3 and note 6 to the financial statements. The Company uses estimated proved and probable oil and gas reserves to deplete its petroleum and natural gas assets included in PP&E, to assess for indicators of impairment on the Company's cash generating units ("CGUs") and if any such indicators exist, to perform an impairment test to estimate the recoverable amount of its CGU.

The Company has \$1,063 million of PP&E as of December 31, 2022.

The Company identified an indicator of impairment reversal at December 31, 2022 for the Alberta Central CGU and performed an impairment reversal test to estimate the recoverable amount of the CGU. It was determined the recoverable amount of the Alberta Central CGU exceeded its carrying value, resulting in all previous Alberta Central CGU impairment, net of depletion, of \$64.3 million being reversed.

The estimated recoverable amount of the Alberta Central CGU involves significant estimates including:

- The estimate of proved and probable oil and gas reserves
- The discount rates.

The Company depletes its net carrying value of petroleum and natural gas assets using the unit-of-production method by reference to the ratio of production in the period to the related proved and probable oil and gas reserves, taking into account estimated forecasted future development costs necessary to bring those reserves into production. Depletion expense on petroleum and natural gas assets was \$100.7 million for the year ended December 31, 2022.



The estimate of proved and probable oil and gas reserves includes significant assumptions related to:

- Forecasted oil and gas commodity prices
- Forecasted production volumes
- Forecasted operating costs
- Forecasted royalty costs
- Forecasted future development costs.

The Company engages independent third-party reserve evaluators to estimate proved and probable oil and gas reserves.

Why the matter is a key audit matter

We identified the assessment of the impact of estimated proved and probable oil and gas reserves on PP&E as a key audit matter. Significant auditor judgment was required to evaluate the results of our audit procedures regarding the estimate of proved and probable oil and gas reserves and discount rates.

How the matter was addressed in the audit

The following are the primary procedures we performed to address this key audit matter:

We assessed the depletion expense calculation for compliance with IFRS as issued by the IASB.

With respect to the estimate of proved and probable oil and gas reserves:

- We evaluated the competence, capabilities and objectivity of the independent third-party reserve evaluators engaged by the Company
- We compared forecasted oil and gas commodity prices to those published by other independent third-party reserve evaluators
- We compared the 2022 actual production, operating costs, royalty costs and development costs of the Company to those estimates used in the prior year's estimate of proved oil and gas reserves to assess the Company's ability to accurately forecast
- We evaluated the appropriateness of forecasted production and forecasted operating costs, royalty costs and future development costs assumptions by comparing to 2022 historical results. We took into account changes in conditions and events affecting the Company to assess the adjustments or lack of adjustments made by the Company in arriving at the assumptions.

We involved valuation professionals with specialized skills and knowledge, who assisted in:

- Evaluating the appropriateness of the discount rate by comparing the discount rate to market and other external data
- Assessing the reasonableness of the Company's estimate of the recoverable amount by comparing the Company's estimate to market metrics and other external data.



Other Information

Management is responsible for the other information. Other information comprises:

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions and the information as at the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditor's report.

We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.



Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure, and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.



- Determine, from the matters communicated with those charged with governance, those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our auditor's report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this auditor's report is Timothy Arthur Richards.

KPMG LLP

Chartered Professional Accountants

Calgary, Canada

March 13, 2023

BALANCE SHEET

As at December 31,
(thousands)

	Note	2022	2021
ASSETS			
Current assets			
Trade and other receivables		\$ 64,041	\$ 51,471
Deposits and prepaid expenses		3,732	3,510
Fair value of financial instruments	17	1,533	-
		69,306	54,981
Non-current assets			
Property, plant and equipment	5,6	1,075,941	1,020,847
Deferred tax	15	9,766	-
Total Assets		\$ 1,155,013	\$ 1,075,828
LIABILITIES			
Current liabilities			
Trade and other payables		\$ 89,156	\$ 78,216
Dividends payable	13	10,009	-
Lease liabilities	10	1,487	1,371
Decommissioning obligation	11	8,573	5,480
		109,225	85,067
Non-current liabilities			
Lease liabilities	10	3,003	1,260
Bank debt	7	31,280	142,412
Secured notes	8	-	12,546
Decommissioning obligation	11	86,135	115,311
		120,418	271,529
Total Liabilities		229,643	356,596
SHAREHOLDERS' EQUITY			
Share capital	12	1,104,304	1,102,852
Treasury shares	12	(16,972)	(4,080)
Warrants	12	-	16,221
Contributed surplus		25,156	33,188
Deficit		(187,118)	(428,949)
Total Shareholders' Equity		925,370	719,232
Total Liabilities and Shareholders' Equity		\$ 1,155,013	\$ 1,075,828
Contractual obligations	19		
Subsequent events	13		

The accompanying notes are an integral part of these financial statements.

Approved on behalf of the Board of Directors,

signed "M. Scott Ratushny"
M. Scott Ratushny
Director

signed "John Gordon"
John Gordon
Director

STATEMENT OF EARNINGS AND COMPREHENSIVE EARNINGS

For the years ended December 31,

(thousands except per share amounts)

	<i>Note</i>	2022	2021
Revenue			
Petroleum and natural gas revenue	16	\$ 737,590	\$ 445,069
Royalties		(150,001)	(80,051)
Realized gain (loss) on commodity contracts	17	1,661	(46,835)
Unrealized gain on commodity contracts	17	1,533	10,004
Processing and other revenue	16	4,250	3,686
Other income	11	810	4,059
		595,843	335,932
Expenses			
Operating		199,197	158,529
Transportation		6,275	3,406
General and administrative		18,514	15,033
Share-based compensation	14	7,192	4,414
Finance	20	15,150	22,999
Re-measurement loss on warrant liability	12	-	12,923
Depletion and depreciation	6	102,467	78,534
Impairment reversal, net	5,6	(46,411)	(218,338)
Loss on conversion of convertible debentures	9	-	1,221
Loss on secured notes repayment	8	760	683
Gain on acquisitions / dispositions	5	(239)	(28,557)
Transaction costs	5	-	670
		302,905	51,517
Earnings before deferred tax		292,938	284,415
Deferred tax recovery	15	(9,749)	-
		283,189	284,415
Earnings and comprehensive earnings		\$ 302,687	\$ 284,415
Earnings per share			
	12		
- Basic		\$ 1.97	\$ 1.98
- Diluted		\$ 1.92	\$ 1.84

The accompanying notes are an integral part of these financial statements.

STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

<i>(thousands except number of common shares)</i>	Common Shares, net of treasury shares	Share Capital <i>(note 12)</i>	Treasury Shares <i>(note 12)</i>	Warrants <i>(note 12)</i>	Equity Component of Convertible Debentures	Contributed Surplus <i>(note 14)</i>	Deficit	Total Shareholders' Equity
As at January 1, 2021	121,348,705	\$ 1,054,169	\$ (3,041)	\$ -	\$ 1,582	\$ 33,502	\$ (713,364)	\$ 372,848
Purchase of common shares for RA ⁽¹⁾ and PA ⁽²⁾ settlements	(1,394,358)	-	(4,000)	-	-	-	-	(4,000)
Common shares issued in connection with acquisition (note 5)	6,270,229	18,184	-	-	-	-	-	18,184
Reclassification of warrants to equity	-	-	-	16,453	-	-	-	16,453
Issue of warrants	-	-	-	574	-	-	-	574
Exercise of warrants	500,000	1,081	-	(806)	-	-	-	275
Settlement of RA ⁽¹⁾ and PA ⁽²⁾	1,306,710	-	2,961	-	-	(5,297)	-	(2,336)
Convertible debentures conversion and redemption	22,410,400	29,596	-	-	(1,582)	-	-	28,014
Share-based compensation	-	-	-	-	-	4,983	-	4,983
Share issue costs	-	(178)	-	-	-	-	-	(178)
Earnings for the year	-	-	-	-	-	-	284,415	284,415
As at December 31, 2021	150,441,686	\$ 1,102,852	\$ (4,080)	\$ 16,221	\$ -	\$ 33,188	\$ (428,949)	\$ 719,232
As at January 1, 2022	150,441,686	\$ 1,102,852	\$ (4,080)	\$ 16,221	\$ -	\$ 33,188	\$ (428,949)	\$ 719,232
Purchase of common shares for RA ⁽¹⁾ and PA ⁽²⁾ settlements	(2,691,538)	-	(19,001)	-	-	-	-	(19,001)
Exercise of warrants	10,122,000	28,313	-	(16,221)	-	-	-	12,092
Settlement of RA ⁽¹⁾ and PA ⁽²⁾	1,608,629	-	6,109	-	-	(16,735)	-	(10,626)
Purchase of common shares for cancellation	(3,724,156)	(26,807)	-	-	-	544	-	(26,263)
Share-based compensation	-	-	-	-	-	8,159	-	8,159
Dividends (\$0.38 per share)	-	-	-	-	-	-	(60,856)	(60,856)
Share issue costs, net of deferred tax of \$17	-	(54)	-	-	-	-	-	(54)
Earnings for the year	-	-	-	-	-	-	302,687	302,687
As at December 31, 2022	155,756,621	\$ 1,104,304	\$ (16,972)	\$ -	\$ -	\$ 25,156	\$ (187,118)	\$ 925,370

(1) Restricted Bonus Award ("RA")

(2) Performance Bonus Award ("PA")

The accompanying notes are an integral part of these financial statements.

STATEMENT OF CASH FLOWS

For the years ended December 31,

(thousands)

	Note	2022	2021
Cash provided by (used in)			
Operating activities			
Earnings for the year		\$ 302,687	\$ 284,415
Adjustments for			
Share-based compensation	14	7,192	4,414
Depletion and depreciation	6	102,467	78,534
Impairment reversal, net	5,6	(46,411)	(218,338)
Re-measurement loss of warrant liability		-	12,923
Unrealized gain on commodity contracts	17	(1,533)	(10,004)
Other income	11	(810)	(4,059)
Deferred tax recovery	15	(9,749)	-
Accretion	9,11	8,058	7,690
Interest on secured notes	8	361	2,915
Loss on conversion of convertible debt	9	-	1,221
Loss on secured note prepayment	8	760	683
Gain on acquisition / dispositions	5	(239)	(28,557)
Decommissioning expenditures	11	(19,610)	(6,302)
Change in non-cash working capital	21	(5,910)	(414)
		337,263	125,121
Investing activities			
Property, plant and equipment expenditures	6	(118,225)	(52,069)
Property acquisitions	5	(2,432)	(4,334)
Corporate acquisition	5	-	(15,811)
Property dispositions	5	425	10,375
Change in non-cash working capital	21	4,051	15,268
		(116,181)	(46,571)
Financing activities			
Dividends	13	(50,847)	-
Issuance of secured note and warrants, net of issue costs	8	-	12,476
Repayment of lease liabilities	10	(1,574)	(1,799)
Share issue costs		(71)	(178)
Repayment of secured notes	8	(13,667)	(19,170)
Purchase of common shares for cancellation	12	(26,263)	-
Purchase of common shares for RA and PA settlements and withholding tax	12	(29,627)	(6,338)
Convertible debentures redeemed	9	-	(194)
Warrants exercised	12	12,092	275
Decrease in bank debt		(111,132)	(49,703)
Repayment of acquired debt	5	-	(14,172)
Change in non-cash working capital	21	7	253
		(221,082)	(78,550)
Change in cash and cash equivalents		-	-
Cash and cash equivalents, beginning of year		-	-
Cash and cash equivalents, end of year		\$ -	\$ -

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

For the years ended December 31, 2022 and 2021

(Thousands of dollars, except per share amounts or unless otherwise stated)

1 REPORTING ENTITY

Cardinal Energy Ltd. ("Cardinal" or the "Company") was incorporated pursuant to the Business Corporations Act (Alberta) on December 21, 2010 and commenced activity on May 30, 2012. On January 1, 2022 Cardinal amalgamated with its wholly-owned subsidiary, Venturion Oil Limited. The Company's principal business activity is the acquisition, exploration and production of petroleum and natural gas in the provinces of Alberta, British Columbia, and Saskatchewan. Cardinal's principal place of business is located at 600, 400 – 3rd Avenue SW, Calgary, Alberta, Canada, T2P 4H2.

2 BASIS OF PREPARATION

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. A summary of the significant accounting policies and method of computation is presented in note 3.

The financial statements have been prepared on the historical cost basis. The methods used to measure fair values are discussed in note 4.

The financial statements are presented in Canadian dollars, which is the Company's functional currency.

Operating expenses in the statement of earnings and comprehensive earnings are presented as a combination of function and nature in conformity with industry practice. Depletion and depreciation is presented on a separate line by its nature while general and administrative expense is presented on a functional basis. Significant expenses such as salaries and share-based compensation are presented by their nature in the notes to the financial statements.

The financial statements were authorized for issue by the Board of Directors on March 13, 2023.

3 SIGNIFICANT ACCOUNTING POLICIES

The following accounting policies have been applied consistently to all periods presented in these financial statements.

(a) Business combinations

The acquisition method of accounting is used to account for acquisitions of subsidiaries and assets that meet the definition of a business under IFRS. Subsidiaries are entities controlled by the Company. Control exists when the Company has the power to govern the financial and operating policies of an entity to obtain benefits from its activities. The financial statements of subsidiaries are included in the financial statements from the date that control commences until the date that control ceases.

The cost of an acquisition is measured as the fair value of the assets acquired, equity instruments issued and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at fair value at the acquisition date, except for deferred income taxes. The excess of the cost of an acquisition over the fair value of the identifiable assets and liabilities acquired is recorded as goodwill. If the cost of an acquisition is less than the fair value of the net assets acquired, the difference is recognized immediately in earnings or loss. Acquisition costs incurred by the Company are expensed in earnings or loss in the period incurred.

Intercompany balances and transactions, and any unrealized income and expenses arising from intercompany transactions with subsidiaries, are eliminated in preparing the financial statements.

(b) Jointly owned assets

Many of the Company's crude oil and natural gas activities involve jointly owned assets. The financial statements include the Company's share of these jointly owned assets and its proportionate share of the relevant revenue and related costs.

(c) Property, plant and equipment "PP&E"

i) Recognition and measurement

PP&E

Items of PP&E, including petroleum and natural gas assets, are measured at cost less accumulated depletion and depreciation and accumulated impairment losses and are grouped into cash generating units ("CGUs") for impairment testing. When significant parts of an item of PP&E, including petroleum and natural gas assets, have different useful lives, they are accounted for as separate items (major components).

Gains and losses on disposal of an item of PP&E, including petroleum and natural gas assets, are determined by comparing the proceeds from disposal with the carrying amount of PP&E and are recognized in earnings or loss.

ii) Subsequent costs

Costs incurred subsequent to the determination of technical feasibility and commercial viability and the costs of replacing parts of PP&E are recognized as petroleum and natural gas assets only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are recognized in earnings or loss as incurred. Such capitalized petroleum and natural gas assets generally represent costs incurred in developing proved and/or probable reserves and bringing in or enhancing production from such reserves, and are accumulated on a field or geotechnical area basis.

iii) Depletion and depreciation

The Company depletes its net carrying value of petroleum and natural gas assets using the unit-of-production method by reference to the ratio of production in the period to the related proved and probable oil and gas reserves, taking into account estimated forecasted future development costs necessary to bring those reserves into production. The forecasted future development cost estimates are reviewed by independent third-party reserve evaluators at least annually. Natural gas volumes are converted to equivalent crude oil volumes based upon the relative energy content of six thousand cubic feet of natural gas to one barrel of crude oil.

Depreciation of other assets is recognized in earnings or loss on a straight-line basis or declining balance over their estimated useful life. Depreciation methods, useful life and residual values are reviewed at each reporting date.

iv) Derecognition

The carrying amount of an item of PP&E is derecognized when no future economic benefits are expected from its use or upon sale to a third party. The gain or loss arising from derecognition is included in earnings or loss and is measured as the difference between the net proceeds, if any, and the carrying amount of the asset.

v) Major maintenance and repairs

Ongoing costs to maintain properties are generally expensed as incurred. The costs of material replacement parts, turnarounds and major inspections are capitalized provided it is probable that future economic benefits in excess of cost will be realized and such benefits are expected to extend beyond the current operating period. The carrying amount of a replaced part is derecognized in accordance with our derecognition policy.

(d) Financial instruments

i) Non-derivative financial instruments

Non-derivative financial instruments comprise cash and cash equivalents, trade and other receivables, trade and other payables, bank debt, and secured notes. Non-derivative financial instruments are recognized initially at fair value plus, for instruments not at fair value through earnings or loss, any directly attributable transaction costs.

Cash and cash equivalents comprise cash on hand and term deposits held with banks with original maturities of three months or less and are classified as and measured at amortized cost.

Other non-derivative financial instruments, such as trade and other receivables, trade and other payables, bank debt, and secured notes are classified as and measured at amortized cost using the effective interest method, less any impairment losses.

Financial assets and liabilities are offset and the net amount presented on the balance sheet if, and only if, the Company has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(ii) Derivative financial instruments

The Company enters into certain financial derivative contracts in order to manage the exposure to market risks from fluctuations in commodity prices, interest rates and the exchange rate between Canadian and United States dollars. These instruments are not used for trading or speculative purposes. The Company has not designated its financial derivative commodity contracts as effective accounting hedges, and thus has not applied hedge accounting, even though the Company considers all financial derivative commodity contracts to be economic hedges.

All financial derivative commodity contracts are classified at fair value through earnings or loss and are recorded on the balance sheet at fair value. Transaction costs are recognized in earnings or loss when incurred.

The Company's warrant liability was classified at fair value through earnings or loss and is recorded on the balance sheet at fair value. The warrant liability was included in current liabilities with any changes in fair value recognized as re-measurement of warrant liability in the statement of earnings and comprehensive earnings.

iii) Share capital

Common shares are classified as shareholders' equity. Incremental costs directly attributable to the issue of common shares, net of any tax effects, are recognized as a deduction from shareholders' equity.

(e) Impairment

i) Financial assets

The Company recognizes loss allowances for expected credit losses ("ECLs") on its financial assets measured at amortized cost. Due to the nature of its financial assets, the Company measures loss allowances at an amount equal to expected lifetime ECLs. Lifetime ECLs are the anticipated ECLs that result from all possible default events over the expected life of a financial asset. ECLs are a probability-weighted estimate of credit loss and are discounted at the effective interest rate of the related financial asset.

ii) Non-financial assets

The carrying amounts of the Company's property, plant and equipment, which includes petroleum and natural gas assets are reviewed at each reporting date to determine whether there are any internal or external indicators of impairment or impairment reversal. If any such indicator exists, then the recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the CGU). The estimated recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell ("FVLCS"). FVLCS is determined as the amount that would be obtained from the sale of a CGU in an arm's length transaction between knowledgeable and willing parties. The FVLCS of development and production

assets is generally determined as the net present value of estimated future cash flows expected to arise from the continued use of the CGU and its eventual disposition, using assumptions that an independent market participant may take into account. These cash flows are discounted by an appropriate discount rate which would be applied by such a market participant to arrive at a net present value of the CGU.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Value in use is generally computed by reference to the present value of the proved and probable oil and gas reserves estimated by the Company's independent third-party reserve evaluators.

For the purpose of impairment testing, the goodwill acquired in a business combination is allocated to the CGU's that are expected to benefit from the synergies of the combination.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in earnings or loss. Impairment losses recognized in respect of CGU's are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amounts of the other assets in the unit or group of units on a pro rata basis. Right-of-use assets ("ROU") and lease liabilities are re-measured at each reporting period to reflect any contract modifications or reassessments that impact the remaining cash outflows under the contract.

An impairment loss in respect of PP&E recognized in prior periods is assessed at each reporting date for any internal or external indicators that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depletion and depreciation, if no impairment loss had been recognized. An impairment loss in respect of goodwill is not reversed.

(f) Leased assets

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The ROU asset is initially measured at cost based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The assets are depreciated to the earlier of the end of the useful life of the ROU asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. In addition, the ROU is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

The lease liability is measured at amortized cost using the effective interest method. It is re-measured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liability is re-measured in this way, a corresponding adjustment is made to the carrying amount of the ROU asset, or is recorded in earnings or loss if the carrying amount of the ROU asset has been reduced to zero. Lease payments are applied against the lease obligation, with a portion reflected as interest expense using the effective interest rate method. Cardinal presents the lease liability as its own line item on the balance sheet.

(g) Assets Held for Sale

Non-current assets and their associated liabilities are classified as held for sale if their carrying amounts will be recovered through a sale transaction rather than through continuing use. This condition is met when the sale is highly probable, and the asset is available for immediate sale in its present condition. For the sale to be highly probable, management must be committed to a plan to sell the asset and an active program to locate a buyer has been initiated. The asset must be actively marketed for sale at a price that is reasonable in relation to its current fair value and the sale should be expected to be completed within one year from the date of classification.

Non-current assets classified as held for sale are measured at the lower of the carrying amount and fair value less costs to sell, with impairments recognized in the statement of comprehensive earnings in the period measured. Non-current assets held for sale are presented in current assets and liabilities within the balance sheet. Assets held for sale are not depleted, depreciated or amortized.

(h) Share-based compensation

The grant date fair value of RAs and other dilutive equity instruments granted to employees is recognized as share-based compensation expense, with a corresponding increase in contributed surplus, over the vesting period. A forfeiture rate is estimated on the grant date and is adjusted to reflect the actual number of instruments that vest.

(i) Provisions

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Provisions are not recognized for future operating losses.

The Company's activities give rise to dismantling, decommissioning and site disturbance remediation activities. Provisions are made for the estimated cost of site restoration and capitalized in the relevant asset category.

The decommissioning obligation recognized is the present value of management's best estimate of future expenditures required to settle the obligation using a credit-adjusted rate. Subsequent to the initial measurement, the obligation is adjusted at the end of each period to reflect the passage of time and changes in the estimated future cash flows underlying the obligation. The increase in the provision due to the passage of time is recognized as a finance expense in earnings or loss whereas increases or decreases due to changes in the estimated future cash flows are capitalized. Actual costs incurred upon settlement of the decommissioning obligation are charged against the provision to the extent the provision was established.

(j) Revenue

Revenue from the sale of crude oil, natural gas and natural gas liquids is measured based on the consideration specified in contracts with customers and recognizes revenue when it transfers control of the product to the buyer. This is generally at the time the customer obtains legal title to the product and when it is physically transferred to the delivery mechanism agreed with the customer, often pipelines or other transportation methods.

The Company evaluates its arrangements with 3rd parties and partners to determine if the Company acts as the principal or as an agent. In making this evaluation, management considers if the Company obtains control of the product delivered, which is indicated by the Company having the primary responsibility for the delivery of the product, having the ability to establish prices or having inventory risk. If the Company acts in the capacity of an agent rather than as a principal in a transaction, then the revenue is recognized on a net-basis, only reflecting the fee, if any, realized by the entity from the transaction. Royalty income is recognized as it accrues in accordance with the terms of the overriding royalty agreements. Revenues from processing activities are recognized over time as processing occurs, and generally billed monthly.

(k) Finance income and expenses

Finance expense comprises interest expense on borrowings and lease liabilities, accretion of the discount on decommissioning obligation, other finance expenses and impairment losses recognized on financial assets.

Borrowing costs and interest income are recognized in earnings or loss using the effective interest method.

(l) Government Grants

Government grants are recognized when there is reasonable assurance that the grant will be received and all attached conditions will be complied with. If a grant is received but compliance with any attached condition is not achieved, the grant is recognized as a deferred liability until such conditions are met and fulfilled. When the grant relates to an income or expense item, it is recognized as a reduction to the related expense in the period in which the income is earned or costs are incurred. When the grant relates to an asset, it is recognized as a reduction to the net book value of the related asset and then subsequently in earnings or loss over the expected useful life of the related assets through lower charges to impairment and/or depletion, depreciation and amortization. When the grant relates to a liability, it is recognized as a reduction to the liability and recognized in income.

In 2022, the Company benefited from the Alberta Governments Site Rehabilitation Program (“SRP”) and Saskatchewan Governments Accelerated Site Closure Program (“ASCP”) resulting in a reduction in the decommissioning obligation liability of \$0.8 million (2021 – \$4.1 million) with the offset being recorded as other income in the statement of earnings and comprehensive earnings.

(m) Income tax

Income tax expense consists of current and deferred tax. Income tax expense is recognized in earnings or loss except to the extent that it relates to items recognized directly in equity.

Current tax is the expected tax payable on taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognized using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax is not recognized on the initial recognition of assets or liabilities in a transaction that is not a business combination and that does not affect either accounting or taxable income or loss. In addition, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized to the extent that it is probable that future taxable income will be available against which the temporary difference can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

(n) Earnings per share

Basic earnings per share is calculated by dividing the earnings or loss attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period. Diluted earnings per share is determined by adjusting the earnings attributable to common shareholders and the weighted average number of common shares outstanding for the effects of dilutive instruments such as RAs, PAs, warrants, options and other dilutive instruments.

(o) Use of Judgements and Key Sources of Estimation Uncertainty

The timely preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, disclosure of any contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses for the period. These estimates are subject to measurement uncertainty and the effect on the financial statements of changes in these estimates could be material. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Critical and other Judgments

i) Identification of cash generating units

Cardinal's assets are aggregated into CGUs for the purpose of calculating impairment. CGU's are based on an assessment of the unit's ability to generate largely independent cash inflows. The determination of these CGUs was based on management's judgment in regards to shared infrastructure, geographical proximity, petroleum type and similar exposure to market risk and materiality.

ii) Impairment of property, plant and equipment

Judgments are required to assess when internal or external indicators of impairment, or indicators of impairment reversal, exist and impairment testing is required. In determining the recoverable amount of PP&E, which includes petroleum and natural gas assets, impairment tests are based on estimates of proved and probable oil and gas reserves which are based upon a number of significant assumptions, such as forecasted production volumes, forecasted oil and gas commodity prices, forecasted operating costs, forecasted royalty costs and forecasted future development costs. The estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

iii) Deferred income taxes

Judgments are made by management to determine the likelihood of whether deferred income tax assets at the end of the reporting period will be realized from future taxable income. To the extent that assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognized in respect of deferred tax assets as well as the amounts recognized in earnings or loss in the period in which the change occurs.

iv) Lease accounting regarding incremental borrowing rate and lease term

The incremental borrowing rates are based on judgments including economic environment, term, currency, and the underlying risk inherent to the asset. The carrying balance of the right-of-use assets, lease obligations, and the resulting interest and depletion and depreciation expense, may differ due to changes in the market conditions and lease term. Lease terms are based on assumptions regarding extension terms that allow for operational flexibility and future market conditions.

Key and other Sources of Estimation Uncertainty

i) Reserve estimates

The Company uses estimated proved and probable oil and gas reserves to deplete its petroleum and natural gas assets included in PP&E, to assess for indicators of impairment on the Company's cash generating units ("CGU") and if any such indicators exist, to perform an impairment test to estimate the recoverable amount of its CGUs. Estimates of proved and probable oil and gas reserves are based upon a number of significant assumptions, such as forecasted production volumes, forecasted oil and gas commodity prices, forecasted operating costs, forecasted royalty costs and forecasted future development costs. Cardinal engaged independent third party reserve evaluators to evaluate the Company's estimates of proved and probable oil and gas reserves at December 31, 2022 and 2021. Reserve adjustments are made annually based on actual volumes produced, the results from capital expenditure programs, revisions to previous estimates, new discoveries and acquisitions and dispositions made during the year.

Proved oil and gas reserves are those forecasted quantities of petroleum and natural gas determined to be economically recoverable under existing economic and operating conditions with a high degree of certainty, of at least 90 percent, that those quantities will be equaled or exceeded. Probable oil and gas reserves are those

forecasted quantities of petroleum and natural gas determined to be economically recoverable under existing economic and operating conditions with a moderate degree of certainty, of at least 50 percent, that those quantities will be equaled or exceeded. Cardinal reports production and reserve quantities in accordance with Canadian practices and specifically in accordance with Standards of Disclosures for Oil and Gas Activities ("NI 51-101").

Cardinal cautions users of this information that the process of estimating proved and probable oil and gas reserves is subject to a level of uncertainty. The proved and probable oil and gas reserves are based on current and forecast economic and operating conditions; therefore, changes can be made to future assessments as a result of a number of factors, which can include forecasted oil and gas commodity prices, new technology, changing economic conditions, future reservoir performance and development activity.

ii) Property, plant and equipment

Petroleum and natural gas assets included in PP&E are depleted using the unit-of-production method based on estimated proved and probable oil and gas reserves determined using a number of significant assumptions, such as forecasted oil and gas commodity prices, forecasted production volumes, forecasted operating costs, forecasted royalty costs and forecasted future development costs. The estimate of proved and probable oil and gas reserves and the discount rate is part of the depletion calculation and the impairment test.

iii) Business combinations

In a business combination, management makes estimates of the fair value of assets acquired and liabilities assumed which includes assessing the value of petroleum and natural gas properties based upon the estimation of recoverable quantities of proved and probable oil and gas reserves being acquired.

iv) Decommissioning obligation

Cardinal recognizes a provision for future abandonment activities in the financial statements equal to the net present value of the estimated future expenditures required to settle the estimated future obligation at the balance sheet date. The measurement of the decommissioning obligation involves the use of estimates and assumptions including the discount rate, the expected timing of future expenditures and the amount of future abandonment costs. The estimates were made by management and external consultants considering current costs, technology and enacted legislation.

v) Taxation

The calculation of deferred income taxes is based on a number of assumptions including estimating the future periods in which temporary differences, tax losses and other tax credits will reverse to ensure the appropriate estimate of the substantively enacted tax rates at the time of reversal and the likelihood of deferred tax assets being realized.

IFRS requires the Company, at each reporting date, to make certain judgments on uncertain tax positions by relevant tax authorities. Judgments include determining whether the Company will "more likely than not" be successful in defending its tax positions by considering information from relevant tax interpretations and tax laws in Canada. As such, this recognition threshold is subject to management's judgment and may impact the carrying value of the Company's deferred tax assets and liabilities at the end of the reporting period.

(vi) Derivatives

The Company's estimate of the fair value of derivative financial instruments is dependent on forecasted oil and gas commodity prices and the volatility in those prices.

(vii) Trade and other receivables

The Company monitors receivables due from petroleum and natural gas marketers and from joint asset partners to manage credit risk. The Company historically has not experienced any collection issues with petroleum and natural gas marketers as a significant portion of these receivables are with creditworthy purchasers. To protect against credit losses from joint asset partners, the Company has the ability to withhold production in the event of non-

payment and the ability to obtain the partners' share of capital expenditures in advance of a project. The Company continues to expect that its receivables are substantially collectible at December 31, 2022.

(p) 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. The Company continues to monitor progress on these reporting requirements and have not yet quantified the cost to comply with these standards.

4 DETERMINATION OF FAIR VALUE

A number of the Company's accounting policies and disclosures require the determination of fair value. Fair value has been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair value is disclosed in the notes specific to that asset or liability.

The Company classifies the fair value of financial instruments assets and liabilities according to the following fair value hierarchy based on the amount of observable inputs used to value the instrument:

Level 1 - Fair value is based on unadjusted quoted prices in active markets for identical assets or liabilities as of the reporting date.

Level 2 - Fair value is based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices).

Level 3 - Fair value is based on inputs for the asset or liability that are not based on observable market data.

(a) PP&E

The fair value of PP&E recognized in a business combination is based on market value. The market value of PP&E is the estimated amount for which PP&E could be exchanged on the acquisition date between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. The fair value of petroleum and natural gas interests (included in PP&E) is estimated with reference to the estimate of proved and probable oil and gas reserves expected to be derived from petroleum and natural gas assets based on reserve reports evaluated by independent third party reserve evaluators. The risk-adjusted discount rate is specific to the asset with reference to general market conditions.

(b) Cash and cash equivalents, trade and other receivables, trade and other payables and dividends payable

The fair value of cash and cash equivalents, trade and other receivables, trade and other payables and dividends payable is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. At December 31, 2022 and 2021, the fair value of these balances approximated their carrying value due to their short term to maturity.

(c) Bank debt and secured notes

The fair value of bank debt approximates its carrying value as it bears a floating rate of interest and the margin charged by the lenders is indicative of current credit spreads. The secured notes bear interest at a fixed rate that the Company would expect to pay for similar financing transactions and accordingly the fair value approximates the carrying value.

(d) Derivatives

Derivatives are recorded on the balance sheet at fair value at each reporting period with the change in fair value being recognized as an unrealized gain or loss in the statement of comprehensive earnings. The fair value of forward contracts and swaps is determined by discounting the difference between the contracted prices and published

forecasted oil and gas commodity prices as at the balance sheet date, using the remaining contracted volumes and a credit adjusted interest rate. The fair value of options and collars is based on option models that use published information with respect to volatility, prices and interest rates.

(e) *Share-based compensation*

The fair value of bonus awards is determined on the date of grant based on the value of the Company's common shares.

5 ACQUISITIONS & DISPOSITIONS

2022 Acquisitions and Dispositions

During the year ended December 31, 2022, the Company completed various minor property acquisitions for total consideration of \$2.4 million before closing adjustments with associated decommissioning obligations of \$0.1 million.

On November 1, 2022, the Company disposed of non-core assets for total cash proceeds of \$0.4 million with associated decommissioning obligations of \$8.0 million. In 2022, impairments of \$17.9 million were booked related to assets held for sale.

2021 Acquisitions and Dispositions

On July 15, 2021, Cardinal acquired all of the issued and outstanding common shares of Venturion Oil Corp. (the "Venturion Acquisition") for cash consideration of \$15.8 million and the issuance of 6.3 million common shares valued on the day of closing at \$2.90 per common share. There were \$0.7 million of transaction costs incurred by the Company and expensed through earnings. The Company recorded a \$21.8 million gain on this acquisition representing the excess of the \$55.8 million total identifiable net assets acquired over the \$34.0 million consideration paid, and was primarily the result of an increase in commodity prices between initial negotiations and the closing date. The acquisition has been accounted for as a business combination in accordance with IFRS 3.

Net assets acquired

Petroleum and natural gas properties	\$ 76,353
Working capital	2,156
Bank debt	(14,172)
Risk management contracts	(3,095)
Decommissioning obligations	(5,416)
Gain on acquisition	(21,831)
	\$ 33,995

Consideration

Cash consideration	\$ 15,811
Share consideration (6,270,229 common shares)	18,184
	\$ 33,995

In 2021, the Venturion Acquisition contributed petroleum and natural gas revenue of \$29.3 million and operating income of \$12.2 million. Had the Venturion Acquisition closed on January 1, 2021, the Company's estimated petroleum and natural gas revenue would have been \$476.4 million and the estimated operating income would have been \$218.7 million for the year ended December 31, 2021. Pro forma information is not necessarily representative of future revenue and operations.

On October 6, 2021, the Company disposed of non-core assets for total cash proceeds of \$10.4 million, after closing adjustments. The assets consisted of petroleum and natural gas properties and undeveloped land with a net book value of \$6.1 million and associated decommissioning liabilities of \$0.7 million, resulting in a gain of \$5.1 million.

During the year ended December 31, 2021, the Company completed various minor property acquisitions for total consideration of \$4.3 million before closing adjustments with associated decommissioning obligations of \$0.9 million. A net gain of \$1.6 million was recorded.

6 PROPERTY, PLANT AND EQUIPMENT

	Petroleum and natural gas assets	Right-of-use assets	Corporate assets	Total
Cost				
As at January 1, 2021	\$ 1,663,309	\$ 6,614	\$ 4,361	\$ 1,674,284
Additions	54,213	516	155	54,884
Acquisition	81,552	-	-	81,552
Dispositions	(10,440)	(1,640)	-	(12,080)
Changes in decommissioning obligation	35,154	-	-	35,154
As at December 31, 2021	1,823,788	5,490	4,516	1,833,794
Additions	119,327	3,433	854	123,614
Acquisition	2,536	-	-	2,536
Dispositions	(76,859)	(1,268)	(39)	(78,166)
Changes in decommissioning obligation	(6,576)	-	-	(6,576)
At December 31, 2022	\$ 1,862,216	\$ 7,655	\$ 5,331	\$ 1,875,202
Accumulated depletion and depreciation				
As at January 1, 2021	\$ (952,479)	\$ (3,546)	\$ (2,769)	\$ (958,794)
Depletion and depreciation	(76,556)	(1,564)	(414)	(78,534)
Disposition	4,403	1,640	-	6,043
Impairment reversal	218,338	-	-	218,338
As at December 31, 2021	(806,294)	(3,470)	(3,183)	(812,947)
Depletion and depreciation	(100,663)	(1,305)	(499)	(102,467)
Dispositions	68,435	1,268	39	69,742
Impairment reversal, net	46,411	-	-	46,411
At December 31, 2022	\$ (792,111)	\$ (3,507)	\$ (3,643)	\$ (799,261)
Net book value				
At December 31, 2021	\$ 1,017,494	\$ 2,020	\$ 1,333	\$ 1,020,847
At December 31, 2022	\$ 1,070,105	\$ 4,148	\$ 1,688	\$ 1,075,941

The calculation of depletion for the year ended December 31, 2022 includes forecasted future development costs of \$224.7 million (December 31, 2021 - \$222.3 million) associated with the development of the Company's proved and probable oil and gas reserves. Depletion expense on petroleum and natural gas assets was \$100.7 million for the year ended December 31, 2022 (2021 - \$76.6 million).

For the year ended December 31, 2022, Cardinal capitalized \$1.9 million of general and administrative expenses (2021 - \$1.5 million) and \$1.0 million (2021 - \$0.7 million) of share-based compensation.

Impairment and impairment reversal

2022:

At December 31, 2022, the Company completed assessments of internal and external indicators of impairment reversal. The Company identified an indicator of impairment reversal at December 31, 2022 for the Alberta Central CGU and performed an impairment reversal test to estimate the recoverable amount of the CGU. It was determined the recoverable amount of the Alberta Central CGU exceeded its carrying value, resulting in all previous Alberta Central CGU impairment, net of depletion, of \$64.3 million being reversed. The impairment reversal was the result of a recovery of the forecasted oil and gas commodity prices, increased economic stability, corporate market capitalization, and greater certainty in the sustainability of the commodity price increases.

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 evaluators and 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 volumes, 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, 2022. The forecasted oil and gas commodity prices are based on the average price forecasts of three independent third party reserve evaluators at December 31, 2022 and are a significant assumption in assessing the estimated recoverable amount.

		WTI (USD \$/bbl)	WCS (CAD \$/bbl)	AECO (CAD \$/mmbtu)	Exchange rate (US/CAD)
2023	\$	80.33	\$ 76.54	\$ 4.23	0.75
2024	\$	78.50	\$ 77.75	\$ 4.40	0.77
2025	\$	76.95	\$ 77.54	\$ 4.21	0.77
2026	\$	77.61	\$ 80.07	\$ 4.27	0.77
2027	\$	79.16	\$ 81.89	\$ 4.34	0.78
Thereafter (inflation percentage and exchange rate)		2.0%	2.0%	2.0%	0.78

2021:

As a result of assessments of internal and external indicators of impairment or impairment reversal, the Company performed impairment tests for its CGUs in 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, 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 evaluators 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 volumes, 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 September 30, 2021. The forecasted oil and gas commodity prices were 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

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 independent third party reserve evaluators also assess many other financial assumptions regarding forecasted production volumes, forecasted royalty costs, forecasted operating costs and forecasted future development costs along with several other non-financial assumptions that affect reserve volumes. Management considered these assumptions for the impairment tests in 2022 and 2021, however, it should be noted that all estimates are subject to uncertainty.

7 BANK DEBT

The Company's reserves-based revolving credit facility of \$155.0 million is comprised of a \$135.0 million syndicated term credit facility and a \$20.0 million non-syndicated operating line credit facility (the "Facilities"). The Facilities are available on a revolving basis until May 31, 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, 2024.

The available lending limits of the Facilities are reviewed semi-annually based on the syndicate's interpretation of the Company's reserves, future commodity prices and costs. As the available lending limit of the Facilities is based on the syndicate's interpretation of the Company's reserves and future commodity prices and costs, there can be no assurance that the amount of the Facilities will not decrease at the next scheduled review. On a redetermination date, lenders could reduce the borrowing base to below amounts drawn, in which case, any short fall would have to be repaid within 60 days. The next scheduled review date will be on or before May 31, 2023.

Advances under the Facilities are available by way of either prime rate loans, which bear interest at the banks' prime lending rate plus 1.75% to 5.25%, and bankers' acceptances, which are subject to fees and margins ranging from 2.75% to 6.25%. Interest and standby fees on the undrawn amounts of the Facilities depend upon certain ratios. The Facilities are secured by a general security agreement over all of the Company's assets. There are no financial covenants related to the Facilities, provided that Cardinal is not in default of the terms of the Facilities.

Letters of credit for \$1.7 million were outstanding at December 31, 2022 (2021 – \$1.7 million) that reduced the amount otherwise available to be drawn on the operating line credit facility.

Cardinal was in compliance with the terms of the Facilities at December 31, 2022. For the year ended December 31, 2022 the effective interest rate on the Company's bank debt was 5.5% (2021 – 5.8%).

8 SECURED NOTES

As at January 1, 2021	\$	-
Issued		11,901
Interest		645
As at December 31, 2021	\$	12,546
Interest		361
Redeemed		(12,907)
As at December 31, 2022	\$	-

On July 14, 2021, Cardinal completed a non-brokered private placement ("2021 Private Placement") of \$12.5 million principal amount of second lien secured notes ("Secured Notes").

The Secured Notes bear interest at 10% per annum with an effective interest rate of 11.5%, with interest compounded and accrued semi-annually and added to the principal amount outstanding, payable on maturity. The Secured Notes were to mature on July 14, 2024. As part of the 2021 Private Placement, Cardinal issued one common share purchase warrant ("2021 Warrant") for each \$5.00 principal amount of Secured Notes. Each 2021 Warrant entitled 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 Secured Notes were recognized at fair value, net of directly related issue costs (\$0.03 million), of \$11.9 million with the residual of \$0.6 million allocated to the Warrant.

On March 31, 2022, Cardinal settled the Secured Notes for a payment of \$13.7 million, which included the principal amount, \$0.9 million of accrued interest and a prepayment fee of \$0.3 million. The Company recorded a \$0.8 million loss as a result of the settlement of these notes.

9 CONVERTIBLE DEBENTURES

8.0% Convertible debentures	Number of convertible debentures	Liability component	Equity component
As at January 1, 2021	28,207	\$ 26,886	\$ 1,582
Accretion	-	100	-
Loss on conversion	-	1,221	-
Converted	(28,013)	(28,013)	(1,582)
Redeemed	(194)	(194)	-
Balance at December 31, 2021	-	\$ -	\$ -

On February 4, 2021, Cardinal issued a notice of redemption for all of the outstanding convertible debentures with a principal amount of \$28.2 million, effective March 11, 2021. Prior to the redemption date, the majority of the holders of the convertible debentures exercised their conversion option whereby Cardinal issued 22,410,000 common shares upon the conversion of \$28.0 million of principal amount of the convertible debentures, with a conversion price of \$1.25 per share, representing approximately 99.3% of the outstanding debentures. The redemption of the remaining \$0.2 million principal amount of the convertible debentures was funded through the Company's credit facility.

For the year ended December 31, 2021 Cardinal recognized \$0.3 million of interest, \$0.1 million of accretion, and a loss on conversion of \$1.2 million related to the convertible debentures.

10 LEASE LIABILITIES

	2022	2021
As at January 1	\$ 2,631	\$ 3,914
Additions	3,433	516
Finance cost	146	206
Lease payments	(1,720)	(2,005)
As at December 31	\$ 4,490	\$ 2,631

The Company had future commitments relating to lease liabilities as follows:

As at December 31	2022	2021
Less than 1 year	\$ 1,746	\$ 1,489
1 - 3 years	1,472	1,300
4 - 5 years	817	2
Thereafter	1,323	-
Total undiscounted future lease payments	5,358	2,791
Amounts representing financing	(868)	(160)
Present value of net lease payments	4,490	2,631
Less current portion of lease liabilities	(1,487)	(1,371)
Non-current portion of lease liabilities	\$ 3,003	\$ 1,260

The Company has lease liabilities for contracts related to office space, vehicles, and office equipment. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. Discount rates during the year ended December 31, 2022 were between 6% and 8% (2021 – between 6% and 8%), depending on the duration of the lease term.

11 DECOMMISSIONING OBLIGATION

	2022	2021
Balance, beginning of year	\$ 120,791	\$ 82,787
Liabilities incurred	989	86
Liabilities acquired	104	6,283
Liabilities disposed	(8,238)	(748)
Change in estimates	(6,576)	35,154
Government subsidy for decommissioning expenditures	(810)	(4,059)
Decommissioning expenditures	(19,610)	(6,302)
Accretion	8,058	7,590
Balance, end of year	\$ 94,708	\$ 120,791

The Company's decommissioning obligation results from its ownership interest in crude oil and natural gas assets including well sites and facilities. At December 31, 2022, the total estimated amount to settle Cardinal's decommissioning obligation was \$371 million (December 31, 2021 - \$349 million) on an uninflated and undiscounted basis and \$716 million (December 31, 2021 - \$597 million) on an inflated and undiscounted basis.

The decommissioning obligation was determined by applying an inflation factor of 2.09% (2021 – 1.82%) and discounting the inflated amount using Cardinal's credit-adjusted rate of 9.0% (2021 – 7.0%). The majority of the costs are expected to be incurred over the next 50 years. The \$6.6 million (2021 – \$35.2 million) change in estimates for the year ended December 31, 2022 is a result of changes in the inflation rate, credit-adjusted rate and estimated future abandonment and reclamation costs.

12 SHARE CAPITAL

At December 31, 2022, the Company was authorized to issue an unlimited number of common voting shares without nominal or par value. Holders of common shares are entitled to one vote per share.

Normal Course Issuer Bid ("NCIB")

On June 27, 2022, the Company announced that the Toronto Stock Exchange ("TSX") had accepted the Company's intention to commence an NCIB. Pursuant to the NCIB, the Company is permitted to purchase up to 12,319,686 common shares representing approximately 10% of its public float as of June 20, 2022 over a twelve month period commencing June 30, 2022. As of December 31, 2022, the Company repurchased and cancelled 3,724,156 common shares at average price of \$7.05 per common share, for a total cost of \$26.3 million. Share capital was reduced by the average carrying value of the shares repurchased with the difference between carrying value and purchase cost, including commissions and fees, being charged to contributed surplus.

Treasury Shares

RAs and PAs 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, 2022, the trustee purchased 2,691,538 common shares (2021 – 1,394,358) for \$19.0 million (2021 - \$4.0 million) for the settlement of future vesting RAs and PAs.

During the year ended December 31, 2022, the Company utilized 1,608,629 (2021 – 1,306,710) treasury shares to settle vesting RAs and PAs. As at December 31, 2022, 2,519,681 (December 31, 2021 – 1,436,772) common shares remained classified as treasury shares to be potentially used for future settlements.

Warrants

	Number of warrants
As at January 1, 2021	8,122,000
Issued	2,500,000
Exercised	(500,000)
As at December 31, 2021	10,122,000
Exercised	(10,122,000)
As at December 31, 2022	-

On July 14, 2021, as part of the 2021 Private Placement, Cardinal issued 2,500,000 2021 Warrants with an exercise price of \$3.16 per warrant for one common share. The 2021 Warrants were to expire on July 14, 2024. The warrants were ascribed a value of \$0.6 million (see Note 8).

In 2020, Cardinal issued 8,122,000 Units consisting of one common share and one warrant ("2020 Warrants") at \$0.50 per unit for net proceeds of \$4.0 million. The 2020 Warrants were exercisable at \$0.55 per warrant for one common share. The 2020 Warrants were to expire on December 30, 2023.

The fair value of the 2020 Warrants was determined using the Black-Scholes pricing model with the following inputs:

	March 18 - 31, 2021
As at	
Share Price	\$2.04 - \$2.68
Risk-free interest rate	0.25%
Expected life (years)	2.75
Expected volatility	60%

The 2020 Warrants issued were classified as a financial liability as a result of a cashless exercise provision. All of the warrant holders waived their right to cashless exercise the 2020 Warrants in the first quarter of 2021. 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 of \$12.9 million and reclassified the warrant liability to shareholders equity.

For the year ended December 31, 2022, all outstanding warrants were exercised resulting in \$12.1 million (2021 – \$0.3 million) of proceeds to the Company.

Earnings per share

For the years ended December 31	2022	2021
Earnings for the year	\$ 302,687	\$ 284,415
Earnings per share		
- Basic	\$ 1.97	\$ 1.98
- Diluted	\$ 1.92	\$ 1.84
Weighted average number of common shares		
- Basic	153,993,778	143,636,272
- Diluted	157,897,533	154,572,304

The weighted average number of common shares is adjusted for treasury shares purchased and held by the trustee.

For the year ended December 31, 2022, 33,105 RAs (2021 – 59,182) were excluded from the calculation of diluted earnings per share as their effect was anti-dilutive.

13 DIVIDENDS

During the year ended December 31, 2022, \$60.9 million (\$0.38 per common share) (2021 – \$nil) of dividends were declared, of which \$50.9 million was paid in cash and \$10.0 million was recognized as a liability at December 31, 2022. The dividend payable was settled on January 16, 2023.

On February 15, 2023, the Company paid a dividend of \$9.6 million (\$0.06 per common share) to shareholders of record on January 31, 2023.

On February 13, 2023, the Company announced that a dividend of \$0.06 per common share would be paid on March 15, 2023 to shareholders of record on February 28, 2023. The total amount of dividends declared at February 28, 2023 was \$9.6 million.

14 SHARE-BASED COMPENSATION

The maximum number of common shares issuable under the Company's bonus award plan, in aggregate, cannot exceed five percent of the outstanding common shares. The Company's common shares traded at a weighted average share price of \$7.60 per common share (2021 - \$3.09) during the year ended December 31, 2022.

Bonus Awards

The Company has a bonus award plan whereby RAs and PAs may be granted to directors, officers, employees and other service providers. Awards granted according to the plan vest equally over three years from the date of grant and expire on December 15th of the third year following the year in which the award was granted. 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 are to be settled with either cash, common shares or a combination thereof at the Company's discretion.

	Number of PAs	Number of RAs
As at January 1, 2021	846,369	3,992,659
Granted	972,000	1,866,446
Settled	(282,123)	(2,009,757)
Forfeited	-	(179,245)
Expired	-	(4,505)
As at December 31, 2021	1,536,246	3,665,598
Granted	397,800	778,662
Settled	(606,123)	(1,931,131)
Forfeited	-	(143,053)
Expired	-	(10,885)
As at December 31, 2022	1,327,923	2,359,191

For the year ended December 31, 2022, upon the vesting of 1,931,131 (2021 – 2,009,757) RAs and 606,123 (2021 – 282,123) PAs, when taking into account the performance multiplier for PAs, the Company issued 1,608,629 (2021 – 1,306,710) treasury shares and made payments totalling \$10.6 million (2021 - \$2.3 million) for withholding taxes.

The fair value of the granted awards was determined based on the value of the Company's common shares at each grant date. The weighted average market price of the Company's common shares used to value the RAs granted was \$7.48 (2021 – \$2.25) and PAs granted was \$7.50 (2021 – \$2.12).

Share-based Compensation

Share-based compensation for the year ended December 31, 2022 of \$7.2 million (2021 - \$4.4 million) was expensed and \$1.0 million (2021 - \$0.6 million) was capitalized.

15 DEFERRED TAX

The Company recorded \$9.7 million (2021 – \$nil) of deferred tax recovery for the year ended December 31, 2022.

Reconciliation of effective tax recovery:

For the years ended December 31	2022	2021
Earnings before deferred tax	\$ 292,938	\$ 284,415
Expected tax rate	23.8%	23.8%
Expected deferred tax recovery	69,719	67,691
Permanent items	226	-
Change in unrecognized tax benefits	(79,766)	(67,805)
Change in statutory tax rates and other	72	114
Deferred tax recovery	\$ (9,749)	\$ -

The following tables provide a continuity of the deferred tax asset:

	As at January 1, 2021	Recognized in income	As at December 31, 2021
PP&E	\$ -	\$ (53,568)	\$ (53,568)
Non-capital losses	315	53,253	53,568
Convertible debentures	(315)	315	-
Total	\$ -	\$ -	\$ -

	As at January 1, 2022	Recognized in income	Equity	As at December 31, 2022
PP&E	\$ (53,568)	\$ (40,738)	\$ -	\$ (94,306)
Non-capital losses	53,568	21,381	-	74,949
Deductible restricted bonus awards	-	5,790	-	5,790
Decommissioning obligation	-	22,541	-	22,541
Lease liabilities	-	1,068	-	1,068
Debt issue costs and other	-	72	17	89
Unrealized gain on commodity contracts	-	(365)	-	(365)
Total	\$ -	\$ 9,749	\$ 17	\$ 9,766

The approximate amount of tax pools available to Cardinal as at December 31, 2022 is \$1.3 billion (2021 - \$1.5 billion). The estimate of tax pools includes non-capital losses ("NCLs") of approximately \$507 million (2021 - \$696 million) that can be used to offset taxable income in future periods as follows which expire between 2034 and 2041.

A deferred tax asset was not recognized in respect of temporary differences related to successor tax pools of \$101 million (2021 – \$146 million) as there is not sufficient certainty regarding future utilization.

During the year ended December 31, 2021, Cardinal received a notice of reassessment 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, has filed a notice of objection and will continue defending its position. Although the Company appealed the reassessment, Cardinal has derecognized these pools.

16 REVENUE

Cardinal sells its production pursuant to variable-priced contracts. The transaction price for variable priced contracts is based on the commodity price, adjusted for quality, location or other factors, whereby each component of the pricing formula can be either fixed or variable, depending on the contract terms. Commodity prices are based on market indices that are determined on a monthly or daily basis. Under its contracts, the Company is required to deliver fixed or variable volumes of crude oil, natural gas and natural gas liquids to the contract counterparty. The amount of revenue recognized is based on the agreed transaction price, whereby any variability in revenue relates specifically to the Company's efforts to transfer production, and therefore the resulting revenue is allocated to the production delivered in the period during which the variability occurs. As a result, none of the variable consideration is considered constrained.

Crude oil, natural gas, and natural gas liquids are sold under contracts of varying price and volume terms of up to one year. Revenues are typically collected on the 25th day of the month following production.

The following table details the Company's petroleum and natural gas sales by product, and processing and other revenue generated by processing third party volume at facilities where the Company has an ownership interest:

For the years ended December 31	2022	2021
Crude oil	\$ 689,700	\$ 413,122
NGL	17,078	11,945
Natural gas	30,812	20,002
Petroleum and natural gas revenue	\$ 737,590	\$ 445,069
Processing and other revenue	\$ 4,250	\$ 3,686

Included in accounts receivable at December 31, 2022 is \$45.7 million (December 31, 2021 - \$41.1 million) of accrued petroleum and natural gas revenue.

17 FINANCIAL RISK MANAGEMENT

Cardinal's financial assets and liabilities consist of trade and other receivables, trade and other payables, dividends payable, fair value of financial instruments, and bank debt. Fair value of financial instruments assets and liabilities arise from the use of derivative financial instruments.

The Company classifies fair value according to the following fair value hierarchy based on the amount of observable inputs used to value the instrument:

Level 1 - Fair value is based on unadjusted quoted prices in active markets for identical assets or liabilities as of the reporting date.

Level 2 - Fair value is based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices).

Level 3 - Fair value is based on inputs for the asset or liability that are not based on observable market data.

Derivatives are recorded on the balance sheet at fair value at each reporting period with the change in fair value being recognized as an unrealized gain or loss in the statement of earnings. The fair value of forward contracts and swaps is determined by discounting the difference between the contracted prices and published forward price curves as at the balance sheet date, using the remaining contracted volumes and a credit adjusted interest rate. The fair value of options and collars is based on option models that use published information with respect to volatility, prices and interest rates.

The Company does not apply hedge accounting for these contracts. The Company's production is usually sold using "spot" or near term contracts, with prices fixed at the time of transfer of custody or on the basis of a monthly average market price. However, the Company may give consideration in certain circumstances to the appropriateness of entering into long term, fixed price marketing contracts. The Company does not enter into commodity contracts other than to meet the Company's expected sale requirements.

As at December 31, 2022 and 2021, the only assets or liabilities measured at fair value were the fair value of financial instruments which are classified as level 2 financial instruments.

Carrying amount and fair value of financial assets and liabilities

Trade and other receivables are classified as financial assets at amortized cost and are reported at amortized cost. Trade and other payables, dividends payable, secured notes, and bank debt are classified as financial liabilities at amortized cost and are reported at amortized cost. The fair values of trade and other receivables, and trade and other payables, and dividends payable approximate their carrying amount due to the short-term maturity of these instruments. The fair value of bank debt approximates the carrying amount due to the floating rate of interest and the margin charged by the syndicate is indicative of current credit spreads. The fair values of secured notes fluctuates in response to changes in the market rates of interest payable on similar instruments and credit changes.

Risk management

Cardinal is exposed to normal market risks inherent in the oil and natural gas business, including, but not limited to, commodity price risk, foreign currency rate risk, credit risk, liquidity risk and interest rate risk. The Company seeks to mitigate these risks through various business processes and management controls and from time to time by using various derivative financial instruments and physical delivery sales contracts.

Commodity price risk

The Company is exposed to commodity price risk on petroleum and natural gas sales. Commodity prices for crude oil and natural gas are impacted by not only the relationship between the Canadian and United States dollar, but also by world economic events that dictate the levels of supply and demand.

At December 31, 2022 Cardinal had the following commodity financial derivative contract outstanding:

Type of instrument	Remaining term	Average quantity	Average strike price	Fair value
USD WCS Basis Swap	January 1, 2023 - January 31, 2023	2,500 bbl/d	USD \$ (13.50)	\$ 1,533
				\$ 1,533

Cardinal limits its credit risk by executing counterparty risk procedures which include transacting only with members of the syndicate for our credit facilities or institutions with high credit ratings and by obtaining financial security in certain circumstances. Based on December 31, 2022 forecasted commodity prices, a \$1 per barrel change in the price of crude oil would have changed the unrealized gain by \$nil (2021 – \$nil).

Currency risk

Prices for oil are determined in global markets and are generally denominated in United States dollars. Natural gas prices obtained by the Company are predominantly influenced by North American supply and demand. The exchange rate effect is not quantified but generally a decrease in the value of the \$CAD as compared to the \$USD will increase the prices received by the Company for its petroleum and natural gas revenue.

Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from Cardinal's receivables from petroleum and natural gas marketers, who comprised approximately 71% of the balance at December 31, 2022 (2021 – 80%), and joint venture partners. As at December 31, 2022, the Company's trade and other receivables balance was \$64.0 million (December 31, 2021 - \$51.5 million) and \$3.4 million (December 31, 2021 - \$2.3 million) was outstanding for greater than 90 days.

Receivables from petroleum and natural gas marketers are normally collected on the 25th day of the month following production and Cardinal has not experienced any material collection issues with its petroleum and natural gas marketers. Three of Cardinal's external marketers comprised 71% of the revenue received for the year ended December 31, 2022 (2021 – 87%).

Cash and cash equivalents consist of cash bank balances and short-term deposits maturing in less than 90 days. The carrying amount of cash and cash equivalents, when outstanding, fair value of financial instruments assets, and trade and other receivables represent the maximum credit exposure.

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. The financial liabilities on the balance sheet consist of trade and other payables, and bank debt. Trade and other payables are considered due within one year. Bank debt (see note 7) is considered due in 2024. The Company anticipates it will continue to have adequate liquidity to fund its financial liabilities. The Company has had no defaults or breaches on its financial liabilities as at December 31, 2022.

Interest rate risk

Interest rate risk is the risk that future cash flows will fluctuate as a result of changes in market interest rates. The interest charged on outstanding bank debt fluctuates with the interest rates posted by the lender. Had the interest rate been 25 basis points higher (or lower) throughout the year ended December 31, 2022, earnings before tax would have been affected by approximately \$0.2 million (2021 - \$0.5 million) based on the average bank debt outstanding.

18 CAPITAL MANAGEMENT

The Company's capital structure includes shareholders' equity, bank debt, secured notes, the unused portion of its credit facilities and adjusted working capital (working capital excluding the fair value of financial instruments, current decommissioning obligation, and current lease liabilities).

As at December 31,	2022	2021
Shareholders' equity	925,370	719,232
Bank debt	31,280	142,412
Secured notes	-	12,546
Undrawn component of bank credit facility	122,001	80,954
Adjusted working capital deficiency	31,392	23,235

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.

The key measures that the Company utilizes in evaluating its capital structure are the credit available from the Facilities in relation to the Company's budgeted capital expenditures program and the ratio of net debt to adjusted funds flow. This ratio is calculated as net debt, defined as bank debt plus secured notes plus adjusted working capital deficiency (adjusted for the fair value of financial instruments, current portion of the decommissioning obligation, and current lease liabilities), divided by adjusted funds flow calculated as cash flow from operating activities before changes in non-cash working capital, decommissioning obligation expenditures, and transaction costs for the prior 12 month period. Net debt, adjusted working capital, and adjusted funds flow are capital management 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 increases in petroleum and natural gas reserves and new equity if available on favorable terms. The Company prepares an annual capital expenditure budget, which is monitored quarterly and updated as necessary.

Cardinal's ratio of net debt to adjusted funds flow as at December 31, 2022 was 0.2 to 1, lower than the ratio at December 31, 2021 of 1.3 to 1 due to higher commodity prices, a disciplined capital program and the Company's debt reduction strategy. The Company will continue to monitor this ratio to endeavor to keep it below the targeted range of 1.0 to 1.

For the years ended December 31,	2022	2021
Bank debt	\$ 31,280	\$ 142,412
Secured notes	-	12,546
Adjusted working capital deficiency	31,392	23,235
Net debt	\$ 62,672	\$ 178,193
Cash provided from operating activities	\$ 337,263	\$ 125,121
Change in non-cash working capital	5,910	414
Funds flow	\$ 343,173	\$ 125,535
Decommissioning obligation expenditures	19,610	6,302
Transaction costs	-	670
Adjusted funds flow	362,783	132,507
Net debt to adjusted funds flow	0.2	1.3

19 CONTRACTUAL OBLIGATIONS

As at December 31, 2022, the Company had contractual obligations as follows:

	2023	2024	2025	2026	2027	Thereafter
Trade and other payables	\$ 89,156	-	-	-	-	-
Dividend payable	10,009	-	-	-	-	-
Lease liabilities	1,746	787	685	394	423	1,323
Bank debt ⁽¹⁾	-	31,280	-	-	-	-
Power purchase commitment	14,056	13,195	8,674	8,674	8,674	-
Total contractual obligations	\$ 114,967	\$ 45,262	\$ 9,359	\$ 9,068	\$ 9,097	\$ 1,323

(1) Amount excludes interest.

20 FINANCE

For the years ended December 31,	2022	2021
Interest - bank debt	\$ 5,406	\$ 10,627
Other finance expenses, net	1,179	1,213
Interest - convertible debentures	-	348
Interest - secured notes	361	2,915
Interest - lease liabilities	146	206
Accretion of convertible debentures	-	100
Accretion of decommissioning obligation	8,058	7,590
Finance	\$ 15,150	\$ 22,999

21 SUPPLEMENTAL CASH FLOW INFORMATION

For the years ended December 31,	2022	2021
Source (use) of cash		
Trade and other receivables	\$ (12,570)	\$ (22,210)
Deposits and prepaid expenses	(222)	(634)
Trade and other payables	10,940	35,795
Acquired working capital	-	2,156
Change in non-cash working capital	\$ (1,852)	\$ 15,107
Allocated to operating activities	\$ (5,910)	\$ (414)
Allocated to investing activities	4,051	15,268
Allocated to financing activities	7	253
	\$ (1,852)	\$ 15,107
Interest paid	\$ 5,553	\$ 13,073
Interest received	\$ -	\$ 1

22 PERSONNEL EXPENSES

Cardinal's key management personnel consist of its directors and executive officers. In addition to director fees and salaries, bonuses and short-term benefits paid to the directors and executive officers, respectively, directors and executive officers participate in the share based compensation plans detailed in Note 14. The compensation relating to key management personnel for the year was \$9.1 million (2021 - \$5.6 million) and share based compensation costs were \$5.3 million (2021 - \$3.1 million).