



## Canacol Energy Ltd. Announces Prospective Resources Report for Two Shale Oil Blocks in the Middle Magdalena Basin, Colombia

**CALGARY, ALBERTA - (April 21, 2021)** - Canacol Energy Ltd. ("Canacol" or the "Corporation") (TSX:CNE; OTCQX:CNNEF; BVC:CNEC) is pleased to announce the results of an independent prospective resources evaluation of the Corporation's VMM 2 and VMM 3 blocks, prepared by Boury Global Energy Consultants Ltd. ("BGEC"), effective March 31, 2021 (the "BGEC Report"). For the deep Cretaceous interval, specifically the La Luna and the Tablazo Formations, the Corporation has 20% working interest in VMM 2 and 20% working interest in VMM 3. The two blocks in aggregate consist of 156,367 and 31,273 gross and net acres, respectively, in the Middle Magdalena Basin, Colombia.

The evaluation includes estimates of the Corporation's risked and un-risked prospective resources. Mr. Charle Gamba, President & CEO for Canacol, stated "BGEC's independent evaluation of unconventional prospective resources reaffirm the materiality and significant potential of Canacol's unconventional shale oil blocks. In early April 2021, the Agencia Nacional de Hidrocarburos (ANH), announced the approval of the ExxonMobil Platero multi-stage stimulation pilot project. This is in addition to the ANH approval of Ecopetrol's Kalé pilot project in December 2020. The Corporation considers that these approvals are positive steps towards realizing the commercial potential of the unconventional shale oil play in Colombia, and specifically for the Corporation's prospective resources across its acreage position in the Middle Magdalena Valley basin".

### Independent Evaluation of Unconventional Shale Oil Prospective Resources (Resources Other Than Reserves, ROTR)

*The following discussion is subject to a number of cautionary statements, assumptions and risks as set forth therein. See "Information Regarding Disclosure on Oil and Gas Resources and Operations" at the end of this release for additional cautionary language, explanations and discussion, and see "Forward-looking Statements" for a statement of principal assumptions and risks that may apply. See also "Definitions" in this press release. The discussion includes reference to prospective resources as per the BGEC Report, which was prepared in accordance with the COGE Handbook (October, 2020 Edition).*

BGEC was commissioned to conduct an independent prospective resources evaluation of Canacol's 20% working interest position in the VMM 2 and VMM 3 blocks in the Middle Magdalena Valley basin (the "Evaluated Areas") effective March 31, 2021. All references in the following discussion to prospective resources are in reference to light and medium crude oil and unconventional natural gas in the Evaluated Areas included in the BGEC Report.

### Summary of Company Working Interest Un-risked Prospective Resources (La Luna Prospect)

The following table summarizes BGEC's estimate of the un-risked recoverable volumes associated with Canacol's prospective light and medium crude oil resources and unconventional natural gas (La Luna prospect) for the Evaluated Areas.

Table 1

Unrisked Prospective Resources									
Product Type		Low Estimate <sup>(2)</sup>		Best Estimate <sup>(3)</sup>		High Estimate <sup>(4)</sup>		Mean Estimate <sup>(5)</sup>	
		Gross	Company Gross <sup>(1)</sup>	Gross	Company Gross <sup>(1)</sup>	Gross	Company Gross <sup>(1)</sup>	Gross	Company Gross <sup>(1)</sup>
Light and medium crude oil	MMbbl	1109	222	1883	377	3271	654	2083	417
Unconventional natural gas	BCF	2024	405	4542	908	9335	1867	5252	1050

- (1) Canacol's working interest before royalties in the Evaluated Areas is 20%.
- (2) Low Estimate means there is at least a 90 percent probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- (3) Best Estimate means there is at least a 50 percent probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- (4) High Estimate means there is at least a 10 percent probability (P10) that the quantities actually recovered will equal or exceed the high estimate.
- (5) Mean Estimate represents the arithmetic average of the expected recoverable volume. It is the most accurate single point representation of the volume distribution.

## Summary of Company Working Interest Before and After Royalties Risked Prospective Resources (La Luna Prospect)

The following table summarizes BGEC's estimate of the risked recoverable volumes associated with Canacol's prospective light and medium crude oil resources and unconventional natural gas (La Luna prospect) for the Evaluated Areas.

Table 2

Risked Prospective Resources Truncated and Adjusted for TEFS (6), Pe (7) and CoD (8)										
Product Type		Low Estimate <sup>(2)</sup>		Best Estimate <sup>(3)</sup>		High Estimate <sup>(4)</sup>		Mean Estimate <sup>(5)</sup>		
		Company Gross <sup>(1)</sup>	Company Net <sup>(9)</sup>	Company Gross <sup>(1)</sup>	Company Net <sup>(9)</sup>	Company Gross <sup>(1)</sup>	Company Net <sup>(9)</sup>	Company Gross <sup>(1)</sup>	Company Net <sup>(9)</sup>	
Light and medium crude oil	MMbbl	61	52	104	88	180	153	114	97	
Unconventional natural gas	BCF	94	80	210	178	431	366	243	206	

- (1) Canacol's working interest before royalties in the Evaluated Areas is 20%.
- (2) Low Estimate means there is at least a 90 percent probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- (3) Best Estimate means there is at least a 50 percent probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- (4) High Estimate means there is at least a 10 percent probability (P10) that the quantities actually recovered will equal or exceed the high estimate.
- (5) Mean Estimate represents the arithmetic average of the expected recoverable volume. It is the most accurate single point representation of the volume distribution.
- (6) TEFS is defined as the threshold economic field size.
- (7) Pe is defined as the probability of discovering economic prospective resources, Pe= 41.6% La Luna oil and Pe= 35% La Luna gas.
- (8) CoD is defined as the chance of development, CoD = 66%.
- (9) Canacol's working interest after the deduction of royalties.

Mr. Mark Teare, Senior Vice President Exploration for Canacol, stated "The Corporation has worked steadily with its partners over the last 10 years to identify, de-risk and evaluate the unconventional shale oil potential across its land position in the Middle Magdalena Valley Basin of Colombia. After the Corporation's initial regional work identifying the unconventional shale oil potential of the Cretaceous La Luna Formation, a significant 3 block land position (Santa Isabel, VMM-2 and VMM-3) in the core of this fairway was captured via the acquisition of Carrao Energy in 2011. The Corporation quickly moved to secure partners ConocoPhillips Colombia, Exxon Mobil and Shell to undertake the de-risking of the shale oil resource potential across the three blocks.

The drilling of the Mono Arana-1 well on the VMM-2 block with partner Exxon Mobil in 2012-13 provided confirmation of the excellent reservoir and fluid properties of the La Luna shale. This vertical well, which was not stimulated, naturally flowed 590 barrels of oil per day of 22° API oil and produced a cumulative 143,820 barrels as of December 31, 2017. The Mono Arana-1 well results demonstrated the commercial potential of the La Luna shale on Canacol's acreage position in the Middle Magdalena Valley Basin. The information gathered from Mono Arana-1 allowed the Corporation to better define the La Luna shale resource potential on its acreage and plan an evaluation well on the previously undrilled VMM-3 block.

The Picoplata-1 vertical well was drilled with partner Shell on VMM-3 in 2014 to 2015 to a total depth of 16,406 feet measured depth ("ft MD") and encountered over 1200 feet of potential oil bearing La Luna reservoirs. Analysis of the 659 feet of full diameter conventional core cut from the La Luna shales confirmed the excellent unconventional

reservoir properties and suitability for stimulation. Canacol and its partner, ConocoPhillips Colombia, continue to evaluate the technical data collected from this well to plan next steps towards the evaluation of the La Luna on both blocks.”

## Discussion

The range of prospective resources are a function of the uncertainty of various components used in the prospect evaluation including subsurface variables (productive area, gross interval thickness, net to gross ratio, porosity, oil saturation, and formation volume factor) as well as recovery efficiency. Estimates of prospective resources are the result of a probabilistic simulation of the distribution of measured values for each component. In turn, these estimates are expressed as distributions rather than a single value to capture the range of uncertainty about these estimates as represented in Tables 1 and 2. As exploration activities move forward the values of these components will be better quantified, and further adjustments to estimated volumes can be prepared in the future.

The probability of geologic success,  $P_g$ , is defined as the probability of discovering reservoirs that flow petroleum at a measurable rate.  $P_g$  is estimated by quantifying the probability of each of the following individual geologic factors: trap, source, reservoir, and petroleum migration. The product of these four probabilities or chance factors is computed as  $P_g$ . This methodology was applied to the prospective resource estimates related to light and medium crude oil and unconventional natural gas. For oil  $P_g$  was determined to be 42%, and for gas  $P_g$  was determined to be 35%.

In addition to the application of technical risk defined by  $P_g$ , the Chance of Development (CoD) was assessed and applied to the prospective resource estimates. CoD is defined as the likelihood of full field development. It considers risks associated with the contract, security issues, environmental permits, water use and disposal, and social and community issues. For both light and medium crude oil and unconventional natural gas, the CoD was determined to be 66% for developing these resources in the next 5 years.

In this report, estimates of prospective resources are presented both before and after adjustments for  $P_g$  and CoD to provide un-risked and risked prospective resource estimates as presented in Tables 1 and 2.

Canacol is in the early stages of exploration and appraisal in the evaluated areas. There are a number of positive and negative factors which BGEC considered in determining risk and overall uncertainty. The key positive factors include:

- The drilling, stimulation and testing of Picoplata 1 on VMM 3 (drilled in 2015) providing the first abundant data in the deep basin:
  - 659 ft of full diameter core
  - Full suite of modern day logs including image logs confirming naturally fractured rock
  - 5 DFITS and 3 fracs in the La Luna
  - 31° API oil flow to surface in three zones
- A database of Middle Magdalena wells in the La Luna (47 well penetrations) and Tablazo (27 well penetrations) and seismic on the Evaluated Areas (483 lines of 2D totaling 6,552 km and 129 square kilometres of 3D over 6 surveys)
- Canacol's partnership with a world-class Operator, ConocoPhillips, one of the world's largest independent E&P company based on production and proved reserves
- Proven North American unconventional analogues to the La Luna and Tablazo formations including the Muskwa, Duvernay, Bakken, Haynesville, Eagle Ford and Niobrara

The key negative factors include:

- In the past, Colombia's Autoridad Nacional de Licencias Ambientales (ANLA) had denied applications for multi-stage stimulation of unconventional resource plays due to uncertainty related to the implications of the technology on various factors including potable water sources, seismic activity, and water disposal. The Corporation considers that approvals recently announced by the ANH that Ecopetrol and ExxonMobil proceed with pilot projects to conduct multi-stage stimulations are positive steps toward reducing the risk associated with Chance of Development of its unconventional prospective resources across its acreage in the Middle Magdalena Valley basin.
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## Definitions

Resource definitions, including those set out below, are as specified by NI 51-101, including by reference to CSA Staff Notice 51-324 – Glossary to NI 51-101 Standards of Disclosure for Oil and Gas Activities and the COGE Handbook.

**“Prospective Resources”** are defined as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by applying future development projects. Prospective Resources have both an associated Chance of Discovery and a Chance of Development. Prospective Resources are further categorised according to the level of certainty associated with recoverable estimates assuming their discovery and development and may be subclassified based on project maturity.

The above prospective resources volumes under the heading “un-risked” have not been adjusted for the Chance of Discovery and the Chance of Development, while the prospective resources volumes under the heading “risked” have been risk discounted for BGEC’s estimates of Chance of Discovery (Geological Chance of Success (GCoS)) and Chance of Development (CoD) which involves assessing various risks based upon a number of assumptions and other factors. The Chance of Development is the probability that a resource, once it has been discovered, will ultimately be commercially developed. While the Corporation believes that such estimates and underlying assumptions are reasonable, many of these assumptions are beyond the Corporation’s control, are subject to change and may not, over time, prove to be accurate. As a result, the actual level of various risks (including those currently identified and that may be identified in the future) could prove to be greater and the Chance of Development lower than currently estimated. Such differences could be material.

The estimates of prospective resources provided in this press release are estimates only and there is no guarantee that the estimated prospective resources will be recovered. Actual prospective resources may be greater than or less than the estimates provided in this press release and the differences may be material. There is no certainty that any portion of the prospective resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the prospective resources.

Estimates of prospective resources are by their nature more speculative than estimates of proved reserves and would require substantial capital spending over a significant number of years to implement recovery. Actual locations drilled and quantities that may be ultimately recovered from our properties will differ substantially. In addition, we have made no commitment to drill, and likely will not drill, all of the drilling locations that have been attributable to these quantities.

The following classification of prospective resources represented probabilistically as used in this press release:

- Low Estimate means there is at least a 90 percent probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- Best Estimate means there is at least a 50 percent probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- High Estimate means there is at least a 10 percent probability (P10) that the quantities actually recovered will equal or exceed the high estimate.
- Mean Estimate represents the arithmetic average of the expected recoverable volume. It is the most accurate single point representation of the volume distribution.

## Information Regarding Disclosure on Oil and Gas Resources and Operations

All amounts in this press release are stated in United States dollars unless otherwise specified.

Other than as otherwise disclosed in this press release, projects have not been defined to develop the resources in the evaluated areas as at the evaluation date. Such projects have historically been developed sequentially over a number of drilling seasons and are subject to annual budget constraints, Canacol’s policy of orderly development on a staged basis, the timing of the growth of third-party infrastructure, the short- and long-term view of Canacol on oil prices, the results of exploration and development activities of Canacol and others in the area and possible infrastructure capacity constraints.

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## About Canacol

Canacol is a natural gas exploration and production company with operations focused in Colombia. The Corporation's common stock trades on the Toronto Stock Exchange, the OTCQX in the United States of America, and the Colombia Stock Exchange under ticker symbol CNE, CNNEF, and CNE.C, respectively.

## Forward-Looking Information and Statements

*This press release contains certain forward-looking information and statements within the meaning of applicable securities laws. The use of any of the words "expect," "anticipate," "continue," "estimate," "objective," "ongoing," "may," "will," "project," "should," "believe," "plans," "intends," "strategy," and similar expressions are intended to identify forward-looking information or statements.*

*The forward-looking information and statements contained in this press release reflect several material factors and expectations and assumptions of Canacol including, without limitation: that Canacol will continue to conduct its operations in a manner consistent with past operations; results from drilling and development activities are consistent with past results; the continued and timely development of infrastructure in areas of new production; the general continuance of current industry conditions; the continuance of existing (and in certain circumstances, the implementation of proposed) tax, royalty and regulatory regimes; the accuracy of the estimates of Canacol's resource volumes; certain commodity price and other cost assumptions; and the continued availability of adequate debt and equity financing and cash flow to fund its planned expenditures. There are a number of assumptions associated with the development of the prospects and leads, including the quality of the reservoirs, continued performance from existing wells, future drilling programs and performance from new wells, the growth of infrastructure, well density per section, and recovery factors and development necessary involves known and unknown risks and uncertainties, including those risks identified in this press release. Canacol believes the material factors, expectations and assumptions reflected in the forward-looking information and statements are reasonable but no assurance can be given that these factors, expectations and assumptions will prove to be correct.*

*The forward-looking information and statements included in this press release are not guarantees of future performance and should not be unduly relied upon. Such information and statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information or statements including, without limitation: changes in commodity prices; the early stage of development of some areas in the evaluated areas; the potential for variation in the quality of formations, changes in the demand for or supply of Canacol's products; unanticipated operating results or production declines unanticipated results from Canacol's exploration and development activities; changes in tax or environmental laws, royalty rates or other regulatory matters; changes in development plans of Canacol, increased debt levels or debt service requirements; inaccurate estimation of Canacol's oil and gas reserve and resource volumes; limited, unfavorable or a lack of access to capital markets; increased costs; a lack of adequate insurance coverage; the impact of competitors; and certain other risks detailed from time to time in Canacol's public disclosure documents (including, without limitation, those risks identified in this news release and in Canacol's most recent Annual Information Form).*

*The forward-looking information and statements contained in this news release speak only as of the date of this news release, and none of Canacol or its subsidiaries assumes any obligation to publicly update or revise them to reflect new events or circumstances, except as may be required pursuant to applicable laws.*

*BOE Conversion - "BOE" barrel of oil equivalent is derived by converting natural gas to oil in the ratio of 5.7 Mcf of natural gas to one bbl of oil. A BOE conversion ratio of 5.7 Mcf to 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. As the value ratio between natural gas and crude oil based on the current prices of natural gas and crude oil is significantly different from the energy equivalency of 5.7:1, utilizing a conversion on a 5.7:1 basis may be misleading as an indication of value. In this news release, the Corporation has expressed BOE using the Colombian conversion standard of 5.7 Mcf: 1 bbl required by the Ministry of Mines and Energy of Colombia.*

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