CARDINAL
ENERGY LTD.

2019
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 17, 2020

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INDEPENDENT AUDITORS' 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 sheets as at December 31, 2019 and December 31, 2018
- the statements of earnings (loss) and comprehensive earnings (loss) for the years then ended
- the statements of changes in shareholders' equity for the years then ended
- the statements of cash flows for the years then ended
- and notes to the consolidated 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, 2019 and December 31, 2018, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

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 *"Auditors' Responsibilities for the Audit of the Financial Statements"* section of our auditors' 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.

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.

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG Canada provides services to KPMG LLP.

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 as at the date of this auditors' 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 auditors' 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 IFRS, 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.

Auditors' 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 auditors' 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 auditors' 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 auditors' 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.

The engagement partner on the audit resulting in this auditors' report is Gregory Ronald Caldwell.

KPMG LLP

Chartered Professional Accountants

Calgary, Canada
March 17, 2020

BALANCE SHEETS

As at *(thousands)*	*Note*		**December 31, 2019**		December 31, 2018
ASSETS					
Current assets					
Trade and other receivables		**$**	**39,724**	$	21,124
Deposits and prepaid expenses			**2,794**		2,693
Fair value of financial instruments	17		**261**		15,379
			42,779		39,196
Non-current assets					
Exploration and evaluation assets	6		**272**		251
Property, plant and equipment	7		**1,003,200**		1,054,529
Deferred tax	15		**103,576**		112,360
			1,107,048		1,167,140
Total Assets		**$**	**1,149,827**	$	1,206,336
LIABILITIES					
Current liabilities					
Trade and other payables		**$**	**69,871**	$	30,618
Dividends payable	13		**1,938**		1,445
Liability component of convertible debentures	9		**44,158**		-
Lease liabilities	10		**1,850**		-
Decommissioning obligation	11		**6,450**		5,000
Fair value of financial instruments	17		**3,407**		-
			127,674		37,063
Non-current liabilities					
Deferred flow-through share premium	12		**-**		390
Lease liabilities	10		**3,581**		-
Bank debt	8		**173,308**		211,443
Liability component of convertible debentures	9		**-**		48,146
Decommissioning obligation	11		**107,362**		116,672
			284,251		376,651
Total Liabilities			**411,925**		413,714
SHAREHOLDERS' EQUITY					
Share capital	12		**1,062,194**		1,072,284
Treasury shares	12		**(5,182)**		-
Equity component of convertible debentures	9		**1,556**		1,729
Contributed surplus			**26,429**		13,365
Deficit			**(347,095)**		(294,756)
Total Shareholders' Equity			**737,902**		792,622
Total Liabilities and Shareholders' Equity		**$**	**1,149,827**	$	1,206,336
Contractual obligations	19				
Subsequent events	23				

Approved on behalf of the Board of Directors,

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

signed "*Greg T. Tisdale*"
Greg T. Tisdale
Director

STATEMENTS OF EARNINGS (LOSS) AND COMPREHENSIVE EARNINGS (LOSS)

For the years ended *(thousands except per share amounts)*	*Note*		**December 31, 2019**		December 31, 2018
Revenue					
Petroleum and natural gas revenue	16	**$**	**388,971**	$	379,254
Royalties			**(65,759)**		(64,462)
Realized loss on commodity contracts	17		**(14,664)**		(42,153)
Unrealized (loss) gain on commodity contracts	17		**(15,695)**		31,277
Processing and other revenue	16		**2,630**		4,077
			295,483		307,993
Expenses					
Operating			**157,949**		159,358
Transportation			**2,432**		2,324
General and administrative			**15,861**		17,621
Share-based compensation	14		**7,160**		7,401
Finance	20		**22,607**		22,209
Transaction costs			**-**		359
Depletion and depreciation	7		**92,082**		88,076
Impairment (reversal)	7		**23,400**		(74,825)
Gain on dispositions and other	5, 7, 9		**(759)**		(494)
			320,732		222,029
Earnings (loss) before deferred tax			**(25,249)**		85,964
Deferred tax expense	15		**9,091**		25,420
Earnings (loss) and comprehensive earnings (loss) for the year		**$**	**(34,340)**	$	60,544
Earnings (loss) per share	12				
Basic		**$**	**(0.30)**	$	0.53
Diluted		**$**	**(0.30)**	$	0.52

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

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(thousands except number of common shares)	Common Shares, net of treasury shares	Share Capital	Treasury Shares	Equity Component of Convertible Debentures	Contributed Surplus	Deficit	Total Shareholders' Equity
		(note 12)	*(note 12)*	*(note 9)*	*(note 14)*		
January 1, 2018	110,838,321	$ 1,042,352	$ -	$ 1,729	$ 14,501	$ (308,620)	$ 749,962
Common shares issued in connection with acquisition (note 5)	2,314,815	11,250	-	-	-	-	11,250
Issue of flow-through common shares	1,664,000	8,903	-	-	-	-	8,903
Settlement of RAs [1]	1,379,959	9,852	-	-	(9,852)	-	-
Share-based compensation	-	-	-	-	8,759	-	8,759
Tax adjustment on excess value of RAs [1]	-	-	-	-	(43)	-	(43)
Share issue costs, net of deferred tax of $26	-	(73)	-	-	-	-	(73)
Dividends ($0.395 per share)	-	-	-	-	-	(46,680)	(46,680)
Earnings for the year	-	-	-	-	-	60,544	60,544
December 31, 2018	**116,197,095**	**$ 1,072,284**	**-**	**$ 1,729**	**$ 13,365**	**$ (294,756)**	**$ 792,622**
January 1, 2019	116,197,095	$ 1,072,284	$ -	$ 1,729	$ 13,365	$ (294,756)	$ 792,622
Purchase of common shares for RAs [1] settlements	(2,253,357)	-	(6,400)	-	-	-	(6,400)
Settlement of RAs [1]	1,386,255	5,800	1,218	-	(7,905)	-	(887)
Purchase of common shares for cancellation	(1,672,746)	(15,890)	-	-	12,054	-	(3,836)
Purchase of convertible debentures for cancellation	-	-	-	(173)	-	(76)	(249)
Share-based compensation	-	-	-	-	8,217	-	8,217
Tax adjustment on excess value of RAs [1]	-	-	-	-	698	-	698
Dividends ($0.15 per share)	-	-	-	-	-	(17,923)	(17,923)
Loss for the year	-	-	-	-	-	(34,340)	(34,340)
December 31, 2019	**113,657,247**	**$ 1,062,194**	**$ (5,182)**	**$ 1,556**	**$ 26,429**	**$ (347,095)**	**$ 737,902**

(1) Restricted Bonus Awards ("RAs")

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

STATEMENTS OF CASH FLOWS

For the years ended *(thousands)*	*Note*	**December 31, 2019**	December 31, 2018
Cash provided by (used in)			
Operating activities			
Earnings (loss) for the year		**$ (34,340)**	$ 60,544
Adjustments for			
Share-based compensation	14	**7,160**	7,401
Depletion and depreciation	7	**92,082**	88,076
Impairment (reversal)	7	**23,400**	(74,825)
Unrealized loss (gain) on commodity contracts	17	**15,695**	(31,277)
Unrealized foreign exchange loss		**23**	-
Deferred tax expense	15	**9,091**	25,420
Accretion	20	**9,458**	10,017
Gain on dispositions and other	5, 7, 9	**(759)**	(494)
Decommissioning obligation settled	11	**(6,571)**	(6,443)
Change in non-cash working capital	21	**4,740**	10,348
		119,979	88,767
Investing activities			
Exploration and evaluation expenditures		**(21)**	(80)
Property, plant and equipment expenditures		**(65,489)**	(63,075)
Property acquisitions	5	**(396)**	(9,414)
Proceeds from property dispositions	5	**242**	37,421
Change in non-cash working capital	21	**16,838**	(4,908)
		(48,826)	(40,056)
Financing activities			
Dividends	13	**(17,923)**	(46,680)
Repayment of lease liabilities	10	**(2,463)**	-
Purchase of common shares for cancellation	12	**(3,836)**	-
Purchase of common shares for RAs settlements and withholding tax	12	**(7,287)**	-
Purchase of convertible debentures for cancellation	9	**(4,846)**	-
Issue of flow-through common shares	12	**-**	9,786
Decrease in bank debt		**(35,328)**	(7,462)
Share issue costs		**-**	(99)
Change in non-cash working capital	21	**530**	(4,256)
		(71,153)	(48,711)
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.

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. The Company's principal business activity is the acquisition, exploration and production of petroleum and natural gas in the provinces of Alberta 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 ("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. References to “USD” are to United States dollars.

Operating expenses in the statement of earnings or loss 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 17, 2020.

3 SIGNIFICANT ACCOUNTING POLICIES

The following accounting policies have been applied consistently to all periods presented in these financial statements with the exception of IFRS 16 Leases that was adopted in the year as discussed in note 3(o). Certain prior period amounts have been reclassified to conform to current period presentation.

(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) Exploration and evaluation assets "E&E" and Property, plant and equipment "PP&E"

i) Recognition and measurement

E&E

Pre-license costs are expensed in the statement of earnings or loss as incurred. E&E costs including the costs of acquiring licenses are capitalized as E&E. Costs are accumulated in cost centres by well, field or exploration area pending determination of technical feasibility and commercial viability.

E&E are assessed for impairment if (i) sufficient data exists to determine technical feasibility and commercial viability, and (ii) facts and circumstances suggest that the carrying amount exceeds the recoverable amount. For purposes of impairment testing, E&E are allocated to their related cash generating unit ("CGU").

The technical feasibility and commercial viability of extracting a mineral resource is considered to be determinable when proved and/or probable reserves are determined to exist. A review of each exploration license or field is carried out at least annually to ascertain whether proved and/or probable reserves have been discovered. Upon determination of proved and/or probable reserves, E&E attributable to those reserves are first tested for impairment and then reclassified from E&E to PP&E or expensed in earnings or loss to the extent of any impairment.

PP&E

Items of PP&E, including development or production assets, are measured at cost less accumulated depletion and depreciation and accumulated impairment losses and are grouped into CGU's for impairment testing. When significant parts of an item of PP&E, including petroleum and natural gas interests, 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 interests, 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 interests 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 interests 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 net carrying value of development or production assets is depleted using the unit of production method by reference to the ratio of production to the related proved plus probable reserves. 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. In determining its depletion base, Cardinal includes the estimated future development costs necessary to develop proved plus probable reserves. These estimates are reviewed by independent reserve engineers at least annually.

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, dividends payable, bank debt and convertible debentures. 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, dividends payable and bank debt 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.

Convertible debentures are separated into liability and equity components. The liability component is recognized initially at the fair value of a similar liability that does not have an equity conversion option and the equity component is recognized as the difference between the fair value of the convertible debenture as a whole and the fair value of the liability component net of any deferred taxes. Any transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts. Subsequent to initial recognition, the liability component of convertible debentures is classified as and measured at amortized cost and is accreted to the original principal balance using the effective interest method. The equity component is not remeasured subsequent to initial recognition. Convertible debentures can be converted to share capital at the option of the holder and the number of shares to be issued does not vary with changes in fair value. The equity component and the accreted liability component will be reclassified to share capital upon conversion. Any balance in the equity component of convertible debentures that remains after the settlement of the liability will be transferred to contributed surplus.

(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, power costs, 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 contracts as effective accounting hedges, and thus has not applied hedge accounting, even though the Company considers all financial derivative contracts to be economic hedges.

All financial derivative 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.

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 non-financial assets, other than E&E assets and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. E&E assets are assessed for impairment when they are reclassified to PP&E as petroleum and natural gas interests, and also if facts and circumstances suggest that the carrying amount exceeds the recoverable amount.

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 recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell.

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 future cash flows expected to be derived from production of proven and probable reserves.

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. E&E are allocated to the related CGU when they are assessed for impairment, both at the time of any triggering facts and circumstances as well as the reclassification to producing assets (petroleum and natural gas interests in PP&E).

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 and E&E recognized in prior periods is assessed at each reporting date for any indications 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 average depreciation term is 4.0 years.

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 sheets.

(g) Share-based compensation

The grant date fair value of options and other dilutive equity instruments granted to employees is recognized as compensation expense, with a corresponding increase in contributed surplus or warrants, 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.

(h) 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.

(i) 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.

(j) 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.

(k) 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.

(l) Flow-through shares

The resource expenditure deductions for income tax purposes related to exploration and development activities funded by flow-through share arrangements are renounced to investors in accordance with tax legislation. On issuance, the premium received on the flow-through shares, being the difference in price over a common share with no tax attributes, is recognized on the balance sheet. As expenditures are incurred, the deferred tax liability associated with the renounced tax deductions is recognized through earnings and loss along with a pro-rata portion of the deferred premium.

(m) 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 convertible debentures, options, warrants and other dilutive instruments granted to employees. The number of additional shares related to convertible debentures is calculated assuming the debentures are converted into common shares by dividing the face value of convertible debentures by the conversion price. Earnings are adjusted for interest or accretion, net of tax, related to the convertible debentures.

(n) Use of judgments 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 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 impairment indicators, or reversal indicators, exist and impairment testing is required. In determining the recoverable amount of PP&E, in the absence of quoted market prices, impairment tests are based on estimates of reserves, production rates, future petroleum and natural gas prices, future costs, discount rates, market value of land and other relevant assumptions.

iii) Exploration and evaluation assets

The application of the Company's accounting policy for E&E requires management to make certain judgments as to future events and circumstances as to whether economic quantities of reserves have been found in assessing economic and technical feasibility.

iv) 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.

v) 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 Sources of Estimation Uncertainty

i) Reserve estimates

Commercial petroleum reserves are determined based on estimates of petroleum-in-place, recovery factors and future petroleum and natural gas prices and costs. Cardinal engaged independent qualified reserve evaluators to evaluate the Company's petroleum and natural gas ("P&NG") reserves at December 31, 2019 and 2018. 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 reserves are those estimated 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. Proved plus probable reserves are those estimated 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 petroleum and natural gas reserves is subject to a level of uncertainty. The 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 commodity prices, new technology, changing economic conditions, future reservoir performance and development activity.

ii) Property, plant and equipment
Development and production assets within PP&E are depleted using the unit of production method based on estimated proved plus probable reserves determined using estimated future prices and costs. The estimate of proved plus probable reserves is an essential 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 proven and probable 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) Fair value calculation of share-based payments
The fair value of share-based payments for options and warrants is calculated using a Black Scholes or other option pricing model. There are a number of estimates used in the calculation such as the future forfeiture rate, expected option life and the future price volatility of the underlying security which can vary from actual future events. The factors applied in the calculation are management's best estimates based on historical information and future forecasts.

vi) 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.

(vii) Derivatives
The Company's estimate of the fair value of derivative financial instruments is dependent on estimated forward prices and the volatility in those prices.

(o) Changes in accounting policies

(i) Adoption of IFRS 16 - Leases
Effective January 1, 2019, Cardinal adopted IFRS 16, which provides a single recognition and measurement model for lessees to recognize assets and liabilities for contracts that are, or contain, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Cardinal has elected to use the modified retrospective approach upon adoption and therefore the comparative information has not been restated. The effect of initially applying the standard was a $6.5 million increase to ROU

assets, with a corresponding lease liability recorded. The ROU asset was then reduced by $1.0 million for previously recorded lease inducements with the offset recognized to eliminate the lease inducement liability that was previously included in trade and other payables. On January 1, 2019 there was no impact on deficit. The lease liability was measured at the present value of the remaining lease payments, discounted using Cardinal's incremental borrowing rate as at January 1, 2019. The weighted average incremental borrowing rate used to determine the lease obligation on adoption was approximately 6.4%. The ROU assets and lease liabilities recognized largely relate to the Company's head office lease in Calgary.

The Company has elected to apply the practical expedient of not recognizing right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with these leases are recognized as expenses on a straight-line basis over the lease term and are not considered material at December 31, 2019.

The difference in operating lease commitments disclosed as at December 31, 2018 and lease liabilities recognized on the balance sheet at January 1, 2019 is primarily due to non-lease components within the agreements and the impact of discounting using the Company's incremental borrowing rate at January 1, 2019:

		As at January 1, 2019
Less than 1 year	$	2,277
1 - 3 years		5,308
4 - 5 years		1,475
		9,060
Non-lease components		(1,786)
Amounts representing interest		(796)
Lease liabilities		**6,478**

Cash flow from financing activities for the year ended December 31, 2019 was $2.5 million lower due to the deduction of the lease payments reflected in this section while cash flow from operating activities increased $2.5 million. For the year ended December 31, 2019, general and administrative expense was decreased by $1.0 million and operating expense was decreased by $1.9 million offset by an increase in depletion and depreciation expense of $2.4 million.

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 risk management 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 and E&E

The fair value of PP&E and E&E recognized in a business combination is based on market value. The market value of PP&E and E&E is the estimated amount for which PP&E and E&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 market value of petroleum and natural gas

interests (included in PP&E and E&E) is estimated with reference to the discounted cash flows expected to be derived from petroleum and natural gas production based on externally prepared reserve reports. 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, 2019 and 2018, the fair value of these balances approximated their carrying value due to their short term to maturity.

(c) Bank debt and convertible debentures
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 convertible debentures bear interest at a fixed rate that the Company would expect to pay for similar financing transactions and accordingly the initial fair value approximated the carrying value. Subsequent to initial recognition, fair value is determined by trading in an active market.

(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 earnings or loss. 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.

(e) Share-based compensation
The fair value of warrants and stock options is measured using a Black Scholes or other option pricing model. Measurement inputs include share price on measurement date, exercise price of the instrument, expected volatility (based on publicly available information for similar companies), weighted average expected life of the instrument (based on expected general option or holder behaviour), expected dividends, and the risk-free interest rate (based on government bonds). The fair value of restricted bonus awards ("RAs") is determined on the date of grant based on the value of the Company's common shares.

5 ACQUISITIONS & DISPOSITIONS

2019 Acquisitions and Dispositions
During the year ended December 31, 2019, the Company disposed of a number of non-core assets for a total cash proceeds of $0.2 million. The assets consisted of petroleum and natural gas properties and undeveloped land with a net book value of nil and associated decommissioning liabilities of $0.3 million, resulting in a gain of $0.5 million.

The Company incurred $0.4 million of adjustments relating to prior years' acquisitions and dispositions.

2018 Acquisitions and Dispositions

On **January 12, 2018**, the Company closed a consolidating acquisition increasing the Company's working interest in the Midale Unit from 68.8% to 77.2%. Total consideration provided was $18.5 million, before closing adjustments, consisting of $7.3 million in cash and 2,314,815 common shares valued at $4.86 per share with an associated decommissioning obligation of $1.0 million. This property acquisition has been accounted for as a business combination in accordance with IFRS 3.

On **March 7, 2018**, the Company closed a disposition of fee title lands in the Weyburn area of Saskatchewan and a new gross overriding royalty on the Mitsue Gilwood Unit for net proceeds of $24 million plus additional working interests in certain producing wells in the Wainwright area. A gain of $1.0 million was recorded on this disposition.

On **May 17, 2018**, Cardinal disposed of non-core assets for cash proceeds of $1.0 million. The assets consisted of petroleum and natural gas properties with a net book value of $2.7 million and associated decommissioning obligations of $1.1 million, resulting in a loss of $0.6 million on closing of the disposition.

On **September 4, 2018**, Cardinal closed a minor acquisition in the Mitsue area for a consideration of $1.1 million before closing adjustments with an associated decommissioning obligation of $0.1 million.

On **September 14, 2018**, Cardinal sold a royalty interest on its Midale properties for gross proceeds of $12.5 million.

6 EXPLORATION AND EVALUATION ASSETS

		Exploration and Evaluation Assets
At December 31, 2017	$	1,846
Additions		80
Impairment		(1,675)
At December 31, 2018		251
Additions		21
At December 31, 2019	**$**	**272**

Cardinal's E&E assets consist of undeveloped land and exploration projects which are pending technical feasibility and commercial viability.

In 2018, management expensed $1.7 million of certain E&E assets associated with undeveloped land pending expiries due to no future planned development activities. The Company did not expense any of its E&E assets in 2019.

7 PROPERTY, PLANT AND EQUIPMENT

	Petroleum and natural gas assets	Right-of-use assets	Corporate assets	Total
Cost				
At January 1, 2018	$ 1,575,897	$ -	$ 3,903	$ 1,579,800
Additions	53,955	-	177	54,132
Acquisitions	21,706	-	-	21,706
Disposition	(43,806)	-	-	(43,806)
At December 31, 2018	1,607,752	-	4,080	1,611,832
Initial recognition (note 3)	-	5,461	-	5,461
Additions	56,728	1,449	153	58,330
Acquisitions	396	-	-	396
Disposition	-	(732)	-	(732)
At December 31, 2019	**$ 1,664,876**	**$ 6,178**	**$ 4,233**	**$ 1,675,287**
Accumulated depletion and depreciation				
At January 1, 2018	$ (549,810)	$ -	$ (1,417)	$ (551,227)
Depletion and depreciation	(87,608)	-	(468)	(88,076)
Disposition	5,500	-	-	5,500
Impairment reversal	76,500	-	-	76,500
At December 31, 2018	(555,418)	-	(1,885)	(557,303)
Depletion and depreciation	(89,226)	(2,406)	(450)	(92,082)
Disposition	-	698	-	698
Impairment	(23,400)	-	-	(23,400)
At December 31, 2019	**$ (668,044)**	**$ (1,708)**	**$ (2,335)**	**$ (672,087)**
Net book value				
At December 31, 2018	$ 1,052,334	$ -	$ 2,195	$ 1,054,529
At December 31, 2019	**$ 996,832**	**$ 4,470**	**$ 1,898**	**$ 1,003,200**

The calculation of depletion for the year ended December 31, 2019 includes estimated future development costs of $270.3 million (December 31, 2018 - $218.7 million) associated with the development of the Company's proved plus probable reserves.

For the year ended December 31, 2019, Cardinal capitalized $1.5 million of general and administrative expenses (2018 - $1.4 million) and $1.1 million (2018 - $1.4 million) of share-based compensation.

Impairment

2019:

As at December 31, 2019 Cardinal determined that the carrying value of the Alberta Central CGU exceeded the recoverable amount and recorded an impairment of $23.4 million. The impairment recognized was the result of lower forward pricing and higher future costs within the Company's Alberta Central CGU. The recoverable amount of Cardinal's impaired CGU at December 31, 2019 was $299.6 million. The Company did not identify any further indicators of impairment or impairment reversals for its other CGU's.

The 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 crude oil and natural gas proved plus probable reserves estimated by Cardinal's third party reserve evaluators discounted between 10% to 20% depending on the reserves composition. The recoverable amount is sensitive to commodity price, discount rate, production volumes, royalty rates, operating costs and future capital expenditures. In determining the appropriate discount rate, Cardinal considered various characteristics and risks of the assets.

The following table outlines forecast benchmark prices and exchange rates used in the Company's impairment test as at December 31, 2019. The forecast commodity prices are based on those used by external reserve evaluators at December 31, 2019 and are a key assumption in assessing the recoverable amount.

	WTI (US $/bbl)	WCS (CAD $/bbl)	AECO (CAD $/mmbtu)	Exchange rate (US/CAD)
2020	$ 61.00	$ 57.57	$ 2.04	0.76
2021	$ 62.70	$ 62.35	$ 2.32	0.77
2022	$ 63.82	$ 64.33	$ 2.62	0.79
2023	$ 64.20	$ 66.23	$ 2.71	0.79
2024	$ 64.40	$ 67.96	$ 2.81	0.79
Thereafter (inflation percentage and exchange rate)	2.0%	2.0%	2.0%	0.79

A one percent change in the discount rate or a five percent change in the forward price over the life of the reserves would result in changes in impairment of $3.0 million and $32.1 million, respectively.

The external reserve evaluators also assess many other financial assumptions regarding royalty rates, operating costs and future development costs along with several other non-financial assumptions that affect reserve volumes. Management considered these assumptions for the impairment test at December 31, 2019, however, it should be noted that all estimates are subject to uncertainty.

2018:
As at December 31, 2018, Cardinal determined that due to 2018 positive drilling results and improved performance of existing wells which increased proved plus probable reserves, that a reversal of previous impairment in the Company's Alberta South CGU in the amount of $76.5 million was required. After taking into account the reversal, the recoverable amount of the Alberta South CGU was $231.0 million. The Company did not identify any further indicators of impairment or impairment reversals for its other CGU's.

8 BANK DEBT

The Company's reserves-based revolving credit facility of $325 million is comprised of a $295 million syndicated term credit facility and a $30 million non-syndicated operating term credit facility (the "Facilities"). The Facilities are available on a revolving basis until May 23, 2020 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 22, 2021. On a redetermination date, lenders could reduce the borrowing base to below the current drawn amount, in this case, the short fall would have to be repaid within 60 days.

The available lending limits of the Facilities are reviewed semi-annually based on the syndicate's interpretation of the Company's reserves, future commodity prices and costs. As the available lending limit of the Facilities is based on the syndicate's interpretation of the Company's reserves and future commodity prices and costs, there can be no assurance that the amount of the Facilities will not decrease at the next scheduled review.

Advances under the Facilities are available by way of either prime rate loans, which bear interest at the banks' prime lending rate plus 0.5 to 2.5%, and bankers' acceptances and/or London Inter-bank Offered Rate ("LIBOR") loans, which are subject to fees and margins ranging from 1.5 to 3.5%. 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.

At December 31, 2019, the Company had LIBOR loans outstanding of USD $130 million. In conjunction with the draws of US dollar denominated loans, the Company enters into foreign exchanges swaps to fully mitigate the exposure to movements in the exchange rate and reduce borrowing costs (see Note 17). As such the balance outstanding at

December 31, 2019 consisted of LIBOR loan totalling $169 million (USD - $130 million) and Canadian loan of $4.2 million.

Letters of credit for $1.6 million were outstanding at December 31, 2019 (2018 – $2.0 million) that reduced the amount otherwise available to be drawn on the operating term credit facility.

Cardinal was in compliance with the terms of the Facilities at December 31, 2019. For the year ended December 31, 2019 the effective interest rate on the Company's bank debt was 4.4% (2018 – 4.0%).

9 CONVERTIBLE DEBENTURES

	Number of Convertible Debentures		Liability Component		Equity Component
Balance at December 31, 2017	50,000	$	47,245	$	1,729
Accretion	-		901		-
Balance at December 31, 2018	50,000	$	48,146	$	1,729
Purchase of convertible debentures for cancellation	(5,000)	$	(4,823)	$	(173)
Accretion	-		835		-
Balance at December 31, 2019	**45,000**	**$**	**44,158**	**$**	**1,556**

The Company has subordinated unsecured convertible debentures (the "convertible debentures") that bear interest at 5.5% payable semi-annually and have a maturity date of December 31, 2020. The convertible debentures are convertible into common shares of the Company at the option of the holder at a conversion price of $10.50 per common share at any time prior to the maturity date. The convertible debentures are redeemable by the Company subject to certain conditions.

The convertible debentures have been classified as a liability, net of issue costs and net of the fair value of the conversion feature at the date of issue which has been classified as shareholders' equity. The liability component will accrete up to the principal balance at maturity. The accretion of the liability component and interest payable are expensed on the statements of earnings and comprehensive earnings. If the convertible debentures are converted to common shares, a portion of the value of the conversion feature included in shareholders' equity and the liability component will be reclassified to shareholders' equity along with the conversion price.

In December 2018, the Company announced a normal course issuer bid (“NCIB”). Cardinal could purchase up to $5.0 million aggregate principal amount of its convertible debentures, subject to certain conditions. Under the NCIB, the convertible debentures could be repurchased in open market transactions on the TSX, and/or alternative Canadian trading systems, or by such other means as may be permitted by the TSX and applicable securities laws and in accordance with the rules of the TSX governing NCIB's. The total number of convertible debentures that Cardinal was permitted to purchase is subject to a daily purchase limit of $6,000 aggregate principal amount of Convertible Debentures however, Cardinal may make one block purchase per calendar week which exceeds the daily repurchase restrictions. Any convertible debentures that were purchased under the NCIB would be cancelled upon their purchase by the Company. The NCIB expired on December 18, 2019 and was renewed with an expiry of December 18, 2020. In the renewed NCIB, the Company can purchase up to $4.5 million aggregate principal with a daily purchase limit of $10,000 aggregate principal amount of convertible debenture. All other terms are the same as the initial NCIB.

For the year ended December 31, 2019, the Company repurchased and cancelled the maximum number of convertible debentures of $5.0 million allowed under the 2018 NCIB at an average rate of 96.9314 for a gain of $0.2 million.

For the year ended December 31, 2019 Cardinal recognized $2.5 million of interest (2018 - $2.8 million) and $0.8 million of accretion (2018 - $0.9 million) related to the convertible debentures. At December 31, 2019, the fair value of the convertible debentures was $45.0 million (December 31, 2018 - $45.0 million).

10 LEASE LIABILITIES

		Year ended December 31, 2019
Balance, beginning of year	$	**6,478**
Additions		**1,449**
Dispositions		**(33)**
Finance cost		**372**
Lease payments		**(2,835)**
Balance, end of year	$	**5,431**

At December 31, 2019, the Company had future commitments relating to lease liabilities as follows:

		As at December 31, 2019
Less than 1 year	$	**2,137**
1 - 3 years		**2,858**
4 - 5 years		**1,020**
Total undiscounted future lease payments		**6,015**
Amounts representing interest		**(584)**
Present value of net lease payments		**5,431**
Less current portion of lease liabilitles		**(1,850)**
Non-current portion of lease liabilities	**$**	**3,581**

The Company has lease liabilities for contracts related to office space, vehicles, field equipment 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, 2019 were between 6% and 8%, depending on the duration of the lease term.

11 DECOMMISSIONING OBLIGATION

		Year ended December 31, 2019		Year ended December 31, 2018
Balance, beginning of year	$	**121,672**	$	129,638
Liabilities incurred		**372**		466
Liabilities acquired		**-**		1,042
Liabilities disposed		**(235)**		(1,380)
Change in estimates		**(10,049)**		(10,767)
Decommissioning expenditures		**(6,571)**		(6,443)
Accretion		**8,623**		9,116
Balance, end of year	$	**113,812**	$	121,672

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, 2019, the total estimated amount to settle Cardinal's decommissioning obligation was $336 million (December 31, 2018 - $350 million) on an uninflated and undiscounted basis and $629 million (December 31, 2018 - $651 million) on an inflated and undiscounted basis.

The decommissioning obligation was determined by applying an inflation factor of 2.0% (2018 – 2.0%) and discounting the inflated amount using Cardinal's credit-adjusted rate of 7.0% (2018 – 7.0%) over the expected useful life of the underlying assets of 20 to 50 years (2018 – 20 to 50 years). The change in estimates as at December 31, 2019 is mainly related to a change in timing or estimated amount of future obligations.

12 SHARE CAPITAL AND TREASURY SHARES

At December 31, 2019, 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.

NCIB

On July 30, 2019, 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 11,128,148 common shares representing approximately 10% of its public float as of July 23, 2019 between August 2, 2019 and August 2, 2020. As of December 31, 2019, the Company repurchased and cancelled 1,672,746 common shares at an average price of $2.29 per common share, for a total cost of $3.8 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 included in contributed surplus.

Treasury Shares

RAs 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, 2019, the trustee purchased 2,253,357 common shares for $6.4 million for the potential settlement of future vesting RAs. In 2019, the Company utilized 437,275 treasury shares to settle vesting RAs. As at December 31, 2019, 1,816,082 common shares remained classified as treasury shares to be potentially used for future settlements.

Flow-through shares

On August 30, 2018, Cardinal issued 640,000 flow-through common shares pursuant to a private placement at $6.25 per common share for gross proceeds of $4.0 million. The Company recorded a deferred liability for the related premium in the amount of $0.5 million. The Company incurred all qualifying Canadian Exploration Expenditures prior to December 31, 2019.

Between August 30, 2018 and September 5, 2018, Cardinal issued an aggregate of 1,024,000 flow-through common shares pursuant to a private placement at $5.65 per common share for gross proceeds of $5.8 million. The Company recorded a deferred liability for the related premium in the amount of $0.4 million. The Company incurred the qualifying Canadian Development Expenditures prior to December 30, 2018.

Earnings (loss) per share

		2019		2018
Earnings (loss) for the year	**$**	**(34,340)**	$	60,544
Earnings (loss) per share				
- Basic	**$**	**(0.30)**	$	0.53
- Diluted	**$**	**(0.30)**	$	0.52
Weighted average number of common shares				
- Basic		**115,314,709**		114,640,928
- Diluted		**115,314,709**		115,678,937

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

For the year ended December 31, 2019, 4,613,495 RAs (2018 – 2,406,400), 4,285,714 ($45.0 million at $10.50) convertible debentures (2018 – 4,761,905) and nil stock options (2018 – 12,501) were excluded from the calculation of diluted earnings (loss) per share as their effect was anti-dilutive.

13 DIVIDENDS

During the year ended December 31, 2019, $17.9 million (2018 – $46.7 million) of dividends ($0.15 per common share) (2018 - $0.395 per common share) were declared of which $16.0 million (2018 - $45.3 million) was paid in cash and $1.9 million (2018 - $1.4 million) was recognized as a liability at December 31, 2019. The dividend payable was settled on January 15, 2020.

14 SHARE-BASED COMPENSATION

The maximum number of common shares issuable under the Company's stock option plan and restricted 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 $2.47 (2018 - $4.41) during the year ended December 31, 2019.

Stock Options

The Company had a stock option plan that entitled officers, directors and employees to purchase common shares in the Company. In 2019, all stock options expired and the plan is no longer active.

Restricted Bonus Awards

The Company has a restricted bonus award plan whereby awards may be granted to officers, directors and employees. 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. 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 RAs
Balance at December 31, 2017	3,008,987
Granted	2,166,499
Settled	(1,379,959)
Adjustment for dividends declared	148,817
Forfeited	(499,935)
Balance at December 31, 2018	3,444,409
Granted	2,860,780
Settled	(1,746,064)
Adjustment for dividends declared	180,909
Forfeited	(126,539)
Balance at December 31, 2019	**4,613,495**

For the year ended December 31, 2019 the Company settled 1,746,064 (2018 – 1,379,959) RAs by issuing 948,980 (2018 – 1,379,959) common shares, 437,275 (2018 – nil) treasury shares and a payment of $0.9 million (2018 – nil) for withholding tax in exchange for the remaining balance of 359,809 RAs (2018 – nil).

The fair value of the granted RAs was determined based on the value of the Company's common shares at the grant date. The weighted average market price of the Company's common shares used to value the RAs granted was $2.45 (2018 - $4.80).

Share-based Compensation

Share-based compensation for the year ended December 31, 2019 of $7.2 million (2018 - $7.4 million) was expensed and $1.1 million (2018 - $1.4 million) was capitalized.

15 DEFERRED TAX

During the year ended December 31, 2019, the Alberta government announced a graduated corporate tax rate reduction from 12% to 8% over a four year period. The Company recorded $9.1 million (2018 – $25.4 million) of deferred tax expense for the year ended December 31, 2019, $16.5 million (2018 – nil) of which related to the provincial rate reduction, resulting in a deferred tax asset of $100.4 million (2018 – $112.4 million).

Reconciliation of effective tax reduction:

Years ended December 31		**2019**		2018
Earnings (loss) before deferred tax	**$**	**(25,249)**	$	85,964
Expected tax rate		**26.6%**		27.0%
Expected deferred tax expense (recovery)		**(6,716)**		23,210
Non-taxable gain		**(202)**		(133)
Flow-through shares, net		**310**		1,564
Change in unrecognized tax benefits		**(3,238)**		-
Change in statutory tax rates and other		**18,937**		779
Deferred tax expense	**$**	**9,091**	$	25,420

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

	Balance January 1, 2018	Recognized in income	Equity	Other(1)	**Balance December 31, 2018**
PP&E and E&E	$ (17,379)	$ (32,501)	$ -	$ (1,054)	**$ (50,934)**
Non-capital losses	111,265	20,818	-	-	**132,083**
Decommissioning obligation	35,002	(2,151)	-	-	**32,851**
Share issue costs	4,177	(2,354)	26	-	**1,849**
Deductible restricted bonus awards	1,550	(581)	(43)	-	**926**
Convertible debentures	(744)	243	-	-	**(501)**
Debt issue costs and other	688	(450)	-	-	**238**
Unrealized (gain) loss on commodity contracts	4,292	(8,444)	-	-	**(4,152)**
Total	$ 138,851	$ (25,420)	$ (17)	$ (1,054)	**$ 112,360**

	Balance January 1, 2019	Recognized in income	Equity	Other(1)	**Balance December 31, 2019**
PP&E and E&E	$ (50,934)	$ 855	$ -	$ (391)	**$ (50,470)**
Non-capital losses	132,083	(7,699)	-	-	**124,384**
Decommissioning obligation	32,851	(5,742)	-	-	**27,109**
Share issue costs	1,849	(838)	-	-	**1,011**
Deductible restricted bonus awards	926	(1,332)	698	-	**292**
Convertible debentures	(501)	300	-	-	**(201)**
Lease liabilities	-	1,294	-	-	**1,294**
Debt issue costs and other	238	(160)	-	-	**78**
Unrealized (gain) loss on commodity contracts	(4,152)	4,228	-	-	**76**
Unrealized (gain) loss on foreign exchange	-	3	-	-	**3**
Total	$ 112,360	$ (9,091)	$ 698	$ (391)	**$ 103,576**

1) *Premium reversal of the flow-through shares.*

The approximate amount of tax pools available to Cardinal as at December 31, 2019 is $1.4 billion (2018 - $1.5 billion). The estimate of tax pools includes non-capital losses ("NCLs") of approximately $522.2 million (2018 - $489.3 million) that can be used to offset taxable income in future periods which expire as follows:

NCL's by expiry		
2030	$	5,838
2031		32,789
2032		32,996
2033		56,383
2034		69,064
2035		59,984
2036		67,775
2037		86,069
2038		77,160
2039		34,148
Total	**$**	**522,206**

A deferred tax asset was not recognized in respect of temporary differences related to successor tax pools of $101.9 million (2018 – $98.1 million) as there is not sufficient certainty regarding future utilization.

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:

	Year ended December 31,	
	2019	2018
Crude oil	**373,942**	362,251
Natural gas liquids	**6,012**	9,538
Natural gas	**9,017**	7,465
Petroleum and natural gas revenue	**388,971**	379,254
Processing and other revenue	**2,630**	4,077

Included in accounts receivable at December 31, 2019 is $30.8 million (December 31, 2018 - $8.6 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, risk management assets and liabilities, dividends payable, bank debt and convertible debentures. Risk management 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 or loss. 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, 2019 and 2018, the only assets or liabilities measured at fair value were the fair value of financial instruments which are classified as level 2, bank debt which is classified as level 2, and the convertible debentures which are classified as Level 1.

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, liability component of the convertible debentures 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, 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 value of convertible debentures was determined based on the trading value on the Toronto Stock Exchange at the reporting date.

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, 2019 Cardinal had the following commodity financial derivative contracts outstanding:

Type of Instrument	Remaining Term	Average Quantity			Average Strike Price	Fair Value
CDN WTI Swap	January 1, 2020 - March 31, 2020	250	bbl/d		$ 79.50	19
USD WTI Swap	January 1, 2020 - March 31, 2020	1,000	bbl/d	US	$ 60.00	(74)
CDN WTI Collar	January 1, 2020 - March 31, 2020	1,500	bbl/d		$ 72.83	(78)
					$ 80.87	
USD WTI Collar	February 1, 2020 - April 30, 2020	1,000	bbl/d	US	$ 57.00	(16)
				US	$ 62.30	
USD WTI Collar	January 1, 2020 - June 30, 2020	2,000	bbl/d	US	$ 51.75	(77)
				US	$ 65.18	
AECO Swap	January 1, 2020 - March 31, 2020	3,000	gj/d		$ 1.53	(161)
AECO Swap	January 1, 2020 - December 31, 2020	2,000	gj/d		$ 1.74	(68)
CDN WCS Swap	January 1, 2020 - January 31, 2020	1,000	bbl/d		$ 51.75	(15)
CDN WCS Basis Swap	January 1, 2020 - February 29, 2020	500	bbl/d		$ (23.00)	154
						(316)

The Company enters into foreign exchange swap transactions to fully mitigate any movements in the USD/CAD exchange rate during periods that LIBOR loans are outstanding. The following foreign exchange swaps were outstanding as at December 31, 2019:

Type of Contract	Maturity Date	Amount	Contract Price	Fair Value
Foreign exchange swap	January 10, 2020	$75 Million	$1.3266 CAD/USD	(747)
Foreign exchange swap	January 24, 2020	$55 Million	$1.3118 CAD/USD	(2,083)
				(2,830)

The following table provides a reconciliation of the change in fair value of financial instruments:

	Fair value of financial instruments
Balance at December 31, 2017	(15,898)
Unrealized gain on commodity contracts	31,277
Balance at December 31, 2018	15,379
Unrealized loss on commodity contracts	(15,695)
Unrealized loss on foreign exchange	(2,830)
Balance at December 31, 2019	**(3,146)**

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, 2019 commodity prices, a $1 per barrel change in the price of crude oil would have changed the unrealized loss by $0.8 million (2018 – $1.0 million) and a $0.10 per gigajoule change in the price of natural gas would have changed the unrealized loss by $0.1 million (2018 – $0.1 million).

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 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 $US 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 77% of the balance at December 31, 2019 (2018 – 41%), and joint venture partners. As at December 31, 2019, the Company's trade and other receivables balance was $39.7 million (December 31, 2018 - $21.1 million) and $1.9 million (December 31, 2018 - $2.2 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 91% of the revenue received for the year ended December 31, 2019 (2018 – 79%).

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, fair value of financial instruments, bank debt, and convertible debentures. Trade and other payables are considered due within one year. Bank debt (see note 8), the fair value of financial instruments, and the convertible debentures (see note 9) are considered due between one and two years. 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.

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, 2019, earnings before tax would have been affected by approximately $0.5 million (2018 - $0.5 million) based on the average bank debt outstanding.

18 CAPITAL MANAGEMENT

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

	December 31, 2019	December 31, 2018
Shareholders' equity	**737,902**	792,622
Bank debt	**173,308**	211,443
Convertible debentures (liability and equity component)	**45,714**	49,875
Undrawn component of bank credit facility	**150,058**	111,531
Working capital deficiency	**29,291**	8,246

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

The key measures that the Company utilizes in evaluating its capital structure are the credit available from the syndicate 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 the principal amount of convertible debentures plus working capital deficiency or minus working capital surplus (adjusted for the fair value of financial instruments, the current portion of the decommissioning obligation, current lease liabilities and liability component of convertible debentures), divided by 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 and adjusted funds flow are non-GAAP measures.

In order 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 syndicate, the level of credit that may be attainable due to increases in petroleum and natural gas reserves and new common 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, 2019 was 2.0 to 1, lower than the ratio at December 31, 2018 of 3.2 to 1 due to higher adjusted funds flow from higher oil prices and significantly narrower WCS oil price differentials in 2019. Cardinal is within its targeted ratio of 2.0 to 1 and has decreased the ratio over the past three years from 3.3 to 1 in 2017. During periods of significant capital expenditures, acquisitions or low pricing the ratio will increase. The Company will continue to monitor this ratio to endeavor to keep it within the targeted range.

	Years ended	
	December 31, 2019	December 31, 2018
Bank debt	**$ 173,308**	$ 211,443
Principal amount of Convertible Debentures	**45,000**	50,000
Working capital deficiency	**29,291**	8,246
Net debt	**$ 247,599**	$ 269,689
Cash provided from operating activities	**$ 119,979**	$ 88,767
Change in non-cash working capital	**(4,740)**	(10,348)
Funds flow	**$ 115,239**	$ 78,419
Decommissioning obligation expenditures	**6,571**	6,443
Transaction costs	**-**	359
Adjusted funds flow	**121,810**	85,221
Net debt to adjusted funds flow	**2.0**	3.2

The current challenging economic climate may lead to further adverse changes in cash flows, working capital levels and/or debt balances, which may also have a direct impact on the Company's operating results and financial position. These and other factors may adversely affect the Company's liquidity and the Company's ability to generate income and cash flows in the future. At December 31, 2019, the Company remains in compliance with all terms of our Facilities and based on current available information, management expects to comply with all terms during the subsequent 12 month period. However in light of the current volatility in commodity prices and uncertainty regarding the timing for recovery in such prices, pipeline and transportation capacity constraints, and the effect of the Coronavirus (COVID-19), the preparation of financial forecasts is challenging.

19 CONTRACTUAL OBLIGATIONS

At December 31, 2019, the Company had contractual obligations as follows:

	2020	2021	2022	2023	2024	Thereafter
Trade and other payables	69,871	-	-	-	-	-
Dividends payable	1,938	-	-	-	-	-
Lease liabilities	2,137	1,712	1,146	1,011	9	-
Bank debt	-	173,308	-	-	-	-
Capital commitments	750	-	-	-	-	-
Convertible debentures	47,475	-	-	-	-	-
Total contractual obligations	**$ 122,171**	**$ 175,020**	**1,146**	**1,011**	**9**	**-**

20 FINANCE

Years ended December 31	**2019**	2018
Interest - bank debt	**$ 9,280**	$ 8,610
Other finance expenses, net	**999**	832
Interest - convertible debentures	**2,475**	2,750
Interest - lease liabilities	**372**	-
Accretion of convertible debentures	**835**	901
Accretion of decommissioning obligation	**8,623**	9,116
Unrealized foreign exchange loss [(1)]	**23**	-
Finance expense	**$ 22,607**	$ 22,209

(1) – Includes $0.6 million of realized loss on foreign exchange swap, $2.8 million of unrealized loss on foreign exchange swap, offset by $0.6 million of realized foreign exchange gain and $2.8 million unrealized foreign exchange gain on re-evaluation of outstanding debt at year-end.

21 SUPPLEMENTAL CASH FLOW INFORMATION

Changes in non-cash working capital is comprised of:

Years ended December 31	**2019**	2018
Source (use) of cash		
Trade and other receivables	**$ (18,600)**	$ 25,581
Deposits and prepaid expenses	**(101)**	625
Trade and other payables	**40,316**	(22,296)
Dividends payable	**493**	(2,726)
	$ 22,108	$ 1,184
Allocated to operating activities	**$ 4,740**	$ 10,348
Allocated to investing activities	**16,838**	(4,908)
Allocated to financing activities	**530**	(4,256)
	$ 22,108	$ 1,184
Interest paid	**$ 12,135**	$ 11,373
Interest received	**$ 8**	$ 13

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 recorded as general and administrative expenses was $4.5 million (2018 - $3.4 million) and share based compensation costs were $4.1 million (2018 - $4.3 million).

23 SUBSEQUENT EVENTS

On January 13, 2020, the Company confirmed that a dividend of $0.015 per common share would be paid on February 18, 2020 to shareholders of record on January 31, 2020. The total amount of dividends declared at January 31, 2020 was $1.7 million.

On February 11, 2020, the Company confirmed that a dividend of $0.015 per common share would be paid on March 16, 2020 to shareholders of record on February 28, 2020. The total amount of dividends declared at February 28, 2020 was $1.7 million.

In 2020, the Company confirmed that, pursuant to the common shares NCIB announced on July 30, 2019, the Company repurchased and cancelled 897,500 common shares at an average price of $2.77 per common share, for a total cost of $2.5 million.