NEWS RELEASE **MARCH 2, 2021**

CARDINAL ENERGY LTD. ANNOUNCES 2020 YEAR-END RESERVES

Calgary, Alberta – Cardinal Energy Ltd. ("**Cardinal**" or the "**Company**") (TSX:CJ) is pleased to present the results of its independent reserve report effective December 31, 2020. One hundred percent of Cardinal's year-end 2020 reserves were evaluated by independent reserves evaluator GLJ Ltd. ("GLJ") as at December 31, 2020 (the "2020 Reserve Report"). The 2020 financial information in this press release is unaudited and accordingly, such financial information is subject to change based on the results of the Company's year-end audit.

SUSTAINABILITY AND OPERATIONS

The resilience, quality and sustainability of our low decline asset base was demonstrated through an extremely challenging operational and financial period in 2020. The impacts on our business due to COVID-19 and the associated volatility in oil prices were profound and forced rapid decisions to reduce long term negative consequences. Cardinal's focus was to preserve financial liquidity, capture cost savings while keeping our operations safe and maintaining the long term value of our assets.

The year started off in a bullish fashion with WTI oil prices over US$60 per bbl and Cardinal kicking off a multi-well drilling program. This successful program consisted of six horizontal Glauconitic wells and one multi-leg Ellerslie horizontal well in our Bantry and Duchess fields in southern Alberta.

Then the world changed due to the COVID-19 pandemic. We spent the balance of 2020 in a survival mode cutting our capital budget by over 50% and significantly reducing our well reactivation program. The low decline nature of our assets performed exceptionally well as workover and reactivation costs were cut, salaries and wages were significantly reduced and capital spending halted, yet our production base was held relatively flat. We did shut down higher operating cost properties, some of which are still shut in, and we will continue to review these properties to come up with long term solutions to fix their cost structure. Production volumes averaged 17,169 boe/d in the second quarter of 2020 and as prices recovered, reached an average of 18,625 boe/d in the fourth quarter of 2020 without the benefit of drilling new wells as existing production was optimized and selective shut-in barrels were brought back on stream.

Throughout the second half of the year, commodity prices stabilized however there were ongoing restrictions and uncertainty when a second wave of the COVID-19 pandemic hit most countries. WTI oil prices averaged US$42.66 per bbl in the fourth quarter and closed at approximately $48.50 per bbl, an increase of 74% over the average price experienced in the second quarter of 2020. Oil prices through Q1 2021 have continued to strengthen to pre COVID-19 levels with recent spot WTI prices around US$60 per bbl further improving the long term outlook for Cardinal and the industry.

RESERVE REPORT HIGHLIGHTS

All reserves information contained in this press release is based on the 2020 Reserve Report.

- The Net Present Value ("NPV"), discounted at 10% ("NPV10") is $600 million, $712 million for our Proved Developed Producing ("PDP") and Proved Plus Probable Producing ("P+PDP") reserves respectively.
- Cardinal continues to maintain a long producing reserve life index[(1)] ("RLI") of 9.5 years PDP and 12 years P+PDP based on fourth quarter 2020 production which reflects the low decline, low risk predictable nature of our asset base.
- Cardinal's light and medium crude oil reserves, natural gas and associated liquids saw positive technical revisions of 6.3 Mmboe and 6.7 Mmboe in the Total Proved ("TP") and Total Proved plus Probable ("TPP") reserves category, respectively. The Midale CO_2 enhanced recovery project continues to exhibit improved performance.
- Cardinal maintained a high percentage of reserves as producing with the P+PDP reserves accounting for 82% of the Company's total reserves.
- Based on the 2020 Reserve Report, the debt adjusted, NPV10 [(2)] of the Company's PDP reserves was $2.91 per basic share.
- 90% of Cardinal's TPP reserves are associated with oil and natural gas liquids.
- Future Development Capital ("FDC") was reduced by $51 million (19%) in the TPP reserves category as the Company has limited drilling plans in 2021.

Notes:

(1) RLI is calculated by dividing the reserves by the annualized fourth quarter production of 18,625 boe per day, consisting of 10,172 bbl/d of light and medium crude oil, 4,977 bbl/d of heavy crude oil, 1,200 bbl/d of natural gas liquids and 13.7 MMcf/d of conventional natural gas.

(2) PDP net asset value is based on the before tax NPV10 of the PDP reserves less net debt of $247 million (unaudited) divided by the Company's basic shares at December 31, 2020 of 121.3 million.

OIL AND GAS RESERVES

The 2020 Reserve Report encompasses 100% of Cardinal's oil and gas properties and was prepared in accordance with definitions, standards and procedures contained in the Canadian Oil and Gas Evaluation Handbook("COGEH") and National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities ("NI 51-101").

Reserves Detail

Our 2020 Reserve Report reflects the impact of a materially lower commodity price forecast of the three consultant's average (GLJ, McDaniel & Associates Consultants Ltd. and Sproule Associates Ltd.) used by GLJ. The forecast crude oil reference prices are 25% lower in the first five years from the 2019 Reserve Report forecast. There were 2.9 million barrels of TP and 2.3 million barrels of TPP heavy oil reserves removed due to low oil pricing at year end. These revisions were offset by the maintained low decline and improved performance in the Midale and other light and medium crude oil properties with associated natural gas and natural gas liquids.

The FDC was reduced by $47 million on a TP basis and $51 million on a TPP basis year over year due to the removal of some undeveloped locations primarily due to the change in forecasted commodity prices and the Company's decision to have minimal drilling activity in 2021. FDC was also reduced from revisions to the CO_2 purchase requirements and price. The FDC includes costs to develop the undeveloped reserves as well as maintenance capital and CO_2 purchases.

In the 2020 Reserve Report, Cardinal has included all abandonment, decommissioning and reclamation ("ADR") costs for active and inactive wells, pipelines and facilities. The ADR costs for the active assets are considered in the PDP reserves category. Full inclusion of all ADR costs is recommended by COGEH. Cardinal's full inclusion of costs exceeds the NI 51-101 minimum requirement of ADR for active assets only. At year-end 2020, the 2020 Reserve Report included TPP ADR costs discounted at 10% of $79.8 million.

Consistent with prior years and in accordance with COGEH recommendations, Cardinal has included all operating costs, for active and inactive assets. The Company also includes the consideration of future maintenance costs which is included as part of the operating costs or as FDC.

Summary of Oil and Gas Reserves [(1)]

The following tables summarize certain information contained in the 2020 Reserve Report. Reserves included below are the Company's estimated gross reserves as at December 31, 2020, as evaluated in the 2020 Reserve Report.

Reserves Category	**Light and Medium Oil (Mbbl)**	**Heavy Oil (Mbbl)**	**Natural Gas Liquids (Mbbl)**	**Conventional Natural Gas[(2)] (MMcf)**	**Total BOE (Mboe)**
Proved Developed Producing	36,186	18,934	2,984	37,531	64,359
Proved Developed Non-Producing	1,371	1,011	179	6,901	3,711
Proved Undeveloped	4,512	1,845	226	2,531	7,005
Total Proved	**42,069**	**21,790**	**3,389**	**46,963**	**75,074**
Probable	14,180	6,351	1,076	15,457	24,184
Total Proved Plus Probable	**56,249**	**28,141**	**4,465**	**62,420**	**99,258**

Notes:
(1) Total values may not add due to rounding.
(2) Includes non-associated gas, associated gas and solution gas.
(3) In addition to the gross reserves indicated in the above table, the Company has 162 Mboe TPP royalty interest reserves comprised of 122 Mbbl light and medium crude oil and 238 MMcf of conventional natural gas.

Summary of Net Present Values of Future Net Revenue (Before Tax)
(Based on forecast price and costs)

As at December 31, 2020 [(1)(2)(3)]

	Discounted at:				
Reserves Category	**0.0% (M$)**	**5.0% (M$)**	**10.0% (M$)**	**15.0% (M$)**	**20.0% (M$)**
Proved Developed Producing	950,174	770,949	600,164	488,401	412,823
Proved Developed Non-Producing[(4)]	(129,617)	(44,145)	(21,819)	(13,519)	(9,735)
Proved Undeveloped	142,042	78,913	49,693	32,440	21,164
Total Proved	**962,599**	**805,717**	**628,037**	**507,322**	**424,252**
Probable	692,446	312,338	183,298	123,502	90,055
Total Proved Plus Probable	**1,655,045**	**1,118,055**	**811,335**	**630,824**	**514,306**

Notes:

(1) Total values may not add due to rounding.
(2) Based on three consultant's average, as defined below, December 31, 2020 forecast prices and costs. See below for "Price Forecast".
(3) Future net revenue has been reduced for future abandonment costs and estimated capital for future development associated with the reserves.
(4) The Proved Developed Non-Producing NPV includes the consideration of the inactive ADR costs of the Company. Excluding these costs the NPV10 of these reserves would be $32.9 million.

Reconciliations of Changes in Reserves

The following table sets out a reconciliation of the changes in the Corporation's reserves as at December 31, 2020 against such reserves at December 31, 2019 based on forecast prices and cost assumptions in effect at the applicable reserve evaluation date:

	Total Proved				
	Light and Medium Crude Oil (Mbbl)	**Heavy Crude Oil (Mbbl)**	**Conventional Natural Gas (MMcf)**	**Natural Gas Liquids (Mbbl)**	**MBOE (Mboe)**
December 31, 2019	43,962	26,864	46,704	3,276	81,886
Technical Revisions (1)	4,792	(772)	5,629	616	5,575
Improved Recovery	(7)	-	1	(1)	(8)
Extensions and Infill Drilling	628	346	3,098	25	1,515
Dispositions (2)	(113)	-	(7)	(2)	(116)
Economic Factors (1)(3)	(3,387)	(2,882)	(3,452)	(211)	(7,055)
Production	(3,805)	(1,766)	(5,009)	(315)	(6,722)
December 31, 2020	**42,069**	**21,790**	**46,963**	**3,389**	**75,074**

	Total Proved Plus Probable				
	Light and Medium Crude Oil (Mbbl)	**Heavy Crude Oil (Mbbl)**	**Conventional Natural Gas (MMcf)**	**Natural Gas Liquids (Mbbl)**	**MBOE (Mboe)**
December 31, 2019	58,279	34,887	63,016	4,355	108,024
Technical Revisions (1)	5,199	(2,693)	5,174	673	4,040
Improved Recovery	(15)	-	(10)	(1)	(17)
Extensions and Infill Drilling	722	-	3,555	28	1,342
Dispositions (2)	(143)	-	(9)	(2)	(147)
Economic Factors (1)(3)	(3,987)	(2,286)	(4,297)	(273)	(7,262)
Production	(3,805)	(1,766)	(5,009)	(315)	(6,722)
December 31, 2020	**56,249**	**28,141**	**62,420**	**4,465**	**99,258**

Notes:

(1) Heavy oil reserves were revised downward due to truncation or uneconomic with this oil price forecast. Other positive or negative revisions are due to variations in performance versus previous forecasts.
(2) There were no reserve acquisitions in 2020.

(3) Economic factors have been calculated as the difference in reserves using the 2020 Reserve Report price forecast with the 2019 Reserve Report reserve forecasts. There is no consideration of changes in operating costs or price offset changes that occurred in 2020.

Price Forecast

The following table summarizes Consultant's average (an arithmetic average of the price forecasts of GLJ, McDaniel & Associates Consultants Ltd. and Sproule Associates Ltd.) commodity price forecast and foreign exchange rate assumptions as at December 31, 2020, as applied in the 2020 Reserve Report, for the next five years.

Consultants Average Price Forecast[1]

Year	Exchange Rate ($US/$C)	WTI @ Cushing ($US/bbl)	Canadian Light Sweet 40° API ($C/bbl)	Western Canada Select 20.5° API $C/bbl)	Medium at Cromer 29° API ($C/bbl)	Natural gas AECO – C spot ($C/MMbtu)
2021	0.768	47.17	55.76	44.63	53.89	2.78
2022	0.765	50.17	59.89	48.18	57.58	2.70
2023	0.763	53.17	63.48	52.10	61.05	2.61
2024	0.763	54.97	65.76	54.10	63.25	2.65
2025	0.763	56.07	67.13	55.19	64.57	2.70

Note:

(1) Inflation is accounted for at 0% for 2021, 1.3% for 2022, and 2% thereafter.

Future Development Costs

FDC reflects the best estimate of the capital cost required to produce the reserves. The FDC associated with the TPP reserves at yearend 2020 is $219 million undiscounted ($152 million discounted at 10%).

millions $	PDP	Total Proved	Total Proved plus Probable
Total FDC, Undiscounted	61.4	172.6	219.3
Total FDC, Discounted at 10%	34.2	119.9	151.8

FDC included at year-end 2020 for CO_2 purchases, maintenance and facility capital in PDP, TP and TPP were $61 million, $69 million and $80 million, respectively. This represents 37% of Cardinal's TPP FDC of $219 million. There are 76 net future locations included in the 2020 Reserve Report (including future CO_2 injectors).

Note Regarding Forward Looking Statements

This press release contains forward-looking statements and forward-looking information (collectively "forward-looking information") within the meaning of applicable securities laws relating to the Cardinal's plans and other aspects of Cardinal's anticipated future operations, management focus, objectives, strategies, financial, operating and production results. Forward-looking information typically uses words such as "anticipate", "believe", "project", "expect", "goal", "plan", "intend", " may", "would", "could" or "will" or similar words suggesting future outcomes, events or performance. The forward-looking statements contained in this press release speak only as of the date thereof and are expressly qualified by this cautionary statement.

Specifically, this press release contains forward-looking statements relating to: our business strategies, plans and objectives, future drilling plans and locations, plans to improve the cost structure of some of our properties; plans to maintain our production and improve our future Environment, Social and Governance ("ESG") plans, Cardinal's asset base and its future potential and opportunities. In addition, information and statements relating to reserves are deemed to be forward-looking statements, as they involve implied assessment, based on certain estimates and assumptions, that the reserves described exist in quantities predicted or estimated, and that the reserves can be profitably produced in the future.

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 and future 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 competition, conditions in general economic and financial markets, access to markets, availability of drilling and related equipment, effects of regulation by governmental agencies, including curtailments, the ability to obtain financing on acceptable terms which are subject to change based on commodity prices, market conditions 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.

Management has included the forward-looking statements above and a summary of assumptions and risks related to forward-looking statements provided in this press release 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 press release 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.

Oil and Gas Metrics

The term "boe" or barrels of oil equivalent may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 Mcf: 1 bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Additionally, given that the value ratio based on the current price of crude oil, as compared to natural gas, is significantly different from the energy equivalency of 6:1; utilizing a conversion ratio of 6:1 may be misleading as an indication of value.

This press release contains a number of additional oil and gas metrics, net asset value and reserve life index, which do not have standardized meanings or standard methods of calculation and therefore such measures may not be comparable to similar measures used by other companies. Such metrics have been calculated by management and included herein to provide readers with additional measures to evaluate Cardinal's performance; however, such measures are not reliable indicators of the future performance of Cardinal and future performance may not compare to the performance in previous periods.

Development costs include costs of land and seismic, but exclude capitalized general and administration costs. The aggregate of the development costs incurred in the most recent financial year and the change during that year in estimated future development costs generally will not reflect total finding and development costs related to reserves additions for that year. Operating netback is equal to production revenues, less royalties, operating and transportation expenses. Operating netback per boe is calculated by dividing operating netback by total production volumes sold in the period. Reserve life index is calculated based on the amount for the relevant reserve category divided by fourth quarter average daily company interest production.

Net asset value is based on the NPV at varying discount rates before tax for the respective reserve category less net debt.

Certain financial and operating information included in this press release for the year ended December 31, 2020 are based on estimated unaudited financial results for the year then ended, and are subject to the same limitations as discussed under Forward Looking Statements set out above. These estimated amounts may change upon the completion of audited financial statements for the year ended December 31, 2020 and changes could be material.

Supplemental Information Regarding Product Types

This press release includes references 2020 production. The following table is intended to provide the product type composition as defined by NI 51-101.

	LIGHT/MEDIUM CRUDE OIL	HEAVY OIL	NGL	CONVENTIONAL NATURAL GAS	TOTAL (BOE/D)
Q4/20	55%	27%	6%	12%	18,625
Q2/20	57%	27%	4%	12%	17,169

Reserves Advisories

Unless otherwise indicated, all reserves reported in this press release are Company share gross reserves which represent Cardinal's total working interest reserves prior to the deduction of royalties payable.

Future net revenue is a forecast of revenue, estimated using forecast prices and costs arising from the anticipated development and production of resources, net of associated royalties, operating costs, development costs and all corporate abandonment and reclamation costs for all active and inactive wells, pipelines and facilities. It should not be assumed that the future net revenues undiscounted and discounted at 10% included in this press release represent the fair market value of the reserves.

Reserve Definitions:

"Proved" reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.

"Probable" reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

"Developed" reserves are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g. when compared to the cost of drilling a well) to put the reserves on production.

"Developed Producing" reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

"Developed Non-Producing" reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

"Undeveloped" reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable, possible) to which they are assigned.

Drilling Locations

This news release discloses Cardinal's 76 net booked drilling (54 proved and 22 probable locations) locations which are included in the 2020 Reserve Report. There is no certainty that we will drill all drilling locations and if drilled there is no certainty that such locations will result in additional oil and gas production. The drilling locations on which we actually drill wells will ultimately depend upon the availability of capital, regulatory approvals, seasonal restrictions, oil and natural gas prices, costs, actual drilling results, additional reservoir information that is obtained and other factors.

Non-GAAP measures

This press release contains the term "net debt" which does not have a standardized meaning prescribed by International Financial Reporting Standards ("IFRS" or, alternatively, "GAAP") and therefore may not be comparable with the calculation of similar measures by other companies. 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"), secured notes and current liabilities less current assets (adjusted for the fair value of financial instruments, the current portion of lease liabilities and the current portion of the decommissioning obligation). Net debt is used by management to analyze the financial position, liquidity and leverage of Cardinal.

About Cardinal Energy Ltd.

One of Cardinal's goals is to continually improve our Environmental, Safety and Governance mandate and operate our assets in a responsible and environmentally sensitive manner. As part of this mandate, Cardinal injects and conserves more carbon than it emits making us one of the few Canadian energy companies to have a negative carbon footprint.

Cardinal is a Canadian oil focused company built to provide investors with a stable platform for dividend income. Cardinal's operations are focused in low decline light and medium quality oil in Western Canada.

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