Crew Energy Announces Year End 2018 Reserves

February 7, 2019

CALGARY, Feb. 7, 2019 /CNW/ - Crew Energy Inc. (TSX: CR) of Calgary, Alberta ("Crew" or the "Company") is pleased to provide highlights from our independent corporate reserves evaluation prepared by Sproule Associates Ltd. ("Sproule") with an effective date of December 31, 2018 (the "Sproule Report").

2018 RESERVES HIGHLIGHTS

With net capital expenditures of $93 million ($103.2 million gross)[1], Crew successfully expanded reserves through the drilling of ten (10.0 net) and completion of 14 (12.2 net) wells in the Montney at West Septimus, of which three (3.0 net) extended reach horizontal ("ERH") wells were drilled in the Ultra-Condensate Rich ("UCR") area. In addition, four (4.0 net) multi-lateral horizontal wells were drilled at Lloydminster.

Highlights of the proved developed producing ("PDP"), total proved ("1P") and total proved plus probable ("2P") reserves from the Sproule Report are provided below. Finding, development and acquisition ("FD&A")[1,2] costs and finding and development ("F&D")[1,2] costs include changes in future development capital ("FDC")[2].

- **Improving Capital Efficiencies and Robust Recycle Ratios[1,2]:** Crew's 2P F&D and FD&A cost per boe has improved over prior years and reflects the success of the Company's UCR drilling program which features enhanced completions design, longer lateral lengths and reduced drill times compared to previous wells. Recycle ratios are based on the estimated corporate operating netback divided by the F&D costs or the FD&A costs.

	F&D per boe	F&D recycle	FD&A per boe	FD&A recycle
PDP	$11.62	1.4x	$10.52	1.5x
1P	$6.82	2.3x	$6.03	2.6x
2P	$4.72	3.4x	$4.52	3.5x

- **Continued Development Success at West Septimus:** PDP reserves at West Septimus increased 10% over 2017, with 1P and 2P reserves up 3% and 2%, respectively, primarily due to the focus on drilling in the UCR area which generates higher returns and stronger economics in the current commodity price environment.
- **Condensate Growth a Focus at West Septimus**: Within the UCR area at West Septimus, shifting to ERH wells led to a 28% increase in 1P reserves to 30,170 mboe, while 2P reserves increased 17% to 71,681 mboe. Condensate increased by 30% on 1P reserves and represents 30% of UCR 2P reserves[3]. Corporate 2P condensate reserves totaled 50,053 mbbl.
- **Meaningful Reserves Value in UCR Area**: Within Crew's UCR area, the net present value of future net revenue discounted at 10% (before tax) ("NPV10 BT") for 2P was $774.1 million[4] assigned to 14 of 32 net prospective sections at West Septimus. Corporately, the Company's NPV10 BT totaled $507.9 million on PDP reserves, $1.2 billion on 1P reserves and $2.5 billion on 2P reserves.

1All 2018 financial amounts are unaudited. See advisories.

"Finding, Development and Acquisitions costs" or "FD&A costs", "Finding and Development costs" or "F&D costs", "recycle ratio" and "operating 2netback" do not have standardized meanings. See the table "Capital Program Efficiency" and "Information Regarding Disclosure on Oil and Gas Reserves and Operational Information" contained in this news release.

*3*Condensate reserves referenced herein include wellhead plus plant recovery.

4Excludes field-level facility and maintenance operating expenses.

- **ERH Wells Improve Capital Efficiencies:** Crew brought three new ERH wells onto production in late 2018 within our UCR area and has an additional six (6.0 net) wells to bring on in the first quarter of 2019. The Company now has 38 ERH undeveloped 2P locations assigned by Sproule in the UCR area. The ERH program will require fewer wells to develop the resource, resulting in a smaller overall surface footprint providing superior economic returns relative to the previously drilled shorter-reach horizontal wells.

- **Average 3-Year F&D Trending in the Right Direction:** With an ongoing focus on lowering capital costs while improving drilling and completions efficiencies, Crew achieved another consecutive year of declining average three year 2P F&D costs in 2018.

- **Continued Corporate Reserves Growth with Conservative Capital Program**: Approximately $67 million of our $103.2 million exploration and development capital program was directed to drilling and completions activities in 2018. This generated increases across all reserves categories, including approximately 0.3% growth in PDP reserves, 2% in 1P reserves and 11% in 2P reserves compared to 2017, with Crew's reserves replacement ratios[5] on PDP, 1P and 2P totaling 102%, 140% and 568%, respectively.

- **Multilateral Development Increased Heavy Oil Inventory:** Recent success drilling multilateral horizontal wells resulted in additions to overall heavy oil reserves in 2018. Heavy oil multilaterals now represent 32% and 31% of Crew's total 1P and 2P heavy oil reserves, respectively.

2018 RESERVES DETAIL

The detailed reserves data set forth below is based upon an independent reserves assessment and evaluation prepared by Sproule with an effective date of December 31, 2018. The following presentation summarizes the Company's crude oil, natural gas liquids and natural gas reserves and the net present values before income tax of future net revenue for the Company's reserves using forecast prices and costs based on the Sproule Report. The Sproule Report has been prepared in accordance with definitions, standards, and procedures contained in the Canadian Oil and Gas Evaluation Handbook ("COGE Handbook") and National Instrument 51-101 – *Standards of Disclosure for Oil and Gas Activities* ("NI-51-101"). The reserves evaluation was based on Sproule forecast escalated pricing and foreign exchange rates at December 31, 2018 as outlined in the table herein entitled "Price Forecast".

All evaluations and summaries of future net revenue are stated prior to provision for interest, debt service charges and general administrative expenses and after deduction of royalties, operating costs, estimated well abandonment and reclamation costs for entities with reserves assigned and estimated future capital expenditures associated with reserves. It should not be assumed that the estimates of net present value of future net revenues presented in the tables below represent the fair market value of the reserves. There is no assurance that the forecast prices and cost assumptions will be attained and variances could be material. The recovery and reserve estimates of our crude oil, natural gas liquids and natural gas reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual crude oil, natural gas and natural gas liquids reserves may be greater than or less than the estimates provided herein. Reserves included herein are stated on a company gross basis (working interest before deduction of royalties without including any royalty interests) unless noted otherwise. In addition to the detailed information disclosed in this news release, more detailed information will be included in the Company's Annual Information Form (the "AIF") for the year ended December 31, 2018, which will be filed on the Company's profile at www.sedar.com on or before March 29, 2019.

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[5] *"Reserves replacement" and "reserves replacement ratio" do not have standardized meanings. See the table "Capital Program Efficiency" and "Information Regarding Disclosure on Oil and Gas Reserves and Operational Information" contained in this news release.*

See "Information Regarding Disclosure on Oil and Gas Reserves and Operational Information" for additional cautionary language, explanations and discussions and "Forward Looking Information and Statements" for a statement of principal assumptions and risks that may apply.

The preparation and audit of Crew's 2018 annual consolidated financial statements is not yet complete, and accordingly all financial amounts referred to in this news release are unaudited and represent management's estimates. Readers are advised that these financial estimates may be subject to change.

Corporate Reserves(1,2,5)

	Light Crude Oil and Medium Crude Oil (mbbl)	Heavy Crude Oil (mbbl)	Natural Gas Liquids (mbbl)	Conventional Natural Gas(3) (mmcf)	Barrels of oil equivalent(4) (mboe)
Proved					
Developed Producing	411	1,414	11,456	281,509	60,199
Developed Non-producing	22	1,198	118	5,079	2,184
Undeveloped	1,379	2,119	24,122	497,023	110,457
Total Proved	**1,811**	**4,731**	**35,696**	**783,611**	**172,840**
Total Probable	9,089	3,941	45,342	1,078,529	238,127
Total Proved plus Probable	**10,900**	**8,672**	**81,038**	**1,862,140**	**410,967**

Notes:

(1)Reserves have been presented on a "gross" basis which is defined as Crew's working interest (operating and non-operating) share before deduction of royalties and without including any royalty interest of the Company.

(2)Based on Sproule's December 31, 2018 escalated price forecast.

(3)Reflects 100% Conventional Natural Gas by product type.

(4)Oil equivalent amounts have been calculated using a conversion rate of six thousand cubic feet of natural gas to one barrel of oil.

(5)Columns may not add due to rounding.

Reserves Values(1)(2)(3)(4)

The estimated before tax net present value ("NPV") of future net revenues associated with Crew's reserves effective December 31, 2018 and based on the Sproule Report and the published Sproule (December 31, 2018) future price forecast are summarized in the following table:

(m$)	0%	5%	10%	15%	20%

Proved					
Developed Producing	836,054	636,129	507,945	423,426	364,631
Developed Non-producing	35,548	29,715	25,415	22,137	19,559
Undeveloped	1,905,289	1,052,586	646,886	428,435	298,470
Total Proved	2,776,892	1,718,430	1,180,246	873,998	682,660
Total Probable	4,951,916	2,276,352	1,277,008	812,555	562,075
Total Proved plus Probable	7,728,808	3,994,783	2,457,254	1,686,553	1,244,736

Notes:

(1) Based on Sproule's December 31, 2018 escalated price forecast.

(2) The estimated future net revenues are stated prior to provision for interest, debt service charges, general administrative expenses, the impact of hedging activities, and after deduction of royalties, operating costs, certain estimated well abandonment and reclamation costs and estimated future capital expenditures.

(3) The after-tax present values of future net revenue attributed to Crew's reserves will be included in the Company's 2018 AIF to be filed on or before March 29, 2019.

(4) Columns may not add due to rounding.

Price Forecast

The Sproule December 31, 2018 price forecast is summarized as follows:

Year	Exchange Rate	WTI @ Cushing	Canadian Light Sweet	Western Canada Select	Natural gas AECO-C spot	Westcoast Station 2
	($US/$Cdn)	(US$/bbl)	(C$/bbl)	(C$/bbl)	(C$/mmbtu)	(C$/mmbtu)
2019	0.770	63.00	75.27	59.47	1.95	1.35
2020	0.800	67.00	77.89	62.31	2.44	1.94
2021	0.800	70.00	82.25	67.45	3.00	2.60
2022	0.800	71.40	84.79	69.53	3.21	2.81
2023	0.800	72.83	87.39	71.66	3.30	2.90
2024	0.800	74.28	89.14	73.10	3.39	2.99
2025	0.800	75.77	90.92	74.56	3.49	3.09
2026	0.800	77.29	92.74	76.05	3.58	3.18
2027	0.800	78.83	94.60	77.57	3.68	3.28
2028	0.800	80.41	96.49	79.12	3.78	3.38

2029	0.800	82.02	98.42	80.70	3.88	3.48
2030 +(1)		2.0%/yr	2.0%/yr	2.0%/yr	2.0%/yr	2.0%/yr

Note:

(1)Escalated at 2.0% per year starting in 2030 with the exception of foreign exchange which remains flat.

Reserves Reconciliation

The following reconciliation of Crew's gross reserves compares changes in the Company's reserves as at December 31, 2018 based on the Sproule (December 31, 2018) future price forecast relative to the reserves as at December 31, 2017.

TOTAL PROVED	Light & Medium Crude Oil (mbbl)	Heavy Crude Oil (mbbl)	Natural Gas Liquids (mbbl)	Conventional Natural Gas (mmcf)	Oil Equivalent (mboe)
Opening Balance	**1,809**	**4,382**	**31,403**	**790,685**	**169,376**
Extensions & Improved Recovery(1)	0	866	1,959	19,606	6,093
Infill Drilling	0	16	0	0	16
Technical Revisions	110	119	4,251	22,677	8,259
Discoveries	0	0	0	0	0
Acquisitions	0	0	0	0	0
Dispositions	0	(18)	0	0	(18)
Economic Factors	(7)	17	(406)	(10,624)	(2,167)
Production	(101)	(651)	(1,512)	(38,732)	(8,718)
Closing Balance	**1,811**	**4,731**	**35,696**	**783,612**	**172,840**

TOTAL PROVED PLUS PROBABLE	Light & Medium Crude Oil (mbbl)	Heavy Crude Oil (mbbl)	Natural Gas Liquids (mbbl)	Conventional Natural Gas (mmcf)	Oil Equivalent (mboe)
Opening Balance	**12,527**	**8,339**	**68,879**	**1,682,775**	**370,208**
Extensions & Improved Recovery(1)	0	1,776	6,137	105,585	25,511
Infill Drilling	0	15	682	17,944	3,688
Technical Revisions	(1,510)	(800)	6,986	100,560	21,436
Discoveries	0	0	0	0	0

Acquisitions	0	0	0	0	0
Dispositions	0	(28)	0	0	(28)
Economic Factors	(16)	20	(134)	(5,991)	(1,129)
Production	(101)	(651)	(1,512)	(38,732)	(8,718)
Closing Balance	**10,900**	**8,672**	**81,038**	**1,862,141**	**410,967**

Notes:

(1) Increases to Extensions and Improved Recovery are the result of step-out locations drilled by Crew. Reserves additions for improved recovery and extensions are combined and reported as "Extensions and Improved Recovery".

(2) Columns may not add due to rounding.

Capital Program Efficiency

	2018		2017		3 Year Average 2018-2016	
	1P	**2P**	1P	2P	1P	2P
Exploration and Development Expenditures[(1)(6)] ($ thousands)	**103,219**	**103,219**	238,302	238,302	449,723	449,723
Acquisitions/(Dispositions)[(1)(6)] ($ thousands)	**(9,805)**	**(9,805)**	(47,906)	(47,906)	(53,737)	(53,737)
Change in Future Development Capital[(1)] ($ thousands)						
- Exploration and Development	**(19,952)**	**130,237**	9,514	182,870	126,749	600,090
- Acquisitions/Dispositions	**(40)**	**(40)**	(7,875)	(21,800)	(7,915)	(21,840)
Reserves Additions with Revisions and Economic Factors (mboe)						
- Exploration and Development	**12,201**	**49,505**	25,870	59,370	77,023	178,865
- Acquisitions/Dispositions	**(18)**	**(28)**	(1,284)	(4,688)	42	(3,031)
	12,183	**49,478**	24,585	54,681	77,065	175,834
Finding & Development Costs[(2)(5)] ($ per boe)						
- with revisions and economic factors	**6.82**	**4.72**	9.58	7.09	7.48	5.87
Finding, Development & Acquisition Costs[(2)(5)] ($ per boe)						

- with revisions and economic factors	**6.03**	**4.52**	7.81	6.43	6.68	5.54
Recycle Ratio[3][5] **(F&D)**	**2.3**	**3.4**	1.9	2.5		
Reserves Replacement[4][5]	**140%**	**568%**	292%	650%		

Notes:

(1) The aggregate of the exploration and development costs incurred in the most recent financial year and the change during that year in estimated future development capital generally will not reflect total finding and development costs related to reserve additions for that year.

(2) The calculation of F&D and FD&A costs incorporates the change in FDC required to bring proved undeveloped and developed reserves into production. In all cases, the F&D or FD&A number is calculated by dividing the identified capital expenditures by the applicable reserves additions after changes in FDC costs.

(3) Recycle ratio is defined as operating netback per boe divided by F&D costs on a per boe basis. Operating netback is calculated as revenue (including realized hedging gains and losses) minus royalties, operating expenses, and transportation expenses. Crew's operating netback in fourth quarter 2018, used in the above calculations, averaged $15.83 per boe (unaudited).

(4) Reserves replacement ratio is calculated as total reserve additions (including acquisitions net of dispositions) divided by annual production. Crew's 2018 annual production averaged 23,885 boe per day.

(5) "Reserves Replacement", "FD&A Cost", "F&D Cost", and "Recycle Ratio" do not have standardized meanings. See "Information Regarding Disclosure on Oil and Gas Reserves and Operational Information" in this news release.

(6) All 2018 financial amounts are unaudited. See advisories.

Future Development Capital

The following table provides a summary of the estimated FDC required to bring Crew's reserves on production.

Future Development Capital ($millions)[1]	**Total Proved**	**Total Proved plus Probable**
2019	34	102
2020	120	207
2021	137	257
2022	206	282
2023	95	184
Remainder	117	863
Total FDC undiscounted	710	1,894
Total FDC discounted at 10%	520	1,190

Notes:

(1) Reflects development costs deducted by Sproule in the Sproule Report in the estimation of future net revenue attributed to the noted reserve categories using Sproule's forecast pricing and foreign exchange rates at December 31, 2018.

(2)Columns may not add due to rounding

Advisories

Unaudited Financial Information and Non-IFRS Measures

Certain financial and operating information included in this press release for the quarter and year ended December 31, 2018, including finding and development costs and netbacks are based on estimated unaudited financial results for the quarter and year then ended, and are subject to the same limitations as discussed under Forward Looking Information set out below. These estimated amounts may change upon the completion of audited financial statements for the year ended December 31, 2018 and changes could be material.

Information Regarding Disclosure on Oil and Gas Reserves and Operational Information

All amounts in this news release are stated in Canadian dollars unless otherwise specified. Our oil and gas reserves statement for the year ended December 31, 2018, which will include complete disclosure of our oil and gas reserves and other oil and gas information in accordance with NI 51-101, will be contained within our Annual Information Form which will be available on our SEDAR profile at www.sedar.com on or before March 29, 2019. The recovery and reserve estimates contained herein are estimates only and there is no guarantee that the estimated reserves will be recovered. In relation to the disclosure of estimates for individual properties, such estimates may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation. The Company's belief that it will establish additional reserves over time with conversion of probable undeveloped reserves into proved reserves is a forward-looking statement and is based on certain assumptions and is subject to certain risks, as discussed below under the heading "Forward-Looking Information and Statements".

This press release contains metrics commonly used in the oil and natural gas industry, such as "recycle ratio", "finding and development costs", "finding and development recycle ratio", "finding, development and acquisition costs", "operating netbacks", "reserves replacement", and "reserves replacement ratio". Each of these metrics are determined by Crew as specifically set forth in this news release. These terms do not have standardized meanings or standardized methods of calculation and therefore may not be comparable to similar measures presented by other companies, and therefore should not be used to make such comparisons.

Both F&D and FD&A costs take into account reserves revisions during the year on a per boe basis. The aggregate of the costs incurred in the financial year and changes during that year in estimated FDC may not reflect total F&D costs related to reserves additions for that year. Finding and development costs both including and excluding acquisitions and dispositions have been presented in this press release because acquisitions and dispositions can have a significant impact on our ongoing reserves replacement costs and excluding these amounts could result in an inaccurate portrayal of our cost structure.

Management uses these oil and gas metrics for its own performance measurements and to provide shareholders with measures to compare Crew's performance over time, however, such measures are not reliable indicators of Crew's future performance and future performance may not compare to the performance in previous periods. Readers are cautioned that the information provided by these metrics, or that can be derived from the metrics presented in this press release, should not be relied upon for investment or other purposes.

Forward-Looking Information and Statements

The Company anticipates remaining disciplined but flexible with its budgeted 2019 capital expenditures as it monitors business conditions and commodity prices throughout the fiscal year. Where deemed prudent, the Company may make adjustments to its 2019 capital budget. Actual spending may vary due to a variety of factors including, without limitation, drilling results, crude oil and natural gas prices, economic conditions, prevailing debt and/or equity markets, field services and equipment availability, and the impact of any future strategic acquisitions or dispositions. The Company has flexibility to adjust the level of its capital investments as circumstances warrant.

This news 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", "may", "will", "project", "should", "believe", "plans", "intends" "forecast" and similar expressions are intended to identify forward-looking information or statements. In particular, but without limiting the foregoing, this news release contains forward-looking information and statements pertaining to the following: the recognition of significant additional reserves under the heading "2018 Reserves Detail", the volumes and estimated value of Crew's oil and gas reserves, the future net value of Crew's reserves, the future development capital and costs, the future abandonment and reclamation costs, the life of Crew's reserves, the Company's planned 2019 capital expenditures program, the estimated volumes, including shut-ins, and product mix of Crew's oil and gas production; production estimates; Crew's commodity risk management programs; marketing, transportation and natural gas egress plans; future liquidity and financial capacity required to carry out our planned program; future results from operations and operating metrics; expectations regarding stronger economics from our UCR area of operations and ERH locations; future development activities (including drilling and completion plans and associated timing and cost estimates) and related production estimates; and methods of funding our capital program.

In addition, forward-looking statements or information are based on a number of material factors, expectations or assumptions of Crew which have been used to develop such statements and information but which may prove to be incorrect. Although Crew believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because Crew can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions which may be identified herein, assumptions have been made regarding, among other things: that Crew will continue to conduct its operations in a manner consistent with past operations; results from drilling and development activities consistent with past operations; the quality of the reservoirs in which Crew operates and continued performance from existing wells; the continued and timely development of infrastructure in areas of new production; the accuracy of the estimates of Crew's reserve volumes; certain commodity price and other cost assumptions; continued availability of debt and equity financing and cash flow to fund Crew's current and future plans and expenditures; the impact of increasing competition; the general stability of the economic and political environment in which Crew operates; the general continuance of current industry conditions; the timely receipt of any required regulatory approvals; the ability of Crew to obtain qualified staff, equipment and services in a timely and cost efficient manner; drilling results; the ability of the operator of the projects in which Crew has an interest in to operate the field in a safe, efficient and effective manner; the ability of Crew to obtain *financing on acceptable terms; field production rates and decline rates; the ability to replace and expand oil and natural gas reserves through acquisition, development and exploration; the timing and cost of pipeline, storage and facility construction and expansion and the ability of Crew to secure adequate product transportation; future commodity prices; currency, exchange and interest rates; regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which Crew operates; and the ability of Crew to successfully market its oil and natural gas products.*

The forward-looking information and statements included in this news release are not guarantees of future performance and should not be unduly relied upon. Such information and statements, including the assumptions made in respect thereof, involve known and unknown risks, uncertainties and other factors that may cause actual results or events to defer materially from those anticipated in such forward-looking information or statements including, without limitation: changes in commodity prices; changes in the demand for or supply of Crew's products, the early stage of development of some of the evaluated areas and zones the potential for variation in the quality of the Montney formation; unanticipated operating results or production declines; changes in tax or environmental laws, royalty rates or other regulatory matters; changes in development plans of Crew or by third party operators of Crew's properties, increased debt levels or debt service requirements; inaccurate estimation of Crew's oil and gas reserve volumes; limited, unfavourable 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 Crew's public disclosure documents (including, without limitation, those risks identified in this news release and Crew's 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 Crew does not assume any obligation to publicly update or revise any of the included forward-looking statements or information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

BOE equivalent

Barrel of oil equivalents or BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 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. Given that the value ration based on the current price of crude oil as compared to natural gas is significantly different than the energy equivalency of the 6:1 conversion ratio, utilizing the 6:1 ratio may be misleading as an indication of value.

Crew Energy Inc. is a dynamic, growth-oriented exploration and production company, focused on increasing long-term production, reserves and cash flow per share through the development of our world-class Montney resource. Crew is based in Calgary, Alberta and our shares are traded on The Toronto Stock Exchange under the trading symbol "CR".

SOURCE Crew Energy Inc.