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**If you have sold or transferred** all of your shares in MIE Holdings Corporation, you should at once hand this circular to the purchaser or the transferee or the bank, licensed securities dealer, registered institution in securities or other agent through whom the sale or transfer was effected for transmission to the purchaser or the transferee.

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**MIE HOLDINGS CORPORATION**

**MI能源控股有限公司**

*(Incorporated in the Cayman Islands with limited liability)*

**(Stock code: 1555)**

**MAJOR TRANSACTION IN RELATION  
TO THE DISPOSAL OF ASSETS**

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November 30, 2018

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## DEFINITIONS

*In this circular, unless the context otherwise requires, the following expressions shall have the following meanings:*

“Adjustment Date”	8:00 a.m. (Calgary time) on June 1, 2018
“Agreement”	the agreement of purchase and sale dated October 16, 2018 entered into between the Vendor and the Purchaser in relation to the Disposal
“Announcement”	the announcement of the Company dated October 18, 2018 in relation to, inter alia, the Disposal
“Assets”	all of the Vendor’s right, title, estate and interest (whether absolute, contingent, legal or beneficial) in and to the Petroleum and Natural Gas Rights, the Tangibles and the Miscellaneous Interests, but notwithstanding anything to the contrary in the Agreement, which excludes the Excluded Assets
“Board”	the board of Directors
“Business Days”	a day other than a Saturday, a Sunday or a statutory holiday in Calgary, Alberta, Canada
“C\$”	Canadian dollars, the lawful currency of Canada
“Champion”	Champion International Energy Limited, a company incorporated in the British Virgin Islands, which owns 399,070,000 Shares
“Circular”	the circular to be issued by the Company in accordance with the Listing Rules in respect of, among other things, the Disposal
“Closing”	completion of the Disposal in accordance with the terms and conditions of the Agreement
“Closing Date”	October 17, 2018 (Calgary time)
“Company”	MIE Holdings Corporation (stock code: 1555), a company incorporated in the Cayman Islands with limited liability, the Shares of which are listed on the Main Board of the Stock Exchange
“Competent Person”	Sproule Associates Limited
“Competent Person’s Report”	the competent person’s report set out in Appendix II to this circular, issued by the Competent Person, in accordance with the requirements of the Listing Rules

## DEFINITIONS

“Conditions Precedent”	conditions precedent to the Closing, details of which are set out in the paragraph headed “Conditions Precedent” in this announcement
“connected person(s)”	has the meaning ascribed to under the Listing Rules
“Consideration”	the total consideration payable by the Purchaser pursuant to the Agreement, details of which are set out in the paragraph headed “Consideration” in this announcement
“Director(s)”	the director(s) of the Company
“Disposal”	the disposal of the Assets pursuant to the terms and conditions of the Agreement
“Excluded Assets”	certain interests of the Vendor specifically excluded in the Agreement and retained by the Vendor, including without limitation: (i) certain Firm Transportation Receipt (FT-R) contracts under which the Vendor receives services in the total quantity of 180 e3m3/day at Whitburn East; and (ii) certain seismic rights
“Far East Energy”	Far East Energy Limited, a company incorporated in Hong Kong and is owned as to 80% by Ms. Zhao Jiangbo, 9.99% by Mr. Zhang Ruilin and 10% by Mr. Zhao Jiangwei. They have entered into an acting-in-concert agreement under which they agreed to act in concert in relation to all matters that require the decisions of the shareholders of Far East Energy. Pursuant to the acting-in-concert agreement, if a unanimous opinion in relation to the matters that require action in concert is unable to be reached, Mr. Zhang Ruilin shall be allowed to vote on his, Ms. Zhao Jiangbo’s and Mr. Zhao Jiangwei’s shares
“Group”	the Company and its subsidiaries
“GST”	the goods and services tax administered pursuant to the Excise Tax Act of Canada, as amended and the regulations thereunder or under any successor or parallel federal or provincial legislation that imposes a tax on the recipient of goods and services
“Lands”	all lands as areally described in the Agreement
“Latest Practicable Date”	November 23, 2018, being the latest practicable date prior to the printing of this circular for ascertaining certain information herein

## DEFINITIONS

“Leased Substances”	all Petroleum Substances, rights to or in respect of which are granted, reserved or otherwise conferred by or under the Title Documents (but only to the extent that the Title Documents pertain to the Lands)
“Listing Rules”	the Rules Governing the Listing of Securities on the Stock Exchange
“Maple Marathon Disposal”	the very substantial disposal between the Company (as the vendor) and Far East Energy (as the purchaser), in relation to the entire issued share capital in Maple Marathon Investments Limited, which holds the entire issued share capital in Canlin Energy Corporation, details of which are set out in the Company’s announcement dated September 24, 2018
“Miscellaneous Interests”	<p>all property, assets, interests and rights pertaining to the Petroleum and Natural Gas Rights and the Tangibles, or any of them, but only to the extent that such property, assets, interests and rights pertain to the Petroleum and Natural Gas Rights and the Tangibles, or either of them, including without limitation any and all of the following (as set out in the Agreement):</p> <ul style="list-style-type: none"><li>(i) contracts and agreements relating to the Petroleum and Natural Gas Rights and the Tangibles, or either of them, including without limitation gas purchase contracts, processing agreements, transportation agreements and agreements for the construction, ownership and operation of facilities and the agreements;</li><li>(ii) all rights to enter upon, use or occupy, cross or otherwise use or enjoy the surface of the Lands and any lands pooled or unitized therewith or any other lands: (a) upon which the Tangibles are situate, (b) used in connection with the ownership or operation of the Petroleum and Natural Gas Rights, the Tangibles or the Wells, or (c) used to gain access to any of the Lands (or any lands pooled or unitized therewith), the Tangibles or the Wells;</li><li>(iii) all subsisting rights to carry out operations relating to the Lands or Tangibles, and without limitation, all easements and well, pipeline and other Permits, licenses and authorizations;</li></ul>

## DEFINITIONS

- (iv) all records, books, documents, licences, reports and data which relate to the Petroleum and Natural Gas Rights and the Tangibles, or either of them, including any of the foregoing that pertain to seismic, geological or geophysical matters;
- (v) the Wells, including the wellbores and any and all casing;
- (vi) any facility or area specific emergency response plans pertaining to the Assets;
- (vii) all non-interpretative technical data; and
- (viii) the Seismic Rights.

“New Sun”	New Sun International Energy Limited, a company incorporated in the British Virgin Islands, which owns 530,000,000 Shares
“Orient”	Orient International Energy Limited, a company incorporated in the British Virgin Islands, which owns 399,070,000 Shares
“PRC”	the People’s Republic of China, which for the purpose of this circular, excludes Hong Kong, Macau Special Administrative Region of the PRC and Taiwan
“Petroleum and Natural Gas Rights”	all rights to and in respect of the Leased Substances and the Title Documents (but only to the extent that the Title Documents pertain to the Lands)
“Petroleum Substances”	any of crude oil, crude bitumen and products derived therefrom, synthetic crude oil, petroleum, natural gas, natural gas liquids and any and all other substances related to any of the foregoing, whether liquid, solid or gaseous, and whether hydrocarbons or not, including without limitation sulphur and coal bed methane
“Power”	Power International Energy Limited, a company incorporated in the British Virgin Islands, which owns 141,460,000 Shares
“Prime rate”	a rate of interest equal to the annual rate of interest announced from time to time by the main Calgary branch of Canadian Imperial Bank of Commerce as the reference rate then in effect for determining interest rates on Canadian dollar commercial loans in Canada

## DEFINITIONS

“Purchaser”	a public company listed on the Toronto Stock Exchange
“Seismic Rights”	the seismic license rights to be granted by the Vendor to the Purchaser at Closing
“Share(s)”	ordinary share(s) of US\$0.001 each in the capital of the Company
“Shareholder(s)”	holder(s) of the Shares
“Stock Exchange”	The Stock Exchange of Hong Kong Limited
“Tangibles”	means the facilities and any and all tangible depreciable property and assets, other than the facilities, which are used or are intended to be used to produce, process, gather, treat, measure, transport, make marketable or inject the Leased Substances or any of them or in connection with water injection, water disposal or removal operations that pertain to the Petroleum and Natural Gas Rights, including without limitation any and all gas plants, oil batteries, buildings, production equipment, pipelines, pipeline connections, meters, generators, motors, compressors, treaters, dehydrators, scrubbers, separators, pumps, tanks, boilers and communication equipment (including any SCADA systems)
“Title Documents”	collectively, any and all certificates of title, leases, reservations, licenses, assignments, trust declarations, operating agreements, royalty agreements, gross overriding royalty agreements, participation agreements, farm-in agreements, sale and purchase agreements, pooling agreements, joint venture contracts, construction, ownership and operation agreements, Permits, Surface Rights, sale contracts in relation to Leased Substances, and any other documents and agreements granting, reserving or otherwise conferring rights to (i) explore for, drill for, produce, take, use or market Petroleum Substances, (ii) share in the production of Petroleum Substances, (iii) share in the proceeds from, or measured or calculated by reference to the value or quantity of, Petroleum Substances which are produced; and (v) rights to acquire any of the rights described in items (i) to (iv) of this definition; but only if the foregoing pertain in whole or in part to Petroleum Substances within, upon or under the Lands

## DEFINITIONS

“Vendor”	Canlin Resources Partnership, a partnership formed pursuant to the laws of Alberta, Canada and a subsidiary of the Company
“Wells”	all wells which have been, are or may be used in connection with the Petroleum and Natural Gas Rights, including without limitation producing, shut-in, suspended, abandoned, abandoned and reclamation certified, water source, water disposal and water injection wells and the wells, as set out in the Agreement
“%”	per cent

*For the purpose of this circular and for illustrative purpose only, C\$ is converted into HK\$ at the rate of HK\$6.0247: C\$1.00, US\$ is converted into HK\$ at the rate of HK\$7.8220: US\$1.00, and US\$ is converted into RMB at the rate of RMB6.9646:US\$1.00. No representation is made that any amounts in C\$, US\$, or RMB has been or could be converted at the above rates or at any other rates.*



**LETTER FROM THE BOARD**



**MIE HOLDINGS CORPORATION**

**MI能源控股有限公司**

*(Incorporated in the Cayman Islands with limited liability)*

**(Stock code: 1555)**

*Executive Directors*

Mr. Zhang Ruilin (*Chairman*)

Mr. Zhao Jiangwei

*Non-executive Directors*

Ms. Xie Na

Mr. Jiao Qisen

*Independent Non-executive Directors*

Mr. Mei Jianping

Mr. Jeffrey Willard Miller

Mr. Guo Yanjun

*Register office*

Maples Corporate Services Limited

P.O. Box 309

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Grand Cayman KY1-1104

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*Principal place of business*

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Hong Kong

*Beijing Office*

Suite 1501, Block C, Grand Place

5 Hui Zhong Road

Chaoyang District

Beijing 100101

PRC

*To the Shareholders*

Dear Sir/Madam,

**MAJOR TRANSACTION IN RELATION  
TO THE DISPOSAL OF ASSETS**

**INTRODUCTION**

Reference is made to the Announcement in relation to the Agreement entered into by the Vendor and the Purchaser on October 16, 2018 (Calgary time) pursuant to which the Vendor agreed to sell and the Purchaser agreed to purchase the Assets, at the Base Price of C\$30.0 million (approximately HK\$180.7 million) (subject to adjustments).

## LETTER FROM THE BOARD

The purpose of this circular is to provide you with, among other things, (i) further details in relation to the Agreement and the transactions contemplated thereunder; (ii) the Competent Person's Report; and (iii) other information as required under the Listing Rules.

### THE AGREEMENT

The principal terms of the Agreement are as follows:

#### Date

October 16, 2018

#### Parties

- (i) the Vendor; and
- (ii) the Purchaser.

To the best of the Directors' knowledge, information and belief and having made all reasonable enquiries, the Purchaser and its ultimate beneficial owner(s) are third parties independent of the Company and its Connected Person(s).

#### Subject matter of the Disposal

The Assets under the Disposal are oil and gas reserves and infrastructure in the Spirit River Area of northwestern Alberta, Canada, including gathering facilities and pipelines. Section 4 of the Competent Person's Report summarizes the location, formations, acreage, reserves, and historic production of the Assets. Further background on the regional geologic setting and localized geology or engineering are also discussed in sections 5 and 6 of the Competent Persons' Report.

The Assets under the Disposal do not include the Excluded Assets, which are specific Firm Transportation Receipt (FT-R) contracts of 180 e3m3/day as described in the Agreement.

#### Consideration

##### *Purchase Price and adjustments*

The aggregate Consideration under the Agreement was C\$28.3 million (approximately HK\$170.5 million) (the "**Purchase Price**"), which was determined as follows: (i) C\$30.0 million (approximately HK\$180.7 million) (the "**Base Price**"); (ii) plus interest on the Base Price (in the amount of C\$0.3 million (approximately HK\$1.8 million)); and (iii) minus the net amount of operating adjustments (in the amount of C\$2.0 million (approximately HK\$12.0 million)) as at the Closing Date or Adjustment Date (as the case may be) pursuant to the terms of the Agreement.

## LETTER FROM THE BOARD

### *Operating adjustments*

Subject to the terms of the Agreement, all benefits and obligations of any kind and nature relating to the operation of the Assets conveyed pursuant to the Agreement, excluding income taxes but otherwise including without limitation maintenance, development, operating and capital costs, government incentives and administration fees, royalties and other burdens, and proceeds from the sale of production whether accruing, payable or paid and received or receivable, shall be adjusted between the parties as of the Adjustment Date in accordance with generally accepted accounting principles. The operating adjustments under the Agreement amounted to C\$2.0 million (approximately HK\$12.0 million) as at the Adjustment Date and hence an amount of C\$2.0 million (approximately HK\$12.0 million) was deducted from the Base Price when determining the Purchase Price.

### *Interest on Base Price*

At Closing, the Purchaser paid to the Vendor an amount equal to the interest accrued on the Base Price, at the Prime Rate, calculated daily and not compounded, from and including the Adjustment Date to and including August 31, 2018, which amount constituted an increase to the Purchase Price and was allocated to the Petroleum and Natural Gas Rights (being C\$0.3 million (approximately HK\$1.8 million)).

### *Payment of Consideration*

The Purchaser paid to the Vendor, at Closing, (i) the Purchase Price (being C\$28.3 million (approximately HK\$170.5 million)) and (ii) the GST payable (being C\$0.3 million (approximately HK\$1.8 million)) in respect of the Assets, by wire transfer to an account designated by the Vendor to the Purchaser in writing prior to Closing.

The Consideration was determined on normal commercial terms after arm's length negotiations between the Vendor and the Purchaser with reference to a number of factors, including production rates, reserve values and the strategic value of the assets to the Vendor. In reaching the Consideration, the Directors had assessed the value of the Asset's production rates and reserves, given prevailing market conditions referred to in the section titled "Financial and Trading Prospects of the Group" in Appendix I to this circular, as well as the transaction values of recent transactions which the Directors consider similar to the Disposal. With reference to the strategic value of the assets, the Board has assessed this by (i) considering whether or not the Assets under the Disposal will see further investment and development by the Vendor given recent natural gas pricing, and (ii) considering other investment opportunities in the Vendor's portfolio which rank higher than the Assets under the Disposal. In addition, other recent market conditions in Western Canada (as further described in the section titled "Financial and Trading Prospects of the Group" in Appendix I to this circular) are also considered when determining the Asset's strategic value. These current market conditions are relevant in assessing the strategic value of the assets as they require the Company to invest in optimum assets among uncertainties in the market.

Based on the Base Price of approximately C\$30.0 million (approximately HK\$180.7 million), the Disposal represents multiples of C\$4.75/boe, being the Consideration divided by the 2P reserves of the Assets and C\$37,570/boe/d, being the Consideration divided by the total

## LETTER FROM THE BOARD

daily production of the Assets. The Board has reviewed the Consideration in terms of (i) the average production rate acquisition price (\$/boe/d) of similar gas weighted transactions announced in Canada in the latest 12 months and (ii) the average 2P reserves value (\$/boe) of similar gas weighted transactions announced in Canada for the latest 12 months. The abovementioned gas weighted transactions announced in Canada for the latest 12 months include those transactions set out in the table below. Given the gas weighting percentage for the Assets under Disposal is approximately 54%, taking into account of the gas weighting of the gas weighted transactions, the Board has concluded that the Consideration was favorable based on both of these indicators.

### *Gas weighted transactions over C\$10 million announced in Canada for the latest 12 months*

Announcement Date	Target	Acquiror	Transaction		Gas Weighting (%)	Transaction Metrics	
			Value (C\$M)	Deal Type		Production (C\$/boe/d)	2P Reserves (C\$/boe)
24 August 2018	Ikkuma Resources	Pieridae Energy	\$155	Corporate	98%	\$8,049	\$8.57
9 August 2018	Cenovus Energy	NuVista Energy	\$625	Asset	54%	\$65,104	\$3.98
18 May 2018	Iron Bridge Resources	Velvet Energy	\$120	Corporate	69%	\$33,333	\$4.60
19 April 2018	Karve Energy Inc.	Battle River Energy	\$30	Asset	57%	\$8,643	n.a.
19 October 2017	Cenovus Energy	Torxen Resources/ Schlumberger	\$1,300	Asset	77%	\$24,074	n.a.
25 September 2017	Cenovus Energy	International Petroleum	\$512	Asset	71%	\$21,333	\$5.12
1 September 2017	RMP Energy	Tangle Creek Energy	\$80	Asset	70%	\$24,883	\$3.48
Average					71%	\$26,489	\$5.15
Median					70%	\$24,074	\$4.60

“Gas weighting percentage” referred to above means the ratio (as a percentage) of natural gas 2P Reserves volumes against the total 2P Reserves volumes, calculated using an energy conversion rate of 6,000 cubic feet (mcf) to one barrel of oil equivalent (boe). In Western Canada, on an energy equivalent basis, oil and liquids reserve volumes receive a significant pricing premium in comparison to natural gas, therefore generally speaking, assets with lower gas weighted percentages command higher transaction values.

Taking into account the above, the Directors consider that the Consideration is fair and reasonable and in the interests of the Company and the Shareholders as a whole, given that (i) the Consideration is proximal to the average gas weighted metrics of comparable transactions that took place in Canada in the latest 12 months, (ii) the Vendor does not plan to make additional investments in the Assets under the Disposal and (iii) the proceeds generated can be used for the repayment of bank borrowings, financial liabilities, and general working capital.

## LETTER FROM THE BOARD

### Conditions precedent

Closing is conditional on the following conditions precedent being satisfied or waived (if applicable):

#### *Purchaser's conditions*

The obligation of the Purchaser to purchase the Vendor's interest in and to the Assets is subject to the following conditions precedent, which are inserted herein and made part hereof for the exclusive benefit of the Purchaser and may be waived by the Purchaser:

- (i) the representations and warranties of the Vendor as set out in the Agreement shall be true in all material respects when made and as of the Closing Date;
- (ii) all obligations of the Vendor as set out in the Agreement to be performed prior to or at Closing shall have been timely performed in all material respects;
- (iii) from the Adjustment Date to the Closing Time, the Assets shall have suffered no material, adverse physical damage or change. For clarity, a reduction in the price received for the sale of Petroleum Substances is not a material, adverse damage or change; and
- (iv) the Vendor shall have delivered to Purchaser at or prior to Closing discharges, releases or no interest letters of any security held by any third party encumbering the Vendor's interest in and to the Assets or any part or portion thereof, which discharges, releases or no interest letters are requested by Purchaser a reasonable time prior to Closing.

#### *Vendor's conditions*

The obligation of the Vendor to sell its interest in and to the Assets is subject to the following conditions precedent, which are inserted herein and made part hereof for the exclusive benefit of the Vendor and may be waived by the Vendor:

- (i) the representations and warranties of the Purchaser as set out in the Agreement shall be true in all material respects when made and as of the Closing Date;
- (ii) all obligations of the Purchaser as set out in the Agreement to be performed prior to or at Closing shall have been timely performed in all material respects;
- (iii) all amounts to be paid by the Purchaser to the Vendor at Closing shall have been paid to the Vendor in the form stipulated in the Agreement;
- (iv) on or before five Business Days prior to Closing, the Vendor shall have obtained approval for the transaction contemplated herein from its board of directors; and

## LETTER FROM THE BOARD

- (v) the Vendor shall receive confirmation from the Company that all of the requirements under the Listing Rules (including, without limitation, the Shareholders' approval requirements under Chapter 14 of the Listing Rules), which are applicable to the transactions contemplated under the Agreement, have been satisfied.

If any one or more of the foregoing conditions precedent has or have not been satisfied, complied with (through no act, default or omission of the Vendor or the Purchaser (as the case may be)), or waived by the Vendor or the Purchaser (as the case may be), at or before the earlier of the date specified above or the Closing Date, the Vendor or the Purchaser (as the case may be), may rescind the Agreement by written notice to other party. If a party rescinds the Agreement, the Vendor and the Purchaser shall be released and discharged from all obligations (unless specifically provided otherwise in the Agreement).

### Closing

All the Conditions Precedent have been satisfied and accordingly, Closing took place on the Closing Date (being October 17, 2018 (Calgary time)).

Upon Closing of the Disposal and taking into account the Group's Maple Marathon Disposal, the Company will not hold any oil and gas assets directly in Canada. The Company continues to indirectly hold an investment in an oil and natural gas company named Hammerhead Resources (formerly known as CIOC), a Calgary Canada headquartered private oil and gas producer. The Company invested approximately US\$7,000,000 via a private equity fund, CCGRF, in November 2014.

### KEY SUMMARY OF THE COMPETENT PERSON'S REPORT

The Competent Person's Report contains key information on the Assets under the Disposal. This includes regional and local geological setting and formations, acreage and mineral rights, production and reserves, and economic evaluation in relation to the Assets. The results of this evaluation are summarized in section 2 of the Competent Person's Report.

The Vendor's average working interest in the Spirit River Area is 69.56% and its gross area is 1,536 hectares (net 1,069). In May 2018, the Assets were producing approximately 515 bopd at about 72 percent water cut and 3.7 MMcf/d of solution gas from 8 oil wells and approximately 2.2 MMcf/d of raw non-associated gas from an additional 2 gas wells.

According to the Competent Person's Report as at May 31, 2018, the total proved reserves ("1P") of the Assets was approximately 3,998 thousand barrels of oil equivalent ("MBOE") and the total proved and probable reserves ("2P") of the Assets was approximately 6,312 MBOE.

## LETTER FROM THE BOARD

### INFORMATION ON THE PARTIES

#### The Group

The Group is principally engaged in the exploration, development, production and sale of oil, gas and other petroleum products. The Group is currently entitled to 100% and 10% participating interest in the foreign contractors' entitlement and obligations under the PSCs for the Daan oilfield and Moliqing oilfield respectively. The Daan and Moliqing oilfields are situated in Jilin Province and are the Group's most productive oil field in the PRC. In addition, the Group has a diverse producing, resource and infrastructure oil and gas asset throughout Western Canada. The Group also participates as an associate in the exploration, development and production of petroleum assets located in the Republic of Kazakhstan and the northern part of the South China in the PRC.

#### The Purchaser

The Purchaser is listed on the Toronto Stock Exchange and based on publicly available information is a Canadian senior crude oil and natural gas exploration and production company focused on exploration, development, production and acquisition in the western Canadian sedimentary basin.

### FINANCIAL INFORMATION ON THE ASSETS AND FINANCIAL IMPACT OF THE DISPOSAL

The net profits (before taxation and extraordinary items) attributable to the Assets for the two financial years ended December 31, 2017 were C\$3.1 million (approximately HK\$18.7 million) for year ended December 31, 2017 and C\$2.8 million (approximately HK\$16.9 million) for the year ended December 31, 2016 respectively. The net profits (after taxation)<sup>1</sup> attributable to the Assets for the two financial years ended December 31, 2017 were C\$2.3 million (approximately HK\$13.9 million) for year ended December 31, 2017 and C\$2.1 million (approximately HK\$12.7 million) for the year ended December 31, 2016 respectively.

The net book value of the Assets was C\$23.9 million (approximately HK\$144.0 million) as at June 30, 2018. For illustrative purposes, based on the difference between the Consideration and the net book value of the Assets, less operating adjustments and transaction expenses, there will be a book gain of approximately C\$4.6 million (approximately HK\$27.7 million) from the Disposal. However, such calculation is an estimate provided for illustrative purposes only and the accounting treatment of any potential gains or losses arising from the sale of the Assets will be subject to further review by the auditors of the Vendor.

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*1 Note:* Tax resource pools are comingled and are not specifically identifiable to the Assets. Therefore, tax resource deductions specific to the Assets cannot be calculated with a degree of certainty. For simplicity, a general 27% corporate income tax rate was applied for calculation of the after taxation net profits. There were no extraordinary items during the two financial years ended 31 December 2017.



## LETTER FROM THE BOARD

After Closing, the consolidated total assets of the Group will decrease by approximately C\$24.4 million (approximately HK\$147.0 million) and total liabilities of the Group will decrease by approximately C\$0.5 million (approximately HK\$3.0 million) (calculated based on the net book value of the Assets as at June 30, 2018). Upon Closing of the Disposal, the revenue generated by and hence the financial performance of the Assets would cease to be reflected in the consolidated financial statements of the Group. In any event, the Board does not envisage that the Disposal will create any significant adverse impact on the Group's financial position and earnings.

### USE OF PROCEEDS

The net proceeds to the Vendor from the Disposal after deducting related transaction costs and expenses are estimated to be C\$29.0 million (approximately HK\$174.7 million). The Vendor intends to apply the net proceeds from the Disposal towards the partial repayment of a syndicated loan facility and general working capital of the Vendor in the amount of C\$13.0 million (approximately HK\$78.3 million) and C\$15.6 million (approximately HK\$94.0 million) respectively.

### REASONS FOR AND BENEFITS OF THE DISPOSAL

According to the Competent Person's Report as at May 31, 2018, the 2P reserves of the Assets was approximately 6,312 MBOE, representing only about 1.9% of the Vendor's total 2P reserves BOE. Accordingly, the level of reserves in relation to the Assets under Disposal is insignificant as compared to the Vendor's as well as the Group's total 2P reserves. The Assets were acquired by the Group as part of the Group's very substantial acquisition in the fourth quarter of 2017 (the "**Acquisition**") as the Assets formed part of the assets held by CQ Energy Canada Partnership. However, the Assets under the Disposal are considered to be non-strategic in the future development of the Company and will not be seeing future investment and growth by the Vendor. It is in accordance with the normal market practice in Canada for the Group to dispose of non-strategic assets in order to realign its resources. Given the levels of reserves in relation to the Assets under the Disposal only represent a small portion of Assets being acquired under the Acquisition, the Disposal provides a considerable return to the Group from its investment of the Assets under the Acquisition.

The Disposal will further enhance the financial strength of the Group and will allow the Group to maintain a focused and concentrated core asset base of assets that have investment capital prospects and that are include within the long term strategic plan of the Company. The Disposal is a divestment of non-core assets of the Group, which also include the Company's 40% stake in the Kazakhstan business and its 34% stake in the South China Sea business.

Accordingly, as disclosed above, given that (i) the Disposal is generating Consideration which is proximal to the metrics of the latest 12 months of comparable transactions in Canada and (ii) the Disposal strengthens the remaining portfolio of the Vendor through the sale of assets (which are non-strategic to the Vendor and will not be seeing additional investment and growth by the Vendor given the current natural gas pricing) through normal course of business, the Board is of the view that: (i) the Disposal is in the interest of the Company and the Shareholders as a whole; (ii) the terms of the Agreement are fair and reasonable; and (iii) the entering into of the Agreement is in the interest of the Company and Shareholders as a whole.



## LETTER FROM THE BOARD

### IMPLICATIONS UNDER THE LISTING RULES

As the highest applicable percentage ratio in respect of the Disposal exceeds 25% but is less than 75%, the Disposal constitutes a major transaction for the Company under Chapter 14 of the Listing Rules and is therefore subject to the notification, announcement and shareholders' approval requirements under Chapter 14 of the Listing Rules.

To the best of the Directors' knowledge, information and belief, having made all reasonable enquiries, no Shareholder is required to abstain from voting if the Company were to convene a general meeting for the approval of the Agreement. On October 16, 2018, the Company has obtained written approval for the Agreement and the transactions contemplated thereunder has been obtained from each of New Sun, Champion, Orient and Power holding in aggregate 1,469,600,000 Shares representing approximately 50.01% of the issued share capital of the Company as at the date of this announcement. New Sun, Champion, Orient and Power are all indirect wholly owned subsidiaries of Far East Energy, the ultimate holding company of the Company. Therefore, no general meeting will be convened to consider and approve the Agreement pursuant to Rule 14.44 of the Listing Rules.

### ADDITIONAL INFORMATION

Your attention is drawn to the further information contained in the appendices to this circular.

Yours faithfully,  
For and on behalf of the Board  
**Zhang Ruilin**  
*Chairman*

## 1. STATEMENT OF INDEBTEDNESS

### **Borrowings**

At the close of business on October 31, 2018, being the latest practicable date for the purpose of the statement of indebtedness prior to the printing of this circular, the Group had total outstanding indebtedness of approximately RMB5,495,100,000, comprising (i) secured bank loans of approximately RMB468,100,000, (ii) secured finance institution loans of approximately RMB2,838,700,000, and (iii) interest bearing notes carrying at a book value of approximately RMB2,188,300,000.

### **Compound instruments**

At the close of business on October 31, 2018, being the latest practicable date for the purpose of the statement of indebtedness prior to the printing of this circular, the Group had convertible bonds with principal amount of HK\$340,000,000 with an Initial Conversion Price of HK\$0.58 and due to mature on the third anniversary of the date of issue, bearing interest at 5% per annum, payable semi-annually in arrears on January 26, and July 26, and will mature on January 26, 2021. On July 26, 2018, the conversion price was adjusted to HK\$0.47 per conversion share pursuant to the terms and conditions of the convertible bond.

### **Charges**

As at October 31, 2018, certain assets, comprising principally oil & gas assets and properties in Alberta, Canada, were pledged to banks as collateral security for banking facilities with an aggregate outstanding amount of RMB468,100,000. In addition, as at October 31, 2018, Group's interest under the PSCs in China, bank accounts and shares of subsidiaries of the Group were also pledged to secure borrowings in the aggregate amount of RMB2,838,700,000.

### **Contingent liabilities**

As at October 31, 2018, the Group had no material contingent liabilities or guarantees.

Save as aforesaid or otherwise disclosed herein, and apart from intra-group liabilities and normal trade payables in the ordinary course of business, the Group did not have any other debt securities issued and outstanding, or authorised or otherwise created but unissued, loans or any term loans (secured, unsecured, guaranteed or otherwise), any other borrowings or indebtedness in the nature of borrowing including bank overdrafts and any liabilities under acceptances (other than normal trade bills), acceptance credits or hire purchase commitments (guaranteed, unguaranteed, secured or otherwise), mortgages, charges or other material contingent liabilities, as at the close of business on October 31, 2018.

## 2. WORKING CAPITAL STATEMENT

In determining the sufficiency of the working capital of the Group, key considerations include completion of the disposal of Maple Marathon Investments Limited (“**Maple Marathon Disposal**”), details of which have been set out in the circular of the Company dated November 5, 2018, and maturity of the senior notes of US\$315.9 million (equivalent to RMB2,200.1 million) expiring on April 25, 2019 (the “**Senior Notes**”), which is within twelve months from the date of this Circular.

- (i) The Directors have included the receipt of net proceeds from the Maple Marathon Disposal of US\$150 million (equivalent to RMB1,044.7 million), in the working capital forecast assuming the Maple Marathon Disposal will be completed in the near future.
- (ii) Management of the Company is considering refinancing options for the repayment of Senior Notes upon maturity (the “**Planned Senior Notes Refinancing**”). The Directors have included the proceeds from the Planned Senior Notes Refinancing in the working capital forecast based on the management’s best estimate. Up to the date of this Circular, the timetable and the detailed plan of the Planned Senior Notes Refinancing have not been finalised or committed. The Company is in the discussions of the Planned Senior Notes Refinancing with potential financial advisors.

Whether the Maple Marathon Disposal and Planned Senior Notes Refinancing could be completed prior to the maturity of the Senior Notes according to management’s plan, depends on various factors, including but not limited to fulfillment of conditions precedent of the Maple Marathon Disposal, sentiment of bond market and oil price which may affect the financial performance of the Company. In addition, the Group continues exploring alternative financing arrangements.

Should the Planned Senior Notes Refinancing or completion of the Maple Marathon Disposal fail and the related cashflows are excluded from the working capital forecasts and the Group fails to obtain any alternative financing arrangement to meet the repayment of Senior Notes due on April 25, 2019, the Group will not have sufficient working capital for the Group’s requirement upon the maturity of the Senior Notes.

The Directors are of the opinion that, after taking into account the Group’s business prospects, the financial resources available to the Group, including the estimated net proceeds from the Disposal, the internally generated funds, the continuing availability of the financing facilities, the effects of the completion of the Maple Marathon Disposal and on the assumption that the Planned Senior Notes Refinancing as set out above will be completed, the Group has sufficient working capital for its present requirements for at least the next twelve months from the date of this Circular.

### 3. FINANCIAL AND TRADING PROSPECTS OF THE GROUP

In the first half of 2018 (“**1H2018**”, the “**Current Period**”, or the “**Period**”), in response to a complicated economic environment of bullish global crude oil prices paralleled with suppressed Canadian natural gas pricing, the Group strategically increased investment in crude production by drilling new oil wells and enhancing production on vintage well bores, while reduced capital expenditures on natural gas assets in Canada. In 1H2018, both the gross and net hydrocarbon production of the Group increased remarkably compared to the first half of 2017 (“**1H2017**” or the “**Prior Period**”) due to the Acquisition. The Group’s gross oil and gas production increased by 3.38 times to about 10.47 million barrels of oil equivalent (“**BOE**”), while net production increased by 8.11 times to about 9.29 million BOE compared to the Prior Period. During the Current Period, the Group’s net crude sales increased by 48.0% to approximately 1.51 million barrels, and Group’s net natural gas sales was 44.87 billion standard cubic feet (“**MMscf**”). During the Current Period, the average realized crude price of the Group increased by 26.7% to US\$59.68 per barrel, while average realized natural gas price decreased to US\$1.24 per thousand standard cubic feet (“**Mscf**”). As a result of the Acquisition and crude oil price rebound in the Current Period, the Group’s realized sales revenue increased by 2.58 times to RMB1,206 million compared to 1H2017. Reported EBITDA in Current Period is RMB193 million, an increase of RMB430 million compared to the Prior Period. The adjusted EBITDA increased by 53.0% to approximately RMB314 million in the Current Period. In 1H2018, the Group reported a net loss of RMB521 million, a RMB152 million improvement versus the Prior Period. In 2017, despite the challenging macro environment, we were pleased with our achievements in managing and lowering our costs. In particular, lifting costs in our China oilfields increased only 2.0% to US\$8.48/bbl. In terms of overall overhead, the total headcount of the Group increased from 1,387 as of year-end 2016 to 1,495 as of year-end 2017.

In 1H2018, despite concerns around potential trade disputes, the world economy continued to grow and fostered strong growth in oil demand. The OECD crude inventories returned to their normal levels. Supported by the strong demand, oil prices rebounded rapidly in 1H2018. Uncertainties still exist on the supply side, however these uncertainties could drive crude price’s continuous upswing and support a high price range in the second half of 2018 (“**2H2018**”). Canadian natural gas price suffered in 1H2018 and had reached its lowest levels in recent years. Considering seasonality of demand, the market speculates that natural gas price could come back in 2H2018.

Operating in such a challenging macro environment, the Group will focus on financial flexibility and agility. The Group will continue to boost crude production by investing in oil assets, re-completing suitable old wells, and drilling new wells. The Group expects substantial economic gains to emerge with elevated crude oil production. In 2H2018, natural gas production will reflect local price volatilities, the Group will adjust production level to generate optimal returns. As an international oil and gas producer, the Group is well on its course to maximize shareholder values by executing long term strategy with discipline and prudence.

*Sproule*



INDEPENDENT COMPETENT PERSON'S REPORT  
OF CERTAIN P&NG RESERVES IN ALBERTA, CANADA  
OF CANLIN ENERGY CORPORATION  
FOR MIE HOLDINGS CORPORATION  
(AS OF MAY 31, 2018)

[sproule.com](http://sproule.com)

Copies: MIE Holdings Corporation (c/o Canlin Energy Corporation) (2 copies)  
Electronic (2 copies)  
Sproule (1 copy)

Project No.: 4845.22297

Prepared for: MIE Holdings Corporation

Authors: Barrett R. Hanson, P.Eng., SPEC, Project Leader  
Alec Kovaltchouk, P.Geo.

Exclusivity: This report has been prepared for the exclusive use of MIE Holdings Corporation. The distribution to and use by third parties of the Report is governed by the terms and conditions of the Engagement Agreement entered into between Sproule and MIE Holdings Corporation and by the assumptions and limitations as contained herein.

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## 2. Executive Summary

Table 2-1 summarizes our evaluation, before income taxes, of certain P&NG reserves of Canlin Energy Corporation (“the Company” or “Canlin”), as of May 31, 2018. Canlin Energy Corporation is a wholly owned subsidiary of Maple Marathon Investments which is a wholly owned subsidiary of MIE Holdings Corporation (“MIE”). Sproule has performed an evaluation of Canlin’s petroleum and natural gas assets in the Spirit River Area in the Province of Alberta, Canada (“the Assets”). Canlin has entered into a Purchase and Sale Agreement to sell one hundred percent of their interest in the Assets. The evaluation considers certain geological, geophysical, engineering and commercial aspects of the development and production of the Assets.

After tax values have not been reported at the request of Canlin.

The recoverable volumes were estimated deterministically for all reserves categories using production decline analysis on actual production data where sufficient data was available to establish production trends. Volumetric and analogy techniques were also used to estimate recoverable volumes for undeveloped locations and wells with short production histories.

The development forecast presented in this evaluation was based on capital budgets and a development program as presented by the Company under the scope of this evaluation and engagement. The development forecast presented in this report may not represent the full development potential of the lands evaluated.

The reserves definitions and ownership classification used in this evaluation are the standards defined by the COGE Handbook reserve definitions and consistent with Canadian National Instrument 51-101 (“NI 51-101”). The oil reserves are presented in thousands of barrels, at stock tank conditions. The natural gas reserves are presented in millions of cubic feet, at base conditions of 14.65 psia and 60 degrees Fahrenheit. The natural gas liquids and condensate reserves are presented in thousands of barrels, at base conditions of 60 degrees Fahrenheit and equilibrium pressure.

The net present values of the reserves are presented (on a before income tax basis) in Canadian dollars and are based on annual projections of net revenue, which were discounted at various rates using the mid-period discounting method. These rates are 5, 10, 15 and 20 percent and undiscounted.

The price forecasts that formed the basis for the revenue projections in the evaluation were based on Sproule’s May 31, 2018 pricing model.

Capital and operating costs were escalated at 2.0 percent per year starting in 2019. Sproule’s cost escalation in 2018 assumes a 0 percent increase.

Abandonment and reclamation costs for existing wells with economic developed reserves, and future economic proposed development have been included in the evaluation and have been forecast at the entity level.

The Company has not identified any material dedicated facilities for which abandonment and reclamation costs have been included in the evaluation.

The evaluation does not include abandonment and reclamation costs associated with active producing wells, which are not economic to produce under the forecast prices, active service wells, inactive wells, and various active or inactive gathering and processing facilities, that the Company holds an interest in, that were not identified as being material dedicated facilities by the Company.

No allowances for salvage were incorporated into the abandonment and reclamation costs contained in this report.

Table 2-1  
 Canlin Energy Corporation  
 Spirit River  
 Summary of the Evaluation of the P. & N.G. Reserves  
 As Of Date : 2018-05-31

	Remaining Reserves			Net Present Values Before Taxes				
	Gross 100%	Company Gross	Company Net	@ 0% M\$	@ 5.0% M\$	@ 10.0% M\$	@ 15.0% M\$	@ 20.0% M\$
<b>Light and Medium Crude Oil (MBbl)</b>								
Proved Developed Producing	714.6	401.3	321.1	9662	8640	7699	6906	6253
Proved Developed Non-Producing	351.9	254.0	200.3	7148	6267	5539	4952	4478
Proved Undeveloped	1695.7	1531.0	1263.4	19851	12965	8116	4735	2358
<b>Total Proved</b>	<b>2762.2</b>	<b>2186.3</b>	<b>1784.8</b>	<b>36661</b>	<b>27872</b>	<b>21354</b>	<b>16592</b>	<b>13088</b>
Probable Developed Producing	198.6	122.5	90.1	4418	3478	2801	2318	1967
Probable Developed Non-Producing	109.6	71.1	50.1	2516	1925	1526	1250	1053
Probable Undeveloped	1340.8	1101.6	851.4	39669	29549	22731	17991	14579
<b>Total Probable</b>	<b>1649.0</b>	<b>1295.3</b>	<b>991.5</b>	<b>46604</b>	<b>34952</b>	<b>27058</b>	<b>21559</b>	<b>17599</b>
<b>Total Proved + Probable</b>	<b>4411.2</b>	<b>3481.6</b>	<b>2776.4</b>	<b>83264</b>	<b>62824</b>	<b>48411</b>	<b>38151</b>	<b>30687</b>
<b>Conventional Natural Gas (Solution Gas) (MMcf)</b>								
Proved Developed Producing	4000	2280	2116	0	0	0	0	0
Proved Developed Non-Producing	1183	734	672	0	0	0	0	0
Proved Undeveloped	6715	6063	5519	0	0	0	0	0
<b>Total Proved</b>	<b>11897</b>	<b>9077</b>	<b>8308</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Probable Developed Producing	1118	741	678	0	0	0	0	0
Probable Developed Non-Producing	396	242	216	0	0	0	0	0
Probable Undeveloped	5309	4362	3942	0	0	0	0	0
<b>Total Probable</b>	<b>6824</b>	<b>5345</b>	<b>4836</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Proved + Probable</b>	<b>18720</b>	<b>14422</b>	<b>13144</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Conventional Natural Gas (Non Assoc. &amp; Assoc.) (MMcf)</b>								
Proved Developed Producing	2448	796	622	151	132	111	91	73
Probable Developed Producing	646	210	168	141	110	86	68	54
<b>Total Proved + Probable</b>	<b>3094</b>	<b>1006</b>	<b>791</b>	<b>292</b>	<b>242</b>	<b>197</b>	<b>159</b>	<b>128</b>
<b>Natural Gas Liquids (MBbl)</b>								
Proved Developed Producing	111.2	52.5	37.2	0	0	0	0	0
Proved Developed Non-Producing	19.8	12.3	8.7	0	0	0	0	0
Proved Undeveloped	112.3	101.4	82.4	0	0	0	0	0
<b>Total Proved</b>	<b>243.3</b>	<b>166.2</b>	<b>128.4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Probable Developed Producing	30.4	16.2	11.6	0	0	0	0	0
Probable Developed Non-Producing	6.6	4.0	2.9	0	0	0	0	0
Probable Undeveloped	88.8	73.0	55.3	0	0	0	0	0
<b>Total Probable</b>	<b>125.8</b>	<b>93.2</b>	<b>69.7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Proved + Probable</b>	<b>369.1</b>	<b>259.4</b>	<b>198.1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Grand Total (MBoe) - BTax (M\$)</b>								
Proved Developed Producing	1900.4	966.4	814.7	9813	8772	7809	6996	6326
Proved Developed Non-Producing	568.8	388.7	321.1	7148	6267	5539	4952	4478
Proved Undeveloped	2927.1	2642.9	2265.7	19851	12965	8116	4735	2358
<b>Total Proved</b>	<b>5396.4</b>	<b>3998.0</b>	<b>3401.6</b>	<b>36812</b>	<b>28004</b>	<b>21464</b>	<b>16683</b>	<b>13162</b>
Probable Developed Producing	523.1	297.2	242.8	4559	3588	2887	2386	2021
Probable Developed Non-Producing	182.2	115.5	89.0	2516	1925	1526	1250	1053
Probable Undeveloped	2314.5	1901.6	1563.7	39669	29549	22731	17991	14579
<b>Total Probable</b>	<b>3019.7</b>	<b>2314.3</b>	<b>1895.4</b>	<b>46744</b>	<b>35062</b>	<b>27144</b>	<b>21627</b>	<b>17654</b>
<b>Total Proved + Probable</b>	<b>8416.1</b>	<b>6312.3</b>	<b>5297.0</b>	<b>83556</b>	<b>63066</b>	<b>48608</b>	<b>38310</b>	<b>30815</b>

### 3. Introduction

#### 3.1 Scope and Terms of Reference

This report was prepared by Sproule Associates Limited ("Sproule") at the request of Canlin Energy Corporation and MIE Holdings Corporation. Canlin Energy Corporation is hereinafter referred to as "the Company" or "Canlin" and MIE Holdings Corporation is hereinafter referred to as "MIE", unless otherwise specified. MIE owns one hundred percent of the shares of the Company, through its wholly owned subsidiary, Maple Marathon Investments Limited. The effective date of this report is May 31, 2018, and it consists of an independent technical evaluation of certain P&NG reserves in the Province of Alberta, Canada. The reserves evaluated include the Company's interests in the Spirit River Area.

This Competent Person's Report ("CPR") was prepared in August and September 2018 for the purpose of evaluating the Company's interest in certain P&NG reserves according to the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") reserve definitions that are consistent with the standards of Canadian National Instrument 51-101, which have been accepted by the Hong Kong Stock Exchange ("HKEX") as being in accordance with the requirements of Chapter 18 of the Listing Rules of the exchange. This report was prepared for the Company's corporate purposes.

Sproule's evaluation documented in this report includes undeveloped locations with development timing beyond the COGE Handbook recommended practices of three years for the assignment of proved reserves and five years for the assignment of probable reserves. This delay has no consequent impact on the confidence level associated with the reserve estimate.

This report is included in one (1) volume which consists of an Executive Summary, Introduction, and discussion of the evaluation parameters and results according to the reporting requirements of the HKEX. Reserves definitions, abbreviations, units, conversion factors, formation names, cash flow reports and well lists showing interests and burdens are included in Appendices A, B, C, and D, respectively. A representation letter prepared by officers of the Company, Appendix E, confirms the accuracy, completeness and availability of the data requested by and furnished to Sproule during the preparation of this report.

### 3.2 Statement of Competent Persons

#### Barrett R. (Barry) Hanson, P.Eng., SPEC

I, Barrett R. Hanson, Senior Petroleum Engineer, of Sproule, 900, 140 Fourth Avenue SW, Calgary, Alberta, declare the following:

1. I hold the following degree:
  - a. B.Sc., Chemical Engineering (1979), University of Saskatchewan, Saskatoon, Saskatchewan, Canada
2. I am a registered professional:
  - a. Professional Engineer (P.Eng.), Province of Alberta, Canada
  - b. Certified SPE Petroleum Engineer
3. I am a member of the following professional organizations:
  - a. Association of Professional Engineers and Geoscientists of Alberta (APEGA)
  - b. Society of Petroleum Engineers (SPE)
4. I have 39 years experience in the petroleum industry.
5. I am a qualified reserves evaluator and reserves auditor as defined in Canadian National Instrument 51-101 and a Competent Person pursuant to Chapter 18 of the Hong Kong Stock Exchange Listing Rules.
6. My contribution to the report entitled "Independent Competent Person's Report of Certain P&NG Reserves in Alberta, Canada of Canlin Energy Corporation for MIE Holdings Corporation (As of May 31, 2018)" is based on my engineering knowledge and the data provided to me by the Company, from public sources, and from the non-confidential files of Sproule. I did not undertake a field inspection of the properties.
7. I have no interest, direct or indirect, nor do I expect to receive any interest, direct or indirect, in the properties described in the above-named report or in the securities of Canlin Energy Corporation or MIE Holdings Corporation in compliance with Chapter 18 of the Hong Kong Stock Exchange Listing Rules.

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Barrett R. Hanson, P.Eng., SPEC

**Alec Kovaltchouk, P.Ge.**

I, Alec Kovaltchouk, VP, Geoscience of Sproule, 900, 140 Fourth Avenue SW, Calgary, Alberta, declare the following:

1. I hold the following degree:
  - a. M.Sc. Geochemistry (1981) University of Lviv, Lviv, Ukraine
2. I am a registered professional:
  - a. Professional Geoscientist (P.Ge.), Province of Alberta, Canada
3. I am a member of the following professional organizations:
  - a. Association of Professional Engineers and Geoscientists of Alberta (APEGA)
  - b. Canadian Society of Petroleum Geologists (CSPG)
4. I have 34 years experience in the petroleum industry.
5. I am a qualified reserves evaluator and reserves auditor as defined in Canadian National Instrument 51-101 and a Competent Person pursuant to Chapter 18 of the Hong Kong Stock Exchange Listing Rules.
6. My contribution to the report entitled "Independent Competent Person's Report of Certain P&NG Reserves in Alberta, Canada of Canlin Energy Corporation for MIE Holdings Corporation (As of May 31, 2018)" is based on my geoscience knowledge and the data provided to me by the Company, from public sources, and from the non-confidential files of Sproule. I did not undertake a field inspection of the properties.
7. I have no interest, direct or indirect, nor do I expect to receive any interest, direct or indirect, in the properties described in the above-named report or in the securities of Canlin Energy Corporation or MIE Holdings Corporation in compliance with Chapter 18 of the Hong Kong Stock Exchange Listing Rules.

---

Alec Kovaltchouk, P.Ge.

**Cameron P. Six, P.Eng.**

I, Cameron P. Six, President and CEO of Sproule, 900, 140 Fourth Avenue SW, Calgary, Alberta, declare the following:

1. I hold the following degree:
  - a. B.Sc. (with Distinction) Chemical Engineering (1979) University of Calgary, Calgary, Alberta, Canada
2. I am a registered professional:
  - a. Professional Engineer (P.Eng.) Province of Alberta, Canada
3. I am a member of the following professional organizations:
  - a. Association of Professional Engineers and Geoscientists of Alberta (APEGA)
  - b. Society of Petroleum Engineers (SPE)
4. I have 38 years experience in the petroleum industry.
5. I am a qualified reserves evaluator and reserves auditor as defined in Canadian National Instrument 51-101 and a Competent Person pursuant to Chapter 18 of the Hong Kong Stock Exchange Listing Rules.
6. My contribution to the report entitled "Independent Competent Person's Report of Certain P&NG Reserves in Alberta, Canada of Canlin Energy Corporation for MIE Holdings Corporation (As of May 31, 2018)" is based on my engineering knowledge and the data provided to me by the Company, from public sources, and from the non-confidential files of Sproule. I did not undertake a field inspection of the properties.
7. I have no interest, direct or indirect, nor do I expect to receive any interest, direct or indirect, in the properties described in the above-named report or in the securities of Canlin Energy Corporation or MIE Holdings Corporation in compliance with Chapter 18 of the Hong Kong Stock Exchange Listing Rules.

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Cameron P. Six, P.Eng.



### 3.3 Credentials of Sproule

Sproule is one of the world's largest independent subsurface petroleum consulting and evaluation firms with over 65 years of experience in the petroleum industry. Sproule is recognized as a premier reserve evaluator for TSX-listed companies, which file their reserves annually pursuant to Canadian National Instrument 51-101 ("NI 51-101"). In 2016/17, Sproule conducted reserve evaluations for over 60 TSX-listed companies in accordance with NI 51-101 regulations. Sproule also has an active advisory practice providing technical and valuation advice to clients with respect to M&A transactions involving a variety of petroleum assets worldwide. For the past three consecutive years, Sproule has held Deloitte's award for "Best Managed Company".

### 3.4 Field Operations

In the preparation of this evaluation, a field inspection of the properties was not performed. The relevant geoscience and engineering data were made available by the Company or obtained from public sources and the non-confidential files at Sproule. No material information regarding the reserves evaluation would have been obtained by an on-site visit.

### 3.5 Nature and Source of Information

1. All historical production, revenue and expense data, product prices actually received, and other data that were obtained from the Company or from public sources were accepted as represented, without any further investigation by Sproule.
2. Property descriptions, details of interests held, and well data, as supplied by the Company, were accepted as represented. No investigation was made into either the legal titles held or any operating agreements in place relating to the subject properties.
3. Lessor and overriding royalties and other burdens were obtained from the Company. No further investigation was undertaken by Sproule.
4. A Representation Letter to confirm the accuracy, completeness, and availability of data furnished to Sproule during the preparation of this report was provided by the Company, and is included as Appendix E.
5. Sproule has no responsibility for estimates based on analyses of erroneous data supplied by the Company or MIE.

6. Sproule has no responsibility for any results presented that would be affected by information that exists but was not made available to us.
7. Sproule has no responsibility to update our report for events and circumstances occurring after the preparation date of the report or for data that becomes available to us after the preparation date of the report.

### 3.6 Reporting Standards

This report has been prepared by Sproule using current geological and engineering knowledge, techniques and computer software. It has been prepared within the Code of Ethics of the Association of Professional Engineers and Geoscientists of Alberta ("APEGA"). This report adheres in most material aspects to the "best practices" recommended in the COGE Handbook which are in accordance with principles and definitions established by the Calgary Chapter of the Society of Petroleum Evaluation Engineers. The COGE Handbook is incorporated by reference in NI 51-101.

The development plan presented in this evaluation differs from the COGE Handbook guidance of three years for proved undeveloped locations and five years for probable undeveloped locations. The final year of the development plan for both proved and probable locations is 2023 and has been scheduled to ensure a source of supply to support existing processing capacity based on the Company's forecast of availability.

### 3.7 Effective and Preparation Dates

The effective date of the reserves is May 31, 2018. The preparation date of this Competent Person's Report is September 19, 2018.

### 3.8 Evaluation Procedures

1. The development forecast presented in this evaluation was based on capital budgets and a development program as presented by the Company under the scope of this evaluation and engagement. The development forecast presented in this report may not represent the full development potential of the lands evaluated.
2. The Company provided Sproule with lease operating statements containing historical data for twelve months for each of the years 2015, 2016 and 2017 and for the first five months for 2018. These statements were used to determine certain economic parameters.

3. The forecasts of product prices used in this evaluation were based on Sproule's May 31, 2018 price forecasts.
4. Abandonment and reclamation costs for existing wells with economic developed reserves, and future economic proposed development included in this report have been provided by the Company and forecast at the entity level.

The Company has not identified any material dedicated facilities for which abandonment and reclamation costs have been included in this report.

This report does not include abandonment and reclamation costs associated with active producing wells, which are not economic to produce under the forecast prices utilized in this report, active service wells, inactive wells, and various active or inactive gathering and processing facilities, that the Company holds an interest in, that were not identified as being material dedicated facilities by the Company.

No allowances for salvage were incorporated into the abandonment and reclamation costs contained in this report.

5. For this evaluation, Sproule worked on the reserves evaluation model, Value Navigator version 2016.2.0.45. The functionality of the program is not the responsibility of Sproule, and results were accepted as calculated by the model. Sproule's responsibility is limited to the quality of the data input and reasonableness of the outcoming results.

### 3.9 Evaluation Results

1. The analysis of the individual entities, as reported herein, was conducted within the context and scope of an evaluation of a unique group of entities in aggregate. Use of this report outside of this scope may not be appropriate. The estimates of reserves and future net revenue for individual entities may not reflect the same confidence level as estimates of reserves and future net revenue for all entities, due to the affects of aggregation.
2. The accuracy of reserves estimates and associated economic analysis is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data provided at the time this report was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that reservoir and financial performance subsequent to the date of the estimates may necessitate revision. These revisions may be material.

3. The net present values of the reserves presented in this report simply represent discounted future cash flow values at several discount rates. Though net present values form an integral part of fair market value estimations, without consideration for other economic criteria, they are not to be construed as Sproule's opinion of fair market value.
4. The dollar values presented throughout the report are in Canadian dollars, unless otherwise stated.
5. Due to rounding, certain totals may not be consistent from one presentation to the next.

### **3.10 Reserve Definitions**

The reserve definitions are included in Appendix A.

### **3.11 Abbreviations**

The abbreviations are included in Appendix B.

## 4. Summary of Assets

### 4.1 Location of Assets

The Assets are located in northwestern Alberta, approximately 430 kilometres northwest of the City of Edmonton. The Assets consist of the Company's interests in a total of 2,752 hectares of gross petroleum and natural gas rights comprised of a number of individual leases. The Assets lie in the Northwest Plains region of the Western Canada Sedimentary Basin and produce non-associated gas from the Lower Cretaceous Gething Formation and the Middle Triassic Halfway Formation and produce oil and solution gas from the Triassic Charlie Lake Formation. The oil is recovered under primary production by solution gas drive. No additional development drilling opportunities were identified by the Company for the Gething and Halfway formations for the Assets and, therefore, Sproule has not evaluated these zones further. Undeveloped locations have only been included for the Charlie Lake Formation.

The Charlie Lake Formation in the area of the Assets are managed under the provincial regulations, either as a single Charlie Lake pool or as a commingled pool with the Doig Formation.

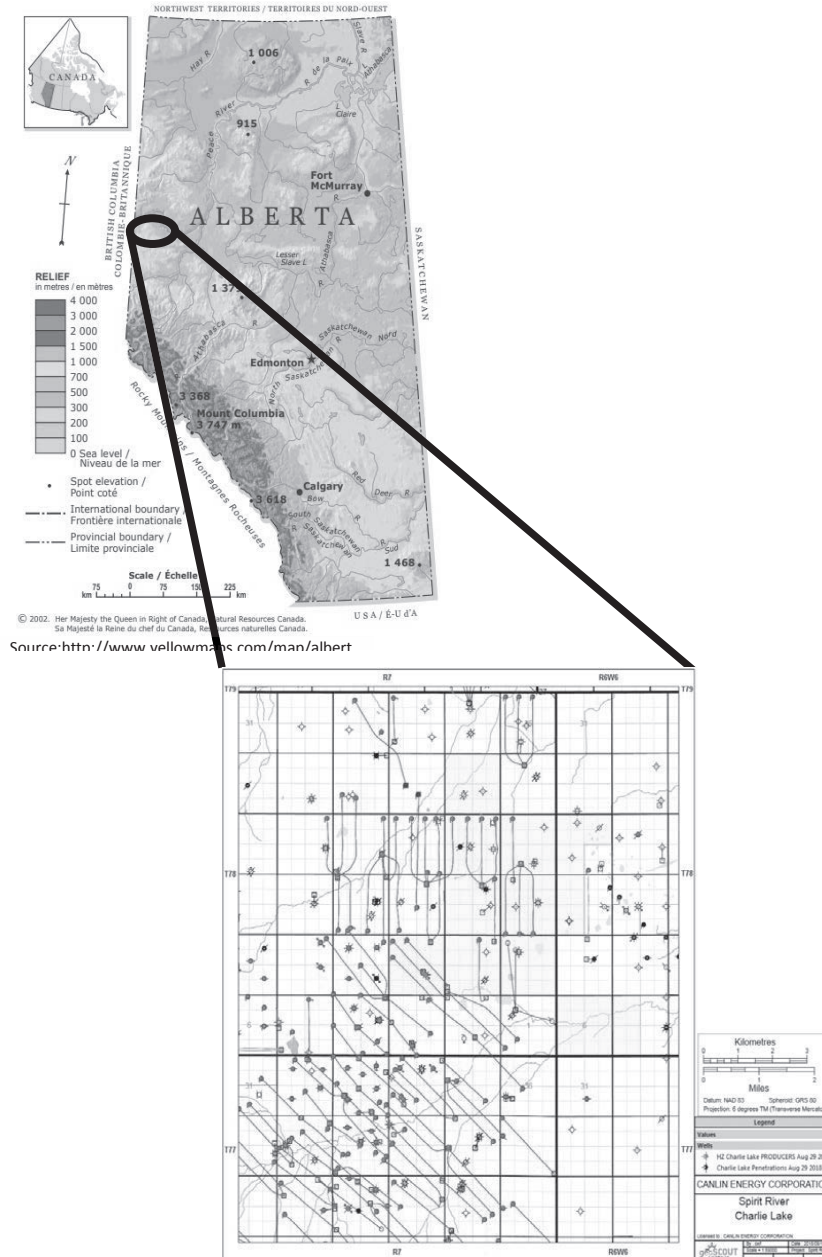


Figure 4.1-1 – Location Map Showing Canlin Interest Lands

## 4.2 Ownership and Acreage

Table 4.2-1 provides a summary of the Company's average working interest, the Project gross (100 percent working interest) acreage and the Company's net acreage in the Spirit River Area.

**Table 4.2-1 – Summary of Canlin's Working Interest  
Project Gross Developed and Canlin Net Developed Acreage**

Area	Canlin Average Working Interest <sup>2</sup> (%)	Canlin Gross <sup>1</sup> Acreage (hectares)	Canlin Net Acreage (hectares)
Spirit River	69.56	1,536	1,069

1. Canlin Gross acreage represents all acreage where Canlin holds an interest.
2. Canlin Average Working Interest is calculated by dividing the Canlin Net Lease Acreage by the Canlin Gross Lease Acreage.

The Company also holds lease interests in this area that are undeveloped which total 1,216 gross and 1,126 net hectares, some of which are not assigned reserves.

## 4.3 Reserves and Net Present Values

Table 4.3-1 provides a summary of the Project gross, Canlin gross before royalty and Canlin net after royalty proved and proved plus probable reserves and associated net present values before deduction of income taxes using escalated prices and costs, as of May 31, 2018.

Table 4.3-1

Canlin Energy Corporation  
Summary of the Evaluation of the P.&N.G. Reserves

As Of Date : 2018-05-31

	Lt. Med, Heavy Oil, Bitumen		Non-Assoc. Assoc Gas		Solution Gas		Natural Gas Liquids / Sulphur		Net Present Values							
	Remaining Reserves	Company Reserves	Remaining Reserves	Company Reserves	Remaining Reserves	Company Reserves	Remaining Reserves	Company Reserves	Before Income Taxes	@ 5%	@ 10%	@ 15%				
	MBbl	MMcf	MBbl	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf				
<b>Spirit River</b>																
PDP	714.6	401.3	321.1	2448	796	622	4000	2280	2116	111.2	52.5	37.2	9813	8772	7809	6996
PNP	351.9	254.0	200.3	0	0	0	1183	734	672	19.8	12.3	8.7	7148	6267	5539	4952
PUD	1695.7	1531.0	1263.4	0	0	0	6715	6063	5519	112.3	101.4	82.4	19851	12965	8116	4735
TP	2762.2	2186.3	1784.8	2448	796	622	11897	9077	8308	243.3	166.2	128.4	36812	28004	21464	16683
PADP	198.6	122.5	90.1	646	210	168	1118	741	678	30.4	16.2	11.6	4559	3588	2887	2386
PANP	109.6	71.1	50.1	0	0	0	396	242	216	6.6	4.0	2.9	2516	1925	1526	1250
PAUD	1340.8	1101.6	851.4	0	0	0	5309	4362	3942	88.8	73.0	55.3	39669	29549	22731	17991
TPA	1649.0	1295.3	991.5	646	210	168	6824	5345	4836	125.8	93.2	69.7	46744	35062	27144	21627
TPP	4411.2	3481.6	2776.4	3094	1006	791	18720	14422	13144	369.1	259.4	198.1	83556	63066	48608	38310



**4.4 Project Gross Field Production Profiles**

In May 2018, the Assets were producing approximately 515 bopd project total at about 72 percent water cut and 3.7 MMcf/d of solution gas from 8 oil wells and approximately 2.2 MMcf/d of raw non-associated gas from an additional 2 gas wells. Working interest production volumes are 275 bpd for oil, 3.0 MMcfpd for gas, and 4.0 bpd for NGL’s.

Production schedules are included in section 6.4.3. Discussion of the overall development plan is included in section 6.5.

The Project gross (100 percent working interest) historical production profile for the Assets including the total proved production forecast is included in Figures 4.4-1 and 4.4-2 for oil and gas production, respectively.

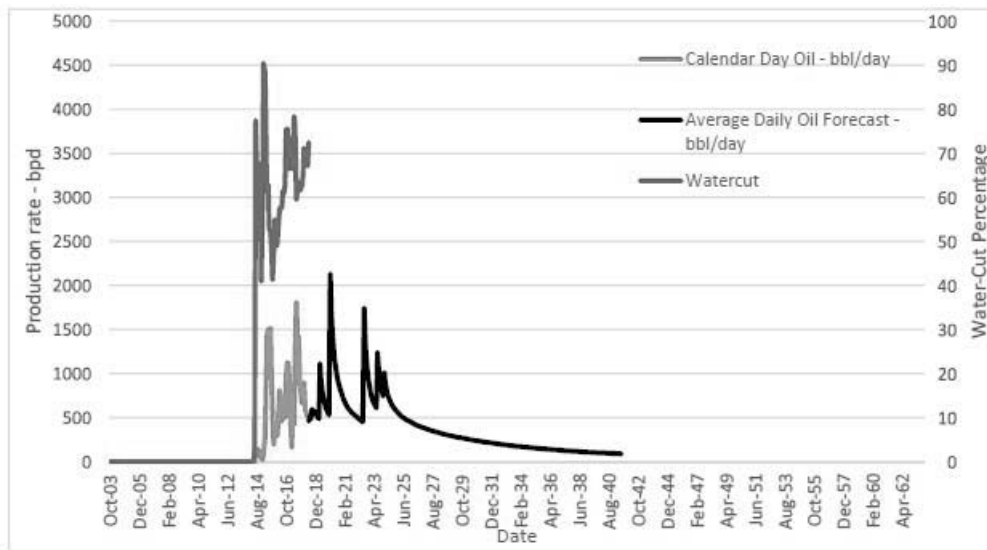


Figure 4.4-1 – Project Gross Production History with Total Proved Oil Production Forecast for the Spirit River Area

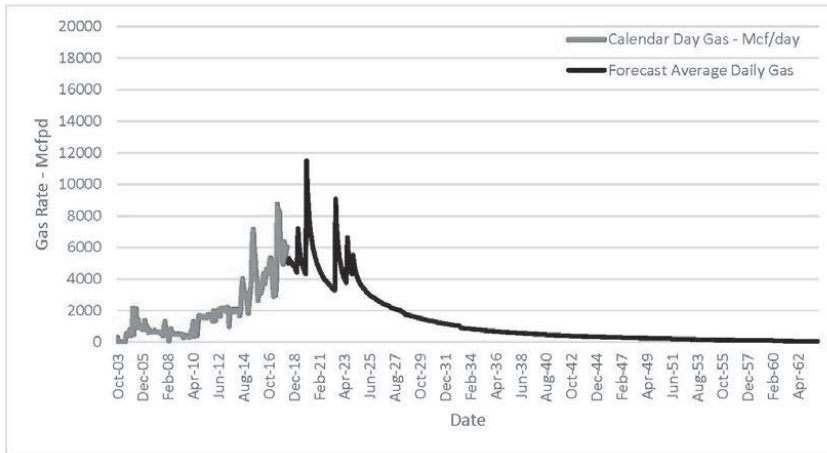


Figure 4.4-2 - Project Gross Production History with Total Proved Gas Production Forecast for the Spirit River Area

Figures 4.4-3 and 4.4-4 show the Project gross (100 percent working interest) historical production profile for the Assets including the total proved plus probable oil and gas production forecasts, respectively.

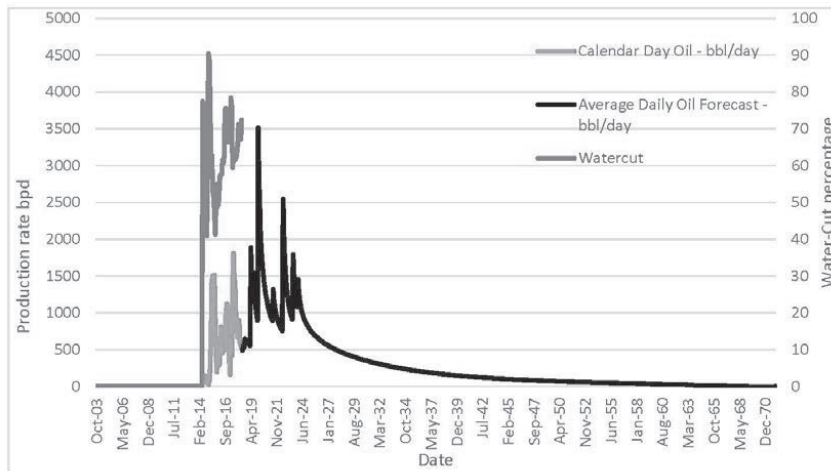


Figure 4.4-3 – Project Gross Production History with Total Proved Plus Probable Oil Production Forecast for the Spirit River Area

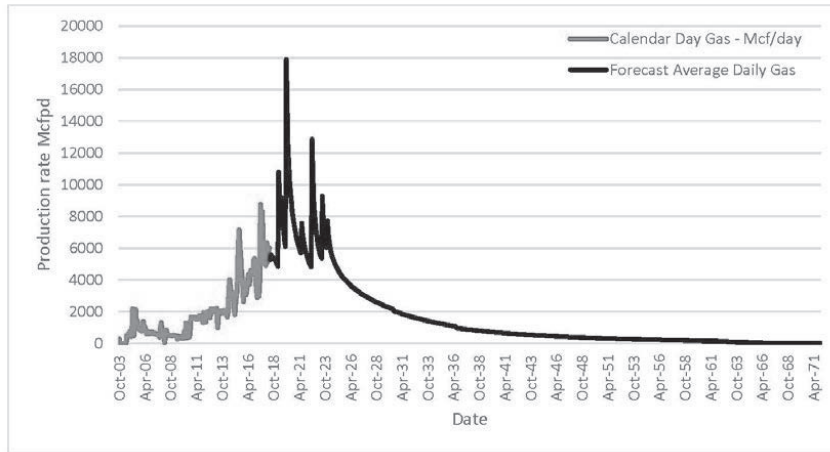


Figure 4.4-4 – Project Gross Production History with Total Proved Plus Probable Gas Production Forecast for the Spirit River Area

## 5. Regional Geological Discussion

### 5.1 Regional Petroleum History [1]

*"The Western Canada Sedimentary Basin ("WCSB") comprises the eastern Canadian Cordillera and two major sedimentary basins: a northwest-trending trough in front of the Cordilleran Fold and Thrust Belt (extending eastward to the Canadian Shield) called the Alberta Basin; and the cratonic Williston Basin, centered in North Dakota and extending into southern Saskatchewan and southwest Manitoba" [1].*

The Spirit River Area generally lies within the Northwest Plains depositional region (part of the Alberta Basin) of the WCSB.

*"The Alberta Basin is a large, petroleum-rich sedimentary basin along the eastern edge of the Rocky Mountains in western Canada. It extends from British Columbia through Alberta and Saskatchewan into Manitoba. The basin was formed when the Earth's crust sank along the continental side of the Rocky Mountains during the Devonian Period (about 415 to 360 million years ago). From that time until the Late Cretaceous Period (about 100 to 65 million years ago), the region was covered by the sea at various intervals. Marine sediments gradually accumulated in the deepest parts of the basin, and large reefs composed of marine animals and algae formed along its margins. Uplift of the region beginning about 65 million years ago halted sedimentation and exposed the basin deposits to erosional forces." [2].*

The formation of the Rocky Mountains' fold and thrust belt had a profound effect on Alberta's hydrocarbon potential by producing the structural traps, some of which are filled or partially filled with hydrocarbons, mainly gas [3]. In the Alberta Basin, tectonic loading depressed the western edge of the North American craton and resulted in a regional westward dip, which inclined the stratigraphic traps into a favourable orientation so that they could be filled with hydrocarbons generated farther west [3].

### 5.2 Regional and Basin Generalized Geology, Evident Petroleum System

The Spirit River Area produces from oil and gas bearing sands, silts and carbonates of Upper Triassic age. The vast majority of the production in the Spirit River Area is from the Upper Triassic Charlie Lake Formation of the Schooler Creek Group.

5.2.1 Geological Settings

The distribution of shales, generally acting as both source rocks and cap rocks, and reservoir rocks of different lithology in the Northwest Plains region of Alberta are displayed on the stratigraphic column shown in Figure 5.2.1-1.

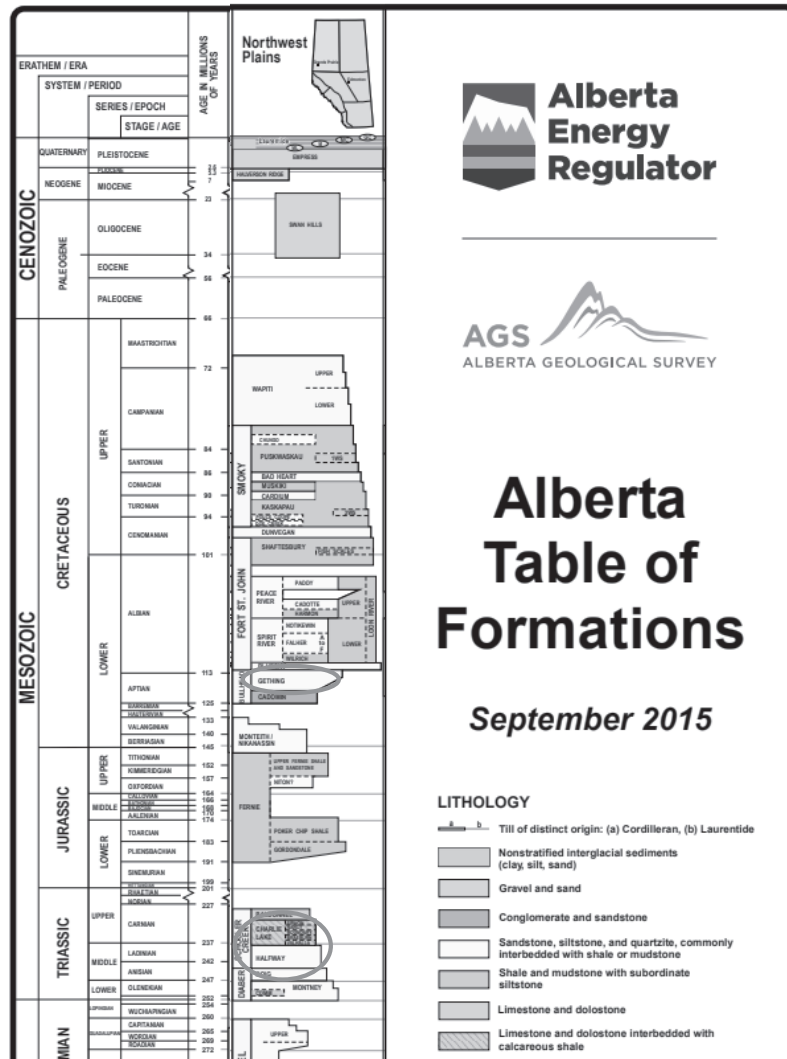


Figure 5.2.1-1 Stratigraphic Correlation Chart of Northwest Plains of Alberta [4]

### 5.2.1.1 Charlie Lake Formation

Triassic sedimentary rocks form significant oil and gas reservoirs in west central Alberta and northeastern British Columbia in Western Canada. In the Alberta Basin, Triassic deposition began with a major marine transgression eastward onto an eroded Carboniferous and Permian peneplain surface (Peace River Embayment) that was followed by an overall regression. Triassic sediments, including the Charlie Lake Formation, were deposited in significant thicknesses within the Peace River Embayment during this prolonged regression. The regional Charlie Lake Formation is dominated by restricted to nearshore marine sedimentation, with deposits accumulating in environments such as sabkhas, coastal dunes, nearshore bars and algal deposits. [5]

### 5.2.2 Source Rocks

*To facilitate discussion of petroleum in the Western Canada Sedimentary Basin, a petroleum system terminology is used. According to Magoon (1988) [6], "a petroleum system includes all those geologic elements and processes that are essential for an oil and gas deposit to exist." These basic elements include source rock, maturation, migration path, reservoir rock, trap, and seal [7].*

The WCSB comprises a number of discrete petroleum systems linked to a number of source rocks [7]. Each petroleum system is named after the source rock, where possible, and the limits of the system are defined by the extent of migration of petroleum from that discrete source [7].

The following petroleum systems are present within the WCSB:

- Ordovician Petroleum System with generally thin source facies of "kukersites";
- Keg River/Brightholme Petroleum System with the source facies of a basinal, marine laminate;
- Duvernay Petroleum System with the source facies of bituminous, slightly argillaceous carbonates interbedded with gray-green, calcareous shales;
- Exshaw-Bakken and Lodgepole Petroleum Systems with the source facies of organic-rich, black, basinal laminites;
- Doig Petroleum System with phosphatic and radioactive facies;
- Nordegg Jurassic Petroleum System with variably phosphatic marlstone and calcareous mudstone;
- Mannville Petroleum System with the coal rich deposits;
- Colorado Group Petroleum System with a thick marine shale succession.

## 6. Local Geological and Engineering Discussion

### 6.1 Reserves

Table 6.1-1 provides a summary of the proved and proved plus probable reserves attributed to the Company's interests in the Spirit River Area at the effective date of the report, May 31, 2018.

**Table 6.1-1 Summary of Oil, Gas and NGL Reserves As of May 31, 2018**  
(Forecast Prices and Costs)

Reserve Category	Oil		Gas		NGL	
	Gross (Mstb)	Net (Mstb)	Gross (MMcf)	Net (MMcf)	Gross (Mstb)	Net (Mstb)
<b>Spirit River</b>						
<b>Total Proved</b>	2,186.3	1,784.8	9,873	8,930	166.2	128.4
<b>Total Proved Plus Probable</b>	3,481.6	2,776.4	15,428	13,935	259.5	198.1

### 6.2 Rights to Explore and Extract Hydrocarbons

The details of the P&NG rights are summarized in Section 8.2.2.

**6.3 Geology**

Figure 6.3-1 shows a detailed view of the Company's interest lands within the Spirit River Area, showing the location of the Company's interest wells and wells owned by others on adjacent lands. Charlie Lake Formation wells are shown in red.

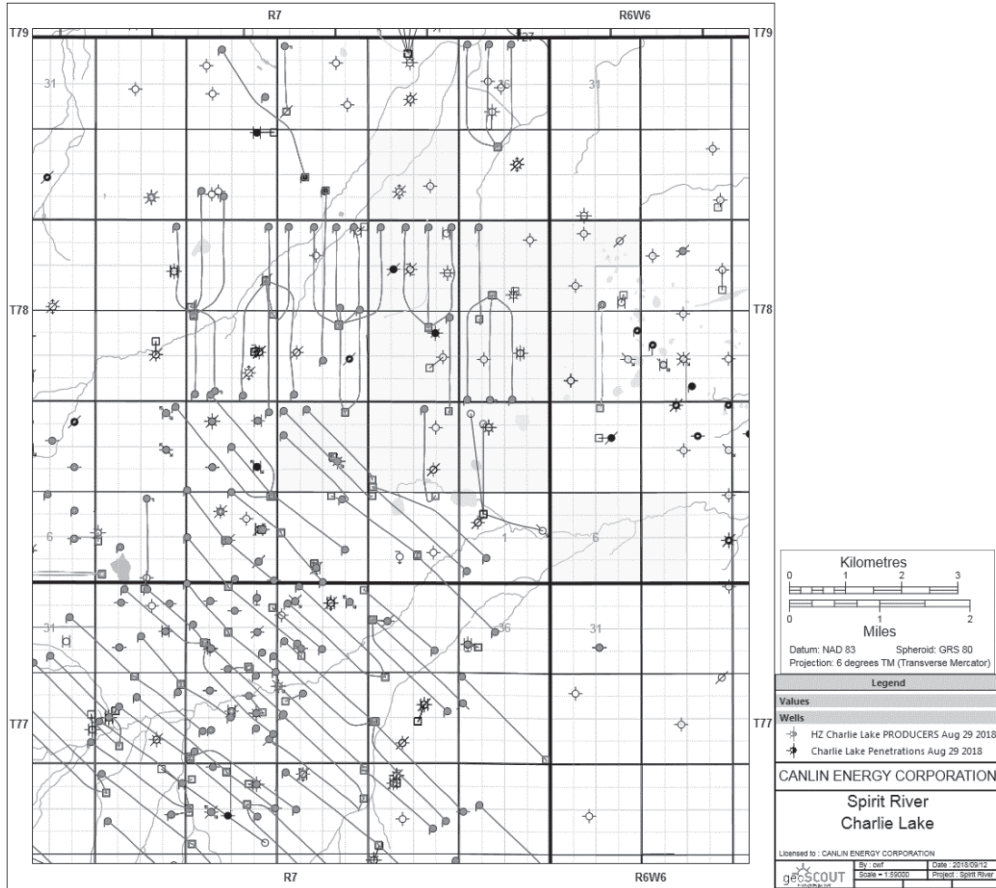


Figure 6.3-1 – Map of the Company's Interest Lands in the Spirit River Area and wells in the area.

**6.3.1 Geological Characteristics**

The geological maps contained in this section were prepared by Canlin and have not been audited by Sproule, nor have they been used in the evaluation. They are provided herein for illustrative purposes only.



6.3.1.1 Charlie Lake Formation

The Charlie Lake Formation in the Spirit River Area is comprised of a stacked series of shallowing upward sandy dolomites with intermixed dolomitic sandstones and shales. The primary depositional environment for the Charlie Lake in this area is widely accepted to be nearshore marine within a broad sabkha-type environment. The estimated regional extent of the mappable nearshore trend is over 200 miles long and 30 to 50 miles wide. Regional dip is to the southwest and results in “top-down” erosion along the northeast flank of the depositional trend. Individual pool sizes along this trend are currently understood to be in the order of 10 to 50 sections with an oil-initially-in-place of 5 to 10 mmoeb per section. Net Pay using a 3 percent Limestone density porosity cutoff (0 percent Sandstone Scale) is estimated at 4 to 12 metres. Water saturation based on a water resistivity of 0.036 from Canadian Well Logging Society tables averages approximately 40 percent.

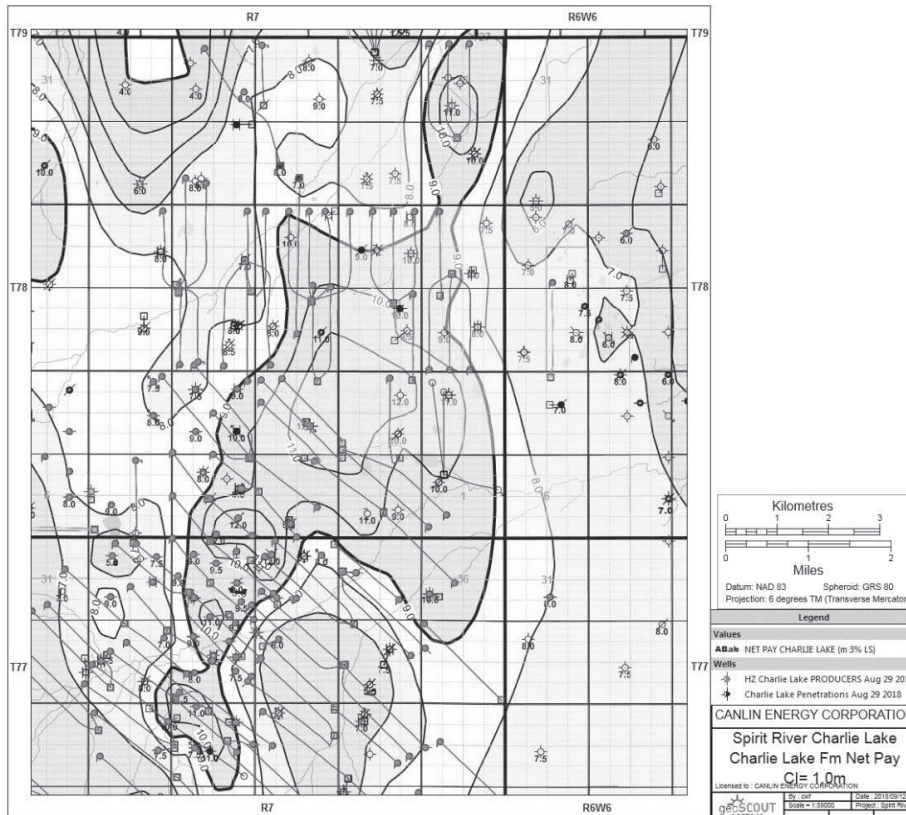


Figure 6.3.1-1 – Spirit River Area – Charlie Lake Formation Net Pay showing 1-metre Contours, Based on cut-offs of 75 gamma API Units and 3% Limestone Porosity or 0% Sandstone Porosity (Source: Canlin Energy)

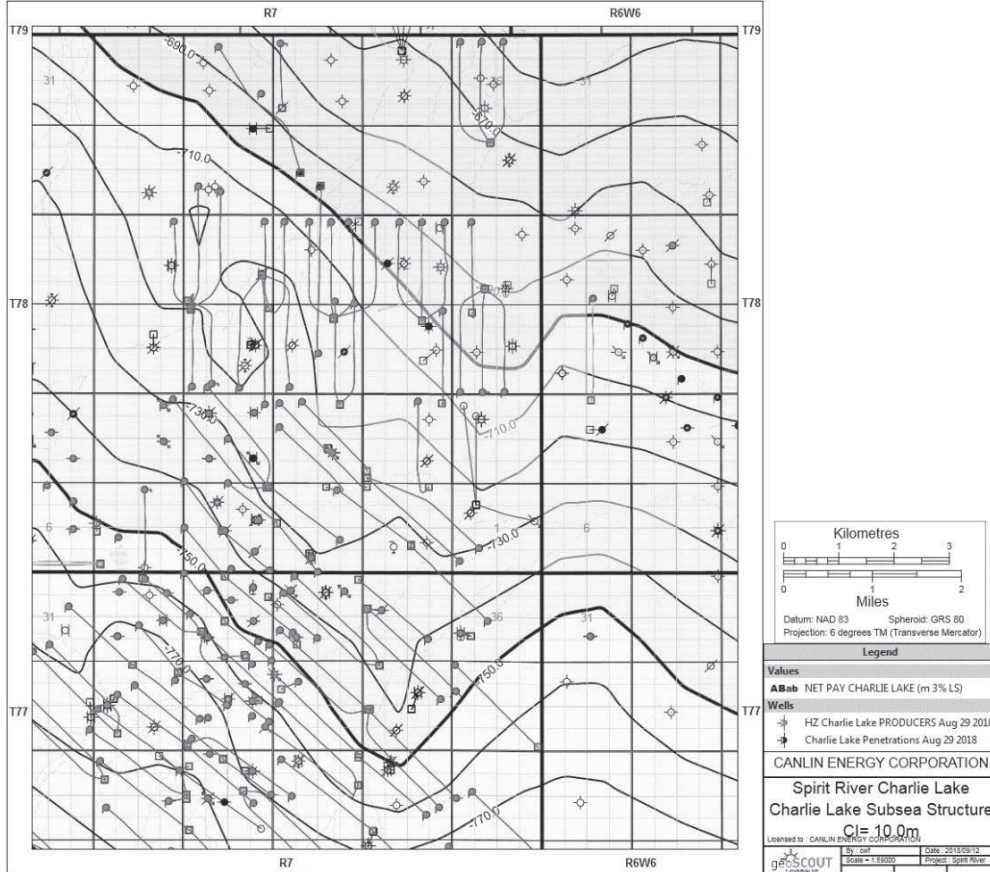


Figure 6.3.1-2 – Spirit River Area – Charlie Lake Formation Subsea Structure showing 10-metre Contours  
(Source: Canlin Energy)

**6.3.2 Reservoir Characteristics**

The average reservoir parameters of the Charlie Lake Formation in the Spirit River Area are summarized in Table 6.3.2-1. The Charlie Lake Formation reservoir parameters are highly variable due to the wide range of sediment types and the depositional system present.

**Table 6.3.2-1 Charlie Lake Formation Reservoir Parameters**

Formation	Thickness	Porosity	Permeability	Pressure	Recovery
Charlie Lake	7-15m	3-18%	0.1 - 50md	9-15mpa	Primary

### 6.3.3 Exploration

The lands surrounding the Spirit River Area are very well developed for oil and gas production. As a result, there has been no exploration activity conducted by the Company. Development activities have targeted known hydrocarbon reservoirs.

## 6.4 Production

### 6.4.1 Production Commencement

Production from the lands currently held by the Company in the Spirit River Area commenced in 2003. Oil production from the Charlie Lake Formation in the Spirit River Area has been on-going since 2014.

### 6.4.2 Extraction Methods

The Charlie Lake Formation in the Spirit River Area has been developed with horizontal wells on primary depletion. The horizontal wells are completed using multi-stage fracture treatments to maximize access to reservoir rock.

### 6.4.3 Production Schedule

Table 6.4.3-1 shows the Project gross (100 percent working interest) proved and proved plus probable production schedule for the Spirit River Area.

**Table 6.4.3-1 – Summary of Project Gross Total Proved Production Forecasts**

Project Gross <sup>1</sup> Production Forecasts								
Spirit River								
Reserves Category	Proved							
	Daily Production Volumes				Production Volume			
Year	Oil	Raw Gas	Condensate	Barrel of Oil Equivalent	Oil	Raw Gas	Condensate	Barrel of Oil Equivalent
	bpd	Mcfpd	bpd	boepd	Mbbbls	MMcf	Mbbbls	Mbbbls
2018	535	4,827	2	1,341.3	114.4	1,033	0.5	287.0
2019	671	4,931	2	1,494.7	245.0	1,800	0.7	545.6
2020	1,159	6,811	2	2,295.8	424.3	2,493	0.6	840.3
2021	592	3,969	1	1,254.5	216.0	1,449	0.5	457.9
2022	834	4,832	1	1,640.5	304.4	1,764	0.4	598.8
2023	809	4,536	1	1,565.5	295.2	1,656	0.3	571.4
2024	708	3,932	1	1,364.1	259.2	1,439	0.2	499.3
2025	491	2,833	1	963.9	179.3	1,034	0.2	351.8
2026	406	2,136	0	762.5	148.3	780	0.1	278.3
2027	341	1,675	0	619.7	124.3	611	0.0	226.2
2028	288	1,450	0	529.4	105.3	531	0.0	193.7
2029	244	1,210	0	445.7	89.1	442	0.0	162.7
2030	210	1,015	0	379.1	76.7	370	0.0	138.4
2031	187	906	0	338.1	68.3	331	0.0	123.4
2032	142	691	0	257.6	52.1	253	0.0	94.3
2033	86	455	0	162.3	31.5	166	0.0	59.2
2034	73	385	0	137.3	26.7	140	0.0	50.1
2035	6	31	0	11.0	2.1	11	0.0	4.0
<b>Total</b>					<b>2,762.2</b>	<b>16,301</b>	<b>3.3</b>	<b>5,482.4</b>

1. Project Gross means 100 percent interest.
2. Barrel of oil equivalent of gas uses a conversion ratio of 6 Mcf:1 bbl.

Table 6.4.3-2 – Summary of Project Gross Total Proved + Probable Production Forecasts

Project Gross <sup>1</sup> Production Forecasts								
Spirit River								
Reserves Category	Proved + Probable							
Year	Daily Production Volumes				Production Volume			
	Oil	Raw Gas	Condensate	Barrel of Oil Equivalent	Oil	Raw Gas	Condensate	Barrel of Oil Equivalent
	bpd	Mcfpd	bpd	boepd	Mbbbls	MMcf	Mbbbls	Mbbbls
2018	585	5,174	2	1,449.5	125.2	1,107	0.5	310.2
2019	1,109	7,044	2	2,284.8	404.7	2,571	0.7	833.9
2020	1,828	10,004	2	3,496.9	669.0	3,661	0.6	1,279.8
2021	1,027	6,117	1	2,047.9	374.8	2,233	0.5	747.5
2022	1,280	7,030	1	2,452.5	467.0	2,566	0.4	895.2
2023	1,187	6,428	1	2,259.1	433.2	2,346	0.4	824.6
2024	1,034	5,589	1	1,966.7	378.6	2,045	0.3	719.8
2025	729	4,085	1	1,410.9	266.2	1,491	0.3	515.0
2026	601	3,391	1	1,166.5	219.3	1,238	0.2	425.8
2027	518	2,924	1	1,006.1	189.1	1,067	0.2	367.2
2028	456	2,563	0	883.4	166.9	938	0.2	323.3
2029	400	1,969	0	728.6	146.2	719	0.0	265.9
2030	345	1,705	0	628.9	125.8	622	0.0	229.5
2031	300	1,492	0	549.2	109.7	545	0.0	200.5
2032	269	1,332	0	491.0	98.5	487	0.0	179.7
2033	232	1,107	0	416.5	84.7	404	0.0	152.0
2034	196	934	0	352.0	71.7	341	0.0	128.5
2035	127	629	0	231.4	46.2	230	0.0	84.5
2036	88	455	0	163.5	32.1	167	0.0	59.9
2037	6	32	0	11.5	2.3	12	0.0	4.2
<b>Total</b>					<b>4,411.2</b>	<b>24,790</b>	<b>4.2</b>	<b>8,547.0</b>

1. Project Gross means 100 percent interest.
2. Barrel of oil equivalent of gas uses a conversion ratio of 6 Mcf:1 bbl

**6.5 Overall Development Plan**

The Company owns and operates a gas compressor site and oil satellite within the Spirit River Area, with oil and gas processing and transportation also available from other operators in the area, all interconnected by existing pipeline infrastructure. Figure 6.5.1 shows the existing infrastructure and facilities owned or accessible by the Company to process and transport oil, solution gas and non-associated gas.

The Company anticipates the existing infrastructure and facilities will be suitable to handle existing declining production volumes and will drill additional horizontal Charlie Lake wells as additional processing capacity becomes available.

The development plan for the Spirit River Field is focused on horizontal development (infill) drilling within the existing Charlie Lake oil pool, where offsetting production has indicated sufficient rate and reserve potential exists to justify future capital expenditures. All undeveloped locations will be horizontal and approximately one mile in length or slightly less to conform to offset spacing regulations and will be multi-stage fracture stimulated.

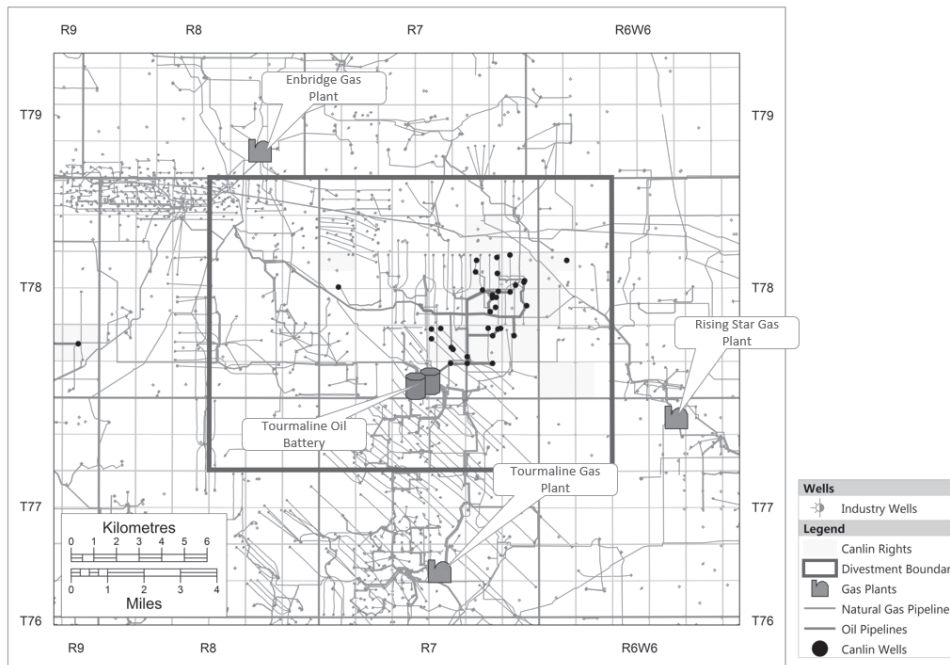


Figure 6.5.1 –Canlin Owned or Accessible Infrastructure in Spirit River Area

Proved reserves have been assigned to 14 undeveloped well locations and probable reserves to an additional 4 locations to give a total of 18 proved plus probable well locations, all targeting the Charlie Lake Formation.

The development forecast presented in this evaluation was based on capital budgets and a development program as presented by the Company under the scope of this evaluation and engagement. The development forecast presented in this report may not represent the full development potential of the lands evaluated.

Table 6.5-2 summarizes the timing and number of undeveloped well locations forecast to be drilled by year.

**Table 6.5-1 – Timing of Undeveloped Well Locations by Year**

	2018	2019	2020	2021	2022	2023
Proved	0	7	0	0	4	3
Proved Plus Probable	0	10	0	1	4	3

The development timing is beyond the recommended guidance in the COGE Handbook and is based on the anticipated timing of processing capacity being available in the existing third party operated processing facilities.

## 6.6 Methods of Estimation

The technically recoverable oil and gas volumes for most producing wells were estimated from production decline curve analyses (DCA) where sufficient data was available to establish production trends. The technical recoverable volumes for undeveloped wells and wells with short production histories were estimated by analogy or a combination of volumetric estimates and analogy, comparing to other wells in the same formation in the general area.

### 6.6.1. Decline Curve Analysis Estimation Method

DCA was completed on all producing and non-producing oil and gas wells with significant history to estimate the recoverable volumes. Production up to May 31, 2018 was reviewed on an individual well basis. Non-producing wells with assigned reserves were scheduled based on capital budgets and a development program as presented by the Company under the scope of this evaluation and engagement. The DCA results were considered reasonable considering other analytical techniques.



### 6.6.2 Analogy Estimation Method

Reserve were estimated by analogy for all undeveloped oil wells in the Spirit River Area. The initial rate and ultimate recovery of all wells completed and produced from the same formation as that targeted by the undeveloped well within the general area were reviewed. The average rate and recovered volumes of the wells reviewed were used to estimate the production profile for the undeveloped locations. The Charlie Lake wells in the Spirit River Area have a relatively short production life. The operator has been working to optimize the drilling and completion programs. As a result, all of the undeveloped wells have been assigned reserves based on the average expected recovery of the existing producers. The estimated ultimate oil recovery has been estimated at 150 and 200 thousand barrels for the proved and proved plus probable cases. Solution gas reserves have been assigned based on an average gas-oil ratio of the existing producers of approximately 4,500 scf/bbl.

### 6.7 Volumes of Gas Sales Products

Forecasts of raw volumes of gas were converted to sales volumes for reserves determination by applying a gas surface loss of 12 percent for the Spirit River Area to account for gas volumes used for fuel and flare and shrinkage due to the removal of gas by-products.

Volumes of gas sold in Western Canada are transacted on the basis of heat content of the gas. The actual gas sales revenues and volumes from the revenue statements were analyzed and compared to the actual posted sales price at the AECO-C sales hub to estimate the apparent heat content of the gas as sold. Sproule derived a sales volume heat content of 1,200 BTU/scf for gas from the Spirit River Area.

The Company's proved and probable by-product reserves and production forecasts were based on the recovery rates determined from revenue statements (barrels per MMcf of natural gas) and the natural gas reserves and production forecasts. Condensate volumes were estimated by applying a constant condensate-gas ratio against each producing gas well based on current ratios. The yields of the respective by-products are presented in Table 6.7-1 below.

**Table 6.7-1 – Gas By-Product Yields from Sales Gas Volumes**

Product	Yield (bbls/MMcf sales gas)
	Spirit River
C <sub>2</sub> - Ethane	0.02
C <sub>3</sub> -Propane	2.9
C <sub>4</sub> -Butane	5.2
C <sub>5</sub> + -Pentanes plus	6.6

These same ratios are also applied to the undeveloped locations.



## 7. General Business Discussion

### 7.1 General Description of the Company

Canlin Energy Corporation is a medium to large size petroleum and natural gas company with producing assets located throughout the Western Canada Sedimentary Basin, extending east into the north end of the Williston Basin. The assets owned by Canlin are generally of a mature state, with production from some wells having commenced in the 1950's.

### 7.2 Statement of Long Term Prospects

The Company's broad base of mineral rights has given them the opportunity to participate in a number of developing oil and gas plays in Western Canada that have occurred due to the technological development of multi-stage fracture stimulations in horizontal wellbores. The highest profile play at the current time being in the Montney Formation. The number of potential drilling locations that the Company has identified on their current land holdings allows them to plan development activity well beyond the time period allowed for the booking of proved and proved plus probable undeveloped reserves under NI 51-101.

### 7.3 Assessment of Technical Staff

Canlin operates many of their properties throughout Western Canada and has very experienced and qualified technical and operations staff. Canlin has conducted on-shore drilling programs with very challenging and complex geological conditions and has demonstrated their capability to adequately handle them safely and within budget. The management team in Calgary provides guidance and oversight on all upstream activities.

## 8. Economic Evaluation Discussion

### 8.1 Discounted Net Present Values

The net present values of the reserves are presented in millions of Canadian dollars and are based on annual projections of the future net revenue. Table 8.1-1 summarizes the net present values of the Assets at various discount rates before deduction of income taxes.

**Table 8.1-1 – Summary of Net Present Value Before Income Taxes  
As of May 31, 2018 (Forecast Prices and Costs)**

Reserves Category	Canlin Net Present Values of Future Net Revenue				
	Before Income Taxes				
	Discounted at (%/Year)				
	0 (MM\$Cdn)	5 (MM\$Cdn)	10 (MM\$Cdn)	15 (MM\$Cdn)	20 (MM\$Cdn)
<b>Alberta, Canada</b>					
<b>Total Proved</b>	36.8	28.0	21.5	16.7	13.2
<b>Total Proved Plus Probable</b>	83.6	63.1	48.6	38.3	30.8

### 8.2 Fiscal Terms

#### 8.2.1 Ownership

The Company's interests in the petroleum and natural gas leases in the Spirit River Area varies from 32.5 percent up to 100 percent working interest. The Company's average working interest in all the evaluated lands is 79.76 percent.

The working interest lands are subject to Crown lessor royalties, with some lands burdened by an additional overriding royalty.

A detailed list of interests and burdens by well is included in Appendix D.

### 8.2.2 Petroleum and Natural Gas Leases, Royalties and Taxes

The Province of Alberta in Canada, as representative of the Crown, owns the majority of the mineral rights on lands within its' borders. The Province administers the rights to Petroleum and Natural Gas through a tenure system where the right to develop and produce the respective commodity is granted to a lessee. The details of the system are described by the Province on their website as follows [8]:

*“The tenure system facilitates the leasing of rights that enable companies to explore for and develop petroleum and natural gas from Alberta's resources, for the benefit of the province's residents. The Alberta tenure system is looked upon by industry as one of the best in the world.*

*Alberta's Crown petroleum and natural gas rights are issued in the form of licences or leases through a competitive bid auction system. Public offerings (or sales) of petroleum and natural gas rights are held every two weeks. Notice of the parcels being offered are published on the department's website approximately eight weeks prior to the sale.*

*The Crown attaches several expectations to the licences and leases issued:*

- *Annual rent of \$3.50 per hectare must be paid for each hectare covered by the agreement;*
- *Tenure holders must meet all regulatory requirements;*
- *Lands in a licence are earned by the drilling of a well;*
- *A lease is proven productive at the end of its five-year term by drilling, producing, mapping, being part of a unit agreement or by paying offset compensation;*
- *If a lease is proven productive, it will continue indefinitely beyond the end of the term;*
- *The tenure ends when an agreement holder can no longer prove his agreement is capable of producing oil or gas in paying quantities or is lost through rental or royalty payment default or by voluntary surrender.”*

The primary term of all leases is 5 years with the right to continue indefinitely if commercial production of the lease product is continuing.

The lessor and overriding royalties applied in this evaluation were based on existing agreements and government regulations. The Crown royalty rates were based upon existing provincial regulations.

Alberta provincial regulations were revised as of January 1, 2017 to emulate a revenue minus cost royalty structure across all hydrocarbons. The structure incorporates a Drilling and Completion Cost Allowance (C<sup>\*</sup>), based on average industry drilling and completion costs, as a proxy for well costs. A company will pay a flat royalty of 5% on a well's early production until the well's total revenue, from all hydrocarbon products, equals C<sup>\*</sup>. Afterwards, the company will pay higher royalty rates that vary depending on the resource and market prices but will not exceed 36% for gas and natural gas liquids or 40% for oil and condensate. Royalty rates will drop to match declining production rates when the well reaches a Maturity Threshold [9].

Wells drilled between July 13, 2016 and December 31, 2016 were given the right to exercise an “early opt-in” to the new royalty framework, otherwise all wells drilled prior to the start date of the new regulations are subject to the previous royalty structure, including any incentive programs, but will transition to the new royalty structure after 10 years from the implementation date of the new program [10].

The Crown royalties also allow for the deduction of the capital and operating costs necessary to process and transport to market the royalty share of production. The eligible operating cost and third party processing component of this Gas Cost Allowance (GCA) used has been estimated at \$3.38/Mcf based on historical information supplied by the Company.

The Capital component of the GCA has been provided by the Company and applied to reduce the Corporate crown gas royalties payable. The remaining Capital component of GCA applicable to the Assets is negligible and does not appear in the cash flow reports.

All of the Company's leases in the evaluation are Crown leases and subject to Crown royalties.

Property taxes are applied against the assessed value of the wells and tangible assets.

Income taxes are assessed at the Corporate level and have not been included in this evaluation.

### **8.3 Economic Assumptions**

#### **8.3.1 Production Term**

All wells are forecast to produce until they are no longer economic. There are no lease or operating terms currently in place that would provide contractual limitations to the production forecast.

#### **8.3.2 Pricing**

The forecast of oil prices used in this evaluation were based on Sproule's May 31, 2018 price forecasts for Western Canada and are shown in Table 8.3.2-1. Sproule develops a proprietary price forecast for a range of international and North American oil and gas benchmarks and marker prices. Sproule's approach is based on a combination of short-term market based methods and long-term forecasts based on Sproule's view on market fundamentals.

Table 8.3.2-1 – Summary of Pricing Forecast and Assumptions as of May 31, 2018

Year	WTI	Canadian <sup>(1)</sup>	Western <sup>(1)</sup> Canada	Alberta	Edmonton				Operating Cost		Exchange
	Cushing	Light Sweet	Select	AECO-C	Pentanes	Edmonton	Edmonton	Ethane Plant	Inflation	Capital	Rate <sup>(3)</sup>
	Oklahoma	Crude	20.5 API	Spot	Plus	Butane <sup>(4)</sup>	Propane <sup>(5)</sup>	Gate	Rate <sup>(2)</sup>	Cost Inflation	Rate <sup>(3)</sup>
	(\$US/bbl)	(\$Cdn/bbl)	(\$Cdn/bbl)	(\$Cdn/MMbtu)	(\$Cdn/bbl)	(\$Cdn/bbl)	(\$Cdn/bbl)	(\$Cdn/bbl)	(%/Yr)	Rate <sup>(2)</sup> (%/Yr)	(\$US/\$Cdn)
<b>Historical</b>											
2013	97.98	93.27	74.93	3.13	105.48	69.88	38.37	8.68	1.0%	0.7%	0.97
2014	93.00	93.99	81.06	4.50	102.39	68.02	44.42	12.46	2.0%	-1.0%	0.91
2015	48.80	57.45	44.83	2.70	61.45	36.81	6.17	7.49	1.8%	-23.2%	0.78
2016	43.32	52.80	38.89	2.18	55.71	34.32	13.60	6.05	1.2%	-3.4%	0.76
2017	50.95	61.84	48.78	2.19	67.21	44.11	28.77	6.11	1.7%	-3.4%	0.77
2018 <sup>(5mo.)</sup>	64.99	73.00	53.26	1.72	82.84	46.27	29.97	4.75	1.6%	1.6%	0.79
<b>Forecast</b>											
2018 <sup>(7mo.)</sup>	67.00	79.72	58.20	1.90	82.91	55.13	31.76	5.26	0.0%	0.0%	0.79
2019	65.00	74.51	59.61	2.50	75.61	55.49	31.82	6.93	2.0%	2.0%	0.82
2020	70.00	78.24	64.94	3.12	78.82	57.65	35.41	8.64	2.0%	2.0%	0.85
2021	73.00	82.45	68.43	3.32	82.35	60.12	37.85	9.21	2.0%	2.0%	0.85
2022	74.46	84.10	69.80	3.65	84.07	61.32	39.29	10.11	2.0%	2.0%	0.85
2023	75.95	85.78	71.20	3.74	85.82	62.55	40.25	10.37	2.0%	2.0%	0.85
2024	77.47	87.49	72.62	3.83	87.61	63.80	41.23	10.62	2.0%	2.0%	0.85
2025	79.02	89.24	74.07	3.93	89.43	65.07	42.23	10.89	2.0%	2.0%	0.85
2026	80.60	91.03	75.55	4.03	91.29	66.37	43.26	11.16	2.0%	2.0%	0.85
2027	82.21	92.85	77.06	4.13	93.19	67.70	44.30	11.43	2.0%	2.0%	0.85
2028	83.85	94.71	78.61	4.23	95.12	69.06	45.36	11.72	2.0%	2.0%	0.85

Escalation Rate of 2.0% thereafter

- (1) This summary table identifies benchmark reference pricing schedules that might apply to a reporting issuer. See Appendix B for more details.
- (2) Inflation rates for forecasting prices and costs.
- (3) Exchange rates used to generate the benchmark reference prices in this table.
- (4) Edmonton Par prior to 2014.
- (5) Source Change 2013-01.
- (6) Source Change 2013-07.

**Notes:**

Product sale prices will reflect these reference prices with further adjustments for quality and transportation to point of sale.

### 8.3.2.1 Oil Pricing

The oil price forecasts set out in Table 8.3.2-1 represent Sproule's long-term forecast which has been set at \$73.00 US per barrel for West Texas Intermediate (WTI) in 2021 with an escalation rate of 2.0% thereafter.

In the near term the Canadian economy faces many headwinds in combination with the US Federal Reserve tightening monetary policy leading to weakness in the Canadian dollar. We expect the Canadian dollar to continue to be correlated to the price of oil over the forecast period. The exchange rate (\$U.S. per \$Canadian) reflects a long-term projection of \$0.85.

Sproule's price outlook for Canadian crudes sees the current differential between WTI and Canadian Light Sweet (CLS) narrowing over the forecast period. With pipeline infrastructure experiencing delays, rail has proven to be an effective method to improve takeaway capacity. The low capital investment required, short time frame for constructing a new loading terminal and the ability to access key markets flexibly suggest that rail will continue to play an important role in the transportation of crude. While Canadian light oil faces competition from US light tight oil (LTO) plays, new market opportunities are arising for Canadian heavy crudes. US Gulf Coast refiners are increasingly seeking Canadian heavy oil as imports from Venezuela and Mexico decline. The dynamics affecting Canadian oil prices are reflected in a long-term narrowing of the CLS differential to 96% of WTI and the Western Canada Select (WCS) differential to 83% of CLS.

### 8.3.2.2 Gas Pricing

The NYMEX futures price for gas bought and sold at Henry Hub in Louisiana is the dominant index for North American gas prices. In Alberta and Saskatchewan, the AECO price is a reflection of the market price for natural gas sold locally, while the BC Westcoast Station 2 price is critical to the BC producer. Natural gas prices are generally reflective of regional factors affecting supply and demand.

Increased supply from development in US shale plays like the Utica and Marcellus combined with increased associated gas volumes from LTO production will introduce some near-term risk to US gas prices. However, demand for natural gas in the US faces many positive catalysts over the forecast period. Significant demand growth is anticipated from the industrial sector, petrochemicals, the switching from coal to natural gas for power plants and the development of pipeline infrastructure to export natural gas from the US to Mexico. Also, significant liquified natural gas export capacity (close to 10 bcf/d) is now either on-stream or currently under construction.

In the United States, Sproule expects a long-term price of \$3.75 US per MMBtu by 2020 for Henry Hub, reflecting long-term full cycle marginal costs, with an escalation rate of 2.0% thereafter.

Supply growth in the US has put pressure on the future of Canadian natural gas prices as market access becomes more limited for the Canadian producer. In Canada, industrial demand growth for natural gas is weak compared to the United States. LNG export projects represent a significant opportunity for Canada but face challenges in their development including high costs and lengthy regulatory approval processes. The estimated first shipment date from Canadian LNG projects has become uncertain. Several projects have now been cancelled.

The long-term price of Alberta AECO-C is expected to be \$3.12 CAD per MMBtu in 2020 with a 2.0% escalation rate thereafter. Detailed price forecasts for natural gas are set out in Table 8.3.2-1. The actual plantgate price will vary with the heat content of the natural gas and the cost of transportation from the plantgate to the trading hub. In the absence of actual natural gas price statistics, the differential is based on the price of natural gas in the area.

#### **8.3.2.3 Natural Gas By-Products**

Sproule and GPMi are collaborating to produce a price outlook for Western Canadian Natural Gas Liquids. The pricing methodology has changed for ethane, propane, butane and condensate. Ethane is typically sold under mid to long term, cost plus contracts. The methodology utilized in this outlook is based on shrinkage value and corresponds to the price of gas at AECO. Propane value is a function of gas value as well as differentials from mid-continent markets. Butane and condensate tend to be priced with reference to crude prices as the dominant demand drivers are refining and diluent markets. Detailed price forecasts for natural gas by-products are set out in Table 8.3.2-1. The prices for these by-products were adjusted in this report to reflect the actual prices received at the plantgate.

Table 8.3.2-2 – Summary of Price Offsets to Forecast Price

Product	Price Offset to Marker
	Spirit River
CrudeOil (\$/bbl) (Canadian Light Sweet)	-1.75
Sales Gas (\$/Mcf)	-0.10
C <sub>2</sub> - Ethane (\$/bbl)	-3.90
C <sub>3</sub> -Propane (\$/bbl)	-9.50
C <sub>4</sub> -Butane (\$/bbl)	-10.00
C <sub>5</sub> +Pentanes plus (\$/bbl)	-1.60
Condensate (\$/bbl)	-1.60

### 8.3.3 Capital Costs

The Company provided estimates of the capital costs required to develop the undeveloped locations. These estimates are summarized in Tables 8.3.3-1.

Table 8.3.3-1 – Summary of Project Gross<sup>1</sup> Capital Costs in 2018

Dollars for Spirit River (MM\$Cdn)

Year	Proved					Proved Plus Probable				
	Number of Wells to be Drilled	Well Drilling Capital	Complete Capital	Well Equipment and Tie-In Capital	Total Capital <sup>2</sup>	Number of Wells to be Drilled	Well Drilling Capital	Complete Capital	Well Equipment and Tie-In Capital	Total Capital <sup>2</sup>
2018	0	0.0	0.0	0.0	0.0	0	0.0	0	0	0
2019	7	11.9	7.0	4.7	23.6	10	17.0	10.0	6.8	33.8
2020	0	0.0	0.0	0.0	0.0	0	0.0	0	0	0
2021	0	0.0	0.0	0.0	0.0	1	1.7	1.0	0.7	3.4
2022	4	6.8	4.0	2.7	13.5	4	6.8	4.0	2.7	13.5
2023	3	5.1	3.0	2.0	10.1	3	5.1	3.0	2.0	10.1
Total <sup>2</sup>	14	23.8	14.0	9.5	47.3	18	30.6	18.0	12.2	60.8

1. Project Gross means 100 percent interest
2. Values may not add due to rounding



### 8.3.4 Operating Costs

The Company provided Sproule with full year operating statements in Canadian dollars for 2015, 2016, and 2017. The operating statement provided for 2018 included actual costs for the first five months of the year. The operating statements were used to calculate the operating costs used for the evaluation, shown in Table 8.3.4-1.

**Table 8.3.4-1 – Summary of Project Gross<sup>1</sup> Operating Cost Assumptions in 2018 Dollars**

	Cost Unit	Spirit River
<b>Fixed Facility Operating</b>	\$Cdn/month	20,833 <sup>2</sup>
<b>Fixed Well Operating</b>	\$Cdn/well/month	14,000
<b>Variable Oil Operating</b>	\$Cdn/bbl	6.80
<b>Variable Gas Operating</b>	\$Cdn/Mcf sales	3.30
<b>Oil Transport</b>	\$Cdn/boe	4.50
<b>Gas Transport</b>	\$Cdn/Mcf	0.40

1. Project Gross means 100 percent interest
2. Decreasing by 1/3 to \$13,960 when production rates decrease by 50% of the 2018 starting rates and by another 1/3 to \$9,375 when rates decrease to 25% of the 2018 starting rates.

### 8.3.5 Abandonment Costs

Abandonment and reclamation costs represent all costs associated with the process of restoring a company's properties, which have been disturbed by oil and gas activities, to a standard imposed by applicable government or regulatory authorities. Pursuant to guidance provided by regulatory agencies, the costs included in this evaluation do not represent the total decommissioning liabilities of the Company but only those costs related to abandonment and reclamation of active wells and material dedicated facilities associated with the Company's active oil and gas activities in a property. Hence, decommissioning liabilities associated with various non-producing wells, gathering systems and various processing facilities may not be included in this evaluation. Examples of material dedicated facilities could be SAGD projects, offshore projects or properties where it is clear that the facilities are dedicated to a given property. This is not meant to include minor facilities such as tanks, dehydrators etc., or non-material facilities that service small or multiple properties.

The Company was requested to provide abandonment and reclamation costs for all existing development, material dedicated facilities, and future development evaluated in this report.

Final abandonment and reclamation costs included in this report have been prepared and included as follows:

Abandonment and reclamation costs for existing wells with economic developed reserves assigned in this report have been estimated by the Company and were included in the report at the entity level.

The Company identified no material dedicated facilities for which abandonment and reclamation costs have been included.

Abandonment and reclamation costs for future development drilling locations have been estimated by the Company and were included in the report at the entity level.

The Company identified no future material dedicated facilities development for which abandonment and reclamation costs have been included.

This report does not include abandonment and reclamation costs associated with active producing wells, which were not economic to produce under the forecast prices utilized in this report, active service wells, inactive wells, and various active or inactive gathering and processing facilities, that the Company holds an interest in, that were not identified as being material dedicated facilities by the Company.

No allowances for salvage were incorporated into the abandonment and reclamation costs contained in this report.

The abandonment cost per well used in the report in the Spirit River Area was \$122,000 per well. The abandonment expenditure for all entities was incurred 60 months after the last month of production of that entity.

### 8.3.6 Sensitivity Analysis

Sproule performed sensitivity analyses on the total proved plus probable case of key assumptions of price and costs, the results of which are presented in Table 8.3.6-1.

**Table 8.3.6-1 – Summary of Sensitivity Analyses**

Variable	Sensitivity	Asset Value Impact <sup>(1)</sup>	
		Plus	Minus
\$CdnMM			
Commodity Price	+/- 5%	7.07	-7.25
Operating Costs	+/- 20%	-16.46	17.06
Capital Costs	+/- 20%	-8.65	8.65

(1) Based on NPV discounted at 10% before tax.

## 9. Social and Environmental Discussion

Western Canada has a long history of petroleum exploration and production activities and is governed by mature petroleum regulation systems covering both social and environmental issues.

Canlin is proficient and professional in both technical and administrative aspects of the exploration and production activities in Western Canada. Additionally, Canlin's Health, Safety and Environment (HSE) policies emphasize sound HSE performance as one of the foundations for sustainable development.

## 10. Basis of Opinion

### 10.1 Evaluation Results

The accuracy of reserves estimates and associated economic analysis is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data provided at the time this report was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that reservoir and financial performance subsequent to the date of the estimates may necessitate revision. These revisions may be material.

The net present values of the reserves presented in this report simply represent discounted future cash flow values at several discount rates. Though net present values form an integral part of fair market value estimations, without consideration for other economic criteria, they are not to be construed as Sproule's opinion of fair market value.

The Competent Person's Report has been prepared within the context of the Competent Person's understanding of the effects of petroleum legislation, taxation and other regulations.

Interests, burdens, and other data provided by the Company were accepted as represented, without any further investigation by Sproule. Sproule has no reason to believe the data supplied by the Company is inaccurate or misleading. A Representation Letter to confirm the accuracy, completeness, and availability of data furnished to Sproule during the preparation of this report was provided by the Company.

The Competent Person's Report represents an independent opinion based on the information provided by the Company, from public sources, and from the non-confidential files of Sproule.

The Competent Person's Report was performed under an Engagement Agreement that contains standard clauses pertaining to indemnification and liability. Sproule is indemnified by the Company and MIE for misstatements owing to the reliance by Sproule on data and interpretations provided by the Company and MIE, whether directly or indirectly from third parties. Sproule is not indemnified for acts of willful misconduct performed by its management or staff.

## 10.2 Risks

This report may contain forward-looking statements including expectations of future production revenues and capital expenditures. Information concerning reserves may also be deemed to be forward-looking as estimates involve the implied assessment that the reserves described can be profitably produced in the future. These statements are based on current expectations that involve a number of risks and uncertainties, which could cause actual results to differ from those anticipated. These risks include, but are not limited to: the underlying risks of the oil and gas industry (i.e., corporate commitment, regulatory approval, operational risks in development, exploration and production); potential delays or changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserves estimations; the uncertainty of estimates and projections relating to production; costs and expenses; health, safety and environmental factors; commodity prices; and exchange rate fluctuation.

### 10.2.1 Guidance Note 7

In accordance with Guidance Note 7 of the Stock Exchange of Hong Kong Limited ("SEHK"), Sproule has completed a risk analysis addressing the areas of risk along with an assessment of the degree of risk for the proved and probable reserves evaluated in this report. These assessments are necessarily subjective and qualitative. SEHK has classified risk from minor to major, which can be further clarified as:

- Major Risk: the factor poses an immediate danger of a failure, which if uncorrected, will have a material effect (>15% to 20%) on the project cash flow and performance and could potentially lead to project failure.
- Moderate Risk: the factor, if uncorrected, could have a significant effect (10% to 15%) on the project cash flow and performance unless mitigated by some corrective action.
- Minor Risk: the factor, if uncorrected, will have little or no effect (<10%) on project cash flow and performance.

The likelihood of a risk occurring within a 7-year time frame has been assessed as follows:

- Likely: will probably occur
- Possible: may occur
- Unlikely: unlikely to occur

The degree or consequence of a risk and its likelihood are combined into an overall risk assessment matrix by SEHK as presented in Table 10.2.1-1.

Table 10.2.1-1 – Overall Risk Assessment Matrix

Likelihood of Risk (within 7 years)	Consequence Rating		
	Minor	Moderate	Major
Likely	Medium	High	High
Possible	Low	Medium	High
Unlikely	Low	Low	Medium

A summary of the main risks associated with the proved and probable reserves evaluated in this report are shown below in Table 10.2.1-2.

Table 10.2.1-2 – Project Risk Assessment

Hazard/Risk Issue	Likelihood of Risk Occurring	Consequence Rating	Risk
<b>Geological</b>			
Lack of Significant Source	Unlikely	Minor*	Low
Lack of Significant Migration Timing and Preservation	Unlikely	Minor*	Low
Lack of Significant Trap	Unlikely	Minor*	Low
Lack of Significant Reservoir	Unlikely	Minor*	Low
<b>Engineering</b>			
Reduction in reserves significantly outside of the certainty levels of COGE Handbook	Unlikely	Major	Medium
Reduction in production forecasts significantly outside of the certainty levels of COGE Handbook	Unlikely	Major	Medium
<b>Economic Conditions</b>			
Decrease in oil prices	Possible	Major	High
Increase in Inflation	Possible	Minor	Low

Table 10.2.1-2 – Project Risk Assessment (cont'd)

Hazard/Risk Issue	Likelihood of Risk Occurring	Consequence Rating	Risk
Exchange Rate Fluctuation	Possible	Minor	Low
Reduced Market	Unlikely	Moderate	Low
<b>Commercial</b>			
Change in Corporate Commitment	Unlikely	Moderate	Medium
Delays in Development Plan	Possible	Moderate	Medium
Regulatory Approval	Unlikely	Major	Medium
Country Risk (Political/Regulatory)	Unlikely	Moderate	Low
Operational Interruption (Third Party/Weather)	Likely	Minor	Medium
Cyber-Security/Terrorism	Unlikely	Major	Medium
<b>Capital and Operating Costs</b>			
Increased Capital Cost	Possible	Minor	Medium
Underestimation of Operating Costs	Possible	Minor	Medium
<b>Environment</b>			
Oil Spill	Unlikely	Major	Medium
Abandonment Funding	Unlikely	Minor	Low

\* Consequence Rating classified as Minor, as Risk is already mitigated.



*Geological*

The overall chance of geological success is the aggregation of the chance of encountering all the individual geological aspects required for the formation of a hydrocarbon accumulation (reservoir, trap, migration timing and preservation). The oil and gas assets in the Spirit River Area, evaluated by Sproule, were categorized as proved and probable reserves. These assets are geologically well defined by seismic and well logs and are on production. The petroleum system related to the evaluated assets is discussed in Section 5.2. The chance of encountering geological aspects in these assets is very high and hence the overall geological risk is assessed to be very low.

*Engineering*

Proved reserves are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.

Probable reserves are those additional reserves which are less likely to be recovered than proved reserves but more certain to be recovered than possible reserves. When probabilistic methods are used, there should be at least a 50% probability that the quantities actually recovered will equal or exceed the sum of estimated proved plus probable reserves.

*Economic Conditions*

Sproule considered several economic risk factors in its assessment. Short-term market volatility in the price of crude oil and natural gas continues to represent commodity price risk. However, long-term market fundamentals for oil point to continued demand growth in world markets such that the market will fully and sustainably rebalance in the 2018 – 2020 timeframe. A catalyst in the movement towards rebalancing was the production cuts made by OPEC during 2017 and the commitment to continue these cuts through to the end of 2018.

Supply growth in the US has put pressure on the future of Canadian natural gas prices as market access becomes more limited for the Canadian producer. In Canada, industrial demand growth for natural gas is weak compared to the United States. LNG export projects represent a significant opportunity for Canada but face challenges in their development including high costs and lengthy regulatory approval processes. The estimated first shipment date from Canadian LNG projects has become uncertain. Several projects have now been cancelled.

*Commercial*

To be included in the reserves class, a project must be sufficiently defined to establish its commercial viability. There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of firm intention to proceed with development within a reasonable time frame.

The overall commercial risks are tied to corporate commitment, development plan delays, regulatory approval, country risk, operational interruptions, and terrorist attacks. The corporate commitment is likely to remain strong given the nature of the operator and the political will to optimize production of domestic petroleum assets. A delay in the development plan may be possible and could have a moderate impact on cash flows, which at a minimum would be shifted out with the associated impact on the net present value of project cash flows.

Country risk is a broad-based term to cover off any other market risks associated with investing in a particular country, such as a change in government policy (including climate change issues), nationalization of assets or similar events. Typical indicators of country risk, such as credit default swap spreads to mature markets, suggest that the overall country risk in Canada is relatively low.

The Company is currently subject to operational interruptions due to the fluctuating nature of processing capacity available in third party operated facilities which process production from the Assets. These interruptions are expected to continue on an intermittent basis for the next two to three years but the risk of these interruptions continuing beyond this time period is low as the locations available for development to the third party operator are reduced and the volume from existing producing wells decreases due to natural decline.

Extreme and/or severe weather conditions normally occur annually for periods of a few days to a couple of weeks in the areas of the Assets, occasionally causing operational interruptions. The design of equipment installed in the area and the operation thereof is intended to minimize the risk of permanent damage to the equipment during these periods of interruption.

The Assets could be the target of a terrorist attack. As the Assets are located in a relatively remote part of Northern Alberta, the risk to these is viewed as low. Attacks against downstream infrastructure upon which the operations rely, such as pipelines, pumping (compression and terminaling facilities) could also affect the operations of the Assets, but this risk is also viewed as low.

The digital systems upon which the operations of the Company and of the Assets rely could be the target of cyber-terrorism. The Company has a computing systems group who continually monitor for these types of threats and the Company implements policies intended to minimize the impact of any such action. The risk of a cyber-terrorist attack impacting cash flows in a significant manner is viewed as low.

*Capital and Operating Costs*

It is possible that the project may suffer from increased capital and operating costs, which will have an impact on project cash flows and returns. Based on a sensitivity analysis on the impact of increases to capital and operating costs, quite significant changes would be required before this would have even a moderate impact on cash flows.

*Environmental*

The consequences of an oil spill in the Spirit River Area is relatively low. There are a number of streams and rivers bisecting the area; however, all the oil wells require artificial lift to produce and thus any uncontrolled release of fluids can be relatively quickly and easily managed and brought under control. The oil and gas industry in Western Canada has a strong track record of responsible development and the probability of a major spill is viewed as unlikely.

There is a chance that the Company may not have sufficient funds available to fulfill its well and facility abandonment obligations but in the context of overall likely impact on cash flows, the risk is viewed as low.

**10.3 Exclusivity**

This report has been prepared for the exclusive use of Canlin Energy Corporation and MIE Holdings Corporation. It may not be reproduced, distributed, or made available to any other company or person, regulatory body, or organization without the knowledge and written consent of Sproule, and without the complete contents of the report being made available to that party.

#### 10.4 Report Preparation

The report entitled "Independent Competent Person's Report of Certain P&NG Reserves in Alberta, Canada of Canlin Energy Corporation for MIE Holdings Corporation (As of May 31, 2018)" was prepared by the following Sproule personnel:

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Barrett R. Hanson, P.Eng., SPEC  
Project Leader;  
Senior Petroleum Engineer  
     19 / 09 / 2018      dd/mm/yr

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Alec Kovaltchouk, P.Geo.  
VP, Geoscience  
     19 / 09 / 2018      dd/mm/yr

##### 10.4.1 Sproule Executive Endorsement

This report has been reviewed and endorsed by the following Executive of Sproule:

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Cameron P. Six, P.Eng.  
President and CEO  
     19 / 09 / 2018      dd/mm/yr

##### 10.4.2 Permit to Practice

Sproule Associates Limited is a member of the Association of Professional Engineers and Geoscientists of Alberta and our permit number is P00417.

## 11. References

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- [2] The Editors of Encyclopaedia Britannica: Alberta Basin, Encyclopedia Britannica Inc. May 17, 2010 <<https://www.britannica.com/place/Alberta-Basin>>, [Accessed: August 30, 2018]
- [3] Alberta Geological Survey (2017): Mountain Building and the Alberta Basin. <<https://ags.aer.ca/mountain-building-and-the-alberta-basin>> [Accessed: August 30, 2018]
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- [7] Creaney, S. et al (1994): Petroleum Generation and Migration; in Geological Atlas of the Western Canada Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.), Canadian Society of Petroleum Geologists and Alberta Research Council, URL , <<https://ags.aer.ca/publications/chapter-3-structure-and-architecture>> [Accessed: March 28, 2018]
- [8] What is Tenure? <<http://www.energy.gov.ab.ca/Tenure/About/Pages/WIT.aspx>> [Accessed: September 12, 2018] .
- [9] Brochure titled "Alberta's Modernized Royalty Framework Overview", Alberta Government, published February 23, 2017.
- [10] "Alberta at a Crossroads – Royalty Review Advisory Panel Report", page 60, Royalty Review Panel chaired by Dave Mowat, released January 28, 2016.

## Appendix A — Reserve Definitions

The following definitions form the basis of our classification of reserves and values presented in this report. The definitions are those set out in National Instrument 51-101 ("NI 51-101") and/or the Canadian Oil and Gas Evaluation Handbook as amended from time to time (the "COGE Handbook"), maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter) and incorporated into NI 51-101 by reference.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, from a given date forward, based on:

- analysis of drilling, geological, geophysical and engineering data;
- the use of established technology;
- specified economic conditions, which are generally accepted as being reasonable, and shall be disclosed; and
- a remaining reserve life of 50 years.

Reserves are classified according to the degree of certainty associated with the estimates.

### 1. Proved Reserves

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.

### 2. Probable 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.

### 3. Possible Reserves

Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated proved plus probable plus possible reserves. Possible reserves have not been considered in this report.

Other criteria that must also be met for the categorization of reserves are provided in Section 5.5 of the COGE Handbook.

Each of the reserves categories (proved, probable, and possible) may be divided into developed or undeveloped categories.

**4. Developed 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. The developed category may be subdivided into producing and non-producing.

**5. Developed Producing Reserves**

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.

**6. Developed Non-Producing Reserves**

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.

**7. Undeveloped Reserves**

Undeveloped reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., 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.

In multi-well pools, it may be appropriate to allocate total pool reserves between the developed and undeveloped categories or to subdivide the developed reserves for the pool between developed producing and developed non-producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities, and completion intervals in the pool and their respective development and production status.

## 8. Levels of Certainty for Reported Reserves

The qualitative certainty levels contained in the definitions in Sections 1, 2 and 3 are applicable to individual reserves entities, which refers to the lowest level at which reserves estimates are made, and to reported reserves, which refers to the highest level sum of individual entity estimates for which reserve estimates are made.

Reported total reserves estimated by deterministic or probabilistic methods, whether comprised of a single reserves entity or an aggregate estimate for multiple entities, should target the following levels of certainty under a specific set of economic conditions:

- a. There is a 90% probability that at least the estimated proved reserves will be recovered.
- b. There is a 50% probability that at least the sum of the estimated proved reserves plus probable reserves will be recovered.
- c. There is a 10% probability that at least the sum of the estimated proved reserves plus probable reserves plus possible reserves will be recovered.

A quantitative measure of the probability associated with a reserves estimate is generated only when a probabilistic estimate is conducted. The majority of reserves estimates will be performed using deterministic methods that do not provide a quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with reserves estimates and the effect of aggregation is provided in Section 5.5.3 of the COGE Handbook. Whether deterministic or probabilistic methods are used, evaluators are expressing their professional judgement as to what are reasonable estimates.

9. **Remaining Recoverable Reserves** are the total remaining recoverable reserves associated with the acreage in which the Company has an interest.
10. **Company Gross Reserves** are the Company's working interest share of the remaining reserves, before deduction of any royalties.
11. **Company Net Reserves** are the gross remaining reserves of the properties in which the Company has an interest, less all Crown, freehold, and overriding royalties and interests owned by others plus all royalty interest volumes received.



12. **Net Production Revenue** is income derived from the sale of net reserves of oil, non-associated and associated gas, and gas by-products, less all capital and operating costs.
13. **Fair Market Value** is defined as the price at which a purchaser seeking an economic and commercial return on investment would be willing to buy, and a vendor would be willing to sell, where neither is under compulsion to buy or sell and both are competent and have reasonable knowledge of the facts.
14. **Barrels of Oil Equivalent (BOE) Reserves** – BOE is the sum of the oil reserves, plus the gas reserves divided by a factor of 6, plus the natural gas liquid reserves, all expressed in barrels or thousands of barrels. Equivalent reserves can also be expressed in thousands of cubic feet of gas equivalent (McfGE) using a conversion ratio of 1 bbl:6 Mcf.
15. **Oil (or Crude Oil)** – a mixture consisting mainly of pentanes and heavier hydrocarbons that exists in the liquid phase in reservoirs and remains liquid at atmospheric pressure and temperature. Crude oil may contain small amounts of sulphur and other non-hydrocarbons, but does not include liquids obtained from the processing of natural gas. Crude oil volumes are further divided into Product Types, for reporting purposes.
16. **Gas (or Natural Gas)** – a mixture of lighter hydrocarbons that exist either in the gaseous phase or in solution in crude oil in reservoirs, but are gaseous at atmospheric conditions. Natural gas may contain sulphur or other non-hydrocarbon compounds. Natural Gas volumes are further divided into Product Types, for reporting purposes.
17. **Non-Associated Gas** – an accumulation of natural gas in a reservoir where there is no crude oil.
18. **Associated Gas** – the gas cap overlying a crude oil accumulation in a reservoir.
19. **Solution Gas** – gas dissolved in crude oil.
20. **Natural Gas By Products** – those components that can be removed from natural gas including, but not limited to, ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.
21. **Product Types** - sub-classify the principle product types of petroleum, crude oil, gas and by-products, into specific groupings based on the properties of the hydrocarbon and the properties of the accumulation and reservoir rock from which it is found. Regulatory agencies may define in legislation the production types they require to be used for reporting purposes in their jurisdiction. The Canadian Securities Associations (CSA) defines the following Product Types for reporting purposes in National Instrument 51-101, effective July 1, 2015.

**Crude Oil**

- I) **Light Crude Oil** means crude oil with a relative density greater than 31.1 degrees API gravity;
- II) **Medium Crude Oil** means crude oil with a relative density greater than 22.3 degrees API gravity and less than or equal to 31.1 degrees API gravity;
- III) **Heavy Crude Oil** means crude oil with a relative density greater than 10 degrees API gravity and less than or equal to 22.3 degrees API gravity;
- IV) **Tight Oil** means crude oil:
  - a. contained in dense organic rich rocks, including low-permeability shales, siltstones and carbonates, in which the crude oil is primarily contained in microscopic pore spaces that are poorly connected to one another, and
  - b. that typically requires the use of hydraulic fracturing to achieve economic production rates;
- V) **Bitumen** means a naturally occurring solid or semi-solid hydrocarbon:
  - a. consisting mainly of heavier hydrocarbons, with a viscosity greater than 10,000 millipascal-seconds (mPa·s) or 10,000 centipoise (cP) measured at the hydrocarbon's original temperature in the reservoir and at atmospheric pressure on a gas-free basis, and
  - b. that is not primarily recoverable at economic rates through a well without the implementation of enhanced recovery methods;
- VI) **Synthetic Crude Oil** means a mixture of liquid hydrocarbons derived by upgrading bitumen, kerogen or other substances such as coal, or derived from gas to liquid conversion and may contain sulphur or other compounds;

**Natural Gas**

- VII) **Conventional Natural Gas** means natural gas that has been generated elsewhere and has migrated as a result of hydrodynamic forces and is trapped in discrete accumulations by seals that may be formed by localized structural, depositional or erosional geological features;
- VIII) **Coal Bed Methane** means natural gas that
  - a) primarily consists of methane, and
  - b) is contained in a coal deposit;
- IX) **Shale Gas** means natural gas:
  - a) contained in dense organic-rich rocks, including low-permeability shales, siltstones and carbonates, in which the natural gas is primarily adsorbed on the kerogen or clay minerals, and
  - b) that usually requires the use of hydraulic fracturing to achieve economic production rates;

- X) **Synthetic Gas** means a gaseous fluid:
- a) generated as a result of the application of an in-situ transformation process to coal or other hydrocarbon-bearing rock, and
  - b) comprised of not less than 10% by volume of methane;
- XI) **Gas Hydrate** means a naturally occurring crystalline substance composed of water and gas in an ice-lattice structure;

**By-Products**

- XII) **Natural Gas Liquids** means those hydrocarbon components that can be recovered from natural gas as a liquid including, but not limited to, ethane, propane, butanes, pentanes plus, and condensates.
- XIII) **Sulphur** is a non-hydrocarbon elemental by-product of gas processing and oil refining.

## Appendix B — Abbreviations, Units, Conversion Factors and Formation Names

### Abbreviations

ARF	Alberta royalty framework (pre 2017)
AOF	absolute open flow
BOE	barrels of oil equivalent
bpd	barrels per day
bopd	barrels of oil per day
bwpd	barrels of water per day
Cr	Crown
DPIIP	discovered petroleum initially-in-place
DSU	drilling spacing unit
FH	Freehold
GCA	gas cost allowance
GOR	gas-oil ratio
GORR	gross overriding royalty
LPG	liquid petroleum gas
LRR	lease royalty rate
McfGE	thousands of cubic feet of gas equivalent
Mcfpd	thousands of cubic feet per day
MPR	maximum permissive rate
MRF	Alberta modernized royalty framework (post 2016)
MRL	maximum rate limitation
NC	'new' Crown
NCI	net carried interest
NGL	natural gas liquids
NORR	net overriding royalty
NPI	net profits interest
NRA	no reserves assigned
NRI	net revenue interest
NPV	net present value
OC	'old' Crown
ORRI	overriding royalty interest
P&NG	petroleum and natural gas
PSU	production spacing unit
PVT	pressure-volume-temperature
TPIIP	total petroleum initially-in-place
Unecon	uneconomic reserves evaluation case
UPIIP	undiscovered petroleum initially-in-place
WI	working interest

**Imperial and Metric Units**

Imperial Units			Metric Units	
M (10 <sup>3</sup> )	thousand		<b>Prefixes</b>	k (10 <sup>3</sup> )
MM (10 <sup>6</sup> )	million	M (10 <sup>6</sup> )		mega
B (10 <sup>9</sup> )	billion	G (10 <sup>9</sup> )		giga
T (10 <sup>12</sup> )	trillion	T (10 <sup>12</sup> )		tera
Q (10 <sup>15</sup> )	quadrillion	P (10 <sup>15</sup> )		peta
in.	inches	<b>Length</b>	cm	centimetres
ft	feet		m	metres
mi	miles		km	kilometres
ft <sup>2</sup>	square feet	<b>Area</b>	m <sup>2</sup>	square metres
ac	acres		ha	hectares
cf or ft <sup>3</sup>	cubic feet	<b>Volume</b>	m <sup>3</sup>	cubic metres
scf	standard cubic feet		L	litres
gal	gallons		e <sup>6</sup> m <sup>3</sup>	million cubic metres
Mcf	thousand cubic feet		m <sup>3</sup>	cubic metres
MMcf	million cubic feet		e <sup>3</sup> m <sup>3</sup>	thousand cubic metres
Bcf	billion cubic feet		stm <sup>3</sup>	stock tank cubic metres
bbl	barrels			
Mbbl	thousand barrels			
stb	stock tank barrels			
bbl/d	barrels per day	<b>Rate</b>	m <sup>3</sup> /d	cubic metre per day
Mbbl/d	thousand barrels per day		e <sup>3</sup> m <sup>3</sup> /d	thousand cubic metres
Mcf/d	thousand cubic feet per day		e <sup>3</sup> m <sup>3</sup> /d	thousand cubic metres
MMcf/d	million cubic feet per day		e <sup>6</sup> m <sup>3</sup> /d	million cubic metres
Btu	British thermal units	<b>Energy</b>	J	joules
oz	ounces	<b>Mass</b>	g	grams
lb	pounds		kg	kilograms
ton	tons		t	tonnes
lt	long tons			
psi	pounds per square inch	<b>Pressure</b>	Pa	pascals
psia	pounds per square inch absolute		kPa	kilopascals (10 <sup>3</sup> )
psig	pounds per square inch gauge			
°F	degrees Fahrenheit	<b>Temperature</b>	°C	degrees Celsius
°R	degrees Rankine		K	degrees Kelvin
M\$	thousand dollars	<b>Dollars</b>	k\$	1 kilodollar

**Imperial and Metric Units (Cont’d)**

Imperial Units		Time	Metric Units	
sec	second		s	second
min	minute	min	minute	
hr	hour	h	hour	
d	day	d	day	
wk	week		week	
mo	month		month	
yr	year	a	annum	

Conversion Tables

Conversion Factors — Metric to Imperial		
cubic metres (m <sup>3</sup> ) (@ 15°C)	x 6.29010	= barrels (bbl) (@ 60°F), water
m <sup>3</sup> (@ 15°C)	x 6.3300	= bbl (@ 60°F), Ethane
m <sup>3</sup> (@ 15°C)	x 6.30001	= bbl (@ 60°F), Propane
m <sup>3</sup> (@ 15°C)	x 6.29683	= bbl (@ 60°F), Butanes
m <sup>3</sup> (@ 15°C)	x 6.29287	= bbl (@ 60°F), oil, Pentanes Plus
m <sup>3</sup> (@ 101.325 kPaa, 15°C)	x 0.0354937	= thousands of cubic feet (Mcf) (@ 14.65 psia, 60°F)
1,000 cubic metres (10 <sup>3</sup> m <sup>3</sup> ) (@ 101.325 kPaa, 15°C)	x 35.49373	= Mcf (@ 14.65 psia, 60°F)
hectares (ha)	x 2.4710541	= acres
1,000 square metres (10 <sup>3</sup> m <sup>2</sup> )	x 0.2471054	= acres
10,000 cubic metres (ha·m)	x 8.107133	= acre feet (ac-ft)
m <sup>3</sup> /10 <sup>3</sup> m <sup>3</sup> (@ 101.325 kPaa, 15°C)	x 0.0437809	= Mcf/Ac.ft. (@ 14.65 psia, 60°F)
joules (j)	x 0.000948213	= Btu
megajoules per cubic metre (MJ/m <sup>3</sup> ) (@ 101.325 kPaa, 15°C)	x 26.714952	= British thermal units per standard cubic foot (Btu/scf) (@ 14.65 psia, 60°F)
dollars per gigajoule (\$/GJ)	x 1.054615	= \$/Mcf (1,000 Btu gas)
metres (m)	x 3.28084	= feet (ft)
kilometres (km)	x 0.6213712	= miles (mi)
dollars per 1,000 cubic metres (\$/10 <sup>3</sup> m <sup>3</sup> ) (\$/10 <sup>3</sup> m <sup>3</sup> )	x 0.0288951	= dollars per thousand cubic feet (\$/Mcf) (@ 15.025 psia) B.C.
	x 0.02817399	= \$/Mcf (@ 14.65 psia) Alta.
dollars per cubic metre (\$/m <sup>3</sup> )	x 0.158910	= dollars per barrel (\$/bbl)
gas/oil ratio (GOR) (m <sup>3</sup> /m <sup>3</sup> )	x 5.640309	= GOR (scf/bbl)
kilowatts (kW)	x 1.341022	= horsepower
kilopascals (kPa)	x 0.145038	= psi
tonnes (t)	x 0.9842064	= long tons (LT)
kilograms (kg)	x 2.204624	= pounds (lb)
litres (L)	x 0.2199692	= gallons (Imperial)
litres (L)	x 0.264172	= gallons (U.S.)
cubic metres per million cubic metres (m <sup>3</sup> /10 <sup>6</sup> m <sup>3</sup> ) (C <sub>3</sub> )	x 0.177496	= barrels per million cubic feet (bbl/MMcf) (@ 14.65 psia)
m <sup>3</sup> /10 <sup>6</sup> m <sup>3</sup> (C <sub>4</sub> )	x 0.1774069	= bbl/MMcf (@ 14.65 psia)
m <sup>3</sup> /10 <sup>6</sup> m <sup>3</sup> (C <sub>5+</sub> )	x 0.1772953	= bbl/MMcf (@ 14.65 psia)
tonnes per million cubic metres (t/10 <sup>6</sup> m <sup>3</sup> ) (sulphur)	x 0.0277290	= LT/MMcf (@ 14.65 psia)
millilitres per cubic meter (mL/m <sup>3</sup> ) (C <sub>5+</sub> )	x 0.0061974	= gallons (Imperial) per thousand cubic feet (gal (Imp)/Mcf)
(mL/m <sup>3</sup> ) (C <sub>5+</sub> )	x 0.0074428	= gallons (U.S.) per thousand cubic feet (gal (U.S.)/Mcf)
Kelvin (K)	x 1.8	= degrees Rankine (°R)
millipascal seconds (mPa·s)	x 1.0	= centipoise
density (kg/m <sup>3</sup> ), ρ	ρ+1000x141.5-	= °API
	131.5	

Conversion Tables (Cont'd)

Conversion Factors — Imperial to Metric		
barrels (bbl) (@ 60°F)	x 0.15898	= cubic metres (m <sup>3</sup> ) (@ 15°C), water
bbl (@ 60°F)	x 0.15798	= m <sup>3</sup> (@ 15°C), Ethane
bbl (@ 60°F)	x 0.15873	= m <sup>3</sup> (@ 15°C), Propane
bbl (@ 60°F)	x 0.15881	= m <sup>3</sup> (@ 15°C), Butanes
bbl (@ 60°F)	x 0.15891	= m <sup>3</sup> (@ 15°C), oil, Pentanes Plus
thousands of cubic feet (Mcf) (@ 14.65 psia, 60°F)	x 28.17399	= m <sup>3</sup> (@ 101.325 kPaa, 15°C)
Mcf (@ 14.65 psia, 60°F)	x 0.02817399	= 1,000 cubic metres (10 <sup>3</sup> m <sup>3</sup> ) (@ 101.325 kPaa, 15°C)
acres	x 0.4046856	= hectares (ha)
acres	x 4.046856	= 1,000 square metres (10 <sup>3</sup> m <sup>2</sup> )
acre feet (ac-ft)	x 0.123348	= 10,000 cubic metres (10 <sup>4</sup> m <sup>3</sup> ) (ha·m)
Mcf/ac-ft (@ 14.65 psia, 60°F)	x 22.841028	= 10 <sup>3</sup> m <sup>3</sup> /m <sup>3</sup> (@ 101.325 kPaa, 15°C)
Btu	x 1054.615	= joules (J)
British thermal units per standard cubic foot (Btu/Scf) (@ 14.65 psia, 60°F)	x 0.03743222	= megajoules per cubic metre (MJ/m <sup>3</sup> ) (@ 101.325 kPaa, 15°C)
\$/Mcf (1,000 Btu gas)	x 0.9482133	= dollars per gigajoule (\$/GJ)
\$/Mcf (@ 14.65 psia, 60°F) Alta.	x 35.49373	= \$/10 <sup>3</sup> m <sup>3</sup> (@ 101.325 kPaa, 15°C)
\$/Mcf (@ 15.025 psia, 60°F), B.C.	x 34.607860	= \$/10 <sup>3</sup> m <sup>3</sup> (@ 101.325 kPaa, 15°C)
feet (ft)	x 0.3048	= metres (m)
miles (mi)	x 1.609344	= kilometres (km)
dollars per barrel (\$/bbl)	x 6.29287	= dollars per cubic metre (\$/m <sup>3</sup> )
GOR (scf/bbl)	x 0.177295	= gas/oil ratio (GOR) (m <sup>3</sup> /m <sup>3</sup> )
horsepower	x 0.7456999	= kilowatts (kW)
psi	x 6.894757	= kilopascals (kPa)
long tons (LT)	x 1.016047	= tonnes (t)
pounds (lb)	x 0.453592	= kilograms (kg)
gallons (Imperial)	x 4.54609	= litres (L) (.001 m <sup>3</sup> )
gallons (U.S.)	x 3.785412	= litres (L) (.001 m <sup>3</sup> )
barrels per million cubic feet (bbl/MMcf) (@ 14.65 psia) (C <sub>3</sub> )	x 5.6339198	= cubic metres per million cubic metres (m <sup>3</sup> /10 <sup>6</sup> m <sup>3</sup> )
bbl/MMcf (C <sub>4</sub> )	x 5.6367593	= (m <sup>3</sup> /10 <sup>6</sup> m <sup>3</sup> )
bbl/MMcf (C <sub>5+</sub> )	x 5.6403087	= (m <sup>3</sup> /10 <sup>6</sup> m <sup>3</sup> )
LT/MMcf (sulphur)	x 36.063298	= tonnes per million cubic metres (t/10 <sup>6</sup> m <sup>3</sup> )
gallons (Imperial) per thousand cubic feet (gal (Imp)/Mcf) (C <sub>5+</sub> )	x 161.3577	= millilitres per cubic meter (mL/m <sup>3</sup> )
gallons (U.S.) per thousand cubic feet (gal (U.S.)/Mcf) (C <sub>5+</sub> )	x 134.3584	= (mL/m <sup>3</sup> )
degrees Rankine (°R)	x 0.555556	= Kelvin (K)
centipoises	x 1.0	= millipascal seconds (mPa·s)
°API	(°API)x131.5)x	= density (kg/m <sup>3</sup> )
	1000/141.5	



SPOULE STANDARD FORMATION NAME ABBREVIATIONS - CANADA							
ABB.	FORMATION NAME	ABB.	FORMATION NAME	ABB.	FORMATION NAME	ABB.	FORMATION NAME
ABGP	ALBERTA GROUP	EARL	EARLIE	LKRV	LOWER KEG RIVER	RVCV	RAVENSCRAG
ALID	ALIDA	EDMN	EDMONTON	LLTN	LYLETON	SBRS	SUNBURST
ALXO	ALEXO	EKPP	ELK POINT GROUP	LMNV	LOWER MANNVILLE	SBWI	SECOND BOW ISLAND SS
AMRN	AMARANTH	ELDN	ELDON	LPIN	LEPINE	SCLD	SCOLLARD
ARCM	ARCTOMYS	ELKK	ELK	LPRK	LEA PARK	SCLN	SCALLION
ARCS	ARCS	ELKT	ELKTON	LRSV	LOWER SHAUNAVON	SCTR	SCATTER
ASRN	ASHERN	ELRL	ELLERSLIE	LVGS	LIVINGSTONE	SFBR	SHAFTESBURY
ASVL	ASHVILLE	ERLK	ERNESTINA LAKE	LWAT	LOWER WATROUS	SFCR	SWIFT CURRENT
BARO	BARONS SAND	ERNG	ETHERINGTON	LWGR	LOWER GRAND RAPIDS	SHND	SHUNDA
BCDS	BASAL COLORADO SS.	ESND	EASTEND	MASE	MASEFIELD	SKGP	SASKATCHEWAN GROUP
BCHO	BISTCHO	EXSW	EXSHAW	MBGP	MANITOBA GROUP	SKNN	SIKANNI
BCKG	BUCKINGHORSE	FCLZ	FISH SCALE ZONE	MBRL	MOBERLY	SLLN	SULLIVAN
BCLK	BIRCH LAKE	FLHR	FALHER	MCLN	MCLAREN	SLPM	SULPHUR MOUNTAIN
BCMB	BASAL SAND (CAMBRIAN)	FLUM	FLUME	MCMR	MCMURRAY	SLPP	SULPHUR POINT
BCRK	BLACK CREEK	FNGN	FINNEGAN	MCON	MCCONNELL	SLVP	SLAVE POINT
BDBD	BASAL RED BEDS	FNSQ	FANTASQUE	MDCN	MEDICINE HAT	SMGP	SMOKY GROUP
BDBR	BIRDBEAR	FRBG	FIREBAG	MDGP	MADISON GROUP	SMRR	ST. MARY RIVER
BDLK	BOUNDARY LAKE	FRBR	FROBISHER	MDLK	MEADOW LAKE	SNMN	STONY MOUNTAIN
BDRT	BADHEART	FRCM	FRENCHMAN	MIDL	MIDALE	SNVN	SHAUNAVON
BGRY	BIGORAY MEMBER	FRLM	FAIRHOLME	MILK	MIDDLE INTERLAKE	SPNL	SPINNEY HILL
BGVL	BIG VALLEY	FRMS	FOREMOST	MJLK	MAJEAU LAKE	SPRF	SPEARFISH
BHLL	BEAVERHILL LAKE	FRNG	FERNIE GROUP	MLDD	MILDRED	SPRK	SPARKY
BKKN	BAKKEN	FSMP	FORT SIMPSON	MLKR	MILK RIVER	SPRR	SPRAY RIVER
BLCK	BLACKSTONE	FTJN	FORT ST. JOHN GROUP	MLTN	MOULTON	SPRV	SPIRIT RIVER
BLDN	BALDONNEL	FVEL	FAVEL	MMTN	MIST MOUNTAIN	SRSR	SOURIS RIVER
BLDV	BLOOD RESERVE	FVLM	FORT VERMILION	MNCH	MUNCHO	SSPK	SECOND WHITE SPECKS
BLLY	BELLOY	FWSS	FIRST WHITE SPECKS	MNTE	MONTEITH	SSSH	SASSENACH
BLGZ	BASAL QUARTZ	GBJC	GREY BEDS (JURASSIC)	MNTN	MONTNEY	STLR	STETTLER
BLRG	BLUE RIDGE MEMBER	GRPO	GRAND RAPIDS	MNVL	MANNVILLE	STNL	STONEWALL
BLRV	BELLY RIVER	GDRC	GOODRICH	MORR	MORRO	STON	STONE
BLSK	BLUESKY	GLCC	GLAUCONITIC SS.	MPRK	MOUNTAIN PARK	STPN	STEPHEN
BNFF	BANFF	GLPM	GENERAL PETROLEUM	MRDN	MORDEN	STSK	SOUTHESK
BOYN	BOYNE	GLWD	GILWOOD	MSBR	MOOSEBAR	STTH	SAWTOOTH
BRPW	BEARPAW	GMBL	GRUMBLER	MSKG	MUSKEG	SUCC	SUCCESS
BRSS	BROSSEAU	GNTN	GUNTON	MSKK	MUSKIKI	SULY	SULLY
BRVR	BESA RIVER	GOGG	GOG	MSKW	MUSKWA	SWFT	SWIFT
BRWD	BROWN SAND	GOLT	GOLATA	MSNC	MISSION CANYON	SWNH	SWAN HILLS
BRZU	BRAZEAU	GPPG	GYPSSUM SPRINGS	MSTY	MISTY	SWNR	SWAN RIVER
BSLD	BOW ISLAND	GRBD	GREEN BEDS	MTHK	MT. HAWK	TBER	TABER
BSUT	BLACK SHALE UNIT	GRBT	GARBUTT	MTSN	MATTSON	TFLS	TWIN FALLS
BSVN	BOISSEVAIN	GRLG	GRAYLING	MTYT	MT. WHYTE	TLFL	TAYLOR FLAT
BTPK	BEATTIE PEAKS	GRMN	GRAMINIA	MWBL	MOWITCH-BELCOURT	TLSN	TILSTON
B TTL	BATTLE	GRNW	GRANITE WASH	NCSL	NEWCASTLE	TNLM	TUNNEL MOUNTAIN
BVRF	BEAVERFOOT	GRSM	GRISMONT	NKNS	NIKANASSIN	TOAD	TOAD
CARN	CARN	GRTT	GROTTO	NNDA	NONDA	TOOY	TORQUAY
CCPD	CONTACT RAPIDS	GTES	GATES	NRDG	NORDEGG	TRFK	THREE FORKS
CDMN	CADOMIN	GTNG	GETHING	NSKU	NISKU	TRLM	TURTLE MOUNTAIN
CDRL	CATHEDRAL	GVBG	GRAVELBOURG	NTKN	NOTIKEWIN	TRRV	TROUT RIVER
CDTT	CADOTTE	HGHD	HIGHWOOD	OCOZ	OSTRACOD ZONE	TRVL	TURNER VALLEY
CHNK	CHINOOK	HLFY	HALFWAY	OLDM	OLDMAN	TTCH	TETCHO
CKGK	COOKING LAKE	HNDQ	HONDO	PCCP	POUCE COUPE	TTLN	TATHLINA
CLDK	COLD LAKE	HNSN	HANSON	PCGP	PEACE RIVER GROUP	UBMG	UPPER BLAIRMORE
CLLK	CHARLIE LAKE	HOME	HOME	PCPL	PORCUPINE HILLS	ULIK	UPPER INTERLAKE
CLMR	CALMAR	HRLD	HERALD	PDDY	PADDY	UKRV	UPPER KEG RIVER
CLMT	CALMUT	HRMN	HARMON	PECH	PEECHEE	UMNV	UPPER MANNVILLE
CLNY	COLONY	HRRV	HORN RIVER	RGBD	PASSAGE BEDS	UPGR	UPPER GRAND RAPIDS
CLRD	COLORADO	HRVR	HAY RIVER	PIKA	PIKA	USHV	UPPER SHAUNAVON
CLSP	COALSPIR SCOLLARD	HSCN	HORSESHOE CANYON	PIPR	PIPER	UTRV	UPPER TURNER VALLEY
CLWS	CLEARWATER SHALE	HSLR	HASLER	PKCP	POKER CHIP SHALE	VCTR	VICTORIA
CMGS	CUMMINGS	IRTN	IRETON	PKKU	PUSKASKAU	VGRD	VANGUARD
CMRS	CAMROSE	ISBL	ISHBEI	PKSK	PEKSKO	VKNS	VIKING SAND
CNCG	CHINCHAGA	JDTH	JUDITH RIVER	PKWK	PAKOWKI	VMLR	VERMILION RIVER
CNGO	CHUNGO	JLFU	JOLI FOU	PLCN	PELICAN	VRDN	VIRDEN
CNTH	CYNTHIA MEMBER	JNMR	JEAN MARIE	PLSR	PALLISER	WATT	WATT MOUNTAIN
CNTR	CANTUAR	JPGP	JUMPING POUND	PMBN	PEMBINA	WBMN	WABAMUN
CPSL	CYPRESS HILLS	KEGR	KEG RIVER	PNPT	PINE POINT	WBSK	WABISKAW
CRDM	CARDIUM	KKIS	KAKISA	PPHT	PROPHET	WDMN	WOOD MOUNTAIN
CRFT	CROWFOOT	KNDL	KINDLE	PPLR	POPLAR	WFVL	WATERFOWL
CRLS	CHARLES	KSBY	KISBEY	PRDN	PARDONET	WGTE	WESTGATE
CRSN	CHRISTINA	KSKN	KISKATINAW	PRDX	PERDRIX	WHRS	WHITEHORSE
CRSR	CRUISER	KSKP	KASKAPAU	PRGL	PRESQUITE	WKPH	WOKKPASH
CRWS	CROWNEST	KSKS	KANANASKIS	PRVP	PRAIRIE EVAPORITE	WLCK	WILLOW CREEK
CSFD	CROSSFIELD	KTCH	KOTCHO	PSKP	PASKAPOO	WLRC	WILRICH
CSTG	COSTIGAN	KTNL	KOTANELEE	RCKK	ROCK CREEK	WNPG	WINNIPEG
CTBK	CUT BANK	KTNY	KOOTENAY	RCLF	RATCLIFFE	WOLF	WOLF LAKE MEMBER
DBLT	DEBOLT	LABI	LA BICHE	RDBV	RED BEDS (DEVONIAN)	WPGP	WAPITI GROUP
DCRK	DOE CREEK	LAMR	LOWER AMARANTH	RDGM	RIDING MOUNTAIN	WPGS	WINNIEGOSIS
DWDW	DEADWOOD	LBMG	LOWER BLAIRMORE	RDKF	REDKNIFE	WPBI	WAPIABI
DINA	DINA	LBRG	LOTSBERG	RDRV	RED RIVER	WRBR	WINTERBURN
DNVG	DUNVEGAN	LBSK	LOBSTICK MEMBER	REXX	REX	WRLK	WHITEWATER LAKE
DOIG	DOIG	LCLD	LOWER COLORADO	RLDG	ROUTLEDGE	WSEC	WASECA
DPRW	DUPEROW	LDGP	LODGEPOLE	RNBW	RAINBOW	WTMD	WHITEMUD
DSBY	DAWSON BAY	LDMR	LLOYDMINSTER	RNDL	RUNDLE GROUP	WTRS	WATROUS
DTSS	DETRITAL SANDSTONE	LDDC	LEDUC	RRDN	RIERDON	WTRW	WATERWAYS
DUDN	DUNEDIN	LILK	LOWER INTERLAKE	RSRY	ROSERAY	YOMN	YEOMAN
DVRN	DUVERNAY	LIRD	LIARD	RSTN	RESTON	ZAMA	ZAMA

**Appendix C – Cash Flow Reports**

This appendix contains detailed cash flow reports containing summaries of reserves and net present values for Canlin's working interests in the Spirit River Area.

Discussion of the fiscal terms and economic assumptions are included in Section 8.0

The cash flow report tables present the economic summary and production details.

Appendix C  
Summary of Reserves and Net Present Values

Canlin Energy Corporation  
Spirit River  
Total Proved + Probable

Production Start : 2018-06-01  
As Of Date : 2018-05-31

	Lt Med Oil	Heavy Oil	Bitumen	Synthetic	Tight Oil	Solution Gas	Non-Asso	Shale Gas	Ethane	Propane	Butane	Pentane	Plus	Total NGL	Sulphur	Equiv. Oil
	MMbbl	MMbbl	MMbbl	MMbbl	MMbbl	MMbbl	MMcf	MMcf	MMbbl	MMbbl	MMbbl	MMbbl	MMbbl	MMbbl	MLT	MMBOE
Gross	4411.2	0.0	0.0	0.0	0.0	18720	3094	0	0.5	71.9	128.9	167.8	369.1	369.1	0.0	8416.1
Co. Gr.	3481.6	0.0	0.0	0.0	0.0	14422	1006	0	0.4	50.8	91.2	117.1	259.4	259.4	0.0	6312.3
Co. Net	2776.4	0.0	0.0	0.0	0.0	13144	791	0	0.3	37.8	70.6	89.3	198.1	198.1	0.0	5297.0

Year	Oil Comp. Gross	Gas Comp. Gross	BOE Comp. Gross	Oil Revenue	Gas Revenue	Other Revenue	Total Revenue	Total Crown	Total Non-Crown	Total Royalty	Royalty %	Opex	Other Exp.	Total Expenses	Total Capital	Aband. & Reclam.	BTax Cash Flow
	bbbl/d	Mcf/d	boe/d	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$	M\$	M\$	M\$	M\$	M\$
2018	371.2	2326	798.5	6193.9	1075.2	485.1	7754.2	1373.4	54.4	1427.8	18.4	3359.7	0.0	3359.7	62.8	0.0	2903.9
2019	721.3	3477	1359.7	19156.1	3655.4	1155.9	23967.4	3128.1	164.8	3292.9	13.7	9200.5	0.0	9200.5	26021.9	0.0	-14547.9
2020	1378.9	6018	2483.1	38602.8	7982.0	2095.0	48683.9	6655.7	213.3	6868.9	14.1	16335.8	0.0	16335.8	0.0	0.0	25479.2
2021	770.8	3522	1417.1	22704.3	4966.7	1292.6	28963.6	5044.7	129.9	5174.6	17.9	10955.9	0.0	10955.9	3523.5	0.0	9309.6
2022	1079.4	4674	1936.9	32444.6	7267.4	1751.7	41463.7	5743.3	107.3	5850.6	14.1	14489.8	0.0	14489.8	14367.1	0.0	6756.3
2023	1016.7	4376	1819.6	31183.6	6977.3	1677.1	39838.0	6517.3	831.1	7348.3	18.4	14624.8	0.0	14624.8	11034.2	0.0	6830.6
2024	882.3	3811	1581.6	27687.9	6244.0	1498.1	35430.0	6096.1	1070.9	7167.0	20.2	13884.7	0.0	13884.7	0.0	0.0	14378.2
2025	595.6	2633	1078.6	19019.0	4416.4	1057.0	24492.3	4373.0	523.1	4896.1	20.0	11187.2	0.0	11187.2	0.0	0.0	8409.0
2026	485.9	2161	882.4	15835.2	3719.2	887.6	20441.9	3448.8	391.2	3840.0	18.8	10166.3	0.0	10166.3	0.0	0.0	6435.6
2027	416.1	1853	756.1	13837.4	3270.4	778.5	17886.3	2704.2	323.4	3027.6	16.9	9585.6	0.0	9585.6	0.0	0.0	5273.1
2028	364.5	1622	662.1	12402.9	2941.3	698.6	16042.8	2194.1	2475.3	15.4	9196.2	0.0	9196.2	0.0	0.0	0.0	4371.3
2029	319.6	1395	566.2	11063.4	2480.1	586.6	14130.1	1785.7	241.5	2027.1	14.3	8564.8	0.0	8564.8	0.0	0.0	3538.2
2030	276.1	1174	491.4	9753.2	2210.9	522.8	12486.9	1486.9	202.4	1689.3	13.5	7975.5	0.0	7975.5	0.0	0.0	2822.2
2031	243.9	1040	434.7	8792.1	1999.9	473.2	11265.2	1267.3	181.1	1448.3	12.9	7645.7	0.0	7645.7	0.0	54.0	2117.2
2032	218.1	926	387.9	8043.6	1821.7	431.5	10296.9	1104.2	165.1	1269.3	12.3	7416.7	0.0	7416.7	0.0	0.0	1610.8
2033	187.9	764	328.1	7050.6	1530.0	363.0	8943.5	930.5	150.5	1081.0	12.1	6731.2	0.0	6731.2	0.0	0.0	1131.3
2034	161.4	656	281.7	6178.9	1339.0	318.3	7836.1	796.2	135.8	932.0	11.9	6257.7	0.0	6257.7	0.0	302.5	343.9
2035	110.5	461	195.2	4318.2	962.1	228.7	5509.1	567.0	115.6	682.6	12.4	4520.1	0.0	4520.1	0.0	84.3	222.1
2036	78.2	334	139.4	3125.9	710.7	169.4	4066.0	416.8	106.4	523.2	13.1	3383.9	0.0	3383.9	0.0	59.6	39.3
2037	5.5	24	9.9	225.5	51.1	12.2	288.7	30.9	8.7	39.7	13.7	246.5	0.0	246.5	0.0	176.9	-174.3
Sub Total				297619.0	65620.7	16486.8	379726.5	55664.0	5397.7	61061.7		175728.6	0.0	175728.6	55009.5	677.2	87249.5
5 Years				0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	3693.2	-3693.2
Total				297619.0	65620.7	16486.8	379726.5	55664.0	5397.7	61061.7		175728.6	0.0	175728.6	55009.5	4370.4	83556.4


Discount	5%	10%	12%	15%	18%	20%	25%
Discount	220770.3	172149.3	157604.4	139455.2	124703.4	116340.9	99317.1
Discount	48300.6	37367.3	34104.0	30039.1	26742.9	24878.2	21093.3
Discount	12305.5	9651.5	8855.9	7862.0	7053.1	6594.0	5658.3
Discount	281376.3	219168.1	200564.3	177356.4	158499.3	147813.2	126068.7
Discount	41821.9	32820.0	30084.9	26643.8	23824.1	22217.1	18928.9
Discount	3723.4	2699.6	2401.7	2037.4	1748.9	1589.1	1273.7
Discount	45545.3	35519.6	32486.6	28681.3	25723.1	23806.2	20202.6
Discount	91791.1	82809.6	71887.6	63263.7	58483.2	49008.1	
Discount	123092.4	91791.1	82809.6	71887.6	63263.7	58483.2	49008.1
Discount	48157.6	42688.5	40807.0	38257.0	35990.5	34616.5	31587.9
Discount	1514.9	560.7	383.4	220.7	129.7	92.0	40.5
Discount	63066.1	48608.2	44077.7	38309.8	33542.4	30815.3	25229.6

Reserve Life	Reserve Half Life	Reserve Life Index	Before Tax Payout	First Year Co Gr. Operating Costs
18.6 years	4.0 years	25.1	1.9 years	\$/BOE 18.83

Canlin Energy Corporation  
Project : 22297 - Report : H4  
Page : 1 of 1

Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vmdl

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38



Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Total Proved + Probable

Appendix C  
Production and Price Forecast

Year	Light & Medium Oil				Gas				Solution Gas				Ethane				Propane							
	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Mcf/d	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Mcf	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl				
2018	13	585	125.2	79.4	61.1	77.97	1	1595	341	111	92	2.16	633	387	356	2.16	0.0	0.0	0.0	1.36	32	1.6	1.2	22.26
2019	17	1109	404.7	263.3	217.9	76.49	1	1403	512	166	134	2.88	1750	1103	1032	2.88	0.1	0.0	0.0	3.03	7.5	4.2	3.3	22.32
2020	23	1828	669.0	504.7	415.2	76.49	1	1193	436	142	110	3.62	2786	2061	1919	3.62	0.1	0.1	0.0	4.74	10.6	7.3	5.7	25.91
2021	24	1027	374.8	281.3	218.0	80.70	1	1014	370	120	93	3.86	1595	1165	1070	3.86	0.0	0.0	0.0	5.31	6.5	4.2	3.1	28.35
2022	28	1280	467.0	394.0	324.2	82.35	1	862	314	102	77	4.26	1944	1604	1474	4.26	0.1	0.0	0.0	6.21	7.4	5.6	4.4	29.79
2023	30	1187	433.2	371.1	285.1	84.03	1	732	267	87	65	4.37	1797	1510	1341	4.37	0.0	0.0	0.0	6.47	6.8	5.3	3.8	30.75
2024	31	1034	378.6	322.9	240.8	85.74	1	622	228	74	55	4.48	1572	1321	1155	4.48	0.0	0.0	0.0	6.72	5.9	4.6	3.2	31.73
2025	31	729	266.2	217.4	162.6	87.49	1	529	193	63	47	4.60	1119	898	796	4.60	0.0	0.0	0.0	6.99	4.3	3.2	2.2	32.73
2026	31	601	219.3	177.4	135.4	89.28	1	450	164	53	40	4.72	925	735	658	4.72	0.0	0.0	0.0	7.26	3.6	2.6	1.8	33.76
2027	30	518	189.1	151.9	119.3	91.10	1	382	140	45	40	4.84	800	631	570	4.84	0.0	0.0	0.0	7.53	3.1	2.2	1.6	34.80
2028	30	456	166.9	133.4	107.3	92.96	1	325	119	39	34	4.96	706	555	506	4.96	0.0	0.0	0.0	7.82	2.7	2.0	1.4	35.86
2029	30	400	146.2	116.6	95.6	94.85	1	25	9	3	3	5.05	623	488	448	5.05	0.0	0.0	0.0	8.05	2.1	1.6	1.2	36.77
2030	28	345	125.8	100.8	83.6	96.78	-	-	-	-	-	-	548	428	396	5.16	0.0	0.0	0.0	8.29	1.8	1.4	1.1	37.70
2031	27	300	109.7	89.0	74.6	98.75	-	-	-	-	-	-	479	380	352	5.27	0.0	0.0	0.0	8.53	1.6	1.3	1.0	38.64
2032	26	269	96.5	79.8	67.4	100.76	-	-	-	-	-	-	429	339	315	5.38	0.0	0.0	0.0	8.78	1.4	1.1	0.9	39.60
2033	25	232	84.7	68.6	58.2	102.81	-	-	-	-	-	-	355	279	259	5.48	0.0	0.0	0.0	9.03	1.2	0.9	0.7	40.59
2034	24	196	71.7	58.9	50.2	104.90	-	0	-	-	-	-	300	239	222	5.59	0.0	0.0	0.0	9.29	1.0	0.8	0.6	41.59
2035	19	127	46.2	40.3	34.1	107.04	-	-	-	-	-	-	202	168	155	5.71	0.0	0.0	0.0	9.56	0.7	0.6	0.4	42.61
2036	11	88	32.1	28.6	23.9	109.21	-	-	-	-	-	-	147	122	112	5.82	0.0	0.0	0.0	9.83	0.5	0.4	0.3	43.65
2037	9	6	2.3	2.0	1.7	111.43	-	-	-	-	-	-	10	9	8	5.94	0.0	0.0	0.0	10.10	0.0	0.0	0.0	44.71
Total			4411.2	3481.6	2776.4			3094	1006	791			18720	14422	13144		0.5	0.4	0.3		71.9	50.8	37.8	

Year	Heavy Oil				Bitumen				Sulphur				Butane				Pentane Plus							
	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily MMT	Gross MMT	Co Grs MMT	Co Net MMT	Price \$/Bbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl		
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total																								

Canlin Energy Corporation  
Project : 22297 - Report : H1  
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Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vnd1

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38

**Sproule**

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Total Proved + Probable

Appendix C  
Summary of Reserves and Net Present Values

Year	Oil			Gas			NGL			Revenue			Royalties			Resource			Aband. & Reclaim.			Sask. Tax			Before Tax			BTax Cum.				
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
2018	6193.9	1075.2	485.1	0.0	0.0	0.0	0.0	0.0	0.0	1605.9	232.4	0.0	54.4	0.0	3359.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2966.7	
2019	19156.1	3655.4	1155.9	0.0	0.0	0.0	0.0	0.0	0.0	3639.9	511.9	0.0	164.8	0.0	9200.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11474.0	
2020	38602.8	7982.0	2099.0	0.0	0.0	0.0	0.0	0.0	0.0	7616.4	960.7	0.0	213.3	0.0	16335.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25479.2	
2021	22704.3	4966.7	1292.6	0.0	0.0	0.0	0.0	0.0	0.0	5743.6	699.0	0.0	129.9	0.0	10955.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12833.1	
2022	32444.6	7267.4	1751.7	0.0	0.0	0.0	0.0	0.0	0.0	6610.8	867.6	0.0	107.3	0.0	14489.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21123.3	
2023	31183.6	6977.3	1677.1	0.0	0.0	0.0	0.0	0.0	0.0	7454.1	936.8	0.0	831.1	0.0	14624.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17864.8	
2024	27687.9	6244.0	1498.1	0.0	0.0	0.0	0.0	0.0	0.0	6957.4	861.4	0.0	1070.9	0.0	13884.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14378.2	
2025	19019.0	4416.4	1057.0	0.0	0.0	0.0	0.0	0.0	0.0	4987.8	614.8	0.0	523.1	0.0	11884.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8409.0	
2026	15835.2	3719.2	887.6	0.0	0.0	0.0	0.0	0.0	0.0	3933.0	484.2	0.0	391.2	0.0	10166.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6435.6	
2027	13837.4	3270.4	778.5	0.0	0.0	0.0	0.0	0.0	0.0	3069.0	364.8	0.0	323.4	0.0	9585.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5273.1	
2028	12402.9	2941.3	698.6	0.0	0.0	0.0	0.0	0.0	0.0	2487.1	292.9	0.0	281.1	0.0	9196.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4371.3	
2029	11063.4	2480.1	586.6	0.0	0.0	0.0	0.0	0.0	0.0	2010.6	224.9	0.0	241.5	0.0	8564.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3538.2	
2030	9753.2	2210.9	522.8	0.0	0.0	0.0	0.0	0.0	0.0	1672.8	185.9	0.0	202.4	0.0	7975.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2822.2	
2031	8792.1	1999.9	473.2	0.0	0.0	0.0	0.0	0.0	0.0	1426.3	159.0	0.0	181.1	0.0	7645.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2171.2	
2032	8043.6	1821.7	431.5	0.0	0.0	0.0	0.0	0.0	0.0	1243.8	139.6	0.0	165.1	0.0	7416.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1610.8	
2033	7050.6	1530.0	363.0	0.0	0.0	0.0	0.0	0.0	0.0	1047.3	116.8	0.0	150.5	0.0	6731.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1131.3	
2034	6178.9	1339.0	318.3	0.0	0.0	0.0	0.0	0.0	0.0	897.3	101.1	0.0	135.8	0.0	6257.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	646.4	
2035	4318.2	962.1	228.7	0.0	0.0	0.0	0.0	0.0	0.0	639.1	72.2	0.0	115.6	0.0	4520.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	306.4	
2036	3125.9	710.7	169.4	0.0	0.0	0.0	0.0	0.0	0.0	470.0	53.2	0.0	106.4	0.0	3383.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.9	
2037	225.5	51.1	12.2	0.0	0.0	0.0	0.0	0.0	0.0	34.8	3.8	0.0	8.7	0.0	246.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	
Sub Total	297619.0	65620.7	16486.8	0.0	0.0	0.0	0.0	0.0	0.0	63547.0	7883.0	0.0	5397.7	0.0	175728.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	142936.2	
5 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total	297619.0	65620.7	16486.8	0.0	0.0	0.0	0.0	0.0	0.0	63547.0	7883.0	0.0	5397.7	0.0	175728.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	142936.2
Year	Other Capital	CEE	CDE	COGPE	Total Capital	Net Revenue	Cum. Net Revenue	AdValorem /Severance	Aband. & Reclaim.	Sask. Tax	Before Tax	BTax Cum.																				
2018	62.8	0.0	0.0	0.0	62.8	2903.9	2903.9	0.0	0.0	0.0	2903.9	2903.9																				
2019	5216.7	0.0	20805.1	0.0	26021.9	-14547.9	-14547.9	0.0	0.0	0.0	-14547.9	-11644.0																				
2020	0.0	0.0	0.0	0.0	0.0	25479.2	13835.2	0.0	0.0	0.0	25479.2	13835.2																				
2021	708.1	0.0	2815.4	0.0	3523.5	9309.6	23144.8	0.0	0.0	0.0	9309.6	23144.8																				
2022	2889.0	0.0	11478.1	0.0	14367.1	29901.0	52944.6	0.0	0.0	0.0	29901.0	29901.0																				
2023	2217.4	0.0	8816.8	0.0	11034.2	6830.6	36731.6	0.0	0.0	0.0	6830.6	36731.6																				
2024	0.0	0.0	0.0	0.0	0.0	14378.2	51109.8	0.0	0.0	0.0	14378.2	51109.8																				
2025	0.0	0.0	0.0	0.0	0.0	8409.0	59518.8	0.0	0.0	0.0	8409.0	59518.8																				
2026	0.0	0.0	0.0	0.0	0.0	6435.6	65954.5	0.0	0.0	0.0	6435.6	65954.5																				
2027	0.0	0.0	0.0	0.0	0.0	5273.1	71227.6	0.0	0.0	0.0	5273.1	71227.6																				
2028	0.0	0.0	0.0	0.0	0.0	4371.3	75596.9	0.0	0.0	0.0	4371.3	75596.9																				
2029	0.0	0.0	0.0	0.0	0.0	3538.2	79137.0	0.0	0.0	0.0	3538.2	79137.0																				
2030	0.0	0.0	0.0	0.0	0.0	2822.2	81959.2	0.0	0.0	0.0	2822.2	81959.2																				
2031	0.0	0.0	0.0	0.0	0.0	2171.2	84130.4	54.0	0.0	0.0	2171.2	84076.4																				
2032	0.0	0.0	0.0	0.0	0.0	1610.8	85741.2	0.0	0.0	0.0	1610.8	85687.2																				
2033	0.0	0.0	0.0	0.0	0.0	1131.3	86872.5	0.0	0.0	0.0	1131.3	86818.5																				
2034	0.0	0.0	0.0	0.0	0.0	646.4	87516.9	302.5	0.0	0.0	646.4	87162.4																				
2035	0.0	0.0	0.0	0.0	0.0	306.4	87825.3	84.3	0.0	0.0	306.4	87384.5																				
2036	0.0	0.0	0.0	0.0	0.0	98.9	87924.2	59.6	0.0	0.0	98.9	87423.8																				
2037	0.0	0.0	0.0	0.0	0.0	2.6	87926.8	176.9	0.0	0.0	2.6	87249.5																				
Sub Total	11094.0	0.0	43915.4	0.0	55009.5	87926.8	87926.8	677.2	0.0	0.0	87249.5	87249.5																				
5 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3693.2	0.0	0.0	-3693.2	-3693.2																				
Total	11094.0	0.0	43915.4	0.0	55009.5	87926.8	87926.8	4370.4	0.0	0.0	83556.4																					

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38

Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vmd

Canlin Energy Corporation  
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Appendix C  
Summary of Reserves and Net Present Values

Canlin Energy Corporation  
Spirit River  
Total Proved

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Year	Oil		Gas		Other		Total		Non-Asso		Shale Gas		Ethane		Propane		Butane Pentane Plus		Total NGL		Sulphur		Equiv. Oil			
	Comp. Gross	BOE Comp. Gross	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	
2018	336.0	2108	723.4	5607.0	974.6	440.8	7022.4	1183.7	49.7	1233.4	17.6	3121.0	0.0	3121.0	62.8	0.0	2605.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2605.2	
2019	433.0	2268	849.6	11499.7	2384.2	759.2	14643.1	1959.4	134.8	2094.2	14.3	6389.7	0.0	6389.7	19309.4	0.0	-13150.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16341.0	
2020	887.8	3994	1620.9	24855.2	5298.1	1397.2	31550.4	3678.9	130.7	3809.6	12.1	11399.9	0.0	11399.9	0.0	0.0	5944.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5944.7	
2021	424.7	2076	805.8	12508.9	2927.7	766.0	16202.6	2979.2	90.1	3069.3	18.9	7188.6	0.0	7188.6	0.0	0.0	1055.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1055.4	
2022	701.3	3104	1270.9	21079.3	4827.0	1165.8	27072.0	3782.9	75.6	2852.4	10.5	10256.9	0.0	10256.9	0.0	0.0	10886.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10886.7	
2023	696.7	3032	1253.0	21368.0	4834.2	1163.4	27365.6	3782.9	606.4	4389.2	16.0	10886.7	0.0	10886.7	0.0	0.0	1055.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1055.4	
2024	614.8	2663	1103.4	19293.5	4362.3	1047.6	24703.4	3778.8	791.8	4570.6	18.5	10553.3	0.0	10553.3	0.0	0.0	9579.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9579.4	
2025	407.0	1810	739.2	12997.9	3037.0	727.5	16762.4	2703.0	389.7	3092.7	18.5	8578.8	0.0	8578.8	0.0	0.0	5090.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5090.8	
2026	328.8	1417	588.7	10715.0	2438.6	579.8	13733.4	1962.9	294.7	2257.6	16.4	7754.4	0.0	7754.4	0.0	0.0	3721.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3721.4	
2027	272.7	1151	483.8	9067.2	2032.2	480.2	11579.5	1429.4	222.9	1652.3	14.3	7016.0	0.0	7016.0	0.0	0.0	2911.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2911.2	
2028	232.3	997	415.0	7902.2	1807.7	426.3	10136.2	1138.2	190.7	1328.9	13.1	6510.9	0.0	6510.9	0.0	0.0	2296.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2296.3	
2029	199.0	836	352.4	6888.5	1542.5	364.6	8795.6	921.9	166.2	1088.1	12.4	5958.8	0.0	5958.8	0.0	0.0	1696.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1696.8	
2030	171.6	701	300.2	6060.1	1320.8	312.3	7693.2	766.5	149.7	916.2	11.9	5524.8	0.0	5524.8	0.0	0.0	1252.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1252.3	
2031	152.8	625	267.4	5507.6	1201.8	284.4	6993.8	662.2	135.1	797.3	11.4	5394.3	0.0	5394.3	0.0	0.0	751.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	751.5	
2032	119.6	490	209.4	4410.6	963.4	228.2	5602.3	523.3	118.6	641.9	11.5	4507.5	0.0	4507.5	0.0	0.0	237.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	237.6	
2033	75.5	325	135.1	2833.7	650.8	154.4	3638.9	347.4	104.7	452.1	12.4	2980.8	0.0	2980.8	0.0	0.0	125.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125.5	
2034	65.0	278	116.0	2489.2	567.7	134.9	3191.8	298.1	95.9	394.0	12.3	2797.0	0.0	2797.0	0.0	0.0	330.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	330.0	
2035	5.2	22	9.3	204.0	46.6	11.1	261.7	24.9	7.9	32.8	12.5	233.1	0.0	233.1	0.0	0.0	-4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2	
2036	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-117.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-117.0	
2037	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1084.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1084.2	
Sub Total				185287.6	41217.2	10443.6	236948.4	30917.5	3755.3	34672.8		117052.6	0.0	117052.6	44773.4	1952.7	3896.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3896.8
3 Years				0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	1684.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1684.8	
Total				185287.6	41217.2	10443.6	236948.4	30917.5	3755.3	34672.8		117052.6	0.0	117052.6	44773.4	1952.7	3896.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3896.8

Reserve Life	Reserve Half Life		Reserve Life Index		Before Tax Payout		First Year Co Gr. Operating Costs					
	17.6 years	4.2 years	17.3	1.9 years	\$/BOE 20.46							
Discount 5%	140086.9	31041.1	7983.0	179111.0	23685.3	2638.3	84601.6	0.0	84601.6	38759.3	1422.5	28004.0
Discount 10%	110479.6	24374.7	6361.9	141216.3	18845.9	1935.7	64369.6	0.0	64369.6	34008.1	592.6	21464.3
Discount 12%	101459.1	22344.1	5866.0	129669.2	17353.1	1728.2	19081.4	0.0	58406.4	32385.6	424.5	19371.4
Discount 15%	90098.2	19787.2	5239.6	115125.0	15460.0	1472.5	16932.6	0.0	51050.0	30197.6	261.7	16683.1
Discount 18%	80781.3	17691.4	4724.3	103196.9	13896.6	1268.5	15165.1	0.0	45156.9	28264.7	164.5	14445.7
Discount 20%	75469.1	16497.0	4429.7	96395.7	13000.8	1154.8	14155.6	0.0	41857.7	27098.8	122.0	13161.6
Discount 25%	64594.5	14054.0	3824.5	82472.9	11157.6	929.5	12087.1	0.0	35251.9	24546.0	59.7	10528.1

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Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vmdl

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38

**Sproule**

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Total Proved

Appendix C  
Production and Price Forecast

Year	Light & Medium Oil				Gas				Solution Gas				Ethane				Propane							
	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Mcf/d	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Mcf	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Bbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl				
2018	13	535	114.4	71.9	56.2	77.97	1	1578	338	110	91	2.16	571	341	318	2.16	0.0	0.0	0.0	1.36	3.0	1.5	1.1	22.26
2019	15	671	245.0	158.0	129.6	72.76	1	1350	493	160	129	2.88	1091	668	623	2.88	0.0	0.0	0.0	3.03	5.2	2.7	2.1	22.32
2020	20	1159	424.3	324.9	275.7	76.49	1	1107	405	132	102	3.62	1788	1330	1243	3.62	0.0	0.0	0.0	4.74	7.2	4.8	3.9	25.91
2021	20	592	216.0	155.0	117.8	80.70	1	908	331	108	83	3.86	943	650	595	3.86	0.0	0.0	0.0	5.31	4.2	2.5	1.7	28.35
2022	24	834	304.4	256.0	222.4	82.35	1	744	272	88	67	4.26	1280	1045	973	4.26	0.0	0.0	0.0	6.21	5.1	3.7	3.1	29.79
2023	26	809	295.2	254.3	203.2	84.03	1	610	223	72	54	4.37	1234	1034	929	4.37	0.0	0.0	0.0	6.47	4.8	3.6	2.7	30.75
2024	27	708	259.2	225.0	172.8	85.74	1	500	183	60	45	4.48	1083	915	806	4.48	0.0	0.0	0.0	6.72	4.2	3.2	2.3	31.73
2025	26	491	179.3	148.6	114.1	87.49	1	410	150	49	38	4.60	760	612	545	4.60	0.0	0.0	0.0	6.99	3.0	2.2	1.5	32.73
2026	26	406	146.3	120.0	95.4	89.28	1	147	54	17	14	4.72	632	500	452	4.72	0.0	0.0	0.0	7.26	2.3	1.7	1.2	33.76
2027	26	341	124.3	99.5	81.7	91.10	-	-	-	-	-	-	538	420	385	4.84	0.0	0.0	0.0	7.53	1.8	1.4	1.0	34.80
2028	24	288	105.3	85.0	71.0	92.96	-	-	-	-	-	-	467	365	336	4.96	0.0	0.0	0.0	7.82	1.5	1.2	0.9	35.86
2029	23	244	89.1	72.6	61.4	94.85	-	-	-	-	-	-	389	305	282	5.05	0.0	0.0	0.0	8.05	1.3	1.0	0.8	36.77
2030	20	210	76.7	62.6	53.3	96.78	-	-	-	-	-	-	326	256	237	5.16	0.0	0.0	0.0	8.29	1.1	0.8	0.7	37.70
2031	20	187	68.3	55.8	47.8	98.75	-	0	-	-	-	-	291	228	211	5.27	0.0	0.0	0.0	8.53	1.0	0.8	0.6	38.64
2032	19	142	52.1	43.8	37.5	100.76	-	-	-	-	-	-	222	179	165	5.38	0.0	0.0	0.0	8.78	0.7	0.6	0.5	39.60
2033	11	86	31.5	27.6	23.3	102.81	-	-	-	-	-	-	146	119	108	5.48	0.0	0.0	0.0	9.03	0.5	0.4	0.3	40.59
2034	9	73	26.7	23.7	20.1	104.90	-	-	-	-	-	-	124	102	92	5.59	0.0	0.0	0.0	9.29	0.4	0.3	0.3	41.59
2035	9	6	2.1	1.9	1.6	107.04	-	-	-	-	-	-	10	8	7	5.71	0.0	0.0	0.0	9.56	0.0	0.0	0.0	42.61
Total			2762.2	2186.3	1784.8			2448	796	622			11897	9077	8308		0.3	0.2	0.2		47.3	32.5	24.7	

Year	Heavy Oil				Bitumen				Sulphur				Butane				Pentane Plus								
	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gross MMT	Co Grs MMT	Co Net MMT	Price \$/Bbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl					
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	2.7	2.0	45.13	7.3	3.5	2.4	81.31	
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.4	4.9	3.8	45.49	12.5	6.4	4.7	74.01	
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.0	8.6	7.1	47.65	17.0	11.1	8.9	77.22	
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	4.5	3.2	50.12	10.0	5.8	4.0	80.75	
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.2	6.7	5.6	51.32	12.0	8.6	7.0	82.47	
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.6	6.5	5.0	52.55	11.2	8.4	6.4	84.22	
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	5.8	4.3	53.80	9.7	7.4	5.4	86.01	
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	3.1	2.3	56.37	5.2	3.9	2.9	89.69	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	2.5	2.0	57.70	4.0	3.2	2.6	91.59	
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8	2.2	1.8	59.06	3.5	2.7	2.3	93.52	
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	1.8	1.5	60.44	2.9	2.3	1.9	95.42	
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	1.5	1.3	61.85	2.4	1.9	1.6	97.37	
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	1.3	1.1	63.28	2.2	1.7	1.5	99.34	
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	1.1	0.9	64.75	1.7	1.3	1.1	101.36	
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	0.7	0.6	66.24	1.1	0.9	0.7	103.42	
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	0.6	0.5	67.77	0.9	0.8	0.6	105.52	
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.0	0.0	69.32	0.1	0.1	0.1	107.67	
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.8	58.3	45.8		110.9	75.1	57.7		
Total																									

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Total Proved

Appendix C  
Summary of Reserves and Net Present Values

Year	Oil			Revenue			Royalties			Resource			Opex			Operating Income	
	M\$	Gas	M\$	M\$	Gas	M\$	M\$	Crown	M\$	MinTax	M\$	M\$	Other Exp.	M\$	M\$	M\$	
2018	5607.0	974.6	440.8	0.0	0.0	0.0	1379.5	195.8	0.0	49.7	0.0	3121.0	0.0	2668.0	0.0	6159.2	
2019	11499.7	2384.2	759.2	0.0	0.0	0.0	2307.4	348.0	0.0	134.8	0.0	6389.7	0.0	6389.7	0.0	16341.0	
2020	24855.2	5298.1	1397.2	0.0	0.0	0.0	4274.7	595.8	0.0	130.7	0.0	11399.9	0.0	13999.9	0.0	5944.7	
2021	12508.9	2927.7	766.0	0.0	0.0	0.0	3412.4	433.2	0.0	90.1	0.0	7188.6	0.0	7188.6	0.0	13962.6	
2022	21079.3	4827.0	1165.8	0.0	0.0	0.0	3255.7	478.9	0.0	75.6	0.0	10256.9	0.0	10256.9	0.0	12088.6	
2023	21368.0	4834.2	1163.4	0.0	0.0	0.0	4348.8	566.0	0.0	606.4	0.0	10886.7	0.0	10886.7	0.0	9579.4	
2024	19293.5	4362.3	1047.6	0.0	0.0	0.0	4324.0	545.2	0.0	791.8	0.0	10533.3	0.0	10533.3	0.0	5090.8	
2025	12997.9	3037.0	727.5	0.0	0.0	0.0	3087.5	384.5	0.0	389.7	0.0	8578.8	0.0	8578.8	0.0	3721.4	
2026	10715.0	2438.6	579.8	0.0	0.0	0.0	2225.5	262.6	0.0	294.7	0.0	7754.4	0.0	7754.4	0.0	2296.3	
2027	9067.2	2032.2	480.2	0.0	0.0	0.0	1612.1	182.7	0.0	222.9	0.0	7016.0	0.0	7016.0	0.0	2296.3	
2028	7902.2	1807.7	426.3	0.0	0.0	0.0	1284.0	145.8	0.0	190.7	0.0	6510.9	0.0	6510.9	0.0	1748.7	
2029	6888.5	1542.5	364.6	0.0	0.0	0.0	1040.0	118.1	0.0	166.2	0.0	5958.8	0.0	5958.8	0.0	1252.3	
2030	6060.1	1320.8	312.3	0.0	0.0	0.0	865.4	98.9	0.0	149.7	0.0	5524.8	0.0	5524.8	0.0	802.2	
2031	5507.6	1201.8	284.4	0.0	0.0	0.0	749.9	87.7	0.0	135.1	0.0	5394.3	0.0	5394.3	0.0	452.9	
2032	4410.6	963.4	228.2	0.0	0.0	0.0	593.1	69.8	0.0	118.6	0.0	4507.5	0.0	4507.5	0.0	205.9	
2033	2833.7	650.8	154.4	0.0	0.0	0.0	394.2	46.7	0.0	104.7	0.0	2980.8	0.0	2980.8	0.0	0.8	
2034	2489.2	567.7	134.9	0.0	0.0	0.0	338.6	40.5	0.0	95.9	0.0	2797.0	0.0	2797.0	0.0	-4.2	
2035	204.0	46.6	11.1	0.0	0.0	0.0	28.3	3.3	0.0	7.9	0.0	233.1	0.0	233.1	0.0	0.0	
2036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Sub Total	185287.6	41217.2	10443.6	0.0	0.0	0.0	35520.8	4603.4	0.0	3755.3	0.0	117052.6	0.0	85223.0	0.0	85223.0	
3 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total	185287.6	41217.2	10443.6	0.0	0.0	0.0	35520.8	4603.4	0.0	3755.3	0.0	117052.6	0.0	85223.0	0.0	85223.0	

Year	Other Capital	COGPE			Total Capital			Net Revenue			Aband. & Reclaim.	Sask. Tax		Before Tax		BTax Cum.
		M\$	CEE	M\$	M\$	CDE	M\$	M\$	Cum. Revenue	M\$		M\$	Tax	M\$		
2018	62.8	0.0	0.0	0.0	62.8	0.0	2605.2	2605.2	0.0	0.0	0.0	2605.2	0.0	2605.2	0.0	2605.2
2019	3870.2	0.0	15439.2	0.0	19309.4	-13150.1	-13150.1	-10545.0	0.0	0.0	0.0	0.0	-13150.1	0.0	-10545.0	-10545.0
2020	0.0	0.0	0.0	0.0	0.0	16341.0	5796.1	5796.1	0.0	0.0	0.0	0.0	16341.0	0.0	5796.1	5796.1
2021	0.0	0.0	0.0	0.0	0.0	5944.7	11740.8	11740.8	0.0	0.0	0.0	0.0	5944.7	0.0	5944.7	11740.8
2022	2889.0	0.0	11478.1	0.0	14367.1	-404.4	11336.4	0.0	0.0	0.0	0.0	0.0	-404.4	0.0	0.0	11336.4
2023	2217.4	0.0	8816.8	0.0	11034.2	1055.4	12391.8	12391.8	0.0	0.0	0.0	0.0	1055.4	0.0	1055.4	12391.8
2024	0.0	0.0	0.0	0.0	0.0	9579.4	21971.2	21971.2	0.0	0.0	0.0	0.0	9579.4	0.0	9579.4	21971.2
2025	0.0	0.0	0.0	0.0	0.0	5090.8	27062.0	27062.0	0.0	0.0	0.0	0.0	5090.8	0.0	5090.8	27062.0
2026	0.0	0.0	0.0	0.0	0.0	3721.4	30783.4	30783.4	0.0	0.0	0.0	0.0	3721.4	0.0	3721.4	30783.4
2027	0.0	0.0	0.0	0.0	0.0	2911.2	33694.6	33694.6	0.0	0.0	0.0	0.0	2911.2	0.0	2911.2	33694.6
2028	0.0	0.0	0.0	0.0	0.0	2296.3	35991.0	35991.0	0.0	0.0	0.0	0.0	2296.3	0.0	2296.3	35991.0
2029	0.0	0.0	0.0	0.0	0.0	1748.7	37739.7	37739.7	0.0	0.0	0.0	0.0	1748.7	0.0	1748.7	37739.7
2030	0.0	0.0	0.0	0.0	0.0	1252.3	38991.9	38991.9	0.0	0.0	0.0	0.0	1252.3	0.0	1252.3	38991.9
2031	0.0	0.0	0.0	0.0	0.0	802.2	39794.1	39794.1	0.0	0.0	0.0	0.0	802.2	0.0	802.2	39794.1
2032	0.0	0.0	0.0	0.0	0.0	452.9	40247.0	40247.0	0.0	0.0	0.0	0.0	452.9	0.0	452.9	40247.0
2033	0.0	0.0	0.0	0.0	0.0	205.9	40452.9	40452.9	0.0	0.0	0.0	0.0	205.9	0.0	205.9	40452.9
2034	0.0	0.0	0.0	0.0	0.0	0.8	40453.8	40453.8	0.0	0.0	0.0	0.0	0.8	0.0	0.8	40453.8
2035	0.0	0.0	0.0	0.0	0.0	-4.2	40449.5	40449.5	0.0	0.0	0.0	0.0	-4.2	0.0	-4.2	40449.5
2036	0.0	0.0	0.0	0.0	0.0	0.0	40449.5	40449.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40449.5
2037	0.0	0.0	0.0	0.0	0.0	0.0	40449.5	40449.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40449.5
Sub Total	9039.4	0.0	35734.0	0.0	44773.4	40449.5	40449.5	40449.5	0.0	0.0	0.0	0.0	1952.7	0.0	38496.8	38496.8
3 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	9039.4	0.0	35734.0	0.0	44773.4	40449.5	40449.5	40449.5	0.0	0.0	0.0	0.0	1952.7	0.0	38496.8	38496.8

Canlin Energy Corporation  
Project : 22297 - Report : H2  
Page : 1 of 1  
Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vml  
Run By : CarolinH  
Version : 16.2.0.45  
Run Time : /18/09/13 14:38



Appendix C  
Summary of Reserves and Net Present Values

Canlin Energy Corporation  
Spirit River  
Proved Developed Producing

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Year	Oil Comp. Gross	Gas Comp. Gross	BOE Comp. Gross	Oil Revenue		Gas Revenue		Other Revenue		Total Revenue		Total Crown		Total Non-Crown		Total Royalty		Total Opex		Total Other Exp.		Total Expenses		Total Capital		Aband. & Reclaim.		BTax Cash Flow			
				Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue
2018	222.6	1782	550.1	3714.9	823.5	374.3	4912.7	889.0	20.0	909.0	18.5	2429.8	0.0	2429.8	0.0	3352.2	0.0	3352.2	0.0	3352.2	0.0	3352.2	0.0	3352.2	0.0	3352.2	0.0	1574.0	0.0	1574.0	
2019	155.8	1324	399.2	4138.5	1391.7	449.8	5980.0	987.3	21.3	1008.6	16.9	3352.2	0.0	3352.2	0.0	3199.1	0.0	3199.1	0.0	3199.1	0.0	3199.1	0.0	3199.1	0.0	3199.1	0.0	1619.2	0.0	1619.2	
2020	145.7	1176	361.9	4079.8	1560.0	421.2	6061.0	1032.7	15.8	1048.5	17.3	3199.1	0.0	3199.1	0.0	2759.8	0.0	2759.8	0.0	2759.8	0.0	2759.8	0.0	2759.8	0.0	2759.8	0.0	1404.5	0.0	1404.5	
2021	112.9	929	283.7	3326.7	1310.4	349.4	4986.4	809.4	12.8	822.2	16.5	2759.8	0.0	2759.8	0.0	2477.5	0.0	2477.5	0.0	2477.5	0.0	2477.5	0.0	2477.5	0.0	2477.5	0.0	1166.0	0.0	1166.0	
2022	93.5	768	234.7	2810.8	1194.1	295.9	4300.8	646.2	11.0	657.3	15.3	2477.5	0.0	2477.5	0.0	2314.0	0.0	2314.0	0.0	2314.0	0.0	2314.0	0.0	2314.0	0.0	2314.0	0.0	904.9	0.0	904.9	
2023	80.4	651	200.0	2465.2	1037.8	256.3	3759.3	530.9	9.6	540.4	14.4	2314.0	0.0	2314.0	0.0	2196.6	0.0	2196.6	0.0	2196.6	0.0	2196.6	0.0	2196.6	0.0	2196.6	0.0	704.1	0.0	704.1	
2024	70.6	560	173.6	2215.5	917.8	225.9	3359.2	449.7	8.7	458.5	13.6	2196.6	0.0	2196.6	0.0	2097.9	0.0	2097.9	0.0	2097.9	0.0	2097.9	0.0	2097.9	0.0	2097.9	0.0	532.4	0.0	532.4	
2025	62.5	486	151.8	1997.4	814.8	199.5	3011.7	373.5	8.0	381.4	12.7	2097.9	0.0	2097.9	0.0	1858.8	0.0	1858.8	0.0	1858.8	0.0	1858.8	0.0	1858.8	0.0	1858.8	0.0	421.5	0.0	421.5	
2026	55.7	362	122.0	1814.0	622.4	149.6	2585.9	298.3	7.3	305.6	11.8	1858.8	0.0	1858.8	0.0	1656.1	0.0	1656.1	0.0	1656.1	0.0	1656.1	0.0	1656.1	0.0	1656.1	0.0	330.5	0.0	330.5	
2027	48.6	278	99.6	1614.6	491.2	116.1	2221.8	228.5	6.7	235.3	10.6	1656.1	0.0	1656.1	0.0	1423.2	0.0	1423.2	0.0	1423.2	0.0	1423.2	0.0	1423.2	0.0	1423.2	0.0	221.4	0.0	221.4	
2028	38.2	240	82.2	1298.0	435.5	102.7	1836.2	185.3	6.2	191.6	10.4	1423.2	0.0	1423.2	0.0	1165.4	0.0	1165.4	0.0	1165.4	0.0	1165.4	0.0	1165.4	0.0	1165.4	0.0	125.6	0.0	125.6	
2029	29.8	179	62.7	1031.6	330.8	78.2	1440.6	143.8	5.7	149.5	10.4	1165.4	0.0	1165.4	0.0	849.7	0.0	849.7	0.0	849.7	0.0	849.7	0.0	849.7	0.0	849.7	0.0	61.2	0.0	61.2	
2030	21.2	118	42.7	748.1	221.3	52.3	1021.8	105.6	5.3	110.9	10.9	849.7	0.0	849.7	0.0	709.9	0.0	709.9	0.0	709.9	0.0	709.9	0.0	709.9	0.0	709.9	0.0	50.6	0.0	50.6	
2031	19.2	106	38.7	691.4	204.7	48.4	944.6	93.2	4.9	98.1	10.4	709.9	0.0	709.9	0.0	532.5	0.0	532.5	0.0	532.5	0.0	532.5	0.0	532.5	0.0	532.5	0.0	79.8	0.0	79.8	
2032	15.0	80	29.7	554.7	157.3	37.3	749.0	74.0	4.6	78.6	10.5	532.5	0.0	532.5	0.0	433.3	0.0	433.3	0.0	433.3	0.0	433.3	0.0	433.3	0.0	433.3	0.0	-156.5	0.0	-156.5	
2033	9.7	60	20.8	363.4	120.9	26.5	513.0	52.2	4.3	56.5	11.0	433.3	0.0	433.3	0.0	39.9	0.0	39.9	0.0	39.9	0.0	39.9	0.0	39.9	0.0	39.9	0.0	-376.4	0.0	-376.4	
2034	8.6	55	18.6	327.6	111.4	26.5	465.4	46.3	4.0	50.3	10.8	39.9	0.0	39.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.1	0.0	-9.1	
2035	0.7	4	1.5	27.0	9.2	2.2	38.4	3.9	0.3	4.2	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2036	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2037	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Sub Total				33219.3	11754.7	3214.1	48188.1	6950.0	156.6	7106.5	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	10086.9	0.0	10086.9
3 Years				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				33219.3	11754.7	3214.1	48188.1	6950.0	156.6	7106.5	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	30422.7	0.0	845.5	0.0	845.5
Discount	5%			26473.7	9332.5	2612.3	38418.5	5723.0	122.0	5845.1	23440.4	0.0	23440.4	0.0	23440.4	0.0	23440.4	0.0	23440.4	0.0	23440.4	0.0	23440.4	0.0	23440.4	0.0	23440.4	0.0	361.0	0.0	361.0
Discount	10%			21973.7	7690.9	2200.1	31864.7	4871.4	100.2	4971.6	18920.2	0.0	18920.2	0.0	18920.2	0.0	18920.2	0.0	18920.2	0.0	18920.2	0.0	18920.2	0.0	18920.2	0.0	18920.2	0.0	163.4	0.0	163.4
Discount	12%			20583.9	7179.0	2070.6	29833.5	4601.4	93.7	4695.1	17551.8	0.0	17551.8	0.0	17551.8	0.0	17551.8	0.0	17551.8	0.0	17551.8	0.0	17551.8	0.0	17551.8	0.0	17551.8	0.0	120.8	0.0	120.8
Discount	15%			18816.9	6524.5	1904.2	27245.6	4252.3	85.6	4337.8	15833.6	0.0	15833.6	0.0	15833.6	0.0	15833.6	0.0	15833.6	0.0	15833.6	0.0	15833.6	0.0	15833.6	0.0	15833.6	0.0	77.8	0.0	77.8
Discount	18%			17350.8	5978.5	1764.4	25093.7	3957.1	79.0	4036.1	14428.1	0.0	14428.1	0.0	14428.1	0.0	14428.1	0.0	14428.1	0.0	14428.1	0.0	14428.1	0.0	14428.1	0.0	14428.1	0.0	51.0	0.0	51.0
Discount	20%			16506.5	5662.7	1683.2	23852.4	3784.7	75.2	3859.9	13627.7	0.0	13627.7	0.0	13627.7	0.0	13627.7	0.0	13627.7	0.0	13627.7	0.0	13627.7	0.0	13627.7	0.0	13627.7	0.0	38.8	0.0	38.8
Discount	25%			14754.1	5004.8	1512.8	21271.8	3420.4	67.5	3487.9	11989.5	0.0	11989.5	0.0	11989.5	0.0	11989.5	0.0	11989.5	0.0	11989.5	0.0	11989.5	0.0	11989.5	0.0	11989.5	0.0	20.1	0.0	20.1

Reserve Life	Reserve Half Life		Reserve Life Index		First Year Co. Gr. Operating Costs	
	17.6 years	1.7 years	3214.1	48188.1	4.2	\$/BOE 21.95
17.6 years			3214.1	48188.1	4.2	21.95

Canlin Energy Corporation  
Project : 22297 - Report : H4  
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Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vmdl

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38



Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Proved Developed Producing

Appendix C  
Production and Price Forecast

Year	Gr. Well Count	Light & Medium Oil			Gas			Solution Gas			Ethane			Propane								
		Gr. Well Count	Gr. Daily Mcf/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Mcf/d	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Mcf	Gr. Well Count	Gr. Daily Mcf/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl			
2018	8	392	88.9	47.6	36.2	77.97	1	1578	338	110	216	469	271	253	2.16	0.0	0.0	0.0	2.7	1.3	0.9	22.26
2019	8	276	100.9	56.9	43.7	72.76	1	1350	493	160	288	562	323	302	2.88	0.0	0.0	0.0	3.5	1.6	1.1	22.32
2020	8	256	93.6	53.3	40.6	76.49	1	1107	405	132	3.62	510	299	277	3.62	0.0	0.0	0.0	4.74	3.0	1.4	25.91
2021	8	199	72.7	41.2	32.0	80.70	1	908	331	108	3.86	398	231	214	3.86	0.0	0.0	0.0	5.31	2.4	1.1	28.35
2022	8	165	60.4	34.1	27.1	82.35	1	744	272	88	4.26	331	192	177	4.26	0.0	0.0	0.0	6.21	2.0	0.9	29.79
2023	8	142	52.0	29.3	23.7	84.03	1	610	223	72	4.37	286	165	153	4.37	0.0	0.0	0.0	6.47	1.7	0.8	30.75
2024	8	125	45.8	25.8	21.2	85.74	1	500	183	60	4.48	252	146	135	4.48	0.0	0.0	0.0	6.72	1.4	0.7	31.73
2025	8	111	40.5	22.8	19.1	87.49	1	410	150	49	4.60	223	129	119	4.60	0.0	0.0	0.0	6.99	1.2	0.6	32.73
2026	8	99	36.1	20.3	17.3	89.28	1	347	131	42	4.72	198	114	107	4.72	0.0	0.0	0.0	7.26	0.8	0.4	33.76
2027	8	86	31.4	17.7	15.3	91.10	-	-	-	-	-	176	102	94	4.84	0.0	0.0	0.0	7.53	0.6	0.3	34.80
2028	7	66	24.3	14.0	12.0	92.96	-	-	-	-	-	151	88	82	4.96	0.0	0.0	0.0	7.82	0.5	0.3	35.86
2029	6	54	19.9	10.9	9.4	94.85	-	-	-	-	-	121	65	61	5.05	0.0	0.0	0.0	8.05	0.4	0.2	36.77
2030	4	42	15.2	7.7	6.6	96.78	-	-	-	-	-	89	43	40	5.16	0.0	0.0	0.0	8.29	0.3	0.1	37.70
2031	4	38	13.8	7.0	6.1	98.75	-	0	-	-	-	80	39	36	5.27	0.0	0.0	0.0	8.53	0.3	0.1	38.64
2032	4	30	10.8	5.5	4.8	100.76	-	-	-	-	-	61	29	27	5.38	0.0	0.0	0.0	8.78	0.2	0.1	39.60
2033	3	19	6.9	3.5	3.0	102.81	-	-	-	-	-	46	22	20	5.48	0.0	0.0	0.0	9.03	0.2	0.1	40.59
2034	2	17	6.1	3.1	2.7	104.90	-	-	-	-	-	42	20	18	5.59	0.0	0.0	0.0	9.29	0.1	0.1	41.59
2035	2	1	0.5	0.3	0.2	107.04	-	-	-	-	-	3	2	2	5.71	0.0	0.0	0.0	9.56	0.0	0.0	42.61
Total			714.6	401.3	321.1			2448	796	622		4000	2280	2116		0.1	0.1	0.1	21.2	10.1	7.3	

Year	Gr. Well Count	Heavy Oil			Bitumen			Sulphur			Butane			Pentane Plus									
		Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily MMT	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl				
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total																							

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Proved Developed Producing

Appendix C  
Summary of Reserves and Net Present Values

Year	Oil			Gas			NGL			Revenue			Royalties			Resource			MinTax			Opex			Other Exp.			Operating Income			
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	
2018	3714.9	823.5	374.3	0.0	0.0	0.0	0.0	1055.7	166.7	0.0	20.0	0.0	0.0	0.0	2429.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1574.0	0.0	0.0	1574.0	
2019	4138.5	1391.7	449.8	0.0	0.0	0.0	0.0	1213.5	226.2	0.0	21.3	0.0	0.0	0.0	3352.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1619.2	0.0	0.0	1619.2	
2020	4079.8	1560.0	421.2	0.0	0.0	0.0	0.0	1258.9	226.2	0.0	15.8	0.0	0.0	0.0	3199.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1813.4	0.0	0.0	1813.4	
2021	3326.7	1310.4	349.4	0.0	0.0	0.0	0.0	995.1	185.7	0.0	12.8	0.0	0.0	0.0	2759.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1404.5	0.0	0.0	1404.5	
2022	2810.8	1194.1	295.9	0.0	0.0	0.0	0.0	804.8	158.5	0.0	11.0	0.0	0.0	0.0	2477.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1166.0	0.0	0.0	1166.0	
2023	2465.2	1037.8	256.3	0.0	0.0	0.0	0.0	664.0	133.1	0.0	9.6	0.0	0.0	0.0	2314.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	904.9	0.0	0.0	904.9	
2024	2215.5	917.8	225.9	0.0	0.0	0.0	0.0	563.3	113.5	0.0	8.7	0.0	0.0	0.0	2196.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	704.1	0.0	0.0	704.1	
2025	1997.4	814.8	199.5	0.0	0.0	0.0	0.0	465.2	91.7	0.0	8.0	0.0	0.0	0.0	2097.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	532.4	0.0	0.0	532.4	
2026	1814.0	622.4	149.6	0.0	0.0	0.0	0.0	354.3	56.1	0.0	7.3	0.0	0.0	0.0	1858.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	421.5	0.0	0.0	421.5	
2027	1614.6	491.2	116.1	0.0	0.0	0.0	0.0	265.2	36.7	0.0	6.2	0.0	0.0	0.0	1656.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	330.5	0.0	0.0	330.5	
2028	1298.0	435.5	102.7	0.0	0.0	0.0	0.0	215.6	30.3	0.0	6.7	0.0	0.0	0.0	1423.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	221.4	0.0	0.0	221.4	
2029	1031.6	330.8	78.2	0.0	0.0	0.0	0.0	166.2	22.4	0.0	5.7	0.0	0.0	0.0	1165.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125.6	0.0	0.0	125.6	
2030	748.1	221.3	52.3	0.0	0.0	0.0	0.0	120.8	15.2	0.0	5.3	0.0	0.0	0.0	849.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.2	0.0	0.0	61.2	
2031	691.4	204.7	48.4	0.0	0.0	0.0	0.0	106.9	13.7	0.0	4.9	0.0	0.0	0.0	839.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0	7.3	
2032	554.7	157.3	37.3	0.0	0.0	0.0	0.0	84.6	10.7	0.0	4.6	0.0	0.0	0.0	709.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-39.3	0.0	0.0	-39.3	
2033	363.4	120.9	28.7	0.0	0.0	0.0	0.0	60.1	7.9	0.0	4.3	0.0	0.0	0.0	532.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-76.1	0.0	0.0	-76.1	
2034	327.6	111.4	26.5	0.0	0.0	0.0	0.0	53.5	7.2	0.0	4.0	0.0	0.0	0.0	517.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-102.8	0.0	0.0	-102.8	
2035	27.0	9.2	2.2	0.0	0.0	0.0	0.0	4.5	0.6	0.0	0.3	0.0	0.0	0.0	43.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.1	0.0	0.0	-9.1	
2036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub Total	33219.3	11754.7	3214.1	0.0	0.0	0.0	0.0	8452.2	1502.2	0.0	156.6	0.0	0.0	0.0	30422.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10658.8	0.0	0.0	10658.8	
3 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	33219.3	11754.7	3214.1	0.0	0.0	0.0	0.0	8452.2	1502.2	0.0	156.6	0.0	0.0	0.0	30422.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10658.8	0.0	0.0	10658.8	0.0
Year	Other Capital	CEE	CDE	COGPE	Total Capital	Net Revenue	Cum. Net Revenue	AdValorem /Severance	Aband. & Reclaim.	Sask. Tax	Before Tax	BTax Cum.																			
2018	0.0	0.0	0.0	0.0	0.0	1574.0	1574.0	0.0	0.0	0.0	1574.0	1574.0																			
2019	0.0	0.0	0.0	0.0	0.0	3193.1	5006.6	0.0	0.0	0.0	3193.1	3193.1																			
2020	0.0	0.0	0.0	0.0	0.0	1813.4	5006.6	0.0	0.0	0.0	1813.4	1813.4																			
2021	0.0	0.0	0.0	0.0	0.0	1404.5	6411.0	0.0	0.0	0.0	1404.5	1404.5																			
2022	0.0	0.0	0.0	0.0	0.0	1166.0	7577.0	0.0	0.0	0.0	1166.0	1166.0																			
2023	0.0	0.0	0.0	0.0	0.0	904.9	8481.9	0.0	0.0	0.0	904.9	904.9																			
2024	0.0	0.0	0.0	0.0	0.0	704.1	9186.0	0.0	0.0	0.0	704.1	9186.0																			
2025	0.0	0.0	0.0	0.0	0.0	532.4	9718.4	0.0	0.0	0.0	532.4	9718.4																			
2026	0.0	0.0	0.0	0.0	0.0	421.5	10139.9	0.0	0.0	0.0	421.5	10139.9																			
2027	0.0	0.0	0.0	0.0	0.0	330.5	10470.5	0.0	0.0	0.0	330.5	10470.5																			
2028	0.0	0.0	0.0	0.0	0.0	221.4	10691.9	0.0	0.0	0.0	221.4	10691.9																			
2029	0.0	0.0	0.0	0.0	0.0	125.6	10817.5	0.0	0.0	0.0	125.6	10817.5																			
2030	0.0	0.0	0.0	0.0	0.0	61.2	10878.7	0.0	0.0	0.0	61.2	10878.7																			
2031	0.0	0.0	0.0	0.0	0.0	7.3	10886.0	0.0	0.0	0.0	7.3	10886.0																			
2032	0.0	0.0	0.0	0.0	0.0	-39.3	10846.8	0.0	50.6	0.0	-43.3	10835.4																			
2033	0.0	0.0	0.0	0.0	0.0	-76.1	10770.7	0.0	79.8	0.0	-119.1	10716.3																			
2034	0.0	0.0	0.0	0.0	0.0	-102.8	10667.9	0.0	80.5	0.0	-156.5	10559.8																			
2035	0.0	0.0	0.0	0.0	0.0	0.0	10658.8	0.0	273.6	0.0	-376.4	10183.4																			
2036	0.0	0.0	0.0	0.0	0.0	0.0	10658.8	0.0	0.0	0.0	-9.1	10174.3																			
2037	0.0	0.0	0.0	0.0	0.0	0.0	10658.8	0.0	87.4	0.0	0.0	10174.3																			
Sub Total	0.0	0.0	0.0	0.0	0.0	10658.8	10658.8	0.0	572.0	0.0	10086.9	10086.9																			
3 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	273.6	0.0	-273.6	0.0																			
Total	0.0	0.0	0.0	0.0	0.0	10658.8	10658.8	0.0	845.5	0.0	9813.3	9813.3																			



Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38

Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin2297.vmd

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Production Start : 2018-07-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Proved Developed Non-Producing

Appendix C  
Summary of Reserves and Net Present Values

Year	Oil		Gas		Synthetic		Tight Oil		Solution Gas		Shale Gas		Propane		Butane Pentane Plus		Total NGL		Sulphur		Equiv. Oil		
	Comp. Gross	BOE Comp. Gross	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue
bb/d	Mcf/d	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf
2018	131.9	380	1892.1	151.1	66.5	2109.7	294.7	29.8	324.4	15.4	691.3	0.0	691.3	0.0	691.3	62.8	0.0	1031.2	0.0	0.0	0.0	568.8	
2019	123.2	334	3271.5	351.5	109.5	3732.6	721.0	69.7	790.7	21.2	1486.1	0.0	1486.1	0.0	1486.1	0.0	0.0	1455.8	0.0	0.0	0.0	1234.5	
2020	104.5	293	2925.5	389.1	101.6	3416.2	734.6	59.1	793.7	23.2	1388.1	0.0	1388.1	0.0	1388.1	0.0	0.0	1234.5	0.0	0.0	0.0	928.4	
2021	78.8	224	1199.0	2320.3	316.3	61.5	574.6	51.1	574.6	21.1	1215.0	0.0	1215.0	0.0	1215.0	0.0	0.0	928.4	0.0	0.0	0.0	722.0	
2022	64.3	184	1924.0	286.8	68.7	2289.5	398.1	45.2	443.2	19.4	1124.3	0.0	1124.3	0.0	1124.3	0.0	0.0	722.0	0.0	0.0	0.0	575.3	
2023	54.9	158	1683.3	251.8	60.2	1995.4	310.4	40.4	350.8	17.6	1069.3	0.0	1069.3	0.0	1069.3	0.0	0.0	575.3	0.0	0.0	0.0	473.0	
2024	45.9	129	1439.2	211.5	50.4	1701.1	242.0	34.5	276.4	16.3	951.7	0.0	951.7	0.0	951.7	0.0	0.0	473.0	0.0	0.0	0.0	355.8	
2025	38.1	111	1217.0	187.0	44.4	1448.4	182.9	33.1	216.0	14.9	876.6	0.0	876.6	0.0	876.6	0.0	0.0	355.8	0.0	0.0	0.0	245.9	
2026	31.1	97	1013.7	166.4	39.4	1219.5	136.5	32.7	169.2	13.9	804.4	0.0	804.4	0.0	804.4	0.0	0.0	245.9	0.0	0.0	0.0	207.0	
2027	20.9	68	693.7	120.2	28.4	842.3	78.5	9.3	87.8	10.4	547.5	0.0	547.5	0.0	547.5	0.0	0.0	207.0	0.0	0.0	0.0	159.1	
2028	18.1	59	614.7	107.7	25.4	747.7	66.3	6.7	73.0	9.8	515.7	0.0	515.7	0.0	515.7	0.0	0.0	159.1	0.0	0.0	0.0	126.6	
2029	14.0	43	486.0	78.8	18.6	583.4	51.0	3.6	54.6	9.4	414.3	0.0	414.3	0.0	414.3	0.0	0.0	126.6	0.0	0.0	0.0	94.4	
2030	12.5	38	439.9	70.8	16.7	527.5	44.4	3.1	47.5	9.0	400.5	0.0	400.5	0.0	400.5	0.0	0.0	94.4	0.0	0.0	0.0	79.4	
2031	11.3	34	405.7	65.3	15.5	486.2	39.7	2.9	42.6	8.7	396.7	0.0	396.7	0.0	396.7	0.0	0.0	79.4	0.0	0.0	0.0	47.2	
2032	8.5	29	313.8	57.7	13.7	385.5	31.2	1.8	33.0	8.6	333.0	0.0	333.0	0.0	333.0	0.0	0.0	47.2	0.0	0.0	0.0	157.8	
2033	3.0	16	114.4	32.2	7.6	154.3	12.7	0.0	12.7	8.2	139.0	0.0	139.0	0.0	139.0	0.0	0.0	157.8	0.0	0.0	0.0	2.6	
2034	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	57.3	
2035	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.3	0.0	0.0	0.0	0.0	
2036	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2037	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.0	
Sub Total			20764.9	2844.3	748.2	24357.4	3867.4	422.8	4290.2		12353.5	0.0	12353.5	0.0	12353.5	62.8	386.0	7265.0					
1 Years			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-116.9	0.0	0.0				
Total			20764.9	2844.3	748.2	24357.4	3867.4	422.8	4290.2		12353.5	0.0	12353.5	0.0	12353.5	62.8	386.0	7148.1					
Discount 5%			16887.1	2245.9	602.4	19735.5	3245.0	348.5	3593.5		9586.9	0.0	9586.9	0.0	9586.9	61.7	226.5	6266.9					
Discount 10%			14206.6	1841.1	503.1	16550.8	2792.9	294.7	3087.6		7755.3	0.0	7755.3	0.0	7755.3	60.6	108.2	5539.1					
Discount 12%			13359.9	1715.1	472.0	15546.9	2645.4	277.3	2922.8		7193.4	0.0	7193.4	0.0	7193.4	60.2	81.7	5288.9					
Discount 15%			12268.4	1554.2	432.0	14254.6	2451.6	254.6	2706.2		6482.4	0.0	6482.4	0.0	6482.4	59.6	54.4	4952.0					
Discount 18%			11348.8	1420.1	398.6	13167.5	2284.6	235.2	2519.8		5896.1	0.0	5896.1	0.0	5896.1	59.0	36.9	4655.7					
Discount 20%			10813.0	1342.7	379.2	12534.9	2185.8	223.8	2409.5		5560.2	0.0	5560.2	0.0	5560.2	58.6	28.7	4477.8					
Discount 25%			9685.0	1181.5	338.6	11205.2	1973.3	199.5	2172.9		4868.1	0.0	4868.1	0.0	4868.1	57.8	15.8	4090.6					

Reserve Life	Reserve Half Life		Reserve Life Index		First Year Co Gr. Operating Costs	
	15.5 years	1.8 years	1.8 years	9.7	\$/BOE	20.85
5%						
10%						
12%						
15%						
18%						
20%						
25%						

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Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vmd

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38



Production Start : 2018-07-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Proved Developed Non-Producing

Appendix C  
Production and Price Forecast

Year	Light & Medium Oil				Gas				Solution Gas				Ethane				Propane							
	Gr. Well Count	Gr. Bbl/d	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Mcf/d	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Mcf	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Bbl	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl
2018	5	166	30.6	24.3	20.0	77.97	-	-	102	70	65	2.16	0.0	0.0	0.0	1.36	0.3	0.2	0.2	1.36	0.3	0.2	0.2	22.26
2019	5	162	59.2	45.0	33.8	72.76	-	-	193	122	112	2.88	0.0	0.0	0.0	3.03	0.6	0.4	0.3	3.03	0.6	0.4	0.3	22.32
2020	5	142	52.1	38.2	27.7	76.49	-	-	176	107	98	3.62	0.0	0.0	0.0	4.74	0.6	0.4	0.2	4.74	0.6	0.4	0.2	25.91
2021	5	108	39.6	28.8	21.6	80.70	-	-	135	82	74	3.86	0.0	0.0	0.0	5.31	0.4	0.3	0.2	5.31	0.4	0.3	0.2	28.35
2022	5	89	32.5	23.5	18.1	82.35	-	-	111	67	60	4.26	0.0	0.0	0.0	6.21	0.4	0.2	0.1	6.21	0.4	0.2	0.1	29.79
2023	5	76	27.8	20.0	15.9	84.03	-	-	95	58	52	4.37	0.0	0.0	0.0	6.47	0.3	0.2	0.1	6.47	0.3	0.2	0.1	30.75
2024	5	61	22.2	16.8	13.6	85.74	-	-	74	47	43	4.48	0.0	0.0	0.0	6.72	0.2	0.2	0.1	6.72	0.2	0.2	0.1	31.73
2025	4	53	19.4	13.9	11.5	87.49	-	-	65	41	37	4.60	0.0	0.0	0.0	6.99	0.2	0.1	0.1	6.99	0.2	0.1	0.1	32.76
2026	4	47	17.2	11.4	9.5	89.28	-	-	58	35	32	4.72	0.0	0.0	0.0	7.26	0.2	0.1	0.1	7.26	0.2	0.1	0.1	33.76
2027	4	35	12.8	7.6	6.7	91.10	-	-	45	25	23	4.84	0.0	0.0	0.0	7.53	0.1	0.1	0.1	7.53	0.1	0.1	0.1	34.80
2028	3	31	11.3	6.6	5.8	92.96	-	-	40	22	20	4.96	0.0	0.0	0.0	7.82	0.1	0.1	0.1	7.82	0.1	0.1	0.1	35.86
2029	3	21	7.8	5.1	4.5	94.85	-	-	24	16	15	5.05	0.0	0.0	0.0	8.05	0.1	0.1	0.0	8.05	0.1	0.1	0.0	36.77
2030	2	19	6.9	4.5	4.1	96.78	-	-	21	14	13	5.16	0.0	0.0	0.0	8.29	0.1	0.0	0.0	8.29	0.1	0.0	0.0	37.70
2031	2	17	6.2	4.1	3.7	98.75	-	-	19	12	12	5.27	0.0	0.0	0.0	8.53	0.1	0.0	0.0	8.53	0.1	0.0	0.0	38.64
2032	2	13	4.7	3.1	2.8	100.76	-	-	16	11	10	5.38	0.0	0.0	0.0	8.78	0.1	0.0	0.0	8.78	0.1	0.0	0.0	39.60
2033	1	5	1.7	1.1	1.0	102.81	-	-	9	6	6	5.48	0.0	0.0	0.0	9.03	0.0	0.0	0.0	9.03	0.0	0.0	0.0	40.59
Total			351.9	254.0	200.3				1183	734	672		0.0	0.0	0.0		3.9	2.4	1.7		3.9	2.4	1.7	

Year	Heavy Oil				Bitumen				Sulphur				Butane				Pentane Plus							
	Gr. Well Count	Gr. Bbl/d	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Bbl/d	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl	Gross MMT	Co Grs MMT	Co Net MMT	Price \$/Bbl	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl	Gross MBbl	Co Grs MBbl	Co Net MBbl	Price \$/Bbl
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.4	0.3	45.13	0.8	0.5	0.4	81.31
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	0.7	0.5	45.49	1.4	0.9	0.6	74.01
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	0.6	0.4	47.65	1.3	0.8	0.5	77.22
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	0.5	0.3	50.12	1.0	0.6	0.4	80.75
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	0.4	0.3	51.32	0.8	0.5	0.3	82.47
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.3	0.2	52.55	0.7	0.4	0.3	84.22
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.3	0.2	53.80	0.6	0.4	0.2	86.01
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.2	0.2	55.07	0.5	0.3	0.2	87.83
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.2	0.2	56.37	0.4	0.3	0.2	89.69
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.1	0.1	57.70	0.3	0.2	0.2	91.59
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.1	0.1	59.06	0.3	0.2	0.1	93.52
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	60.44	0.2	0.2	0.1	95.42
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	61.85	0.2	0.1	0.1	97.37
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	63.28	0.1	0.1	0.1	99.34
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	64.75	0.1	0.1	0.1	101.36
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.0	0.0	66.24	0.1	0.0	0.0	103.42
Total													7.0	4.3	3.2		8.9	5.5	3.8		8.9	5.5	3.8	



Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38

Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin2297.vml

Canlin Energy Corporation  
Project : 22297 - Report : H1  
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Appendix C  
Summary of Reserves and Net Present Values

Canlin Energy Corporation  
Spirit River  
Proved Undeveloped

Production Start : 2019-01-01  
As Of Date : 2018-05-31


Year	Oil Comp. Gross bbbl/d	Gas Comp. Gross Mcf/d	BOE Comp. Gross boe/d	Oil		Gas		Other		Total		Total		Total		Total		Total		Total		Total	
				Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue
2019	154.0	610	2658	4089.7	641.0	198.8	4930.5	251.0	43.8	294.8	6.0	1551.4	0.0	1551.4	19309.4	0.0	-16225.1						
2020	637.6	2525	11006.6	17849.8	3349.0	874.4	22073.2	1911.6	55.9	1967.4	8.9	6812.7	0.0	6812.7	0.0	0.0	13293.1						
2021	233.0	923	402.1	6862.0	1301.1	335.2	8498.2	1646.3	26.2	1672.5	19.7	3213.9	0.0	3213.9	0.0	0.0	3611.8						
2022	543.4	2152	938.1	16334.4	3346.1	801.3	20481.8	1732.5	19.4	1751.9	8.6	6655.2	0.0	6655.2	14367.1	0.0	-2292.4						
2023	561.4	2223	969.2	17219.4	3544.6	846.9	21610.9	2941.6	556.4	3498.1	16.2	7503.4	0.0	7503.4	11034.2	0.0	-424.8						
2024	498.4	1973	860.3	15638.9	3233.0	771.2	19643.1	3087.1	748.6	3835.7	19.5	7405.0	0.0	7405.0	0.0	0.0	8402.4						
2025	306.4	1213	528.9	9783.4	2035.2	483.6	12302.2	2146.6	348.7	2495.3	20.3	5604.3	0.0	5604.3	0.0	0.0	4202.6						
2026	242.0	958	417.8	7887.3	1649.8	390.8	9928.0	1528.2	254.6	1782.8	18.0	5091.2	0.0	5091.2	0.0	0.0	3054.0						
2027	203.3	805	350.9	6758.8	1420.8	335.7	8515.4	1122.3	206.9	1329.3	15.6	4812.5	0.0	4812.5	0.0	0.0	2373.6						
2028	176.0	697	303.9	5989.5	1264.5	298.2	7552.2	886.5	177.9	1064.4	14.1	4572.0	0.0	4572.0	0.0	0.0	1915.9						
2029	155.1	614	267.8	5370.9	1132.8	267.8	6771.5	727.1	156.9	884.0	13.1	4379.1	0.0	4379.1	0.0	0.0	1508.5						
2030	137.9	546	238.1	4872.1	1028.7	243.2	6144.0	616.5	141.3	757.8	12.3	4274.6	0.0	4274.6	0.0	0.0	1111.6						
2031	122.4	485	211.2	4410.5	931.7	220.5	5562.7	529.3	127.3	656.6	11.8	4158.5	0.0	4158.5	0.0	0.0	747.6						
2032	96.0	380	165.8	3542.1	748.4	177.3	4467.8	418.2	112.2	530.3	11.9	3464.5	0.0	3464.5	0.0	0.0	472.9						
2033	62.8	249	108.4	2355.9	497.6	118.1	2971.6	282.5	100.4	382.9	12.9	2309.3	0.0	2309.3	0.0	0.0	279.4						
2034	56.5	224	97.5	2161.7	456.3	108.5	2726.4	251.8	91.9	343.7	12.6	2279.1	0.0	2279.1	0.0	0.0	103.6						
2035	4.5	18	7.8	177.0	37.4	8.9	223.3	21.0	0.0	28.6	12.8	189.8	0.0	189.8	0.0	0.0	4.9						
2036	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-117.0						
2037	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-877.8						
2038	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Sub Total				131303.4	26618.2	6481.3	164402.9	20100.1	3175.9	23276.1	6.0	74276.4	0.0	74276.4	44710.6	994.8	21145.0						
2 Years				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1294.4						
Total				131303.4	26618.2	6481.3	164402.9	20100.1	3175.9	23276.1	6.0	74276.4	0.0	74276.4	44710.6	2289.2	19850.6						
Discount	5%			96726.1	19462.7	4768.3	120957.0	14717.2	2167.8	16885.0		51574.3	0.0	51574.3	38697.6	835.1	12965.1						
Discount	10%			74299.3	14842.7	3658.7	92800.8	11181.7	1540.7	12722.4		37694.0	0.0	37694.0	33947.5	321.0	8115.7						
Discount	12%			67515.3	13450.0	3323.4	84288.7	10106.4	1357.2	11463.5		33661.3	0.0	33661.3	32325.4	222.0	6616.5						
Discount	15%			59012.9	11708.5	2903.4	73624.7	8756.2	1132.4	9888.6		28734.0	0.0	28734.0	30138.1	129.4	4734.7						
Discount	18%			52081.7	10292.8	2561.2	64935.7	7654.8	954.3	8609.2		24832.7	0.0	24832.7	28205.7	76.6	3211.5						
Discount	20%			48149.7	9491.6	2367.2	60008.5	7030.4	855.9	7886.2		22669.8	0.0	22669.8	27040.1	54.5	2357.8						
Discount	25%			40155.4	7867.7	1973.0	49996.0	5763.9	662.5	6426.4		18394.2	0.0	18394.2	24488.3	23.9	663.2						

Reserve Life	Reserve Half Life	Reserve Life Index	Before Tax Payout	First Year Co Gr. Operating Costs
17.0 years	3.0 years	27.2	4.9 years	\$/BOE 15-99

Canlin Energy Corporation  
Project : 22297 - Report : H4  
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Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vmdl

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38



Production Start : 2019-01-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Proved Undeveloped

Appendix C  
Production and Price Forecast

Year	Light & Medium Oil				Gas				Solution Gas				Ethane				Propane				
	Gr. Well Count	Gr. Daily Bbl/d	Gross MBBbl	Co Grs MBBbl	Gr. Well Count	Gr. Daily Mcf/d	Gross MMcf	Co Grs MMcf	Gr. Well Count	Gr. Daily MMcf	Gross MMcf	Co Grs MMcf	Gr. Well Count	Gr. Daily MMBbl	Gross MMBbl	Co Grs MMBbl	Gr. Well Count	Gr. Daily MMBbl	Gross MMBbl	Co Grs MMBbl	
2019	2	232	84.8	56.2	52.0	72.76	-	-	336	223	209	2.88	0.0	0.0	1.1	0.7	0.7	3.03	1.1	0.7	22.32
2020	7	761	278.5	233.4	207.4	76.49	-	-	1103	924	868	3.62	0.0	0.0	3.6	3.0	2.7	4.74	3.6	3.0	25.91
2021	7	284	103.8	85.0	64.2	80.70	-	-	411	337	307	3.86	0.0	0.0	1.4	1.1	0.8	5.31	1.4	1.1	28.35
2022	11	580	211.6	198.4	177.2	82.35	-	-	838	785	735	4.26	0.0	0.0	2.8	2.6	2.0	6.21	2.8	2.6	29.79
2023	13	590	215.4	204.9	163.6	84.03	-	-	853	811	724	4.37	0.0	0.0	6.47	2.7	2.0	6.47	6.47	2.7	30.75
2024	14	522	191.2	182.4	138.0	85.74	-	-	757	722	628	4.48	0.0	0.0	6.72	2.5	2.4	6.72	6.72	2.5	31.73
2025	14	327	119.4	111.8	83.5	87.49	-	-	473	443	389	4.60	0.0	0.0	6.99	1.6	1.5	6.99	6.99	1.6	32.73
2026	14	260	95.0	88.3	68.5	89.28	-	-	376	350	313	4.72	0.0	0.0	7.26	1.2	1.2	7.26	7.26	1.2	33.76
2027	14	220	80.1	74.2	59.7	91.10	-	-	317	294	267	4.84	0.0	0.0	7.53	1.0	1.0	7.53	7.53	1.0	34.80
2028	14	191	69.7	64.4	53.1	92.96	-	-	276	255	234	4.96	0.0	0.0	7.82	0.9	0.8	7.82	7.82	0.9	35.86
2029	14	168	61.3	56.6	47.4	94.85	-	-	243	224	207	5.05	0.0	0.0	8.05	0.8	0.7	8.05	8.05	0.8	36.77
2030	14	150	54.6	50.3	42.6	96.78	-	-	216	199	184	5.16	0.0	0.0	8.29	0.7	0.7	8.29	8.29	0.7	37.70
2031	14	132	48.3	44.7	38.1	98.75	-	-	191	177	163	5.27	0.0	0.0	8.53	0.6	0.6	8.53	8.53	0.6	38.64
2032	13	100	36.6	35.2	30.0	100.76	-	-	145	139	128	5.38	0.0	0.0	8.78	0.5	0.5	8.78	8.78	0.5	39.60
2033	7	63	22.9	22.9	19.2	102.81	-	-	91	91	82	5.48	0.0	0.0	9.03	0.3	0.3	9.03	9.03	0.3	40.59
2034	7	56	20.6	20.6	17.4	104.90	-	-	82	82	74	5.59	0.0	0.0	9.29	0.3	0.3	9.29	9.29	0.3	41.59
2035	7	5	1.7	1.7	1.4	107.04	-	-	7	7	6	5.71	0.0	0.0	9.56	0.0	0.0	9.56	9.56	0.0	42.61
Total			1695.7	1531.0	1263.4				6715	6063	5519		0.2	0.1	0.1	20.0	22.1		22.1	20.0	15.7

Year	Heavy Oil				Bitumen				Sulphur				Butane				Pentane Plus				
	Gr. Well Count	Gr. Daily Bbl/d	Gross MBBbl	Co Grs MBBbl	Gr. Well Count	Gr. Daily MBBbl	Gross MBBbl	Co Grs MBBbl	Gr. Well Count	Gr. Daily MLt	Gross MLt	Co Grs MLt	Gr. Well Count	Gr. Daily MMBbl	Gross MMBbl	Co Grs MMBbl	Gr. Well Count	Gr. Daily MMBbl	Gross MMBbl	Co Grs MMBbl	
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total													39.7	35.8	29.3	50.4	45.5		50.4	45.5	37.4



Production Start : 2019-01-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Proved Undeveloped

Appendix C  
Summary of Reserves and Net Present Values

Year	Oil			Gas			NGL			Revenue			Royalties			Resource			Aband. & Reclaim.			Sask. Tax			Before Tax			BTax Cum.		
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
2019	4089.7	641.0	199.8	0.0	0.0	0.0	0.0	0.0	305.5	54.5	43.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	151.4	0.0	3084.3
2020	17849.8	3349.0	874.4	0.0	0.0	0.0	0.0	0.0	2212.8	301.3	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6812.7	0.0	13293.1
2021	6662.0	1301.1	335.2	0.0	0.0	0.0	0.0	0.0	1843.5	197.3	26.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3213.9	0.0	3611.8
2022	16334.4	3346.1	801.3	0.0	0.0	0.0	0.0	0.0	2012.4	279.8	19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6655.2	0.0	12074.7
2023	17219.4	3544.6	846.9	0.0	0.0	0.0	0.0	0.0	3343.3	401.7	556.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7503.4	0.0	10609.5
2024	15638.9	3233.0	771.2	0.0	0.0	0.0	0.0	0.0	3494.9	407.8	748.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7405.0	0.0	8402.4
2025	9783.4	2035.2	483.6	0.0	0.0	0.0	0.0	0.0	2420.8	274.2	348.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5604.3	0.0	4202.6
2026	7887.3	1649.8	390.8	0.0	0.0	0.0	0.0	0.0	1720.0	191.8	254.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5091.2	0.0	3054.0
2027	6758.8	1420.8	335.7	0.0	0.0	0.0	0.0	0.0	1258.8	136.5	206.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4812.5	0.0	2373.6
2028	5989.5	1264.5	298.2	0.0	0.0	0.0	0.0	0.0	993.7	107.2	177.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4572.0	0.0	1915.9
2029	5370.9	1132.8	267.8	0.0	0.0	0.0	0.0	0.0	816.5	89.4	156.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4379.1	0.0	1508.5
2030	4872.1	1028.7	243.2	0.0	0.0	0.0	0.0	0.0	694.7	78.2	141.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4274.6	0.0	1111.6
2031	4410.5	931.7	220.5	0.0	0.0	0.0	0.0	0.0	598.3	69.0	127.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4158.5	0.0	747.6
2032	3542.1	748.4	177.3	0.0	0.0	0.0	0.0	0.0	473.1	55.0	112.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3464.5	0.0	472.9
2033	2355.9	497.6	118.1	0.0	0.0	0.0	0.0	0.0	319.3	36.8	100.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2309.3	0.0	279.4
2034	2161.7	456.3	108.5	0.0	0.0	0.0	0.0	0.0	285.1	33.3	91.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2279.1	0.0	103.6
2035	177.0	37.4	8.9	0.0	0.0	0.0	0.0	0.0	23.8	2.7	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	189.8	0.0	4.9
2036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub Total	131303.4	26618.2	6481.3	0.0	0.0	0.0	0.0	0.0	22816.6	2716.5	3175.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74276.4	0.0	66850.4
2 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	131303.4	26618.2	6481.3	0.0	0.0	0.0	0.0	0.0	22816.6	2716.5	3175.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74276.4	0.0	66850.4

Year	Other Capital			CEE			CDE			COGPE			Total Capital			Net Revenue			Cum. Net Revenue			AdValorem /Severance			Aband. & Reclaim.			Sask. Tax			Before Tax			BTax Cum.		
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$			
2019	3870.2	0.0	0.0	15439.2	0.0	0.0	19309.4	-16225.1	-16225.1	-16225.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-16225.1			
2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13293.1	-2932.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2932.0			
2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3611.8	679.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3611.8			
2022	2889.0	0.0	0.0	11478.1	0.0	0.0	14367.1	-2292.4	-2292.4	-2292.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2292.4			
2023	2217.4	0.0	0.0	8816.8	0.0	0.0	11034.2	-424.8	-424.8	-424.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-424.8			
2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8402.4	8402.4	8402.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2037.3			
2025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4202.6	4202.6	4202.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8402.4			
2026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3054.0	3054.0	3054.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3054.0				
2027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2373.6	2373.6	2373.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2373.6				
2028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1915.9	1915.9	1915.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1915.9				
2029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1508.5	1508.5	1508.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1508.5				
2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1111.6	1111.6	1111.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1111.6				
2031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	747.6	747.6	747.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	747.6				
2032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21278.9	21278.9	21278.9	0.0																									

Appendix C  
Summary of Reserves and Net Present Values

Canlin Energy Corporation  
Spirit River  
Total Probable

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Year	Oil				Gas				Synthetic				Tight Oil		Solution Gas		Non-Assoc		CBM		Ethane		Propane		Butane Pentane Plus		Total NGL		Sulphur		Equiv. Oil							
	Comp. Gross	Comp. Gross	BOE Comp. Gross	Revenue	Comp. Gross	Comp. Gross	BOE Comp. Gross	Revenue	Other Revenue	Total Revenue	Comp. Gross	Comp. Gross	BOE Comp. Gross	Revenue	Total Revenue	Royalty	Non-Crown	Total Royalty	MMcf	MMcf	MMcf	MMcf	MMBbl	MMBbl	MMBbl	MMBbl	MMBbl	MMBbl	MMBbl	MMBbl	MMT	MMT	MBOE	MBOE				
2018	35.2	218	75.1	586.9	100.6	44.3	731.8	189.7	4.7	194.4	26.6	4.7	194.4	26.6	238.7	0.0	238.7	0.0	238.7	0.0	238.7	0.0	238.7	0.0	238.7	0.0	238.7	0.0	238.7	0.0	238.7	0.0	298.7	0.0	-1397.7	0.0		
2019	288.3	1209	510.1	7656.4	1271.2	396.8	9324.3	11687.7	30.1	1198.8	12.9	82.6	3059.4	17.9	2810.8	0.0	2810.8	0.0	2810.8	0.0	2810.8	0.0	2810.8	0.0	2810.8	0.0	2810.8	0.0	2810.8	0.0	2810.8	0.0	9138.1	0.0	9138.1	0.0		
2020	491.1	2023	862.2	13747.6	2683.9	701.8	17133.4	2976.8	82.6	3059.4	17.9	82.6	3059.4	17.9	4935.9	0.0	4935.9	0.0	4935.9	0.0	4935.9	0.0	4935.9	0.0	4935.9	0.0	4935.9	0.0	4935.9	0.0	4935.9	0.0	3364.9	0.0	3364.9	0.0		
2021	346.1	1446	611.3	10195.4	2039.0	526.6	12761.0	2065.5	39.8	2105.3	16.5	31.7	2998.1	20.8	3767.2	0.0	3767.2	0.0	3767.2	0.0	3767.2	0.0	3767.2	0.0	3767.2	0.0	3767.2	0.0	3767.2	0.0	3767.2	0.0	7160.7	0.0	7160.7	0.0		
2022	378.1	1569	666.0	11365.3	2440.4	585.9	14391.6	2966.4	31.7	2998.1	20.8	224.7	2959.1	23.7	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	5775.2	0.0	5775.2	0.0		
2023	320.0	1344	566.6	9815.6	2143.0	513.7	12472.4	2734.4	224.7	2959.1	23.7	224.7	2959.1	23.7	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	3738.1	0.0	4998.8	0.0	4998.8	0.0		
2024	267.5	1149	478.2	8394.3	1881.7	450.6	10726.6	2317.3	279.1	2596.4	24.2	279.1	2596.4	24.2	3331.4	0.0	3331.4	0.0	3331.4	0.0	3331.4	0.0	3331.4	0.0	3331.4	0.0	3331.4	0.0	3331.4	0.0	3331.4	0.0	3318.2	0.0	3318.2	0.0		
2025	188.5	822	339.4	6021.1	1379.4	329.5	7730.0	1670.0	133.4	1803.4	23.3	133.4	1803.4	23.3	2608.4	0.0	2608.4	0.0	2608.4	0.0	2608.4	0.0	2608.4	0.0	2608.4	0.0	2608.4	0.0	2608.4	0.0	2608.4	0.0	2714.2	0.0	2714.2	0.0		
2026	157.1	744	293.7	5120.2	1280.6	307.7	6708.5	1485.9	96.5	1582.4	23.6	96.5	1582.4	23.6	2411.9	0.0	2411.9	0.0	2411.9	0.0	2411.9	0.0	2411.9	0.0	2411.9	0.0	2411.9	0.0	2411.9	0.0	2411.9	0.0	2569.5	0.0	2569.5	0.0		
2027	143.5	702	272.3	4770.2	1238.3	298.3	6306.8	1274.8	100.5	1375.3	21.8	100.5	1375.3	21.8	2569.5	0.0	2569.5	0.0	2569.5	0.0	2569.5	0.0	2569.5	0.0	2569.5	0.0	2569.5	0.0	2569.5	0.0	2569.5	0.0	2619.4	0.0	2619.4	0.0		
2028	132.3	625	247.0	4500.7	1133.7	272.3	5906.6	1056.0	90.4	1146.4	19.4	90.4	1146.4	19.4	2685.4	0.0	2685.4	0.0	2685.4	0.0	2685.4	0.0	2685.4	0.0	2685.4	0.0	2685.4	0.0	2685.4	0.0	2685.4	0.0	2074.9	0.0	2074.9	0.0		
2029	120.6	508	213.9	4174.9	937.6	222.0	5334.5	863.8	75.2	939.0	17.6	75.2	939.0	17.6	2606.0	0.0	2606.0	0.0	2606.0	0.0	2606.0	0.0	2606.0	0.0	2606.0	0.0	2606.0	0.0	2606.0	0.0	2606.0	0.0	1841.4	0.0	1841.4	0.0		
2030	104.5	473	191.2	3693.1	890.1	210.5	4793.7	720.4	52.7	773.1	16.1	52.7	773.1	16.1	2450.7	0.0	2450.7	0.0	2450.7	0.0	2450.7	0.0	2450.7	0.0	2450.7	0.0	2450.7	0.0	2450.7	0.0	2450.7	0.0	1569.9	0.0	1569.9	0.0		
2031	91.1	415	167.2	3284.5	798.1	188.9	4271.5	605.1	45.9	651.0	15.2	45.9	651.0	15.2	2251.4	0.0	2251.4	0.0	2251.4	0.0	2251.4	0.0	2251.4	0.0	2251.4	0.0	2251.4	0.0	2251.4	0.0	2251.4	0.0	1365.7	0.0	1365.7	0.0		
2032	98.5	436	178.5	3633.0	858.3	203.3	4694.6	580.9	46.5	627.4	13.4	46.5	627.4	13.4	2909.3	0.0	2909.3	0.0	2909.3	0.0	2909.3	0.0	2909.3	0.0	2909.3	0.0	2909.3	0.0	2909.3	0.0	2909.3	0.0	1395.6	0.0	1395.6	0.0		
2033	112.4	439	192.9	4216.8	879.2	208.6	5304.6	583.1	45.8	628.8	11.9	45.8	628.8	11.9	3750.4	0.0	3750.4	0.0	3750.4	0.0	3750.4	0.0	3750.4	0.0	3750.4	0.0	3750.4	0.0	3750.4	0.0	3750.4	0.0	1005.8	0.0	1005.8	0.0		
2034	96.4	378	165.7	3689.7	771.3	183.3	4644.3	488.1	39.9	538.0	11.6	39.9	538.0	11.6	3460.7	0.0	3460.7	0.0	3460.7	0.0	3460.7	0.0	3460.7	0.0	3460.7	0.0	3460.7	0.0	3460.7	0.0	284.4	0.0	284.4	0.0	673.9	0.0	673.9	0.0
2035	105.3	439	185.8	4114.2	915.5	217.6	5247.3	542.0	107.8	649.8	12.4	107.8	649.8	12.4	4286.9	0.0	4286.9	0.0	4286.9	0.0	4286.9	0.0	4286.9	0.0	4286.9	0.0	4286.9	0.0	4286.9	0.0	84.3	0.0	84.3	0.0	226.3	0.0	226.3	0.0
2036	78.2	334	139.4	3125.9	710.7	169.4	4006.0	416.8	106.4	523.2	13.1	106.4	523.2	13.1	3383.9	0.0	3383.9	0.0	3383.9	0.0	3383.9	0.0	3383.9	0.0	3383.9	0.0	3383.9	0.0	3383.9	0.0	57.4	0.0	57.4	0.0	156.3	0.0	156.3	0.0
2037	5.5	24	9.9	225.5	51.1	12.2	288.7	30.9	8.7	39.7	13.7	8.7	39.7	13.7	246.5	0.0	246.5	0.0	246.5	0.0	246.5	0.0	246.5	0.0	246.5	0.0	246.5	0.0	246.5	0.0	-907.3	0.0	909.9	0.0	909.9	0.0		
Sub Total				112331.4	24403.5	6043.2	142778.1	24746.5	1642.4	26389.0		1642.4	26389.0		58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	48732.7	0.0	48732.7	0.0	48732.7	0.0		
5 Years				0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total				112331.4	24403.5	6043.2	142778.1	24746.5	1642.4	26389.0		1642.4	26389.0		58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	58675.9	0.0	48732.7	0.0	48732.7	0.0	48732.7	0.0	48732.7	0.0
Discount	5%			80683.3	17259.5	4322.5	102265.3	18136.6	1085.1	1921.7		1085.1	1921.7		38490.8	0.0	38490.8	0.0	38490.8	0.0	38490.8	0.0	38490.8	0.0	38490.8	0.0	38490.8	0.0	38490.8	0.0	92.4	0.0	35062.1	0.0	35062.1	0.0	35062.1	0.0
Discount	10%			61669.7	12992.6	3289.6	77951.9	13974.1	763.8	14737.9		763.8	14737.9		27421.6	0.0	27421.6	0.0	27421.6	0.0	27421.6	0.0	27421.6	0.0	27421.6	0.0	27421.6	0.0	27421.6	0.0	8680.3	0.0	27143.9	0.0	27143.9	0.0	27143.9	0.0
Discount	12%			56145.3	11759.9	2990.0	70895.1	12731.8	673.5	13405.3		673.5	13405.3		24403.2	0.0	24403.2	0.0	24403.2	0.0	24403.2	0.0	24403.2	0.0	24403.2	0.0	24403.2	0.0	24403.2	0.0	8421.4	0.0	24706.3	0.0	24706.3	0.0	24706.3	0.0
Discount	15%			49357.0	10251.9	2622.4	62231.3	11183.8	564.9	11748.7		564.9	11748.7		20837.6	0.0	20837.6	0.0	20837.6	0.0	20837.6	0.0	20837.6	0.0	20837.6	0.0	20837.6	0.0	20837.6	0.0	8059.3	0.0	21626.7	0.0	21626.7	0.0	21626.7	0.0
Discount	18%			43922.1	9051.5	2328.8	55302.4	9927.5	480.4	10408.0		480.4	10408.0		18106.8	0.0	18106.8	0.0	18106.8	0.0	18106.8	0.0	18106.8	0.0	18106.8	0.0	18106.8	0.0	18106.8	0.0	7725.8	0.0	19096.7	0.0	19096.7	0.0	19096.7	0.0
Discount	20%			40871.9	8381.2	2164.4	51417.4	9216.3	434.2	9650.6		434.2	9650.6		16625.5	0.0	16625.5	0.0	16625.5	0.0	16625.5	0.0	16625.5	0.0	16625.5	0.0	16625.5	0.0	16625.5	0.0	7517.7	0.0	17653.6	0.0	17653.6			

Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Total Probable

Appendix C  
Production and Price Forecast

Year	Light & Medium Oil				Gas				Solution Gas				Ethane				Propane							
	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Mcf/d	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Mcf	Gross MMcf	Co Grs MMcf	Co Net MMcf	Price \$/Bbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl
2018	50	10.8	49.9	7.5	4.9	77.97	16	4	62	45	38	2.16	62	45	38	2.16	0.0	0.0	0.0	0.0	0.2	0.2	0.1	22.26
2019	2	438	159.8	105.2	88.4	72.76	53	19	659	435	409	2.88	659	435	409	2.88	0.0	0.0	0.0	0.0	2.2	1.5	1.2	22.32
2020	3	669	244.8	179.7	139.5	76.49	86	31	997	730	676	3.62	997	730	676	3.62	0.0	0.0	0.0	0.0	3.4	2.4	1.8	25.91
2021	4	435	158.8	126.3	100.2	80.70	106	39	1066	652	515	3.86	1066	652	515	3.86	0.0	0.0	0.0	0.0	2.3	1.7	1.3	28.35
2022	4	445	162.6	138.0	101.8	82.35	117	43	1177	663	559	4.26	1177	663	559	4.26	0.0	0.0	0.0	0.0	2.3	1.9	1.3	29.79
2023	4	378	138.0	116.8	81.9	84.03	122	45	1422	563	476	4.37	1422	563	476	4.37	0.0	0.0	0.0	0.0	2.0	1.6	1.1	30.75
2024	4	326	119.5	97.9	68.0	85.74	122	45	1489	489	406	4.48	1489	489	406	4.48	0.0	0.0	0.0	0.0	2.0	1.6	1.1	31.73
2025	5	238	87.0	68.8	48.5	87.49	119	43	359	286	250	4.60	359	286	250	4.60	0.0	0.0	0.0	0.0	2.1	1.8	1.4	31.73
2026	5	194	71.0	57.3	40.0	89.28	302	110	293	236	206	4.72	293	236	206	4.72	0.0	0.0	0.0	0.0	2.1	1.8	1.4	32.73
2027	4	178	64.8	52.4	37.6	91.10	382	140	262	211	185	4.84	262	211	185	4.84	0.0	0.0	0.0	0.0	2.1	1.8	1.4	33.73
2028	6	168	61.6	48.4	36.4	92.96	1	325	239	190	170	4.96	239	190	170	4.96	0.0	0.0	0.0	0.0	7.82	1.2	0.8	35.86
2029	7	156	57.1	44.0	34.2	94.85	1	25	224	183	166	5.05	224	183	166	5.05	0.0	0.0	0.0	0.0	0.0	0.6	0.4	36.77
2030	8	135	49.2	38.2	30.3	96.78	0	0	189	152	141	5.27	189	152	141	5.27	0.0	0.0	0.0	0.0	0.0	0.6	0.4	37.70
2031	7	113	41.3	33.3	26.8	98.75	0	0	207	160	150	5.38	207	160	150	5.38	0.0	0.0	0.0	0.0	0.0	0.6	0.4	38.64
2032	7	127	46.3	36.1	29.9	100.76	0	0	209	160	151	5.48	209	160	151	5.48	0.0	0.0	0.0	0.0	0.0	0.6	0.4	39.60
2033	14	146	53.2	41.0	35.0	102.81	0	0	176	138	130	5.59	176	138	130	5.59	0.0	0.0	0.0	0.0	0.0	0.6	0.4	41.59
2034	15	123	45.0	35.2	30.1	104.90	0	0	192	160	148	5.71	192	160	148	5.71	0.0	0.0	0.0	0.0	0.0	0.6	0.4	42.61
2035	10	121	44.1	38.4	32.5	107.04	0	0	147	122	112	5.82	147	122	112	5.82	0.0	0.0	0.0	0.0	0.0	0.5	0.4	43.65
2036	11	88	32.1	28.6	23.9	109.21	0	0	10	9	8	5.94	10	9	8	5.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.71
2037	9	6	2.3	2.0	1.7	111.43	0	0	6824	5345	4836	6.24	6824	5345	4836	6.24	0.2	0.1	0.1	0.1	24.6	18.3	13.2	44.71
Total			1649.0	1295.3	991.5			646	210	168			6824	5345	4836		0.2	0.1	0.1	0.1	24.6	18.3	13.2	

Year	Heavy Oil				Bitumen				Sulphur				Butane				Pentane Plus									
	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily Bbl/d	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl	Gr. Well Count	Gr. Daily MLL	Gross MLL	Co Grs MLL	Co Net MLL	Price \$/LT	Gr. Well Count	Gr. Daily MMBbl	Gross MMBbl	Co Grs MMBbl	Co Net MMBbl	Price \$/Bbl		
2018																										
2019																										
2020																										
2021																										
2022																										
2023																										
2024																										
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2031																										
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2033																										
2034																										
2035																										
2036																										
2037																										
Total																										

Canlin Energy Corporation  
 Project : 22297 - Report : H1  
 Price : 2018-05-31 SAL Prices  
 Scenario : NIS1-101  
 DB : Canlin22297.vnd1  
 Run By : CarolinH  
 Version : 16.2.0.45  
 Run Time : 18/09/13 14:38




Production Start : 2018-06-01  
As Of Date : 2018-05-31

Canlin Energy Corporation  
Spirit River  
Total Probable

Appendix C  
Summary of Reserves and Net Present Values

Year	Oil			Gas			NGL			Revenue			Royalties			Resource			Aband. & Reclaim.			Sask. Tax			Before Tax			BTax Cum.			
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
2018	586.9	100.6	44.3	0.0	0.0	0.0	0.0	0.0	226.4	36.7	0.0	4.7	0.0	0.0	238.7	0.0	0.0	0.0	2810.8	0.0	0.0	0.0	0.0	0.0	0.0	298.7	0.0	0.0	298.7	0.0	5314.8
2019	7656.4	1271.2	396.8	0.0	0.0	0.0	0.0	1332.5	1638.8	1638.8	30.1	0.0	0.0	0.0	2810.8	0.0	0.0	0.0	4935.9	0.0	0.0	0.0	0.0	0.0	0.0	-1397.7	0.0	0.0	-1397.7	0.0	9138.1
2020	13747.6	2683.9	701.8	0.0	0.0	0.0	0.0	3341.7	3641.9	3641.9	82.6	0.0	0.0	0.0	4935.9	0.0	0.0	0.0	3767.2	0.0	0.0	0.0	0.0	0.0	0.0	3364.9	0.0	0.0	3364.9	0.0	11404.0
2021	10195.4	2039.0	526.6	0.0	0.0	0.0	0.0	2331.3	2658.8	2658.8	39.8	0.0	0.0	0.0	3767.2	0.0	0.0	0.0	4232.8	0.0	0.0	0.0	0.0	0.0	0.0	7160.7	0.0	0.0	7160.7	0.0	18564.7
2022	11365.3	2440.4	585.9	0.0	0.0	0.0	0.0	3355.1	388.7	388.7	31.7	0.0	0.0	0.0	4232.8	0.0	0.0	0.0	3738.1	0.0	0.0	0.0	0.0	0.0	0.0	3311.4	0.0	0.0	3311.4	0.0	24339.9
2023	9815.6	2143.0	513.7	0.0	0.0	0.0	0.0	3105.3	370.9	370.9	224.7	0.0	0.0	0.0	3738.1	0.0	0.0	0.0	279.1	0.0	0.0	0.0	0.0	0.0	0.0	2714.2	0.0	0.0	2714.2	0.0	32456.9
2024	8394.3	1881.7	450.6	0.0	0.0	0.0	0.0	2633.4	316.2	316.2	133.4	0.0	0.0	0.0	279.1	0.0	0.0	0.0	2608.4	0.0	0.0	0.0	0.0	0.0	0.0	2608.4	0.0	0.0	2608.4	0.0	33182.2
2025	6021.1	1379.4	329.5	0.0	0.0	0.0	0.0	1900.3	230.3	230.3	133.4	0.0	0.0	0.0	2608.4	0.0	0.0	0.0	1707.5	0.0	0.0	0.0	0.0	0.0	0.0	2411.9	0.0	0.0	2411.9	0.0	33182.2
2026	5120.2	1280.6	307.7	0.0	0.0	0.0	0.0	1707.5	221.6	221.6	100.5	0.0	0.0	0.0	2411.9	0.0	0.0	0.0	1456.9	0.0	0.0	0.0	0.0	0.0	0.0	2569.5	0.0	0.0	2569.5	0.0	33182.2
2027	4770.2	1238.3	298.3	0.0	0.0	0.0	0.0	1456.9	182.1	182.1	90.4	0.0	0.0	0.0	2569.5	0.0	0.0	0.0	106.0	0.0	0.0	0.0	0.0	0.0	0.0	2074.9	0.0	0.0	2074.9	0.0	33182.2
2028	4500.7	1133.7	272.3	0.0	0.0	0.0	0.0	1203.1	147.1	147.1	75.2	0.0	0.0	0.0	2074.9	0.0	0.0	0.0	75.2	0.0	0.0	0.0	0.0	0.0	0.0	1789.5	0.0	0.0	1789.5	0.0	33182.2
2029	4174.9	937.6	222.0	0.0	0.0	0.0	0.0	970.6	106.8	106.8	52.7	0.0	0.0	0.0	1789.5	0.0	0.0	0.0	52.7	0.0	0.0	0.0	0.0	0.0	0.0	1569.9	0.0	0.0	1569.9	0.0	33182.2
2030	3693.1	890.1	210.5	0.0	0.0	0.0	0.0	807.4	87.0	87.0	45.9	0.0	0.0	0.0	1569.9	0.0	0.0	0.0	45.9	0.0	0.0	0.0	0.0	0.0	0.0	1369.0	0.0	0.0	1369.0	0.0	33182.2
2031	3284.5	798.1	188.9	0.0	0.0	0.0	0.0	676.4	71.3	71.3	46.5	0.0	0.0	0.0	1369.0	0.0	0.0	0.0	46.5	0.0	0.0	0.0	0.0	0.0	0.0	1157.9	0.0	0.0	1157.9	0.0	33182.2
2032	3633.0	858.3	203.3	0.0	0.0	0.0	0.0	650.7	69.8	69.8	45.8	0.0	0.0	0.0	1157.9	0.0	0.0	0.0	45.8	0.0	0.0	0.0	0.0	0.0	0.0	925.3	0.0	0.0	925.3	0.0	33182.2
2033	4216.8	879.2	208.6	0.0	0.0	0.0	0.0	653.1	70.1	70.1	39.9	0.0	0.0	0.0	925.3	0.0	0.0	0.0	39.9	0.0	0.0	0.0	0.0	0.0	0.0	716.0	0.0	0.0	716.0	0.0	33182.2
2034	3689.7	771.3	183.3	0.0	0.0	0.0	0.0	558.7	60.6	60.6	107.8	0.0	0.0	0.0	716.0	0.0	0.0	0.0	107.8	0.0	0.0	0.0	0.0	0.0	0.0	4286.9	0.0	0.0	4286.9	0.0	33182.2
2035	4114.2	915.5	217.6	0.0	0.0	0.0	0.0	610.9	68.9	68.9	106.4	0.0	0.0	0.0	4286.9	0.0	0.0	0.0	106.4	0.0	0.0	0.0	0.0	0.0	0.0	3883.9	0.0	0.0	3883.9	0.0	33182.2
2036	3125.9	710.7	169.4	0.0	0.0	0.0	0.0	470.0	53.2	53.2	8.7	0.0	0.0	0.0	3883.9	0.0	0.0	0.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	2465.5	0.0	0.0	2465.5	0.0	33182.2
2037	225.5	51.1	12.2	0.0	0.0	0.0	0.0	34.8	3.8	3.8	0.0	0.0	0.0	0.0	2465.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57713.3	0.0	0.0	57713.3	0.0	33182.2
Sub Total	112331.4	24403.5	6043.2	0.0	0.0	0.0	0.0	28026.1	3279.6	3279.6	1642.4	0.0	0.0	0.0	58675.9	0.0	0.0	0.0	1642.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57713.3
5 Years	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	112331.4	24403.5	6043.2	0.0	0.0	0.0	0.0	28026.1	3279.6	3279.6	1642.4	0.0	0.0	0.0	58675.9	0.0	0.0	0.0	1642.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57713.3

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/13 14:38



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Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vndi

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Canlin Energy Corporation  
Project : 22297 - Report : H2  
Page : 1 of 1

**Appendix D – Well List with Interests and Burdens**

Appendix D  
Interests and Burdens

Canlin Energy Corporation  
Spirit River

As Of Date : 2018-05-31

Entity Status Location	Phase Formation	Type	Type	Payout Value	WI % (PE/TF)	Interest Start YYYY mm	Payable			Receivable				
							GORR %	NORR %	NPI %	FHI %	GORR %	NORR %	NPI %	
101/04-18-078-06W6/HZ/CLKK	Oil	P&NG	Current	100.00	100.00	0.00								
100/12-10-078-07W6/0 PUMPING OIL	Oil	P&NG	Current	34.88	34.88									
100/13-10-078-07W6/0 PUMPING OIL	Oil	P&NG	Current	34.88	34.88									
100/14-10-078-07W6/0 PUMPING OIL	Oil	P&NG	Current	34.88	34.88									
101/13-11-078-07W6/HZ/CLKK	Oil	P&NG	Current	100.00	100.00	9.00								
101/14-11-078-07W6/HZ/CLKK	Oil	P&NG	Current	100.00	100.00	9.00								
100/15-11-078-07W6/0 PUMPING OIL	Oil	P&NG	Current	100.00	100.00	9.00								
101/16-11-078-07W6/HZ/CLKK	Oil	P&NG	Current	100.00	100.00	9.00								
101/13-12-078-07W6/HZ/CLKK	Oil	P&NG	Current	65.00	65.00									
101/14-12-078-07W6/HZ/CLKK	Oil	P&NG	Current	65.00	65.00									
101/15-12-078-07W6/HZ/CLKK	Oil	P&NG	Current	65.00	65.00									
101/01-13-078-07W6/HZ/CLKK	Oil	P&NG	Current	65.00	65.00									
100/02-13-078-07W6/0 PUMPING OIL	Oil	P&NG	Current	65.00	65.00									
100/03-13-078-07W6/0 FLOWING OIL	Oil	P&NG	Current	65.00	65.00									
102/04-13-078-07W6/0 PUMPING OIL	Oil	P&NG	Current	65.00	65.00									
100/10-13-078-07W6/0 † FLOWING GAS	Gas	P&NG	Current	65.00	65.00									
101/02-14-078-07W6/HZ/CLKK	Oil	P&NG	Current	100.00	100.00									
101/03-14-078-07W6/HZ/CLKK	Oil	P&NG	Current	100.00	100.00									

# Uneconomic \*\* NRA

Canlin Energy Corporation  
Project : 22297 - Report : T4  
Page : 1 of 2

Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vndi

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/18 07:00



Appendix D  
Interests and Burdens

Canlin Energy Corporation  
Spirit River

As Of Date : 2018-05-31

Entity Status	Formation	Phase Type	Type	Payout	WI %	Interest Start	Payable			Receivable				
							Value (PF/TF)	GORR	NORR	NPI	Sliding Scale	FHI	GORR	NORR
Location				mm		YYYY	%	%	%	%	%	%	%	%
100/04-14-078-07W6/HZ/CLKL	CLKL	Oil	P&NG Current		100.00									
102/16-14-078-07W6/0 PUMPING OIL	CLKL	Oil	P&NG Current		100.00									
100/13-23-078-07W6/0 PUMPING OIL	CLKL	Oil	P&NG Current		50.00									
102/14-23-078-07W6/0 PUMPING OIL	CLKL	Oil	P&NG Current		50.00									
100/15-23-078-07W6/0 PUMPING OIL	CLKL	Oil	P&NG Current		50.00									
102/16-23-078-07W6/0 PUMPING OIL	CLKL	Oil	P&NG Current		50.00									
100/03-24-078-07W6/0 FLOWING GAS	GTNG	Gas	P&NG Current Payout	M\$ 1728.3	32.50									
		Gas	P&NG APO		67.50				1.40					
100/13-24-078-07W6/0 PUMPING OIL	CLKL	Oil	P&NG Current Payout	M\$ 3143.3	100.00									
		Oil	P&NG APO		67.50				1.40					
101/14-24-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		67.50				2.09					
101/15-24-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		67.50				1.40					
101/16-24-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		67.50				1.40					
101/13-26-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		100.00									
101/14-26-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		100.00									
101/15-26-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		100.00									
101/16-26-078-07W6/HZ/CLKL Location	CLKL	Oil	P&NG Current		100.00									
SP.River Field Cost		Facility	P&NG Current		100.00									

# Uneconomic \*\* NRA

Canlin Energy Corporation  
Project : 22297 - Report : T4  
Page : 2 of 2

Price : 2018-05-31 SAL Prices  
Scenario : NIS1-101  
DB : Canlin22297.vndi

Run By : CarolinH  
Version : 16.2.0.45  
Run Time : 18/09/18 07:00



**Appendix E – Representation Letter**

The Representation Letter has been included as Appendix E; it was prepared by Officers of the Company and confirms the accuracy, completeness and availability of all data requested by Sproule and or otherwise furnished to Sproule during the course of our evaluation of the Company's assets, herein reported on.





**MIE Holdings Corporation**  
*a value added oil & gas partner*

Date September 19, 2018

Sproule Associates Limited  
900, 140 – 4<sup>th</sup> Avenue SW  
Calgary, AB T2P 3N3

Dear Sir:

Regarding the evaluation of our Company's oil and gas reserves in the Spirit River area and independent appraisal of the economic value of these reserves (the "Reserves Evaluation") as of May 31, 2018 (the "Effective Date"), we herein confirm, to the best of our knowledge and belief after due inquiry, as of the Effective Date and, as applicable, as of today, the following representations and information made available to you during the conduct of the Reserves Evaluation:

1. We (the Client) have made available to you (the Evaluator) certain records, information, and data relating to the evaluated properties that we confirm is, with the exception of immaterial items, complete and accurate as of the Effective Date of the Reserves Evaluation, including, where applicable, the following:
  - accounting, financial, tax, and contractual data;
  - asset ownership and related encumbrance information;
  - details concerning product marketing, transportation, and processing arrangements;
  - all technical information including geological, engineering, and production and test data;
  - estimates of future abandonment and reclamation costs, excluding adjustments for salvage, for developed and undeveloped wells and material dedicated facilities, both existing and planned.
2. We confirm that all financial and accounting information provided to you is, both on an individual entity basis and in total, entirely consistent with that reported by our Company for public disclosure and audit purposes.
3. We confirm that our Company has satisfactory title to all of the assets, whether tangible, intangible, or otherwise, for which accurate and current ownership information has been provided.
4. With respect to all information provided to you regarding product marketing, transportation, and processing arrangements, we confirm that we have disclosed to you all anticipated changes, terminations, and additions to these arrangements that could reasonably be expected to have a material effect on the evaluation of our Company's reserves and future net revenues.

Hong Kong  
Room 21-26, 5/F  
Sun Hung Kai Centre, 30 Harbour Road,  
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Phone (852) 2511 0628 • Fax (852) 2511 1983

CHINA  
Suite 1501, Block C, Grand Place  
5 Hui Zhong Road, Chaoyang District  
Beijing 100101 P.R. China  
Phone 86 (10) 5123 8111 • Fax 86 (10) 5123 8223



**MIE Holdings Corporation**  
*a value added oil & gas partner*

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5. With the possible exception of items of an immaterial nature, we confirm the following as of the Effective Date:

- For all operated properties that you have evaluated, no changes have occurred or are reasonably expected to occur to the operating conditions or methods that have been used by our Company over the past twelve (12) months, except as disclosed to you. In the case of non-operated properties, we have advised you of any such changes of which we have been made aware.
- All regulatory approvals, permits, and licenses required to allow continuity of future operations and production from the evaluated properties are in place and, except as disclosed to you, there are no directives, orders, penalties, or regulatory rulings in effect or expected to come into effect relating to the evaluated properties.
- Except as disclosed to you, the producing trend and status of each evaluated well or entity in effect throughout the three-month period preceding the Effective Date are consistent with those that existed for the same well or entity immediately prior to this three-month period.
- Except as disclosed to you, we have no plans or intentions related to the ownership, development, or operation of the evaluated properties that could reasonably be expected to materially affect the production levels or recovery of reserves from the evaluated properties.
- If material changes of an adverse nature occur in the Company's operating performance subsequent to the Effective Date and prior to the report date, we will inform you of such material changes prior to requesting your approval for any public disclosure of any reserves information.

Between the Effective Date and the date of this letter nothing has come to our attention that has materially affected or could materially affect our reserves and the economic value of these reserves that has not been disclosed to you.

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**MIE Holdings Corporation**  
*a value added oil & gas partner*

---

Yours very truly,  
**MIE Holdings Corporation**

  
SIGNATURE

MEI LIMING(Leon)

NAME

Vice President

TITLE

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2018.DOCX

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## 1. RESPONSIBILITY STATEMENT

This circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Company. The Directors, having made all reasonable enquiries, confirm that, to the best of their knowledge and belief the information contained in this circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the mission of which would make any statement herein or this circular misleading.

## 2. DISCLOSURE OF INTERESTS

### (a) Directors' and Chief Executive's Interests in Shares and Underlying Shares

As at the Latest Practicable Date, the interests or short positions of the Directors and chief executive of the Company in the Shares, underlying shares and debentures (if any) of the Company or any its associated corporations (within the meaning of Part XV of the SFO) as required to be notified to the Company and the Stock Exchange pursuant to Division 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have under such provisions of the SFO), as recorded in the register maintained by the Company pursuant to section 352 of the SFO or otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the “**Model Code**”) were as follows:

*Interests and short positions in the Shares, underlying shares and debentures of the Company or its associated corporations*

Name of Director	Name of corporation	Capacity/nature of interest	Number of Shares (including options to be exercised)/ underlying shares interested	Approximate percentage of interest in the corporation
Mr. Zhang Ruilin	the Company	Interest of controlled corporation (Note 2)	1,577,095,234 (L)	53.67%
		Interest of controlled corporation (Note 3)	88,521,234 (S)	3.01%
		Beneficial owner (Note 4)	7,987,000 (L)	0.27%
Mr. Zhao Jiangwei	the Company	Interest of controlled corporation (Note 2)	1,577,095,234 (L)	53.67%
		Interest of controlled corporation (Note 3)	88,521,234 (S)	3.01%
		Beneficial owner (Note 4)	10,987,000 (L)	0.37%
Mr. Zhang Ruilin	Far East Energy Limited (“FEEL”)	Interest of controlled corporation (Note 2)	8,999	9.99%
Mr. Zhao Jiangwei	FEEL	Interest of controlled corporation (Note 2)	9,000	10%

Name of Director	Name of corporation	Capacity/nature of interest	Number of Shares (including options to be exercised)/ underlying shares interested	Approximate percentage of interest in the corporation
Mr. Jeffrey Willard Miller	the Company	Beneficial owner	2,611,333 (L)	0.09%
Mr. Mei Jianping	the Company	Beneficial owner	2,067,933 (L)	0.07%
Mr. Guo Yanjun	the Company	Beneficial owner	800,000 (L)	0.03%
Ms. Xie Na	the Company	Beneficial owner	800,000 (L)	0.03%

*Notes:*

- The letter “L” denotes long position in the Shares; and “S” denotes short position in the Shares.
- FEEL is held by Ms. Zhao Jiangbo (“Mrs. Zhang”), Mr. Zhang Ruilin (“Mr. Zhang”) and Mr. Zhao Jiangwei (“Mr. Zhao”) as to 80%, 9.99% and 10%, respectively. On May 24, 2013, 72,000 shares in FEEL were issued to Mrs. Zhang, 399,070,000 shares in the Company were transferred from FEEL to Champion International Energy Limited (“Champion”), 399,070,000 shares in the Company were transferred from FEEL to Orient International Energy Limited (“Orient”), 475,000,000 shares in the Company were transferred from FEEL to New Sun International Energy Limited (“New Sun”) and 141,460,000 shares in the Company were transferred from FEEL to Power International Energy Limited (“Power”). Each of Champion, Orient, New Sun and Power is a wholly-owned subsidiary of Sunrise Glory Holdings Limited, which is itself a wholly-owned subsidiary of FEEL. Mrs. Zhang, Mr. Zhang and Mr. Zhao have entered into an Acting-in-Concert Agreement under which they agreed to act in concert in relation to all matters that require the decisions of the shareholders of FEEL. Pursuant to the Acting-in-Concert Agreement, if a unanimous opinion in relation to the matters that require action in concert is unable to be reached, Mr. Zhang shall be allowed to vote on his, Mrs. Zhang’s and Mr. Zhao’s shares. The long interests which FEEL, Mr. Zhang and Mr. Zhao have in the 1,577,095,234 shares in the Company include (i) the beneficial interests which FEEL has (and in the case of Mr. Zhang and Mr. Zhao, the indirect beneficial interests which they have (through their shareholdings in FEEL)) in the 1,469,600,000 shares in the Company held by FEEL through its subsidiaries, (ii) the 7,887,000 share options granted to Mr. Zhang, (iii) the 7,887,000 share options granted to Mr. Zhao, (iv) the put option granted by FEEL, Mr. Zhang and Mr. Zhao, pursuant to a put and call option agreement, over the 88,521,234 shares in the Company held by Mr. Ho Chi Sing through Celestial Energy Limited (“Celestial”), as further described in note (3) below, (v) the 100,000 shares owned by Mr. Zhang himself and (vi) 3,100,000 shares owned by Mr. Zhao himself.
- The Company was informed on November 8, 2014 that TPG Star Energy Ltd. and Celestial had entered into a sale and purchase agreement pursuant to which Celestial had acquired and TPG Star Energy Ltd. has sold 211,855,234 ordinary shares in the Company.

On November 8, 2014, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into a put and call option agreement in relation to certain of the shares, pursuant to which the parties to the put and call option agreement have agreed to grant each other certain rights in relation to their Shares, and section 317(1)(a) of the SFO applies. Mr. Ho Chi Sing is the sole shareholder of the Celestial.

In particular, Mr. Ho Chi Sing, through his holdings in Celestial, is beneficially interested in 211,855,234 shares in the Company. Pursuant to the abovementioned put and call option agreement, Mr. Ho Chi Sing and Celestial have been granted a put option to resell/put 211,855,234 shares to FEEL, Mr. Zhang and Mr. Zhao.

On January 6, 2017, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into the letter agreement in relation to the put and call option. The Board was also informed that Great Harmony International Ltd (“Great Harmony”) and Celestial have entered into a sale and purchase agreement pursuant to which Great Harmony has agreed to acquire (or procure its affiliate or other person or company designated by it to acquire) and Celestial has agreed to sell 211,855,234 ordinary shares in the Company.

On January 18, 2017, February 23, 2017 and March 7, 2017, Celestial had ceased to have 53,334,000 shares, 40,000,000 shares and 30,000,000 shares in long and short positions, respectively.

On May 17, 2017, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into the second letter agreement in relation to the put and call option agreement. For further details, please refer to the Company’s announcement dated May 17, 2017.

On November 30, 2017, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into the supplemental agreement to the second letter agreement in relation to the put and call option agreement. For further details, please refer to the Company’s announcement dated November 30, 2017.

On April 14, 2018, the Controlling Shareholders and Celestial entered into the second supplemental agreement to the second letter agreement in relation to the put and call option agreement. For further details, please refer to the Company’s announcement dated April 15, 2018.

4. These interests represent interests in outstanding stock options under the share option scheme and stock incentive compensation plan. Mr. Zhang’s interests includes the 100,000 shares held by himself and Mr. Zhao’s interests includes the 3,100,000 shares held by himself.

**(b) Persons who have interests or short positions which are discloseable under Divisions 2 and 3 of Part XV of the SFO**

As at the Latest Practicable Date, the following persons, not being a Director or chief executive of the Company, had an interest in the shares and underlying shares of the Company as recorded in the register required to be kept under section 336 of the SFO or as required to be disclosed to the Company and the Stock Exchange under Divisions 2 and 3 of Part XV of the SFO, the details of which are set out below:

*Interests and short positions in the shares and underlying shares of the Company*

Name of shareholder	Nature of interest	Number of Shares held	Approximate percentage of interest in the Company
Ms. Zhao Jiangbo	Interest of controlled corporation ( <i>Note 2</i> )	1,577,095,234 (L)	53.67%
		88,521,234 (S)	3.01%
FEEL	Interest of controlled corporation ( <i>Note 2</i> )	1,577,095,234 (L)	53.67%
		88,521,234 (S)	3.01%
Mr. Ho Chi Sing	Interest of controlled corporation ( <i>Note 3</i> )	1,577,095,234 (L)	53.67%
		88,521,234 (S)	3.01%
Celestial	Interest of controlled corporation ( <i>Note 3</i> )	1,577,095,234 (L)	53.67%
		88,521,234 (S)	3.01%
Billion Capital Shine Inc.	Person having a security interest in Shares	1,472,300,000 (L)	50.10%
China Orient Asset Management (International) Holding Limited	Interest of controlled corporation	1,472,300,000 (L)	50.10%
China Orient Asset Management Co., Ltd.	Interest of controlled corporation	1,472,300,000 (L)	50.10%
Dong Yin Development (Holdings) Limited	Interest of controlled corporation	1,472,300,000 (L)	50.10%
Wise Leader Assets Ltd.	Interest of controlled corporation	1,472,300,000 (L)	50.10%



Name of shareholder	Nature of interest	Number of Shares held	Approximate percentage of interest in the Company
Prudence Investment Management (Hong Kong) Limited	Investment manager	586,216,896 (L)	19.95%
Flying Investments Limited	Beneficial owner	199,160,000 (L)	6.78%
Fung Wing Nam Florence	Interest of controlled corporation	199,160,000 (L)	6.78%

*Notes:*

- (1) The letter “L” denotes long position in the Shares; “S” denotes short position in the Shares.
- (2) FEEL is held by Ms. Zhao Jiangbo (“Mrs. Zhang”), Mr. Zhang Ruilin (“Mr. Zhang”) and Mr. Zhao Jiangwei (“Mr. Zhao”) as to 80%, 9.99% and 10%, respectively. On May 24, 2013, 72,000 shares in FEEL were issued to Mrs. Zhang, 399,070,000 shares in the Company were transferred from FEEL to Champion International Energy Limited (“Champion”), 399,070,000 shares in the Company were transferred from FEEL to Orient International Energy Limited (“Orient”), 475,000,000 shares in the Company were transferred from FEEL to New Sun International Energy Limited (“New Sun”) and 141,460,000 shares in the Company were transferred from FEEL to Power International Energy Limited (“Power”). Each of Champion, Orient, New Sun and Power is a wholly-owned subsidiary of Sunrise Glory Holdings Limited, which is itself a wholly-owned subsidiary of FEEL. Mrs. Zhang, Mr. Zhang and Mr. Zhao have entered into an Acting-in-Concert Agreement under which they agreed to act in concert in relation to all matters that require the decisions of the shareholders of FEEL. Pursuant to the Acting-in-Concert Agreement, if a unanimous opinion in relation to the matters that require action in concert is unable to be reached, Mr. Zhang shall be allowed to vote on his, Mrs. Zhang’s and Mr. Zhao’s shares. The long interests which FEEL, Mr. Zhang and Mr. Zhao have in the 1,577,095,234 shares in the Company include (i) the beneficial interests which FEEL has (and in the case of Mr. Zhang and Mr. Zhao, the indirect beneficial interests which they have (through their shareholdings in FEEL)) in the 1,469,600,000 shares in the Company held by FEEL through its subsidiaries, (ii) the 7,887,000 share options granted to Mr. Zhang, (iii) the 7,887,000 share options granted to Mr. Zhao, (iv) the put option granted by FEEL, Mr. Zhang, Mr. Zhao and Mrs. Zhang, pursuant to a put and call option agreement, over the 88,521,234 shares in the Company held by Mr. Ho Chi Sing through Celestial, as further described in note (3) below, (v) the 100,000 shares owned by Mr. Zhang himself and (vi) 3,100,000 shares owned by Mr. Zhao himself.
- (3) The Company was informed on November 8, 2014 that TPG Star Energy Ltd. and Celestial had entered into a sale and purchase agreement pursuant to which Celestial had acquired and TPG Star Energy Ltd. has sold 211,855,234 ordinary shares in the Company.

On November 8, 2014, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into a put and call option agreement in relation to certain of the shares, pursuant to which the parties to the put and call option agreement have agreed to grant each other certain rights in relation to their Shares, and section 317(1)(a) of the SFO applies. Mr. Ho Chi Sing is the sole shareholder of the Celestial.



In particular, Mr. Ho Chi Sing, through his holdings in Celestial, is beneficially interested in 211,855,234 shares in the Company. Pursuant to the abovementioned put and call option agreement, Mr. Ho Chi Sing and Celestial have been granted a put option to resell/put 211,855,234 shares to FEEL, Mr. Zhang and Mr. Zhao.

On January 6, 2017, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into the letter agreement in relation to the put and call option. The Board was also informed that Great Harmony International Ltd (“Great Harmony”) and Celestial have entered into a sale and purchase agreement pursuant to which Great Harmony has agreed to acquire (or procure its affiliate or other person or company designated by it to acquire) and Celestial has agreed to sell 211,855,234 ordinary shares in the Company.

On January 18, 2017, February 23, 2017 and March 7, 2017, Celestial had ceased to have 53,334,000 shares, 40,000,000 shares and 30,000,000 shares in long and short positions, respectively.

On May 17, 2017, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into the second letter agreement in relation to the put and call option agreement. For further details, please refer to the Company’s announcement dated May 17, 2017.

On November 30, 2017, FEEL, Mr. Zhang, Mr. Zhao, Mrs. Zhang and Celestial entered into the supplemental agreement to the second letter agreement in relation to the put and call option agreement. For further details, please refer to the Company’s announcement dated November 30, 2017.

On April 14, 2018, the Controlling Shareholders and Celestial entered into the second supplemental agreement to the second letter agreement in relation to the put and call option agreement. For further details, please refer to the Company’s announcement dated April 15, 2018

Saved as disclosed above in this section, as at the Latest Practicable Date, the Company had not been notified of any other persons (other than the Directors or chief executive of the Company) who had any interest or short position in the shares and underlying shares of the Company as recorded in the register required to be kept under Section 336 of the SFO or as required to be disclosed to the Company and the Stock Exchange under Divisions 2 and 3 of Part XV of the SFO.

Saved as disclosed in this section, as at the Latest Practicable Date, none of the Directors or Proposed Directors was a director or employee of a company which had an interest in the Shares and underlying Shares which would fall to be disclosed under the provisions of Divisions 2 and 3 of Part XV of the SFO.

### **3. COMPETING INTERESTS**

As at the Latest Practicable Date, none of the Directors or their respective associates had any interest in a business, apart from the business of the Company, which competes or is like to compete with the business of the Company or has any other conflict of interest with the Company which would be required to be disclosed under Rule 8.10 of the Listing Rules.

#### 4. INTEREST IN CONTRACT OR ARRANGEMENT

As at the Latest Practicable Date, none of the Directors has any direct or indirect interests in any assets which have been acquired or disposed of by or leased to, or which are proposed to be acquired or disposed of by or leased to, the Group since December 31, 2017, the date to which the latest published audited consolidated financial statements of the Group were made up.

As at the Latest Practicable Date, so far is known to the Directors, there is no contract or arrangement entered into by any member of the Group subsisting at the Latest Practicable Date in which any Director is materially interested and which is significant to the business of the Group.

#### 5. DIRECTORS' SERVICE CONTRACTS

On November 20, 2009, Mr. Zhang Ruilin and Mr. Zhao Jiangwei, each an executive Director, each entered into a service contract with the Company, which is renewable yearly unless terminated (i) with twelve months' notice by either party, or (ii) by the Company upon certain events such as the Director having committed serious or persistent breaches of the service contract. Should the Company terminate the service contract, Zhang Ruilin and Zhao Jiangwei will be entitled to receive a severance payment equivalent to one year's basic pay under the service contract, save for circumstances described in item (ii) above.

Save as disclosed above, as at the Latest Practicable Date, none of the Directors had any existing service contract or proposed service contract with the Group which is not determinable by the Group within one year without payment of compensation other than statutory compensation.

#### 6. MATERIAL ADVERSE CHANGE

As at the Latest Practicable Date, the Directors were not aware of any material adverse change in the financial or trading position of the Group since December 31, 2017, the date to which the latest published audited accounts of the Company were made up.

#### 7. EXPERT AND CONSENT

The following is the qualification of the expert who has been named in this circular or have given opinion or advice contained in this circular:

<b>Name</b>	<b>Qualification</b>
Sproule Associates Limited	Competent Person

Sproule Associates Limited is referred to as the "Expert" hereinafter.

As at the Latest Practicable Date, the Expert had no shareholding in any member of the Group, nor had any right, whether legally enforceable or not, to subscribe for or to nominate persons to subscribe for securities in any member of the Group, nor had any direct or indirect

interest in any assets which have been acquired or disposed of by, or leased to, any member of the Group or are proposed to be acquired or disposed of by, or leased to, any member of the Group since December 31, 2017, the date to which the latest published audited accounts of the Group was made up.

The Expert has given and has not withdrawn its written consent to the issue of this circular with the inclusion of its letter(s) or report(s) and reference to its name in the form and context in which it is included.

## 8. LITIGATION

As at the Latest Practicable Date, no members of the Group were engaged in any litigation, arbitration or claim of material importance and no litigation, arbitration or claim of material importance is known to the Directors to be pending or threatened against the Group.

## 9. MATERIAL CONTRACTS

The following contracts (not being contracts entered into in the ordinary course of business) have been entered into by the members of the Group within two years immediately preceding the issue of this circular and are material:

- (a) a loan agreement dated December 16, 2016 entered between the Company, Boston-Power, Inc. and G-O Scale Capital Management Co., LLC, pursuant to which the Company agreed to provide a loan in the amount of US\$30 million (approximately HK\$234.7 million) with interest of 9% per annum to Boston-Power, Inc.;
- (b) a purchase and sale agreement dated May 29, 2017 entered into between CQR Partnership and Leucrotta Exploration Inc. for disposal of its interests in the Pouce Coupe area of Alberta and British Columbia, Canada in consideration of C\$5,000,000 (equivalent to approximately HK\$30,123,500);
- (c) the partnership interest purchase and sale agreement (the “PSA”) dated May 31, 2017 entered into between Direct Energy Resources Partnership (“Direct Energy”) and an undisclosed body corporate (“A Partner”) in relation to the sale and purchase of 100% of the interests of partner in CQ Energy Canada Partnership;
- (d) the subscription agreement dated May 31, 2017 entered into between Canlin Energy Corporation (“Canlin”), CCGRF Gastown Limited, Maple Marathon Investments Limited, Mercuria Energy Netherlands BV and the Company in relation to the subscription of convertible preferred shares issued by Canlin;
- (e) an amending agreement dated June 8, 2017 entered into between Direct Energy and A Partner for the purpose of amending the date and time for escrow release under the PSA;
- (f) a sale and purchase agreement dated December 1, 2017 entered into between the Company and Pacific Energy Development (Asia) Co. Corp. in relation to the disposal of the entire issued share capital of Riyadh Energy Limited;

- (g) a sale and purchase agreement dated December 21, 2017 entered into between Global Oil Corporation and MIE International Resources Limited in relation to the acquisition of 10% participating interests in the foreign contractors' entitlement and obligations under certain production sharing contracts for each of the Daan oilfield and the Moliqing oilfield;
- (h) a share purchase agreement dated January 22, 2018 entered into between MIE maple Investments Limited and Journey Energy Inc., (“**Journey**”) in relation to Journey's acquisition of 12,700,000 issued and outstanding common shares in the capital of Journey;
- (i) an agreement of purchase and sale dated March 23, 2018 entered into between the Vendor and Vermillion Resources in relation to the disposal of certain oil and gas assets in central Alberta, Canada;
- (j) a share purchase agreement dated September 24, 2018 entered into between the Company and Far East Energy International Limited in relation to the proposed disposal of the entire issued share capital of Maple Marathon Investments Limited; and
- (k) the Agreement.

#### 10. MISCELLANEOUS

- (a) The registered office of the Company is at P.O. Box 309, Ugland House, Grand Cayman KY1-1 104, Cayman Islands. The head office of the Company is at Suite 1501, Block C, Grand Place, 5 Hui Zhong Road, Chaoyang District, Beijing 100101, the People's Republic of China and the principal place of business in Hong Kong is at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong.
- (b) The branch share registrar and transfer office of the Company in Hong Kong is Tricor Investor Services Limited, at Level 22, Hopewell Centre, 183 Queen's Road East, Hong Kong.
- (c) The company secretary of the Company is Ms. Wong Sau Mei. Ms. Wong is an Associate of both The Hong Kong Institute of Chartered Secretaries and The Institute of Chartered Secretaries and Administrators.
- (d) This circular is prepared in both English and Chinese. In the event of inconsistency, the English version shall prevail.

**11. DOCUMENTS FOR INSPECTION**

Copies of the following documents will be available for inspection at the Company's principal place of business in Hong Kong at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong during normal business hours on any weekday (except public holidays) for a period of 14 days from the date of this circular:

- (a) the memorandum and articles of association of the Company;
- (b) the annual reports of the Company for the financial years ended December 31, 2016 and 2017, respectively;
- (c) the contracts referred to in the paragraph headed "Directors' Service Contracts" in this Appendix;
- (d) the contracts referred to in the paragraph headed "Material Contracts" in this Appendix;
- (e) the Competent Person's Report prepared by the Competent Person, the text of which is set out in Appendix II to this circular;
- (f) the written consent from the Competent Person referred to in the paragraph headed "Expert and Consent" in this Appendix;
- (g) the circular of the Company dated April 18, 2018; and
- (h) this circular.