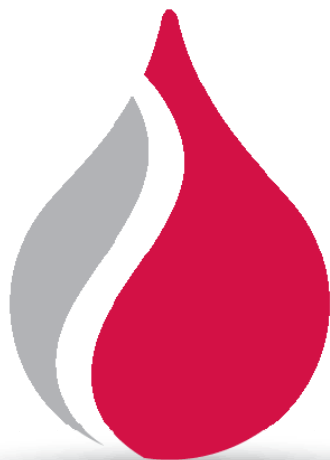




CARDINAL
ENERGY LTD.



Q2 2017

MANAGEMENT DISCUSSION & ANALYSIS

MANAGEMENT'S DISCUSSION AND ANALYSIS

This management's discussion and analysis ("MD&A") is a review of operations, financial position and outlook for Cardinal Energy Ltd. ("Cardinal" or the "Company") for the three and six months ended June 30, 2017 and is dated August 1, 2017. The MD&A should be read in conjunction with Cardinal's unaudited interim condensed financial statements as at and for the three and six months ended June 30, 2017 and the audited financial statements for the years ended December 31, 2016 and 2015. Financial data presented has been prepared in accordance with International Financial Reporting Standards ("IFRS" or, alternatively, "GAAP"), unless otherwise indicated.

All figures in tables are stated in thousands of Canadian dollars (except operational and per share amounts or as noted).

Description of the Business

Cardinal is engaged in the acquisition, development, optimization and production of crude oil and natural gas in all season access areas of Alberta. We are focused on providing sustainable monthly dividends and growth through a combination of accretive oil-based acquisitions and organic development.

Non-GAAP Measures

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

Management utilizes "adjusted funds flow" as a key measure to assess the ability of the Company to generate the funds necessary to finance operating activities, capital expenditures and dividends. Adjusted funds flow excludes the change in non-cash working capital and decommissioning expenditures since Cardinal believes the timing of collection, payment or incurrence of these items involves a high degree of discretion and as such may not be useful for evaluating Cardinal's operating performance. Funds flow excludes the change in non-cash operating working capital. Funds flow and adjusted funds flow are not intended to represent net cash provided by (used in) operating activities calculated in accordance with IFRS. The following table reconciles cash flow from operating activities to funds flow and adjusted funds flow:

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Cash flow from operating activities	12,986	11,167	16	28,369	29,142	(3)
Change in non-cash working capital	2,343	5,508	(57)	1,115	(4,835)	(123)
Funds flow	15,329	16,675	(8)	29,484	24,307	21
Decommissioning expenditures	452	247	83	883	373	137
Adjusted funds flow	15,781	16,922	(7)	30,367	24,680	23

"Adjusted funds flow per share" is calculated using the same weighted average number of shares outstanding used in calculating earnings per share.

"Development capital expenditures" represent expenditures on property, plant and equipment (excluding corporate and other assets and acquisitions) to maintain and grow the Company's base production.

"Free cash flow" represents adjusted funds flow less dividends declared (net of participation in the DRIP and SDP) and less development capital expenditures.

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

The term "net debt" is not recognized under GAAP and is calculated as bank debt plus the principal amount of convertible unsecured subordinated debentures "convertible debentures" and current liabilities less current assets (adjusted for the fair value of financial instruments and the current portion of the decommissioning obligation). Net debt is used by management to analyze the financial position, liquidity and leverage of Cardinal.

"Net debt to adjusted funds flow" is calculated as net debt divided by adjusted funds flow for the trailing twelve month period. The ratio of net debt to adjusted funds flow is used to measure the Company's overall debt position and to measure the strength of the Company's balance sheet. Cardinal monitors this ratio and uses this as a key measure in making decisions regarding financing, capital expenditures and dividend levels.

"Net bank debt" is calculated as net debt less the principal amount of convertible debentures. "Net bank debt to annualized adjusted funds flow" is calculated as net bank debt divided by adjusted funds flow for the most recent quarter, annualized.

"Simple payout ratio" represents the ratio of the amount of dividends declared (net of participation in the DRIP and SDP), divided by adjusted funds flow. "Total payout ratio" represents the ratio of the sum of dividends declared (net of participation in the DRIP and SDP) plus development capital expenditures divided by adjusted funds flow. Simple payout ratio and total payout ratio are other key measures to assess Cardinal's ability to finance operating activities, capital expenditures and dividends.

51-101 Advisory

In accordance with *Standards for Disclosure of Oil and Gas Activities* ("NI 51-101"), natural gas volumes have been converted to barrels of oil equivalent using a conversion rate of six thousand cubic feet of natural gas to one barrel of oil. This ratio is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. **The term "boe" may be misleading, particularly if used in isolation.**

HIGHLIGHTS

Cardinal achieved cash flow from operating activities of \$13.0 million and adjusted funds flow of \$15.8 million for the second quarter of 2017. Adjusted funds flow for the six months ended June 30, 2017 increased 23% compared to the same period in 2016.

We closed the strategic acquisition of light oil assets (the "House Mountain and Midale Acquisition") for total consideration of \$297 million, after preliminary closing adjustments, on June 30, 2017. The key benefits are:

- The acquired assets add 5,000 boe/d of low decline light oil production;
- The acquisition increases the light oil proportion of our crude oil production to 45%;
- The light oil assets would have increased our pro forma first quarter netback by 19% to \$19.14/boe;
- There are significant operating and capital opportunities to further reduce unit operating costs; and
- The acquisition adds a significant number of light oil drilling locations.

Concurrent with the closing of this strategic acquisition, Cardinal issued 30.9 million common shares at \$5.50 per common share for gross proceeds of approximately \$170 million and increased the borrowing base and available lending limit under our credit facilities to \$325 million.

Cardinal increased production for the three months ended June 30, 2017 by 17% to 17,154 boe/d from 14,621 boe/d in the second quarter of 2016.

The Company's netback continued to improve with the second quarter of 2017 increasing by 27% to \$16.73/boe compared to \$13.18/boe in the second quarter of 2016.

OPERATIONS

PRODUCTION

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Crude oil (bbl/d)	13,114	12,598	4	12,912	12,462	4
NGL (bbl/d)	703	272	158	503	272	85
Crude oil and NGL (bbl/d)	13,817	12,870	7	13,415	12,734	5
Natural gas (mcf/d)	20,021	10,506	91	16,506	10,196	62
boe/d	17,154	14,621	17	16,166	14,433	12
% Crude oil and NGL production	81%	88%	(8)	83%	88%	(6)

On December 6, 2016, Cardinal closed an acquisition in our Central Alberta core area at Wainwright which added approximately 450 boe/d of low decline crude oil production.

On March 17, 2017, Cardinal closed an acquisition in our Northwest Alberta core area at Grande Prairie which added approximately 1,600 boe/d of production and light oil development opportunities.

Cardinal's production in the second quarter of 2017 increased by 17% to 17,154 boe/d compared to 14,621 boe/d in the second quarter of 2016. The increase in crude oil and NGL production is due to the Wainwright and Grande Prairie acquisitions and drilling at Bantry and Mitsue. The increase in natural gas production is primarily due to the acquisition at Grande Prairie.

For the six months ended June 30, 2017 production increased by 12% to 16,166 boe/d compared to 14,433 boe/d in 2016. The increase is primarily due to the Wainwright and Grande Prairie acquisitions and drilling at Bantry and Mitsue which more than offset the low decline of the Company's base production.

REVENUE

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Crude oil	60,910	48,407	26	119,354	79,772	50
NGL	1,692	306	n/m	2,571	599	n/m
Crude oil and NGL	62,602	48,713	29	121,925	80,371	52
Natural gas	5,000	1,411	254	8,251	3,177	160
Petroleum and natural gas revenue	67,602	50,124	35	130,176	83,548	56
Cardinal average prices						
Crude oil (\$/bbl)	51.04	42.22	21	51.07	35.17	45
Natural gas (\$/mcf)	2.74	1.48	85	2.76	1.71	61
Equivalent (\$/boe)	43.31	37.67	15	44.49	31.81	40
Benchmark prices						
Crude oil - WTI (US \$/bbl)	48.27	45.59	6	50.09	39.52	27
Crude oil - WCS (Cdn \$/bbl)	49.96	41.61	20	49.68	33.95	46
Natural gas - AECO Spot (Cdn \$/mcf)	2.79	1.42	96	2.74	1.62	69
Exchange rate - (US/Cdn)	0.74	0.78	(5)	0.75	0.75	-

Petroleum and natural gas revenue increased by 35% to \$67.6 million (\$43.31/boe) in the second quarter of 2017 compared to \$50.1 million (\$37.67/boe) in the second quarter of 2016. The increase is primarily due to a 21% increase in Cardinal's average realized crude oil price combined with a 17% increase in production.

Petroleum and natural gas revenue increased by 56% to \$130.2 million (\$44.49/boe) in the six months ended June 30, 2017 compared to \$83.5 million (\$31.81/boe) in the same period of 2016 primarily due to a 45% increase in Cardinal's average realized crude oil price combined with a 12% increase in production.

To mitigate commodity price risks Cardinal has an active 3 year hedging program for Canadian dollar denominated WTI prices. Cardinal is also exposed to medium crude oil differentials at its properties in Bantry and Wainwright. To mitigate this exposure, the Company has entered into WCS differential swaps and has significantly increased the light oil weighting of its production mix.

FINANCIAL INSTRUMENTS

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Average crude oil volumes hedged (bbls/d)	6,250	6,667	(6)	6,250	5,833	7
Realized gain (loss) - commodity contracts	(3,918)	3,047	(229)	(7,118)	13,885	(151)
Unrealized gain (loss) - commodity	15,338	(39,921)	(138)	35,244	(44,217)	(180)

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

Cardinal utilizes a variety of derivatives including swaps and collars to protect against downward commodity price movements and avoids entering into more complex derivative structures. Contracts settled in the period result in realized gains or losses based on the market price compared to the contract price. Changes in the fair value of the contracts, as measured at the balance sheet date, are reported as unrealized gains or losses in the period as the forward markets for commodities and currencies fluctuate and as new contracts are executed. For commodities, Cardinal's risk management program allows for hedging a forward profile of 3 years, of up to 75% of gross average forward 12 months production and up to 50% and 30% of the following 12 and 24 months respectively.

As of the date of this MD&A Cardinal had the following commodity derivatives, referenced to WTI and AECO (unless otherwise noted) outstanding:

Commodity Derivative Traded	Period	Average Volume	Average Strike Price
Crude Oil			
CDN WTI Swap	Jul - Dec 2017	4,556 bbl/d	\$ 62.84
	Jan - Dec 2018	2,244 bbl/d	\$ 67.72
CDN WTI Collar	Jul 2017 - Dec 2017	1,500 bbl/d	Put \$ 65.67
			Call \$ 77.00
	Jan - Dec 2018	1,244 bbl/d	Put \$ 63.40
			Call \$ 76.20
WCS Differential	Jul - Dec 2017	7,500 bbl/d	\$ 19.11
	Jan - May 2018	2,323 bbl/d	\$ 19.20
Natural Gas			
AECO Swap	Jul - Dec 2017	4,500 gj/d	\$ 2.48
	Jan - Dec 2018	4,329 gj/d	\$ 2.59
AECO Collar	Jul - Dec 2017	3,000 gj/d	Put \$ 2.43
			Call \$ 2.93
	Jan - Dec 2018	2,000 gj/d	Put \$ 2.00
			Call \$ 3.00

In connection with certain of the contracts summarized above Cardinal has also granted certain counterparties call options on 1,000 bbl/d for fiscal 2018 at \$70 Cdn WTI.

ROYALTIES

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Royalties	9,380	5,672	65	18,107	10,295	76
Percent of revenue	13.9%	11.3%	23	13.9%	12.3%	13
\$/boe	6.01	4.26	41	6.19	3.92	58

Royalties are either paid or taken in kind and are owed to land and mineral rights owners and to provincial governments. The terms of the land and mineral rights owner agreements and provincial royalty regimes impact Cardinal's overall corporate royalty rate.

Royalties increased by 65% to \$9.4 million (13.9% of revenue) for the second quarter of 2017 from \$5.7 million (11.3% of revenue) in the second quarter of 2016. Royalties for the six months ended June 30, 2017 were \$18.1 million (13.9% of revenue) compared to \$10.3 million (12.3% of revenue) in 2016.

The increases in royalties are primarily due to increases in commodity prices and production. Royalties as a percentage of revenue increased due to higher royalty rates on crude oil production at Mitsue that resulted from higher Alberta reference prices.

OPERATING EXPENSES

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Operating expenses	32,113	26,923	19	63,460	54,794	16
\$/boe	20.57	20.23	2	21.69	20.86	4

Operating expenses include activities in the field required to operate wells and facilities, lift to surface, gather, process, treat, store and ship production. Cardinal manages the variability in its power costs using financial derivative contracts.

For the second quarter of 2017, operating expenses were \$32.1 million (\$20.57/boe) compared to \$26.9 million (\$20.23/boe) in the second quarter of 2016. The increase in operating expenses is primarily due to the increase in production and operating costs per boe were relatively consistent. Operating costs per boe have decreased by 10% compared to the first quarter of 2017.

Operating expenses for the six months ended June 30, 2017 increased to \$63.5 million (\$21.69/boe) from \$54.8 million (\$20.86/boe) in the same period of 2016. The increase in operating expenses is primarily due to the increase in production. Operating costs per boe increased slightly due to an increase in costs related to non-operated production and are expected to further decrease in 2017 to meet our guidance target of \$19.75/boe to \$20.25/boe.

NETBACK

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Petroleum and natural gas revenue	43.31	37.67	15	44.49	31.81	40
Royalties	6.01	4.26	41	6.19	3.92	58
Operating expenses	20.57	20.23	2	21.69	20.86	4
Netback ⁽¹⁾	16.73	13.18	27	16.61	7.03	136

(1) See non-GAAP measures.

Cardinal's netback increased to \$16.73 in the second quarter of 2017 compared to \$13.18 in the second quarter of 2016 and for the first half of 2017 the netback increased to \$16.61 from \$7.03 in 2016. The increases in netback are primarily due to the increases in the average realized crude oil prices.

GENERAL AND ADMINISTRATIVE ("G&A")

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Gross G&A	3,738	3,109	20	7,482	6,039	24
Capitalized G&A and overhead recoveries	(234)	(332)	(30)	(595)	(661)	(10)
G&A	3,504	2,777	26	6,887	5,378	28
\$/boe	2.24	2.09	7	2.35	2.05	15

G&A for the second quarter of 2017 was \$3.5 million (\$2.24/boe) compared to \$2.8 million (\$2.09/boe) in the second quarter of 2016. For the six months ended June 30, 2017, G&A was \$6.9 million (\$2.35/boe) compared to \$5.4 million (\$2.05/boe) for the same period of 2016.

The increases in G&A are primarily due to the reinstatement of salaries that were decreased in 2016 due to low commodity prices and an increase in insurance premiums.

These increases more than offset the increase in production resulting in an increase in G&A per boe. G&A per boe is expected to decrease in 2017 to meet our guidance target of \$2.10/boe to \$2.30/boe as further increases in production are realized.

SHARE-BASED COMPENSATION ("SBC")

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Gross SBC	2,524	2,833	(11)	5,395	5,582	(3)
Capitalized SBC	(267)	(292)	(9)	(515)	(609)	(15)
Net SBC	2,257	2,541	(11)	4,880	4,973	(2)
\$/boe	1.45	1.91	(24)	1.67	1.89	(12)

SBC for the second quarter of 2017 was \$2.3 million (\$1.45/boe) compared to \$2.5 million (\$1.91/boe) in the second quarter of 2016. For the six months ended June 30, 2017, SBC was \$4.9 million (\$1.67/boe) compared to \$5.0 million (\$1.89/boe) in the same period of 2016.

The decreases in SBC are due to warrants and options that have fully vested, partially offset by additional restricted bonus awards ("RAs") granted to staff and executives in the first quarter of 2017.

As at June 30, 2017, Cardinal had 2.5 million RAs outstanding.

FINANCE

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Interest - bank debt	752	527	43	1,262	1,131	12
Other finance charges, net	106	138	(23)	237	218	9
Interest - convertible debentures	685	683	0	1,375	1,371	0
Accretion	2,287	2,275	1	4,435	4,512	(2)
Finance	3,830	3,623	6	7,309	7,232	1
\$/boe	2.45	2.72	(10)	2.50	2.75	(9)
Average bank debt	107,397	75,374	42	91,131	82,385	11
Interest rate - bank debt	2.8%	2.8%	0	2.8%	2.8%	(0)

Finance expense for the second quarter of 2017 was \$3.8 million (\$2.45/boe) compared to \$3.6 million (\$2.72/boe) in the second quarter of 2016. For the six months ended June 30, 2017, finance expense was \$7.3 million (\$2.50/boe) compared to \$7.2 million (\$2.75/boe) in the same period of 2016.

The increases in finance expense for the three and six months ended June 30, 2017 are primarily due to the increases in interest on bank debt and average bank debt outstanding.

TRANSACTION COSTS

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Transaction costs	1,363	-	n/m	1,363	37	n/m

Transaction costs primarily relate to expenses incurred in connection with the House Mountain and Midale Acquisition.

DEPLETION AND DEPRECIATION ("D&D")

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Depletion and depreciation	21,565	20,888	3	41,259	40,876	1
\$/boe	13.82	15.70	(12)	14.10	15.56	(9)

Depletion is calculated based upon capital expenditures incurred since inception of the Company, future development costs associated with proved plus probable reserves, production rates, and proved plus probable reserves. In addition to depletion, Cardinal records depreciation on other capital equipment not directly associated with proved plus probable reserves.

D&D for the second quarter of 2017 was \$21.6 million (\$13.82/boe) compared to \$20.9 million (\$15.70/boe) in the second quarter of 2016. For the six months ended June 30, 2017, D&D was \$41.3 million (\$14.10/boe) compared to \$40.9 million (\$15.56/boe) in the same period of 2016.

D&D in 2017 is consistent with 2016 and the lower depletion rate is due to the impairment at Jenner recognized in 2016 and the disposition of non-core assets in the second quarter of 2017 (see Capital Expenditures).

DEFERRED TAXES

At June 30, 2017 the Company recorded a deferred tax asset of \$114.8 million (2016 – \$115.1 million). The deferred tax asset was recognized as management considered it probable that there will be sufficient future taxable income to utilize the benefits.

The Company has approximately \$1.5 billion of tax pools (\$1.4 billion are unrestricted) available to be applied against future income for tax purposes. Based on available pools and current commodity prices, Cardinal does not expect to pay current income taxes until approximately 2021. Taxes payable beyond 2021 will be primarily a function of commodity prices, capital expenditures and production.

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

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Earnings (loss)	1,218	(35,317)	(103)	8,780	(50,961)	(117)
\$/share						
Basic and diluted	0.02	(0.52)	(104)	0.11	(0.77)	(114)
Cash flow from operating activities	12,986	11,167	16	28,369	29,142	(3)
Adjusted funds flow	15,781	16,922	(7)	30,367	24,680	23
\$/share						
Basic and diluted	0.20	0.25	(20)	0.39	0.37	5
Total payout ratio	156%	112%	39	175%	111%	58
Simple payout ratio	59%	41%	45	55%	54%	2

For the second quarter of 2017, the Company had earnings of \$1.2 million compared to a loss of \$35.3 million in the second quarter of 2016. Adjusted funds flow for the second quarter of 2017 was \$15.8 million compared to \$16.9 million in the second quarter of 2016. The earnings in the second quarter of 2017 is primarily due to increases in production and prices and a \$15.3 million unrealized gain on commodity contracts partially offset by a \$3.9 million realized loss on commodity contracts. Adjusted funds flow decreased as the increases in production and prices were offset by a \$3.9 million realized loss on commodity contracts and the second quarter of 2016 included a \$3.0 million realized gain on commodity contracts.

For the six months ended June 30, 2017 the Company had earnings of \$8.8 million compared to a loss of \$51.0 million in 2016. The earnings in 2017 include an unrealized gain on commodity contracts of \$35.2 million and the loss in 2016 included an unrealized loss on commodity contracts of \$44.2 million. Adjusted funds flow for the first six months of 2017 increased to \$30.4 million from \$24.7 million. The increase in adjusted funds flow was due to the increase in production and continued recovery of commodity prices partially offset by a \$7.1 million realized loss on commodity contracts while the same period in 2016 included a \$13.9 million realized gain on commodity contracts.

The increases in Cardinal's total payout ratio for the second quarter of 2017 from 112% to 156% and for the six months ended June 30, 2017 from 111% to 175% are primarily due to the increases in development capital expenditures as budgeted capital expenditures for 2017 were higher in the first half than the second half.

CAPITAL EXPENDITURES

Property Acquisitions

On **March 17, 2017**, Cardinal acquired petroleum and natural gas properties to expand its Northwest Alberta core area and to increase its light oil development opportunities. Total consideration provided was \$31.6 million, before closing adjustments, consisting of approximately 4.0 million common shares valued at \$6.85 per share and \$4.0 million in cash with an associated decommissioning obligation of \$5.6 million. The Company recorded a deferred tax asset related to temporary differences in the carrying amount of the acquired properties and their tax bases which resulted from a decrease in the value of share consideration that was provided and an adjustment to the fair value of the properties acquired.

On **June 30, 2017**, Cardinal acquired light oil and natural gas properties 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 \$297 million in cash, after preliminary closing adjustments with an associated decommissioning obligation of \$20.0 million.

Other Capital Expenditures

In the first six months of 2017 Cardinal drilled, completed and tied-in 10 (8.7 net) horizontal wells including the well at Mitsue that was spud in the fourth quarter of 2016. The Company drilled an additional one (1.0 net) well at Bantry that was not completed by the end of the quarter and optimized certain wells and facilities in its core areas.

In connection with a 2016 farm-out agreement the farmee drilled, completed and brought on production two vertical wells in the first six months of 2017. In this non-monetary exchange, the value of the royalties that Cardinal expects to receive of \$0.5 million was recorded as an acquisition of petroleum and natural gas properties with an after tax gain on the farm-out of \$0.4 million.

Disposition

For the six months ended June 30, 2017, the Company quit claimed non-core assets with a carrying value of \$2.8 million and an associated decommissioning obligation of \$0.6 million and recognized a loss of \$2.2 million.

Capital Expenditures

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Land	247	5	n/m	520	147	254
Geological and geophysical	286	7	n/m	389	7	n/m
Drilling and completion	7,609	7,898	(4)	22,394	8,482	164
Equipment, facilities and pipelines	7,143	4,167	71	13,201	5,518	139
Total exploration and development ⁽¹⁾	15,285	12,077	27	36,504	14,154	158
Capitalized overhead	234	152	54	409	304	35
Other assets	371	6	n/m	510	8	n/m
Acquisitions, net	297,114	160	n/m	301,115	335	n/m
Total cash capital expenditures	313,004	12,395	n/m	338,538	14,801	n/m
Non-cash expenditures ⁽²⁾	-	-	n/m	28,174	-	n/m
Total capital expenditures ⁽³⁾	313,004	12,395	n/m	366,712	14,801	n/m

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

(2) Represents share consideration associated with the Grande Prairie acquisition and the value of the farm-out recognized in 2017.

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

DECOMMISSIONING OBLIGATION

The decommissioning obligation increased by \$28 million from \$112 million at December 31, 2016 to \$140 million at June 30, 2017. The increase primarily relates to \$25.6 million for acquisitions and \$4.0 million of accretion partially offset by \$0.6 million on the non-core asset disposition and \$0.9 million for decommissioning obligations settled.

LIQUIDITY AND CAPITAL RESOURCES

Capitalization table	As at		
	Jun 30, 2017	Dec 31, 2016	Change %
Net bank debt ⁽¹⁾	238,652	70,300	239
Convertible debentures	50,000	50,000	-
Shares outstanding	110,184,186	74,151,719	49
Market price at end of period (\$ per share)	\$ 4.82	\$ 10.59	(54)
Market capitalization	531,088	785,267	(32)
Total capitalization	819,740	905,567	(9)

(1) See non-GAAP measures.

CAPITAL FUNDING

As at June 30, 2017 Cardinal had a reserves-based revolving credit facility of \$325 million 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 25, 2018 and may be extended for a further 364 day period, subject to approval by the syndicate. 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. Cardinal was in compliance with the terms of the Facilities at June 30, 2017.

The borrowing base of the Facilities is primarily based on reserves and commodity prices estimated by the syndicate and is subject to review and redetermination on a semi-annual basis. The next scheduled review of the borrowing base is to be completed on or before November 30, 2017. 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 (see Liquidity).

Advances under the Facilities are available by way of either prime rate loans, which bear interest at the banks' prime lending rate plus 0.7 to 2.0%, and bankers' acceptances and/or LIBOR loans, which are subject to fees and margins ranging from 1.7 to 3.0%. 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.

Cardinal has \$50 million of convertible debentures which have a maturity date of December 31, 2020. The convertible debentures have a conversion price of \$10.50 per common share and bear interest at 5.5% per annum, payable semi-annually on June 30 and December 31 each year. The convertible debentures are redeemable by the Company after January 1, 2019 subject to certain conditions.

On June 21, 2017, Cardinal entered into an offering with a syndicate of underwriters (the "Offering") to issue 30,910,000 subscription receipts (the "Receipts") at \$5.50 per Receipt for gross proceeds of approximately \$170 million.

We are initiating a process to identify for potential sale certain royalty interests (which may include newly created royalty interests) and fee title lands to reduce our bank debt.

CAPITAL STRUCTURE

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 expenditure program and the ratio of net debt to adjusted funds flow (see non-GAAP measures).

To manage its capital structure, Cardinal considers its net debt to adjusted funds flow ratio, its capital expenditures program, the current level of credit available from the Facilities, the level of credit that may be attainable due to increases in petroleum and natural gas reserves and new equity if available on favourable terms. The Company prepares an annual capital expenditure budget, which is monitored quarterly and updated as necessary.

	Twelve months ended	
	Jun 30, 2017	Dec 31, 2016
Bank debt	\$ 233,229	\$ 61,272
Principal amount of Convertible Debentures	50,000	50,000
Working capital deficiency ⁽¹⁾	5,423	9,028
Net debt	\$ 288,652	\$ 120,300
Cash provided from operating activities	\$ 60,189	\$ 60,962
Change in non-cash working capital	1,365	(4,585)
Funds flow	\$ 61,554	\$ 56,377
Decommissioning obligation expenditures	3,237	2,727
Adjusted funds flow	64,791	59,104
Net debt to adjusted funds flow	4.5	2.0

(1) excludes the fair value of commodity contracts and the current portion of the decommissioning obligation

Cardinal's ratio of net debt to adjusted funds flow at June 30, 2017 was 4.5 : 1, above the Company's target of less than 2 : 1 due to the House Mountain and Midale Acquisition. If the trailing twelve month operating income earned by the prior owner of the House Mountain and Midale Acquisition was included in Cardinals' adjusted funds flow, the ratio would have been 2.4 : 1. The ratio is expected to decrease when proceeds from the sale of royalty interests are realized.

LIQUIDITY

The Company relies on cash flow from operating activities, the unused portion of the Facilities and equity issuances to fund its capital requirements and provide liquidity. As at June 30, 2017 Cardinal had a working capital deficiency of \$5.4 million (excluding the fair value of commodity contracts and the current portion of the decommissioning obligation) and unused capacity (total credit capacity less net debt excluding the principal amount of convertible unsecured subordinated debentures and a letter of credit of \$1.4 million) of \$84.9 million on its Facilities.

The Company believes that it is well positioned to take advantage of its internally developed opportunities funded through its available Facilities combined with anticipated cash flow from operating activities. Proceeds from the proposed royalty interest sales are expected to further strengthen the Company's balance sheet. Present sources of capital are anticipated to be sufficient to satisfy the Company's capital program and dividend payments for the 2017 fiscal year.

GUIDANCE

Based on our expectation for continued lower commodity prices (including the effect of recent increases in the US/Cdn exchange rate) and lower realized prices in the first half of 2017 compared to our previous guidance for the House Mountain and Midale Acquisition Cardinal is revising its second half and annual 2017 guidance. Due to the expected reduction in adjusted funds flow we are also revising our annual guidance for development capital expenditures to maintain a total payout ratio of less than 100% for the second half of 2017 as follows:

2017 Second Half Guidance (prior to royalty dispositions)

	Revised	Previous	Change %
WTI Oil price (US\$)	\$47.50	\$55.00	
Exchange rate (US/Cdn)	0.80	0.74	
Operating income	65,000	100,000	(35)
Adjusted funds flow	56,000	76,000	(26)
Net bank debt, end of period	232,000	223,000	4
Netback	16.24	24.47	(34)
Adjusted funds flow per share (basic)	\$0.51	\$0.69	(26)
Adjusted funds flow per share (diluted) ⁽²⁾	\$0.49	\$0.67	(27)
Net bank debt to annualized adjusted funds flow	2.05	1.47	39
Simple payout ratio	41%	30%	37
Total payout ratio	84%	73%	15

2017 Annual Guidance

Adjusted funds flow	86,000	120,000	(28)
Adjusted funds flow per share (basic)	\$0.91	\$1.28	(29)
Development capital expenditures	60,000	68,000	(12)
Simple payout ratio	46%	32%	44
Total payout ratio	116%	89%	30

(1) Guidance in the tables above (except for operating income) are non-GAAP measures.

(2) Does not include Common Shares issuable upon conversion of outstanding convertible debentures.

Revised guidance is based on a WTI price of \$47.50 US per bbl and an exchange rate of 0.80 US/Cdn for the second half of 2017 (original guidance for 2017 was based on a WTI price of \$55 US per bbl and an exchange rate of 0.74 US/Cdn). We have not changed our other guidance assumptions that include (i) an average royalty rate of 14%; (ii) a differential to WTI of \$19 per bbl; (iii) AECO price of \$3 per gj; and (iv) existing commodity derivatives.

We expect to meet or exceed our other 2017 annual guidance for production, operating costs and G&A per boe, dividend per share annualized and acquisitions and 2017 second half guidance for operating costs per boe.

DIVIDENDS

	Three months ended			Six months ended		
	Jun 30, 2017	Jun 30, 2016	Change %	Jun 30, 2017	Jun 30, 2016	Change %
Dividends declared	9,406	7,202	31	17,424	14,119	23
Reinvested dividends (DRIP and SDP)	(86)	(297)	(71)	(756)	(871)	(13)
Net cash dividends	9,320	6,905	35	16,668	13,248	26
Dividends declared per share	\$ 0.105	\$ 0.105	-	\$ 0.21	\$ 0.21	-

During the six months ended June 30, 2017, \$17.4 million of dividends (\$0.21 per common share) were declared of which \$13.1 million was paid in cash, \$3.9 million was recognized as a liability at June 30, 2017, and \$0.4 million was settled on the issuance of 59,559 common shares pursuant to the Company's DRIP and SDP. On March 13, 2017, Cardinal announced the suspension of the DRIP and SDP, effective for the April 2017 dividend paid on May 15, 2017. The dividend payable was settled on July 14, 2017.

SHARE CAPITAL

On January 9, 2017, Cardinal granted 980,178 RAs to officers, directors and employees pursuant to the Company's restricted bonus award plan. The market value of Cardinal's common shares at the grant date was \$10.50.

On March 17, 2017 Cardinal issued 4.0 million common shares valued at \$6.85 as partial consideration for the Grande Prairie Acquisition.

On June 30, 2017, Cardinal issued 30,910,000 common shares pursuant to the Offering at \$5.50 per common share for gross proceeds of approximately \$170 million.

Equity Instruments as at	August 1, 2017	Jun 30, 2017
Common shares	110,310,282	110,184,186
Convertible debentures (\$50.0 million convertible at \$10.50)	4,761,905	4,761,905
RAs	2,524,353	2,524,353
Warrants (adjusted for dividends)	-	369,207
Stock options	144,726	144,726

OFF BALANCE SHEET ARRANGEMENTS

Cardinal does not have any special purpose entities nor is it a party to any arrangements that would be excluded from the balance-sheet, other than the operating leases summarized in *Commitments and Contractual Obligations*.

COMMITMENTS AND CONTRACTUAL OBLIGATIONS

At June 30, 2017, the Company had contractual obligations and commitments as follows:

	2017	2018	2019	2020	2021	Thereafter
Head office lease	551	1,870	1,870	1,870	1,909	3,819
Field office lease	65	130	22	-	-	-
Trade and other payables	42,161	-	-	-	-	-
Dividends payable	3,856	-	-	-	-	-
Bank debt	-	-	233,229	-	-	-
Convertible debentures	1,375	2,750	2,750	52,750	-	-
	\$ 48,008	\$ 4,750	\$ 237,871	\$ 54,620	\$ 1,909	\$ 3,819

Cardinal is also committed to incur qualifying Canadian Exploration Expense of \$0.3 million prior to December 31, 2017.

SUBSEQUENT EVENTS

On **July 13, 2017**, the Company confirmed that a dividend of \$0.035 per common share would be paid on August 15, 2017 to shareholders of record on July 31, 2017. The total amount of dividends declared at July 31, 2017 was \$3.9 million.

On **August 1, 2017**, the Company confirmed that a dividend of \$0.035 per common share would be paid on September 15, 2017 to shareholders of record on August 31, 2017.

ADDITIONAL INFORMATION

CRITICAL ACCOUNTING ESTIMATES

There have been no changes in Cardinal's critical accounting estimates in the six months ended June 30, 2017. Further information on the Company's critical accounting policies and estimates can be found in the notes to the annual financial statements and MD&A for the year ended December 31, 2016.

INTERNAL CONTROLS UPDATE

Cardinal is required to comply with National Instrument 52-109 "Certification of Disclosure on Issuers' Annual and Interim Filings". The certificate requires that Cardinal disclose in the interim MD&A any change in the Company's internal control over financial reporting ("ICOFR") that occurred during the period that have materially affected, or are reasonably likely to materially affect Cardinal's ICOFR. As of the date of this MD&A Cardinal confirms that there have been no such changes in Cardinal's ICOFR during the second quarter of 2017.

ENVIRONMENTAL RISKS

The oil and gas industry has a number of environmental risks and hazards and is subject to regulation by all levels of government. Environmental legislation includes, but is not limited to, operational controls, site restoration requirements and restrictions on emissions of various substances produced in association with oil and natural gas operations. Compliance with such legislation could require additional expenditures and a failure to comply may result in fines and penalties which could, in the aggregate and under certain unlikely assumptions, become material.

Operations are continuously monitored to minimize the environmental impact and capital is allocated to reclamation and other activities to mitigate the impact on the areas in which we operate.

OUTLOOK

The second quarter of 2017 was transformational for Cardinal with the successful closing of the House Mountain and Midale acquisition. A more balanced crude oil production mix of approximately 45% light oil and liquids after the acquisition is expected to improve our netback.

We remain focused on our goal to create long term shareholder value through accretive growth and regular dividends.

The low decline rate of our base assets (including the recently acquired assets) require minimal capital to maintain production. We have a large inventory of economic projects including opportunities arising from the recent acquisition of Midale and House Mountain. However, current commodity prices (including the effect of the Canada-US exchange rate) has led the Board of Directors to consider whether expending growth capital to bring on production is the best use of available funds. Cardinal has opted to use a conservative price forecast for its second half budget, reduce expenditures which would have resulted in growth and to apply free cash flow to debt reduction.

QUARTERLY DATA

	Jun 30, 2017	Mar 31, 2017	Dec 31, 2016	Sep 30, 2016
Production				
Oil and NGL (bbl/d)	13,114	13,009	12,586	13,027
Natural gas (mcf/d)	20,021	12,952	12,178	11,578
Oil equivalent (boe/d)	17,154	15,168	14,616	14,957
Financial				
Revenue	67,602	62,574	58,721	53,673
Earnings (loss)	1,218	7,562	(31,995)	(4,366)
Basic per share (\$)	0.02	0.10	(0.43)	(0.06)
Diluted per share (\$)	0.02	0.10	(0.43)	(0.06)
Cash flow from operating activities	12,986	15,383	9,728	22,092
Adjusted funds flow	15,781	14,586	16,247	18,177
Basic per share (\$)	0.20	0.19	0.22	0.25
Diluted per share (\$)	0.20	0.19	0.22	0.25
Working capital deficiency ⁽¹⁾	(5,423)	(11,396)	(9,028)	(12,056)
Total assets	1,310,125	982,602	946,237	931,041
Bank debt	233,229	82,978	61,272	23,092
Principal amount of convertible debentures	50,000	50,000	50,000	50,000
Total long-term liabilities ⁽²⁾	420,227	249,806	228,437	197,282
Shareholders' equity	834,532	675,505	651,080	681,250
Weighted average shares - basic (000's)	79,612	75,557	73,728	73,501
Weighted average shares - diluted (000's)	80,511	76,919	73,728	73,501
Common shares outstanding (000's)	110,184	79,262	74,152	73,518
Diluted shares outstanding (000's)	117,984	87,123	82,515	81,886
	Jun 30, 2016	Mar 31, 2016	Dec 31, 2015	Sep 30, 2015
Production				
Oil and NGL (bbl/d)	12,870	12,597	12,176	10,321
Natural gas (mcf/d)	10,506	9,886	9,696	5,390
Oil equivalent (boe/d)	14,621	14,245	13,792	11,220
Financial				
Revenue	50,124	33,424	43,300	42,949
Earnings (loss)	(35,317)	(15,644)	938	(105,674)
Basic per share (\$)	(0.52)	(0.24)	0.01	(1.83)
Diluted per share (\$)	(0.52)	(0.24)	0.01	(1.83)
Cash flow from operating activities	11,167	17,975	9,121	32,497
Adjusted funds flow	16,922	7,758	17,955	24,810
Basic per share (\$)	0.25	0.12	0.29	0.43
Diluted per share (\$)	0.25	0.12	0.28	0.43
Working capital deficiency ⁽¹⁾	(6,891)	(10,225)	(4,368)	(14,673)
Total assets	941,999	945,998	964,333	812,378
Bank debt	25,017	86,797	91,817	56,724
Principal amount of convertible debentures	50,000	50,000	50,000	-
Total long-term liabilities ⁽²⁾	200,381	249,318	251,445	140,347
Shareholders' equity	689,987	661,463	680,446	634,612
Weighted average shares - basic (000's)	67,356	65,725	62,957	57,760
Weighted average shares - diluted (000's)	67,356	65,725	64,280	57,760
Common shares outstanding (000's)	73,482	65,936	65,124	58,334
Diluted shares outstanding (000's)	81,845	74,309	72,357	60,849

(1) – Excluding the fair value of financial instruments and the current portion of decommissioning obligation

(2) – Includes bank debt and the liability component of convertible debentures

Production in 2015 was approximately 11,000 boe/d until the fourth quarter of 2015 when the Company closed the Mitsue acquisition. Production increases in 2016 were due to the Mitsue acquisition and successfully drilling at Bantry. Production in 2017 increased due to the Wainwright and Grande Prairie acquisitions and drilling at Bantry and Mitsue. Revenue decreased from the second quarter of 2015 until the second quarter of 2016 due to decreases in commodity prices. Commodity prices have since improved and combined with increases in production have resulted in increases in revenue.

Adjusted funds flow for the first quarter of 2016 decreased significantly compared to prior quarters due to a significant decrease in crude oil prices and a widening of the WCS differential. Adjusted funds flow for the second and third quarters of 2016 increased compared to the first quarter of 2016 due to a partial recovery in commodity prices and increases in production and decreased in the fourth quarter of 2016 due to reduction in realized gains on commodity contracts. Adjusted funds flow in 2017 was consistent with the fourth quarter of 2016 as increases in production and commodity prices were offset by realized losses on commodity contracts

Cardinal's quarterly earnings (loss) have varied significantly due to changes in operations and commodity prices including an impairment of \$156.9 million in the third quarter of 2015, an unrealized loss of \$39.9 million in the second quarter of 2016, an impairment of \$12.8 million in the fourth quarter of 2016, an unrealized gain of \$19.9 million in the first quarter of 2017, and an unrealized gain of \$15.3 million in the second quarter of 2017.

FORWARD LOOKING STATEMENTS

This MD&A contains certain forward-looking statements and forward-looking information (collectively referred to herein as "forward-looking statements") within the meaning of applicable Canadian securities laws. All statements other than statements of present or historical fact are forward-looking statements. Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "believe", "plan", "intend", "objective", "continuous", "ongoing", "estimate", "expect", "may", "will", "project", "should", or similar words suggesting future outcomes. In particular, this MD&A contains forward-looking statements relating, but not limited to:

- Cardinal's acquisition and growth plans and the source of funding;
- anticipated future production;
- pursuit of light oil development opportunities, drilling inventory and light oil acquisitions;
- the impact of the House Mountain and Midale Acquisition on us, including our operations, product mix, drilling inventory and opportunities to further reduce operating costs;
- estimated tax pools, future taxability and future taxable income;
- expectations to maintain the Facilities at \$325 million at the next scheduled review and the timing of this review;
- anticipated decline rates;
- expectations with respect to payout ratios, adjusted funds flow, net debt to adjusted funds flow ratio and other financial results;
- anticipated operating and G&A expenses per boe;
- Cardinal's business strategy, goals and management focus;
- achieving the Company's revised guidance for 2017 including adjusted funds flow, development capital expenditures and other financial information and other 2017 annual and second half guidance that was not revised;
- Cardinal's dividend plans, the amount, timing and sources of funding of the payment of future dividends and the consistency of our dividend policy;
- expectations with respect to identifying potential royalty interests to sell to reduce bank debt;
- plans to maintain a conservative leverage profile through a targeted net debt to adjusted funds flow ratio of less than 2.0 once the proceeds of the royalty interest sales are realized;
- Cardinal's risk management strategy including the mitigation of our exposure to commodity price risk, medium crude oil differentials and power costs and the benefits to be obtained therefrom;
- sources of funds for the Company's operations, capital expenditures and decommissioning obligations;
- future liquidity and the Company's access to sufficient debt and equity capital;

- Cardinal's asset base and future prospects for development and growth therefrom;
- expectations regarding the business environment, industry conditions, future commodity prices and differentials;
- Cardinal's capital management strategies; and
- treatment under governmental and other regulatory regimes and tax, environmental and other laws.

Forward-looking statements regarding Cardinal are based on certain key expectations and assumptions of Cardinal concerning anticipated financial performance, business prospects, strategies, regulatory developments, current commodity prices and exchange rates, applicable royalty rates, tax laws, future well production rates and reserve volumes, future operating costs, the performance of existing and future wells, the success of its exploration and development activities, the sufficiency and timing of budgeted capital expenditures in carrying out planned activities, the availability and cost of labor and services, the impact of increasing competition, conditions in general economic and financial markets, availability of drilling and related equipment, effects of regulation by governmental agencies, the ability to obtain financing on acceptable terms which are subject to change based on commodity prices, market conditions, drilling success and potential timing delays.

These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond Cardinal's control. Such risks and uncertainties include, without limitation: the impact of general economic conditions; volatility in market prices for crude oil and natural gas; industry conditions; currency fluctuations; imprecision of reserve estimates; liabilities inherent in crude oil and natural gas operations; environmental risks; incorrect assessments of the value of acquisitions and exploration and development programs; competition from other producers; the lack of availability of qualified personnel, drilling rigs or other services; changes in income tax laws or changes in royalty rates and incentive programs relating to the oil and gas industry; hazards such as fire, explosion, blowouts, and spills, each of which could result in substantial damage to wells, production facilities, other property and the environment or in personal injury; and ability to access sufficient capital from internal and external sources.

This MD&A contains future-oriented financial information and financial outlook information (collectively, "FOFI") about our prospective results of operations, adjusted funds flow, and components thereof, all of which are subject to the same assumptions, risk factors, limitations, and qualifications as set forth in the above paragraphs. FOFI contained in this MD&A were made as of the date of this MD&A and is provided for the purpose of describing the anticipated effects of the acquisition and the offering on our business operations. We disclaim any intention or obligation to update or revise any FOFI contained in this document, whether as a result of new information, future events or otherwise, unless required pursuant to applicable law. Readers are cautioned that the FOFI contained in this document should not be used for purposes other than for which it is disclosed herein.

Management has included the forward-looking statements above and a summary of assumptions and risks related to forward-looking statements provided in this MD&A in order to provide readers with a more complete perspective on Cardinal's future operations and such information may not be appropriate for other purposes. Cardinal's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits that Cardinal will derive there from. Readers are cautioned that the foregoing lists of factors are not exhaustive. These forward-looking statements are made as of the date of this MD&A and Cardinal disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws.

Frequently Used Terms

Term or abbreviation

"bbl"	Barrel(s)
"bbl/d"	Barrel(s) per day
"boe"	Barrel(s) of oil equivalent
"boe/d"	Barrel(s) of oil equivalent per day
"COGE Handbook"	Canadian Oil and Gas Evaluation Handbook

"DRIP"	Dividend reinvestment plan
"GJ"	Gigajoule
"gj/d"	Gigajoule(s) per day
"m" preceding a volumetric measure	1,000 units of the volumetric measure
"mcf"	Thousand cubic feet
"mcf/d"	Thousand cubic feet per day
"NGL"	Natural gas liquids
"n/m"	Not meaningful ie absolute value greater than 300 %
"SDP"	Stock dividend program
"US"	United States
"USD"	United States dollars
"WCS"	Western Canadian Select
"WTI"	West Texas Intermediate