



CARDINAL
ENERGY LTD.



2018

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 19, 2019



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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, 2018 and December 31, 2017
- 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 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, 2018 and December 31, 2017, 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 Commission.



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 19, 2019

BALANCE SHEETS

As at (thousands)	Note	December 31, 2018	December 31, 2017
ASSETS			
Current assets			
Trade and other receivables		\$ 21,124	\$ 46,705
Deposits and prepaid expenses		2,693	3,318
Fair value of financial instruments	16	15,379	9,303
		39,196	59,326
Non-current assets			
Exploration and evaluation assets	6	251	1,846
Property, plant and equipment	7	1,054,529	1,028,573
Deferred tax	14	112,360	138,851
		1,167,140	1,169,270
Total Assets		\$ 1,206,336	\$ 1,228,596
LIABILITIES			
Current liabilities			
Trade and other payables		\$ 30,618	\$ 52,914
Dividends payable	12	1,445	4,171
Decommissioning obligation	10	5,000	2,300
Fair value of financial instruments	16	-	21,269
		37,063	80,654
Non-current liabilities			
Deferred flow-through share premium	11	390	560
Bank debt	8	211,443	218,905
Fair value of financial instruments	16	-	3,932
Liability component of convertible debentures	9	48,146	47,245
Decommissioning obligation	10	116,672	127,338
		376,651	397,980
Total Liabilities		413,714	478,634
SHAREHOLDERS' EQUITY			
Share capital	11	1,072,284	1,042,352
Equity component of convertible debentures	9	1,729	1,729
Contributed surplus	13	13,365	14,501
Deficit		(294,756)	(308,620)
Total Shareholders' Equity		792,622	749,962
Total Liabilities and Shareholders' Equity		\$ 1,206,336	\$ 1,228,596
Commitments and contractual obligations	18		
Subsequent events	22		

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

Approved on behalf of the Board of Directors,

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

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

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

For the years ended <i>(thousands except per share amounts)</i>	Note	December 31, 2018	December 31, 2017
Revenue			
Petroleum and natural gas revenue	15	\$ 379,254	\$ 313,844
Royalties		(64,462)	(45,514)
Realized loss on commodity contracts	16	(42,153)	(15,182)
Unrealized gain on commodity contracts	16	31,277	16,444
Processing and other revenue	15	4,077	3,124
		307,993	272,716
Expenses			
Operating		159,358	143,761
Transportation		2,324	2,258
Unrealized gain on power contracts	16	-	(25)
General and administrative		17,621	17,803
Share-based compensation	13	7,401	8,283
Finance	19	22,209	18,652
Transaction costs		359	1,684
Depletion and depreciation	7	88,076	94,732
Impairment (reversal)	6, 7	(74,825)	61,000
Loss (gain) on disposition	5, 7	(494)	1,754
		222,029	349,902
Earnings (loss) before deferred tax		85,964	(77,186)
Deferred tax expense (reduction)	14	25,420	(19,589)
Earnings (loss) and comprehensive earnings (loss) for the year		\$ 60,544	\$ (57,597)
Earnings (loss) per share			
Basic	11	\$ 0.53	\$ (0.61)
Diluted		\$ 0.52	\$ (0.61)

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

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(thousands except number of common shares)	Number of		Equity			Total	
	Common Shares	Share Capital	Warrants	Convertible Debentures	Contributed Surplus	Deficit	Shareholders' Equity
		(note 11)	(note 11)	(note 9)	(note 13)		
January 1, 2017	74,151,719	\$ 839,626	\$ 1,420	\$ 1,729	\$ 18,424	\$ (210,119)	\$ 651,080
Issue of common shares	30,910,000	170,005	-	-	-	-	170,005
Common shares issued in connection with acquisition (note 5)	4,033,708	27,631	-	-	-	-	27,631
Issue of flow-through common shares	475,000	2,290	-	-	-	-	2,290
Exercise of options and warrants	488,470	2,623	(853)	-	(178)	-	1,592
Issued pursuant to SDP and DRIP ⁽¹⁾	89,007	756	-	-	-	-	756
Settlement of RAs ⁽²⁾	690,417	4,813	-	-	(11,301)	-	(6,488)
Settlement of warrants	-	-	(567)	-	-	-	(567)
Share-based compensation	-	-	-	-	8,557	-	8,557
Tax adjustment on excess value of RAs	-	-	-	-	(1,001)	-	(1,001)
Share issue costs, net of deferred tax of \$1,993	-	(5,392)	-	-	-	-	(5,392)
Dividends (\$0.42 per share)	-	-	-	-	-	(40,904)	(40,904)
Loss for the year	-	-	-	-	-	(57,597)	(57,597)
December 31, 2017	110,838,321	\$ 1,042,352	-	\$ 1,729	\$ 14,501	\$ (308,620)	\$ 749,962
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 ⁽²⁾	1,379,959	9,852	-	-	(9,852)	-	-
Share-based compensation	-	-	-	-	8,759	-	8,759
Tax adjustment on excess value of RAs	-	-	-	-	(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

(1) Stock Dividend Program ("SDP") and Dividend Reinvestment Plan ("DRIP")

(2) Restricted Bonus Awards ("RAs")

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

STATEMENTS OF CASH FLOWS

For the years ended <i>(thousands)</i>	Note	December 31, 2018	December 31, 2017
Cash provided by (used in)			
Operating activities			
Earnings (loss) for the year		\$ 60,544	\$ (57,597)
Adjustments for			
Share-based compensation	13	7,401	8,283
Depletion and depreciation	7	88,076	94,732
Impairment (reversal)	6, 7	(74,825)	61,000
Unrealized gain on commodity contracts	16	(31,277)	(16,444)
Unrealized gain on power contracts	16	-	(25)
Deferred tax expense (reduction)	14	25,420	(19,589)
Accretion	19	10,017	9,874
Loss (gain) on disposition	5, 7	(494)	1,754
Decommissioning obligation settled	10	(6,443)	(3,933)
Change in non-cash working capital	20	10,348	(1,525)
		88,767	76,530
Investing activities			
Exploration and evaluation expenditures		(80)	(498)
Property, plant and equipment expenditures		(63,075)	(68,067)
Property acquisitions	5	(9,414)	(299,367)
Proceeds from property dispositions	5	37,421	14,350
Change in non-cash working capital	20	(4,908)	(1,704)
		(40,056)	(355,286)
Financing activities			
Issue of common shares	11	-	170,005
Issue of flow-through common shares	11	9,786	2,851
Share issue costs		(99)	(7,385)
Settlement of RAs	13	-	(6,488)
Settlement of warrants	13	-	(567)
Options and warrants exercised	11	-	1,592
Dividends	12	(46,680)	(40,148)
Increase (decrease) in bank debt		(7,462)	157,633
Change in non-cash working capital	20	(4,256)	1,263
		(48,711)	278,756
Change in cash and cash equivalents		-	-
Cash and cash equivalents, beginning of year		-	-
Cash and cash equivalents, end of year		\$ -	\$ -

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

NOTES TO FINANCIAL STATEMENTS

For the years ended December 31, 2018 and 2017

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

1 REPORTING ENTITY

Cardinal Energy Ltd. ("Cardinal" or the "Company") was incorporated pursuant to the Business Corporations Act (Alberta) on December 21, 2010 and commenced activity on May 30, 2012. 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.

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 19, 2019.

3 SIGNIFICANT ACCOUNTING POLICIES

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

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

Operating leases are not recognized on the Company's balance sheet. Payments made under operating leases are recognized in earnings or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense over the term of the lease.

(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.

(j) Finance income and expenses

Finance expense comprises interest expense on borrowings, 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.

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, 2018 and 2017. 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, the use of substantively enacted tax rates at the balance sheet date 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 9 - Financial Instruments

The Corporation adopted IFRS 9, "Financial Instruments" on January 1, 2018. The transition to IFRS 9 had no material effect on the Corporation's financial statements.

IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, fair value through other comprehensive income ("FVOCI"); or fair value through profit or loss ("FVTPL"). The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. IFRS 9 eliminates the previous IFRS 39 categories of held to maturity, loans and receivables and available for sale. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never separated. Instead, the hybrid financial instrument as a whole is assessed for classification.

Impairment of financial assets: IFRS 9 replaces the "incurred loss" model in IAS 39 with an "expected credit loss" model. The new impairment model applies to financial assets measured at amortized cost, and contract assets and debt investments at FVOCI. Under IFRS 9, credit losses are recognized earlier than under IAS 39. There was no impact on the Company's financial statements.

Cash and cash equivalents, if any, and trade and other receivables continue to be measured at amortized cost and are now classified as "amortized cost". The Corporation's financial liabilities previously classified as "other financial liabilities" being trade and other payables, dividends payable and bank debt continue to be measured at amortized cost and are now classified as "amortized cost". The Corporation has not designated any financial instruments as FVOCI or FVTPL, nor does the Corporation use hedge accounting.

(ii) Adoption of IFRS 15 - Revenue from Contracts with Customers

On January 1, 2018, the Company has adopted IFRS 15 "Revenue from Contracts with Customers" ("IFRS 15") using the modified retrospective approach. IFRS 15 replaced International Accounting Standard 11, "Construction Contracts" ("IAS 11"), IAS 18, "Revenue" ("IAS 18"), and several revenue-related interpretations.

IFRS 15 establishes a single revenue recognition framework, five step model that applies to contracts with customers. The standard requires an entity to recognize revenue to reflect the transfer of goods and services for the amount it expects to receive, when control is transferred to the purchaser.

Cardinal has performed a review of its revenue streams and sales contracts with customers and concluded that the adoption of IFRS 15 does not have an impact on the Company's earnings or in the timing of when revenue is recognized. As a result, no adjustments were required in the January 1, 2018 opening balance sheet. Please refer to Note 15 for more information including additional disclosures as required under IFRS 15.

(iii) Future adoption of IFRS 16 - Leases

Cardinal is required to adopt IFRS 16 "Leases" by January 1, 2019 which requires entities to recognize lease assets and lease obligations on the balance sheet. For lessees, IFRS 16 removes the classification of leases as either operating leases or finance leases, effectively treating all leases as finance leases. Certain short-term leases (less than 12 months) and leases of low-value assets are exempt from the requirements, and may continue to be treated as operating leases.

The Company will use a modified retrospective approach on adoption of IFRS 16 which does not require restatement of prior period financial information as it applies the standard prospectively. On adoption, non-current assets, current liabilities, and non-current liabilities on Cardinal's balance sheet will increase. Interest expense will be recognized on the lease obligation and lease payments will be applied against the lease obligation. This is expected to result in a decrease to operating expenses and general and administration expenses and an increase to interest expense, cash flows from operations and depletion and depreciation expense. The Company will utilize the practical exemptions under the standard for short-term leases and low-value asset leases. Cardinal has assessed its contracts and expects adjustments for its office leases, vehicles and certain office equipment however the full extent of the impact is still being measured.

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, 2018 and 2017, 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 is determined on the date of grant based on the value of the Company's common shares.

5 ACQUISITIONS & 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.

The acquisition has contributed petroleum and natural gas revenue of \$5.7 million and operating income (petroleum and natural gas revenue and processing and other revenue less royalties, transportation, and operating expenses) of \$3.1 million since the property was acquired on January 12, 2018. Had the acquisition closed on January 1, 2018, the Company's estimated total pro-forma petroleum and natural gas revenue would have been \$379.4 million and estimated pro-forma operating income would have been \$157.3 million for the year ended December 31, 2018. Pro-forma information is not necessarily representative of future revenue and operations.

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.

The preceding estimates of fair value were made by management at the time of the preparation of these financial statements based on information then available. Amendments may be made to these amounts as values subject to estimate are finalized.

2017 Acquisitions

On **March 17, 2017**, Cardinal acquired petroleum and natural gas properties in Northwest Alberta (the "Grande Prairie Acquisition") to expand its core area and increase its light oil development opportunities. Total consideration provided, before closing adjustments, consisted of approximately 4.0 million common shares valued at \$6.85 per share and \$3.6 million in cash. The Company recorded a deferred tax asset due to temporary differences in the carrying amount of the acquired properties and their tax bases. This property acquisition has been accounted for as a business combination in accordance with IFRS 3.

Net assets acquired	
Petroleum and natural gas properties	\$ 33,363
Deferred tax asset	3,465
Decommissioning obligation	(5,591)
	\$ 31,237
Consideration	
Share consideration	\$ 27,631
Cash	3,606
	\$ 31,237

In 2017, the Grande Prairie Acquisition contributed petroleum and natural gas revenue of \$14.1 million and operating income (petroleum and natural gas revenue and processing and other revenue less royalties, transportation, and operating expenses) of \$6.2 million. Had the Grande Prairie Acquisition closed on January 1, 2017, the Company's estimated petroleum and natural gas revenue would have been \$318 million and estimated operating income would have been \$128 million for the year ended December 31, 2017. Pro forma information is not necessarily representative of future revenue and operations.

On **June 30, 2017**, Cardinal acquired light oil and natural gas properties in House Mountain, Alberta and Midale, Saskatchewan (the "House Mountain and Midale Acquisition") to expand its Northwest Alberta core area, establish a new core area in Southeast Saskatchewan and significantly increase the light oil weighting of our production mix. Total consideration provided was \$296 million in cash, before closing adjustments, with an associated decommissioning obligation of \$20.0 million. This property acquisition has been accounted for as a business combination in accordance with IFRS 3.

In 2017, the House Mountain and Midale Acquisition contributed petroleum and natural gas revenue of \$57.8 million and operating income of \$29.0 million. Had the House Mountain and Midale Acquisition closed on January 1, 2017, the Company's estimated petroleum and natural gas revenue would have been \$371 million and estimated operating income would have been \$156 million for the year ended December 31, 2017. Pro forma information is not necessarily representative of future revenue and operations.

On **November 1, 2017**, the Company sold a royalty interest on its Wainwright properties for gross proceeds of \$14.5 million.

6 EXPLORATION AND EVALUATION ASSETS

	Exploration and Evaluation Assets
At December 31, 2016	\$ 1,557
Additions	498
Impairment	(209)
At December 31, 2017	1,846
Additions	80
Impairment	(1,675)
At December 31, 2018	\$ 251

Cardinal's E&E assets consist of undeveloped land and exploration projects which are pending technical feasibility and commercial viability. Additions represent costs incurred during the period to acquire additional E&E assets.

During 2018, management expensed \$1.7 million (2017 - \$0.2 million) of certain E&E assets associated with undeveloped land pending expiries due to no future planned development activities.

7 PROPERTY, PLANT AND EQUIPMENT

	Petroleum and natural gas assets	Corporate assets	Total
Cost			
At January 1, 2017	\$ 1,194,338	\$ 2,979	\$ 1,197,317
Additions	55,148	924	56,072
Acquisitions	349,702	-	349,702
Disposition	(23,291)	-	(23,291)
At December 31, 2017	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
Accumulated depletion and depreciation			
At January 1, 2017	\$ (400,849)	\$ (1,003)	\$ (401,852)
Depletion and depreciation	(94,318)	(414)	(94,732)
Disposition	6,148	-	6,148
Impairment	(60,791)	-	(60,791)
At December 31, 2017	(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)
Net book value			
At December 31, 2017	\$ 1,026,087	\$ 2,486	\$ 1,028,573
At December 31, 2018	\$ 1,052,334	\$ 2,195	\$ 1,054,529

The calculation of depletion for the year ended December 31, 2018 includes estimated future development costs of \$218.7 million (2017 - \$161.8 million) associated with the development of the Company's proved plus probable reserves. For the year ended December 31, 2018, Cardinal capitalized \$1.4 million of general and administrative expenses (2017 - \$1.2 million) and \$1.4 million (2017 - \$0.3 million) of share-based compensation.

Impairment and impairment reversal

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 in 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.

The recoverable value of the Company's Alberta South 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 for each CGU, 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, 2018. The forecast commodity prices are based on those used by external reserve evaluators at December 31, 2018 and are a key assumption in assessing the recoverable amount.

	WTI (US \$/bbl)	WCS (CAD \$/bbl)	AECO (CAD \$/mmbtu)	Exchange rate (US/CAD)
2019	\$ 58.58	\$ 51.55	\$ 1.88	0.76
2020	\$ 64.60	\$ 59.58	\$ 2.31	0.78
2021	\$ 68.20	\$ 65.89	\$ 2.74	0.80
2022	\$ 71.00	\$ 68.61	\$ 3.05	0.80
2023	\$ 72.81	\$ 70.53	\$ 3.21	0.81
Thereafter (inflation percentage and exchange rate)	2.0%	2.0%	2.0%	0.81

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 reversal of \$7.8 million and \$9.2 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, 2018, however, it should be noted that all estimates are subject to uncertainty.

2017:

As at December 31, 2017 Cardinal determined that the carrying value of the Alberta South CGU exceeded the recoverable amount and recorded an impairment of \$60.8 million. The impairment recognized was the result of recent well performance and higher future costs within the Company's Alberta South CGU. The recoverable amount of Cardinal's impaired CGU at December 31, 2017 was \$163.5 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 24, 2019 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 23, 2020.

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 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 or other restrictive covenants related to the Facilities provided that Cardinal is not in default of the terms of the Facilities.

A letter of credit for \$2.0 million was outstanding at December 31, 2018 (2017 – \$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, 2018. For the year ended December 31, 2018 the effective interest rate on the Company's bank debt was 4.0% (2017 – 3.3%).

9 CONVERTIBLE DEBENTURES

	Number of Convertible Debentures		Liability Component		Equity Component
Balance at December 31, 2016	50,000	\$	46,361	\$	1,729
Accretion	-		884		-
Balance at December 31, 2017	50,000	\$	47,245	\$	1,729
Accretion	-		901		-
Balance at December 31, 2018	50,000	\$	48,146	\$	1,729

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 after January 1, 2019 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.

For the year ended December 31, 2018 Cardinal recognized \$2.8 million of interest (2017 - \$2.8 million) and \$0.9 million of accretion (2017 - \$0.9 million) related to the convertible debentures. At December 31, 2018, the fair value of the convertible debentures was \$45.0 million (2017 - \$49.5 million).

In December 2018, the Company announced a normal course issuer bid ("NCIB") whereby Cardinal can purchase up to \$5.0 million aggregate principal amount of its convertible debentures, subject to certain conditions. Under the NCIB, the convertible debentures may 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 is 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 are purchased under the NCIB will be cancelled upon their purchase by the Company. The NCIB will expire no later than December 18, 2019. Please refer to Subsequent Events (see note 22) for amount purchased subsequent to year-end.

10 DECOMMISSIONING OBLIGATION

	Year ended		Year ended	
	December 31, 2018		December 31, 2017	
Balance, beginning of year	\$	129,638	\$	111,867
Liabilities incurred		466		222
Liabilities acquired		1,042		25,626
Liabilities disposed		(1,380)		(643)
Change in estimates		(10,767)		(12,491)
Decommissioning expenditures		(6,443)		(3,933)
Accretion		9,116		8,990
Balance, end of year	\$	121,672	\$	129,638

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, 2018, the total estimated amount to settle Cardinal's decommissioning obligation was \$350 million (2017 - \$359 million) on an uninflated and undiscounted basis and \$651 million (2017 - \$665 million) on an inflated and undiscounted basis.

The decommissioning obligation was determined by applying an inflation factor of 2.0% (2017 – 2.0%) and discounting the inflated amount using Cardinal's credit-adjusted rate of 7.0% (2017 – 7.0%) over the expected average useful life of the underlying assets of 20 to 50 years (2017 – 20 to 50 years). The change in estimates as at December 31, 2018 is primarily related to a change in the timing and estimated amount of future obligations.

11 SHARE CAPITAL AND WARRANTS

At December 31, 2018, 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.

	Year ended		Year ended	
	December 31, 2018		December 31, 2017	
	Number of	Amount	Number of	Amount
	shares		shares	
Common shares, beginning of year	110,838,321	\$ 1,077,019	74,151,719	\$ 868,901
Issue of common shares	-	-	30,910,000	170,005
Common shares issued in connection with acquisition	2,314,815	11,250	4,033,708	27,631
Issue of flow-through common shares	1,664,000	8,903	475,000	2,290
Settlement of RAs	1,379,959	9,852	690,417	4,813
Issued pursuant to SDP and DRIP	-	-	89,007	756
Exercise of options and warrants	-	-	488,470	2,623
Common shares, end of year	116,197,095	\$ 1,107,024	110,838,321	\$ 1,077,019
Cummulative share issue costs, net of tax	-	(34,740)	-	(34,667)
Total shareholders' capital, end of year	116,197,095	\$ 1,072,284	110,838,321	\$ 1,042,352

In 2018, the Company issued 2.3 million common shares for the consolidating acquisition in Midale (see note 5).

In 2017, the Company issued 30.9 million common shares with the proceeds being used for the House Mountain and Midale Acquisition (see note 5).

Flow-through shares

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.

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. Insiders subscribed for 204,000 of the common shares issued. The Company incurred \$1.1 million of qualifying Canadian Exploration Expenditures prior to December 31, 2018 and is committed to incurring the remaining \$2.9 million prior to December 31, 2019 (see Note 18).

On December 14, 2017, Cardinal issued 475,000 flow-through common shares pursuant to a private placement at \$6.00 per common share for gross proceeds of \$2.9 million. The Company recorded a deferred liability for the related premium in the amount of \$0.6 million. The Company incurred the qualifying Canadian Exploration Expenditures prior to December 31, 2018.

Earnings (loss) per share

	2018		2017	
Earnings (loss) for the year	\$	60,544	\$	(57,597)
Earnings (loss) per share				
- Basic	\$	0.53	\$	(0.61)
- Diluted	\$	0.52	\$	(0.61)
Weighted average number of common shares				
- Basic		114,640,928		94,113,417
- Diluted		115,678,937		94,113,417

For the year ended December 31, 2018, 2,406,400 RAs (2017 – 3,008,987), 4,761,905 (\$50.0 million at \$10.50) convertible debentures (2017 – 4,761,905), and 12,501 stock options (2017 – 108,337) were excluded from the calculation of diluted earnings (loss) per share as their effect was anti-dilutive.

12 DIVIDENDS

During the year ended December 31, 2018, \$46.7 million (2017 – \$40.9 million) of dividends (\$0.395 per common share) (2017 - \$0.42 per common share) were declared of which \$45.3 million (2017 - \$36.3 million) was paid in cash and \$1.4 million (2017 - \$4.2 million) was recognized as a liability at December 31, 2018. The dividend payable was settled on January 15, 2019. As the Company suspended its dividend reinvestment plan (“DRIP”) and stock dividend program (“SDP”) in 2017, there were no shares issued in 2018 (2017 – 59,559) under these plans while \$0.4 million was settled in 2017.

In December 2018, the Company announced a reduction of the dividend to \$0.01 per share commencing with the December 2018 dividend payable on January 15, 2019.

13 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 \$4.41 (2017 - \$5.44) during the year ended December 31, 2018.

Stock Options

The Company has a stock option plan that entitles officers, directors and employees to purchase common shares in the Company. Stock options are granted at the market price of the common shares at the date of grant and vest equally over three years with each tranche expiring three years following the vesting date. The following tables summarize information about stock options outstanding at December 31, 2018:

	Number of stock options	Weighted average exercise price
Balance at December 31, 2016	184,726	\$ 7.66
Exercised	(40,000)	\$ 6.75
Forfeited	(8,334)	\$ 6.75
Expired	(28,055)	\$ 8.42
Balance at December 31, 2017	108,337	\$ 7.88
Forfeited	(38,889)	\$ 9.00
Expired	(56,947)	\$ 7.00
Balance at December 31, 2018	12,501	\$ 8.40

Exercise price	Outstanding and Exercisable	
	Number of Stock Options	Weighted average remaining life (years)
\$ 8.25	11,668	0.2
\$ 10.50	833	0.8
\$ 8.40	12,501	0.3

Restricted Bonus Awards ("RAs")

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, 2016	2,688,723
Granted	2,069,410
Settled	(1,308,189)
Adjustment for dividends declared	121,372
Forfeited	(562,329)
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

For the year ended December 31, 2018 the Company settled 1,379,959 RAs (2017 – 651,141) with the issuance of common shares. In 2018, the Company did not settle any RAs in cash (2017 – 617,772 RAs for \$6.5 million in cash).

The fair value of the 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 \$4.80 (2017 - \$7.32).

Share-based Compensation

Share-based compensation for the year ended December 31, 2018 of \$7.4 million was expensed (2017 - \$8.3 million) and \$1.4 million (2017 - \$0.3 million) was capitalized.

14 DEFERRED TAX

Reconciliation of effective tax reduction:

Years ended December 31	2018		2017	
Earnings (loss) before deferred tax	\$	85,964	\$	(77,186)
Expected tax rate		27%		27%
Expected deferred tax expense (recovery)		23,210		(20,840)
Non-taxable loss / (gain) on acquisitions, net		(133)		474
Flow-through shares, net		1,564		34
Change in statutory tax rates and other		779		743
Deferred tax expense (recovery)	\$	25,420	\$	(19,589)

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

	Balance				Balance	
	January 1,	Recognized	Equity	Other ⁽¹⁾	December 31,	
	2017	in loss			2017	
PP&E and E&E	\$ (20,761)	\$ 192	\$ -	\$ 3,190	\$ (17,379)	
Non-capital losses	87,575	23,690	-	-	111,265	
Decommissioning obligation	30,204	4,798	-	-	35,002	
Share issue costs	4,581	(2,397)	1,993	-	4,177	
Deductible restricted bonus awards	4,841	(2,290)	(1,001)	-	1,550	
Convertible debentures	(983)	239	-	-	(744)	
Debt issue costs and other	884	(196)	-	-	688	
Unrealized loss on power and commodity contracts	8,739	(4,447)	-	-	4,292	
Total	\$ 115,080	\$ 19,589	\$ 992	\$ 3,190	\$ 138,851	

	Balance				Balance	
	January 1,	Recognized	Equity	Other ⁽²⁾	December 31,	
	2018	in income			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 on commodity contracts	4,292	(8,444)	-	-	(4,152)	
Total	\$ 138,851	\$ (25,420)	\$ (17)	\$ (1,054)	\$ 112,360	

1) Includes the deferred tax on the Grande Prairie Acquisition (see note 5), the farm-out (see note 7) and the premium reversals on flow-through shares.

2) Premium reversal of the flow-through shares.

The approximate amount of tax pools available to Cardinal as at December 31, 2018 is \$1.5 billion (2017 - \$1.5 billion). The estimate of tax pools includes non-capital losses ("NCLs") of approximately \$489.3 million (2017 - \$412.1 million) that can be used to offset taxable income in future periods which expire as follows:

NCL's by expiry

2027	\$	5,838
2028		32,789
2029		32,996
2030		2,946
2031		53,437
2032		69,064
2033		46,575
2034		668
2035		12,741
2036		67,775
2037		86,069
2038		78,362
<hr/>		
Total	\$	489,260

A deferred tax asset was not recognized in respect of temporary differences related to successor tax pools of \$98.1 million (2017 – \$98.8 million) as there is not sufficient certainty regarding future utilization.

15 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 processing facilities where the Company has an ownership interest:

	Twelve months ended	
	December 31,	
	2018	2017
	<hr/>	
Crude oil	362,251	293,508
Natural gas liquids	9,538	7,531
Natural gas	7,465	12,805
Petroleum and natural gas revenue	379,254	313,844
Processing and other revenue	4,077	3,124

Included in accounts receivable at December 31, 2018 is \$8.6 million (2017 - \$33.7 million) of accrued petroleum and natural gas revenue.

16 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, 2018 and 2017, the only assets or liabilities measured at fair value were the fair value of financial instruments which are 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 as well as power on electricity consumption. 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, 2018 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, 2019 - January 31, 2019	1,000 bbl/d	\$ 75.50	414
CDN WTI Swap	January 1, 2019 - April 30, 2019	1,000 bbl/d	\$ 80.00	2,057
CDN WTI Swap	April 1, 2019 - December 31, 2019	500 bbl/d	\$ 45.00	496
CDN WTI Swap	January 1, 2019 - December 31, 2019	1,000 bbl/d	\$ 57.50	7,017
CDN WTI Collar	January 1, 2019 - June 30, 2019	1,500 bbl/d	\$ 70.00	2,329
			\$ 83.33	
CDN WTI Collar	January 1, 2019 - December 31, 2019	500 bbl/d	\$ 80.00	3,006
			\$ 90.10	
AECO Swap	January 1, 2019 - March 31, 2019	2,000 gj/d	\$ 1.74	60
				15,379

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

	Fair value of financial instruments
Balance at December 31, 2016	(32,367)
Unrealized gain on commodity contracts	16,444
Unrealized gain on power contracts	25
Balance at December 31, 2017	(15,898)
Unrealized gain on commodity contracts	31,277
Balance at December 31, 2018	15,379

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, 2018 commodity prices, a \$1 per barrel change in the price of crude oil would have changed the unrealized gain by \$1.0 million (2017 – \$3.3 million) and a \$0.10 per gigajoule change in the price of natural gas would have changed the unrealized gain by \$0.1 million (2017 - \$0.3 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 41% of the balance at December 31, 2018 (2017 – 72%), and joint venture partners. As at December 31, 2018, the Company's trade and other receivables balance was \$21.1 million and \$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. One of Cardinal's external marketers comprised 33% of the revenue received for the year ended December 31, 2018 (2017 – 23%).

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) is considered due in two years and the convertible debentures are due in 2020 (see note 9). 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, 2018, earnings before tax would have been affected by approximately \$0.5 million (2017 - \$0.4 million) based on the average bank debt outstanding.

17 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 commodity contracts and the current portion of the decommissioning obligation).

	December 31, 2018	December 31, 2017
Shareholders' equity	792,622	749,962
Bank debt	211,443	218,905
Convertible debentures (liability and equity component)	49,875	48,974
Undrawn component of bank credit facility	111,531	104,069
Working capital deficiency	(8,246)	(7,062)

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 and the current portion of the decommissioning obligation), 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, 2018 was 3.2 to 1. Although lower than the ratio at December 31, 2017 of 3.3 to 1, it increased over the previous quarter due to significantly lower Canadian crude oil prices experienced in the fourth quarter of 2018 which negatively affected cash flow from operating activities, adjusted funds flow and increased bank debt. Cardinal has targeted a ratio of 2.0 to 1 and has decreased the ratio from a high of 4.5 to 1 in the second quarter of 2017 to 2.3 to 1 in the third quarter of 2018. Cardinal will continue to evaluate further non-core asset dispositions or may consider other forms of financing to reduce its debt to within its targeted range.

	Years ended	
	December 31, 2018	December 31, 2017
Bank debt	\$ 211,443	\$ 218,905
Principal amount of Convertible Debentures	50,000	50,000
Working capital deficiency	8,246	7,062
Net debt	\$ 269,689	\$ 275,967
Cash provided from operating activities	\$ 88,767	\$ 76,530
Change in non-cash working capital	(10,348)	1,525
Funds flow	\$ 78,419	\$ 78,055
Decommissioning obligation expenditures	6,443	3,933
Transaction costs	359	1,684
Adjusted funds flow	85,221	83,672
Net debt to adjusted funds flow	3.2	3.3

18 COMMITMENTS AND CONTRACTUAL OBLIGATIONS

At December 31, 2018, the Company had contractual obligations and commitments as follows:

	2019	2020	2021	2022	2023	Thereafter
Trade and other payables	30,618	-	-	-	-	-
Dividends payable	1,445	-	-	-	-	-
Bank debt	-	211,443	-	-	-	-
Capital commitments	4,438	-	-	-	-	-
Convertible debentures	2,750	52,750	-	-	-	-
Total contractual obligations	\$ 39,251	\$ 264,193	-	-	-	-

	2019	2020	2021	2022	2023	Thereafter
Office leases	1,458	1,436	1,475	1,475	1,475	-
Vehicle leases	819	680	242	-	-	-
Total commitments	\$ 2,277	\$ 2,116	\$ 1,717	\$ 1,475	\$ 1,475	-

19 FINANCE

Years ended December 31	2018		2017	
Interest - bank debt	\$	8,610	\$	5,455
Other finance expenses, net		832		573
Interest - convertible debentures		2,750		2,750
Accretion of convertible debentures		901		884
Accretion of decommissioning obligation		9,116		8,990
Finance expense	\$	22,209	\$	18,652

20 SUPPLEMENTAL CASH FLOW INFORMATION

Changes in non-cash working capital is comprised of:

Years ended December 31	2018		2017	
Source (use) of cash				
Trade and other receivables	\$	25,581	\$	(19,136)
Deposits and prepaid expenses		625		(2,053)
Trade and other payables		(22,296)		17,647
Dividends payable		(2,726)		1,576
	\$	1,184	\$	(1,966)
Allocated to operating activities	\$	10,348	\$	(1,525)
Allocated to investing activities		(4,908)		(1,704)
Allocated to financing activities		(4,256)		1,263
	\$	1,184	\$	(1,966)
Interest paid	\$	11,373	\$	8,228
Interest received	\$	13	\$	22

21 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 13. The compensation relating to key management personnel for the year recorded as general and administrative expenses was \$3.4 million (2017 - \$2.7 million) and share based compensation costs were \$4.3 million (2017 - \$2.8 million).

22 SUBSEQUENT EVENTS

On **January 11, 2019**, the Company confirmed that a dividend of \$0.01 per common share would be paid on February 15, 2019 to shareholders of record on January 31, 2019. The total amount of dividends declared at January 31, 2019 was \$1.2 million.

On **February 11, 2019**, the Company confirmed that a dividend of \$0.01 per common share would be paid on March 15, 2019 to shareholders of record on February 28, 2019. The total amount of dividends declared at February 28, 2019 was \$1.2 million.

On **March 12, 2019**, the Company confirmed that a dividend of \$0.01 per common share would be paid on April 15, 2019 to shareholders of record on March 29, 2019.

On **February 28, 2019**, the Company confirmed that, pursuant to the Normal Course Issuer Bid (“NCIB”) announced in December 2018, it has purchased and cancelled the maximum allowable 10% of the outstanding balance of debentures. The Company has repurchased and cancelled the maximum number of convertible debentures of \$5.0 million allowed under this NCIB at an average rate of 96.9314.