

CALFRAC WELL SERVICES LTD.
BY-LAW NO. 1

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CALFRAC WELL SERVICES LTD.

BY-LAW NO. 1

A by-law relating generally to the conduct of the business and affairs of Calfrac Well Services Ltd. (hereinafter called the "Corporation") is hereby made as follows:

DEFINITIONS

1. In this by-law and all other by-laws of the Corporation, unless the context otherwise specifies or requires:
 - (a) "Act" means the *Canada Business Corporations Act* and the regulations made thereunder, as from time to time amended, and in the case of such amendment any reference in the by-laws shall be read as referring to the amended provisions thereof;
 - (b) "board" means the board of directors of the Corporation;
 - (c) "by-laws" means this by-law and all other by-laws of the Corporation from time to time in force and effect;
 - (d) all terms used in the by-laws that are defined in the Act and are not otherwise defined in the by-laws shall have the meanings given to such terms in the Act;
 - (e) words importing the singular number only shall include the plural and vice versa; words importing the masculine gender shall include the feminine and neuter genders; and
 - (f) the headings used in the by-laws are inserted for reference purposes only and are not to be considered or taken into account in construing the terms or provisions thereof or to be deemed in any way to clarify, modify or explain the effect of any such terms or provisions.

REGISTERED OFFICE

2. The Corporation shall at all times have a registered office in the province in Canada specified in its articles. The directors of the Corporation may change the place and address of the registered office within the province specified in its articles.

SEAL

3. The directors may by resolution from time to time adopt and change a corporate seal of the Corporation.

DIRECTORS

4. Number. The number of directors shall be the number fixed by the articles, or where the articles specify a variable number, the number shall be not less than the minimum and not more than the maximum number so specified and shall be determined from time to time within such limits by the board. Subject to section 105 of the Act, at least twenty-five percent of the directors of the Corporation, or such other number of directors (if any) as may be prescribed by

the Act from time to time, shall be resident Canadians. If the Corporation has less than four directors, at least one director shall be a resident Canadian.

5. Vacancies. Subject to section 111 of the Act, a quorum of directors may fill a vacancy among the directors, except a vacancy resulting from an increase in the number or minimum or maximum number of directors or from a failure to elect the number or minimum number of directors provided for in the articles. If there is not a quorum of directors, or if there has been a failure to elect the number or minimum number of directors provided for in the articles, the directors then in office shall forthwith call a special meeting of shareholders to fill the vacancy and, if they fail to call a meeting or if there are no directors then in office, the meeting may be called by any shareholder.

A director appointed or elected to fill a vacancy holds office for the unexpired term of his or her predecessor.

6. Powers. The directors shall manage, or supervise the management of, the business and affairs of the Corporation and may exercise all such powers and do all such acts and things as may be exercised or done by the Corporation and are not expressly directed or required to be done in some other manner by the Act, the articles, the by-laws, any special resolution of the shareholders of the Corporation or by statute.

7. Duties. Every director and officer of the Corporation in exercising his or her powers and discharging his or her duties shall:

- (a) act honestly and in good faith with a view to the best interests of the Corporation; and
- (b) exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances.

8. Qualification. The following persons are disqualified from being a director of the Corporation:

- (a) anyone who is less than 18 years of age;
- (b) anyone who is of unsound mind and has been so found by a court in Canada or elsewhere;
- (c) a person who is not an individual; and
- (d) a person who has the status of bankrupt.

Unless the articles otherwise provide, a director of the Corporation is not required to hold shares issued by the Corporation.

9. Term of Office. A director's term of office (subject to any applicable provisions of the Corporation's articles and subject to the election of such director for an expressly stated term) shall be from the date such director is elected or appointed until the close of the first annual meeting of shareholders following such director's election or appointment or until a successor to such director is elected or appointed.

10. Election. Subject to sections 106 and 107 of the Act, the shareholders of the Corporation shall at the first meeting of shareholders and at each succeeding annual meeting at which an election of directors is required, elect directors to hold office for a term expiring not later than the close of the third annual meeting of shareholders following the election. A director not elected for an expressly stated term ceases to hold office at the close of the first annual meeting of shareholders following his or her election but, if qualified, is eligible for re-election. Notwithstanding the foregoing, if directors are not elected at a meeting of shareholders, the incumbent directors continue in office until their successors are elected.

If a meeting of shareholders fails to elect the number or the minimum number of directors required by the articles by reason of the lack of consent, disqualification, incapacity or death of any candidates, the directors elected at that meeting may exercise all the powers of the directors if the number of directors so elected constitutes a quorum.

11. Consent to Election. A person who is elected or appointed as a director is not a director unless such person was present at the meeting when the person was elected or appointed and did not refuse to act as a director or, if the person was not present at the meeting when the person was elected or appointed, the person consented to act as a director in writing before the person's election or appointment or within 10 days after it or the person has acted as a director pursuant to the election or appointment.

12. Removal. Subject to sections 107 and 109 of the Act, the shareholders of the Corporation may by ordinary resolution at a special meeting remove any director from office before the expiration of his or her term of office and may, subject to the Act, elect any person in his or her stead for the remainder of the director's term.

13. Vacation of Office. A director of the Corporation ceases to hold office when:

- (a) the director dies or resigns;
- (b) the director is removed from office; or
- (c) the director becomes disqualified under section 105(1) of the Act.

A resignation of a director becomes effective at the time a written resignation is sent to the Corporation, or at the time specified in the resignation, whichever is later.

14. Validity of Acts. An act of a director or officer is valid notwithstanding an irregularity in the director's or officer's election or appointment or a defect in the director's or officer's qualification.

MEETINGS OF DIRECTORS

15. Place of Meeting. Unless the articles otherwise provide, meetings of directors and of any committee of directors may be held at any place. A meeting of directors may be convened by the Chairman of the Board (if any), the President (if any) or any director at any time and the Secretary (if any) or any other officer or any director shall, as soon as reasonably practicable following receipt of a direction from any of the foregoing, send a notice of the applicable meeting to the directors.

16. Notice. Notice of the time and place for the holding of any meeting of directors or of any committee of directors shall be sent to each director or each director who is a member of such committee, as the case may be, not less than 48 hours before the time of the meeting; provided that a meeting of directors or of any committee of directors may be held at any time without notice if all the directors or members of such committee are present (except where a director attends the meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called) or if all the absent directors waive notice of the meeting. The notice of a meeting of directors shall specify any matter referred to in subsection (3) of section 115 of the Act that is to be dealt with at the meeting, but need not specify the purpose or the business to be transacted at the meeting.

For the first meeting of directors to be held following the election of directors at an annual or special meeting of the shareholders or for a meeting of directors at which a director is appointed to fill a vacancy in the board, no notice of such meeting need be given to the newly elected or appointed director or directors in order for the meeting to be duly constituted, provided a quorum of the directors is present.

17. Waiver of Notice. Notice of any meeting of directors or of any committee of directors or the time for the giving of any such notice or any irregularity in any meeting or in the notice thereof may be waived by any director in writing or by facsimile or electronic mail addressed to the Corporation or in any other manner, and any such waiver may be validly given either before or after the meeting to which such waiver relates. Attendance of a director at any meeting of directors or of any committee of directors is a waiver of notice of such meeting, except when a director attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

18. Omission of Notice. The accidental omission to give notice of any meeting of directors or of any committee of directors to or the non-receipt of any notice by any person shall not invalidate any resolution passed or any proceeding taken at such meeting.

19. Electronic, Telephone Participation Etc. A director may participate in a meeting of directors or of any committee of directors by means of telephone or other communication facilities that permit all persons participating in the meeting to hear each other, and a director participating in a meeting by those means is deemed for the purposes of the Act and this by-law to be present at that meeting.

20. Adjournment. Any meeting of directors or of any committee of directors may be adjourned from time to time by the chairman of the meeting, with the consent of the meeting, to a fixed time and place. Notice of an adjourned meeting of directors or committee of directors is not required to be given if the time and place of the adjourned meeting is announced at the original meeting. Any adjourned meeting shall be duly constituted if held in accordance with the terms of the adjournment and a quorum is present thereat. The directors who formed a quorum at the original meeting are not required to form the quorum at the adjourned meeting. If there is no quorum present at the adjourned meeting, the original meeting shall be deemed to have terminated forthwith after its adjournment. Any business may be brought before or dealt with at the adjourned meeting that might have been brought before or dealt with at the original meeting in accordance with the notice calling the same.

21. Quorum and Voting. Subject to the articles and any agreement to which the Corporation is a party, a majority of the number of directors constitutes a quorum at any meeting of directors and, notwithstanding any vacancy among the directors, a quorum of directors may exercise all the powers of the directors. Subject to section 111 of the Act and subsections (3) and (4) of section 114 of the Act, directors shall not transact business at a meeting of directors unless a quorum is present and at least twenty-five percent (25%) of the directors present are resident Canadians. Questions arising at any meeting of directors shall be decided by a majority of votes. In the case of an equality of votes, the chairman of the meeting in addition to his original vote shall not have a second or casting vote.

22. Resolution in Lieu of Meeting. A resolution in writing, signed by all the directors entitled to vote on that resolution at a meeting of directors or committee of directors, is as valid as if it had been passed at a meeting of directors or committee of directors. A resolution in writing dealing with all matters required by the Act or this by-law to be dealt with at a meeting of directors, and signed by all the directors entitled to vote at that meeting, satisfies all the requirements of the Act and this by-law relating to meetings of directors.

COMMITTEES OF DIRECTORS

23. General. The directors may from time to time appoint from their number a managing director, who must be a resident Canadian, or a committee of directors, and may delegate to the managing director or such committee any of the powers of the directors, except that (unless the Act otherwise permits) no managing director or committee shall have the authority to:

- (a) submit to the shareholders any question or matter requiring the approval of the shareholders;
- (b) fill a vacancy among the directors or in the office of auditor, or appoint additional directors;
- (c) issue securities except as authorized by the directors;
- (d) issue shares of a series under section 27 of the Act except as authorized by the directors;
- (e) declare dividends;
- (f) purchase, redeem or otherwise acquire shares issued by the Corporation;
- (g) pay a commission referred to in section 41 of the Act except as authorized by the directors;
- (h) approve a management proxy circular;
- (i) approve a take-over bid circular or directors' circular;
- (j) approve any financial statements referred to in section 155 of the Act; or
- (k) adopt, amend or repeal by-laws of the Corporation; or

- (l) exercise any other power which under the Act a committee of directors has no authority to exercise.

Notwithstanding the foregoing and subject to the articles, the directors may, by resolution, delegate to a director, a committee of directors or an officer the power to:

- (a) borrow money on the credit of the Corporation;
- (b) issue, reissue, sell or pledge or hypothecate debt obligations of the Corporation;
- (c) give a guarantee on behalf of the Corporation to secure performance of an obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the corporation, owned or subsequently acquired, to secure any obligation of the corporation.

24. Audit Committee. Subject to subsection (2) of section 171 of the Act, so long as the Corporation remains a "distributing corporation", any of the issued securities of which remain outstanding and are held by more than one person, the directors shall appoint from among their number an audit committee to be composed of not fewer than three directors, a majority of whom are not officers or employees of the Corporation or any of its affiliates. At any time when the Corporation is not a "distributing corporation", any of the issued securities of which remain outstanding and are held by more than one person, the directors may (but shall not be required to) appoint from among their number an audit committee to be composed of such number of directors as may be determined by the board from time to time in accordance with the Act.

Each member of the audit committee shall serve during the pleasure of the board and, in any event, only so long as such member shall be a director. The directors may fill vacancies in the audit committee by election from among their number.

The audit committee shall have power to fix its quorum at not less than a majority of its members and to determine its own rules of procedure subject to any requirements imposed by the board from time to time and to the following paragraph.

The auditor of the Corporation is entitled to receive notice of every meeting of the audit committee and, at the expense of the Corporation, to attend and be heard thereat, and, if so requested by a member of the audit committee, shall attend every meeting of the committee held during the term of office of the auditor. The auditor of the Corporation or any member of the audit committee may call a meeting of the audit committee.

The audit committee shall review the financial statements of the Corporation referred to in section 155 of the Act prior to approval thereof by the board and shall have such other powers and duties as may from time to time by resolution be assigned to it by the board.

REMUNERATION OF DIRECTORS, OFFICERS AND EMPLOYEES

25. Subject to the articles, the directors of the Corporation may fix the remuneration of the directors, officers and employees of the Corporation. Any remuneration paid to a director of the Corporation shall be in addition to the salary paid to such director in his or her capacity as an

officer or employee of the Corporation. The directors may also by resolution award special remuneration to any director in undertaking any special services on the Corporation's behalf other than the routine work ordinarily required of a director of the Corporation. The confirmation of any such resolution by the shareholders shall not be required. The directors, officers and employees shall also be entitled to be paid their travelling and other expenses properly incurred by them in connection with the affairs of the Corporation.

SUBMISSION OF CONTRACTS OR TRANSACTIONS TO
SHAREHOLDERS FOR APPROVAL

26. The directors in their discretion may submit any contract, act or transaction for approval, ratification or confirmation at any annual meeting of the shareholders or at any special meeting of the shareholders called for the purpose of considering the same and any contract, act or transaction that shall be approved, ratified or confirmed by resolution passed by a majority of the votes cast at any such meeting (unless any different or additional requirement is imposed by the Act or other applicable law or by the Corporation's articles or any other by-law) shall be as valid and as binding upon the Corporation and upon all the shareholders as though it had been approved, ratified and/or confirmed by every shareholder of the Corporation.

CONFLICT OF INTEREST

27. A director or an officer of the Corporation shall disclose to the Corporation, in writing or by requesting to have it entered in the minutes of meetings of directors or of meetings of committees of directors at the time and in the manner provided in the Act, the nature and extent of any interest that he or she has in a material contract or material transaction, whether made or proposed, with the Corporation, if the director or officer is a party to the contract or transaction, is a director or an officer, or an individual acting in a similar capacity, of a party to the contract or transaction, or has a material interest in a party to the contract or transaction. Except as provided in the Act, no such director of the Corporation shall vote on any resolution to approve such contract or transaction. A contract or transaction for which disclosure is required is not invalid, and the director or officer is not accountable to the Corporation or its shareholders for any profit realized from the contract or transaction, because of the director's or officer's interest in the contract or transaction or because the director was present or was counted to determine whether a quorum existed at the meeting of directors or committee of directors that considered the contract or transaction, if the director or officer disclosed his interest in accordance with the provisions of the Act and the contract or transaction was approved by the directors, and it was reasonable and fair to the Corporation when it was approved. Even if these conditions are not met, a director or officer, acting honestly and in good faith, is not accountable to the Corporation or to its shareholders for any profit realized from a contract or transaction for which disclosure is required, and the contract or transaction is not invalid by reason only of the interest of the director or officer in the contract or transaction, if the contract or transaction is approved or confirmed by special resolution at a meeting of the shareholders, disclosure of the interest was made to the shareholders in a manner sufficient to indicate its nature before the contract or transaction was approved or confirmed and the contract or transaction was reasonable and fair to the Corporation when it was approved or confirmed.

FOR THE PROTECTION OF DIRECTORS AND OFFICERS

28. No director or officer of the Corporation shall be liable to the Corporation for the acts, receipts, neglects or defaults of any other director or officer or employee or for joining in any receipt or act for conformity or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired by the Corporation or for or on behalf of the Corporation or for the insufficiency or deficiency of any security in or upon which any of the monies of or belonging to the Corporation shall be placed out or invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person, firm or corporation including any person, firm or corporation with whom or which any monies, securities or effects shall be lodged or deposited or for any loss, conversion, misapplication or misappropriation of or any damage resulting from any dealings with any monies, securities or other assets belonging to the Corporation or for any other loss, damage or misfortune whatever that may happen in the execution of the duties of such director's or officer's respective office of trust or in relation thereto, unless the same shall happen by or through the director's or officer's failure to exercise the powers and to discharge the duties of office honestly, in good faith with a view to the best interests of the Corporation, and in connection therewith to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances, provided that nothing herein contained shall relieve a director or officer from the duty to act in accordance with the Act or relieve such director or officer from liability under the Act. If any director or officer of the Corporation shall be employed by or shall perform services for the Corporation otherwise than as a director or officer or shall be a member of a firm or a shareholder, director or officer of a body corporate which is employed by or performs services for the Corporation, the fact that the director or officer is a shareholder, director or officer of the Corporation or body corporate or member of the firm shall not disentitle such director or officer or such firm or body corporate, as the case may be, from receiving proper remuneration for such services.

INDEMNITIES TO DIRECTORS AND OTHERS

29. (1) The Corporation shall indemnify a director or officer of the Corporation, a former director or officer of the Corporation or another individual who acts or acted at the Corporation's request as a director or officer, or an individual acting in a similar capacity, of another entity, or any other individual permitted by the Act to be so indemnified in the manner and to the fullest extent permitted by the Act. Without limiting the generality of the foregoing, subject to section 124 of the Act, the Corporation shall indemnify a director or officer of the Corporation, a former director or officer of the Corporation or another individual who acts or acted at the Corporation's request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges and expenses, including costs incurred in the defence of an action or proceeding and an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of that association with the Corporation or other entity.

(2) The Corporation shall advance moneys to a director, officer or other individual for the costs, charges and expenses of a proceeding referred to in Paragraph 29(1). The individual shall repay the moneys if the individual does not fulfill the conditions of Paragraph 29(3).

(3) Notwithstanding anything in this paragraph 29, a person referred to in subparagraph 29(1) shall be entitled to indemnity from the Corporation in respect of all costs, charges and expenses reasonably incurred by him in connection with the defence of any civil, criminal or administrative action or proceeding to which he is made a party by reason of being or having been a director or officer of the Corporation or body corporate, if the person seeking indemnity:

- (a) was substantially successful on the merits of his defence of the action or proceeding; and
- (b) fulfills the conditions set out in subparagraph 29(1) hereof.

(4) The Corporation shall not indemnify an individual under Paragraph 29(1) unless the individual:

- (a) acted honestly and in good faith with a view to the best interests of the Corporation, or, as the case may be, to the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at the Corporation's request; and
- (b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that the individual's conduct was lawful.

(5) The Corporation shall, with the approval of a court, indemnify an individual referred to in Paragraph 29(1), or advance moneys under Paragraph 29(2), in respect of an action by or on behalf of the Corporation or other entity to procure a judgment in its favour, to which the individual is made a party because of the individual's association with the Corporation or other entity as described in Paragraph 29(1) against all costs, charges and expenses reasonably incurred by the individual in connection with such action, if the individual fulfills the conditions set out in Paragraph 29(3).

(6) The Corporation may purchase and maintain insurance for the benefit of any individual referred to in Paragraph 29(1) to the extent permitted by the Act.

OFFICERS

30. Appointment of Officers. Subject to the articles, the directors annually or as often as may be required may appoint from among themselves a Chairman of the Board (either on a full-time or part-time basis) and may appoint a President, one or more Vice-Presidents (to which title may be added words indicating seniority or function), a Secretary, a Treasurer and one or more assistants to any of the officers so appointed. None of such officers except the Chairman of the Board needs to be a director of the Corporation although a director may be appointed to any office of the Corporation. Two or more offices of the Corporation may be held by the same person. The directors may from time to time appoint such other officers (including a chief executive officer or chief operating officer), employees and agents as they shall deem necessary who shall have such authority and shall perform such functions and duties as may from time to time be prescribed by resolution of the directors. The directors may from time to time and subject to the provisions of the Act, vary, add to or limit the duties and powers of any officer, employee or agent.

31. Removal of Officers and Vacation of Office. Subject to the articles, all officers, employees and agents, shall be subject to removal by resolution of the directors at any time, with or without cause.

An officer of the Corporation ceases to hold office when such officer dies, resigns or is removed from office. A resignation of an officer becomes effective at the time a written resignation is sent to the Corporation, or at the time specified in the resignation, whichever is later.

32. Vacancies. If the office of Chairman of the Board, President, Vice-President, Secretary, Treasurer, or any other office created by the directors pursuant to Paragraph 30 hereof shall be or become vacant by reason of death, resignation, removal from office or in any other manner whatsoever, the directors may appoint an individual to fill such vacancy.

33. Chairman of the Board. The Chairman of the Board (if any) shall, if present, preside as chairman at all meetings of the board and at all meetings of the shareholders of the Corporation. The Chairman of the Board shall sign such contracts, documents or instruments in writing as require his or her signature and shall have such other powers and shall perform such other duties as may from time to time be assigned to him or her by resolution of the directors.

34. President. The President (if any) shall, subject to the direction of the board, exercise general supervision and control over the business and affairs of the Corporation. In the absence of the Chairman of the Board (if any), and if the President is also a director of the Corporation, the President shall, when present, preside as chairman at all meetings of directors and the shareholders of the Corporation. The President shall sign such contracts, documents or instruments in writing as require his or her signature and shall have such other powers and shall perform such other duties as may from time to time be assigned to him or her by resolution of the directors or as are incident to his or her office.

35. Vice-President. The Vice-President (if any) or, if more than one, the Vice-Presidents in order of seniority, shall be vested with all the powers and shall perform all the duties of the President in the absence or inability or refusal to act of the President, provided, however, that a Vice-President who is not a director shall not preside as chairman at any meeting of directors or shareholders. The Vice-President or, if more than one, the Vice-Presidents shall sign such contracts, documents or instruments in writing as require his or her or their signatures and shall have such other powers and shall perform such other duties as may from time to time be assigned to him or her or them by resolution of the directors.

36. Secretary. Unless another officer has been appointed for that purpose, the Secretary (if any) shall give or cause to be given notices for all meetings of directors, any committee of directors and shareholders when directed to do so and shall, subject to the provisions of the Act, maintain the records referred to in subsections (1) and (2) of section 20 of the Act. The Secretary shall sign such contracts, documents or instruments in writing as require the signature of the Secretary and shall have such other powers and shall perform such other duties as may from time to time be assigned to the Secretary by resolution of the directors or as are incident to the office of the Secretary.

37. Treasurer. Subject to the provisions of any resolution of the directors, the Treasurer (if any) or such other officer who has been appointed for that purpose shall have the care and

custody of all the funds and securities of the Corporation and shall deposit the same in the name of the Corporation in such bank or banks or with such other depositary or depositaries as the directors may by resolution direct; provided that the Treasurer may from time to time arrange for the temporary deposit of moneys of the Corporation in banks, trust companies or other financial institutions within or outside Canada not so directed by the board for the purpose of facilitating transfer thereof to the credit of the Corporation in a bank, trust company or other financial institution so directed. Unless another officer has been appointed for that purpose, the Treasurer shall prepare and maintain adequate accounting records. The Treasurer shall sign such contracts, documents or instruments in writing as require the signature of the Treasurer and shall have such other powers and shall perform such other duties as may from time to time be assigned to such person by resolution of the directors or as are incident to the office of the Treasurer. The Treasurer may be required to give such bond for the faithful performance of his or her duties as the directors in their sole discretion may require and no director shall be liable for failure to require any such bond or for the insufficiency of any such bond or for any loss by reason of the failure of the Corporation to receive any indemnity thereby provided.

38. Assistant Secretary and Assistant Treasurer. The Assistant Secretary (if any) or, if more than one, the Assistant Secretaries in order of seniority, and the Assistant Treasurer (if any) or, if more than one, the Assistant Treasurers in order of seniority, shall assist the Secretary and Treasurer, respectively, in the performance of his or her duties and shall be vested with all the powers and shall perform all the duties of the Secretary and Treasurer, respectively, in the absence or inability or refusal to act of the Secretary or Treasurer as the case may be. The Assistant Secretary or, if more than one, the Assistant Secretaries and the Assistant Treasurer or, if more than one, the Assistant Treasurers shall sign such contracts, documents or instruments in writing as require his or her or their signatures, respectively, and shall have such other powers and shall perform such other duties as may from time to time be assigned to him or her or them by resolution of the directors.

39. Managing Director. The Managing Director (if any) shall conform to all lawful orders given to him or her by the directors and shall at all reasonable times give to the directors or any of them all information they may require regarding the affairs of the Corporation.

40. Duties of Officers may be Delegated. In case of the absence or inability or refusal to act of any officer of the Corporation or for any other reason that the directors may deem sufficient, the directors may delegate all or any of the powers of such officer to any other officer or to any director for the time being.

41. Agents and Attorneys. The Corporation shall have power from time to time to appoint agents or attorneys for the Corporation in or outside Canada with such powers (including the power to subdelegate) of management, administration or otherwise as may be thought fit.

SHAREHOLDERS' MEETINGS

42. Annual Meeting. Subject to sections 132 and 133 of the Act, the annual meeting of shareholders shall be held at a place within Canada (or outside Canada if the place is specified in the articles or all the shareholders entitled to vote at the meeting agree that the meeting is to be held at that place) determined by the directors on such day in each year and at such time as the directors may determine.

43. Special Meetings. The directors of the Corporation may at any time call a special meeting of shareholders to be held on such day and at such time and, subject to section 132 of the Act, at such place within Canada (or outside Canada if the place is specified in the articles) as the directors may determine.

44. Meeting on Requisition of Shareholders. The holders of not less than five percent (5%) of the issued shares of the Corporation that carry the right to vote at a meeting sought to be held may requisition the directors to call a meeting of shareholders for the purposes stated in the requisition. The requisition shall state the business to be transacted at the meeting and shall be sent to each director and to the registered office of the Corporation. Subject to subsection (3) of section 143 of the Act, upon receipt of the requisition, the directors shall call a meeting of shareholders to transact the business stated in the requisition (but if the directors are obligated to call a meeting and do not do so within 21 days after receiving the requisition, any shareholder who signed the requisition may call the meeting).

45. Participation in Meetings by Electronic Means. Any person entitled to attend a meeting of shareholders may participate in the meeting, in accordance with the Act, by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting, if the Corporation makes available such a communication facility and a person participating in a meeting by those means is deemed for the purposes of the Act and the by-laws to be present at the meeting.

46. Meetings held by Electronic Means. If the directors or the shareholders of the Corporation call a meeting of shareholders pursuant to the Act, those directors or shareholders, as the case may be, may determine that the meeting shall be held, in accordance with the Act, entirely by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting.

47. Notice. A notice in writing of a meeting of shareholders stating the day, hour and place of meeting and if special business is to be transacted thereat, stating (i) the nature of that business in sufficient detail to permit the shareholder to form a reasoned judgment on that business and (ii) the text of any special resolution to be submitted to the meeting, shall be sent to each shareholder entitled to vote at the meeting, who on the record date for notice is registered on the records of the Corporation or its transfer agent as a shareholder, to each director of the Corporation and to the auditor of the Corporation not less than 21 days and not more than 60 days (exclusive of the day of mailing and of the day for which notice is given) before the date of the meeting.

48. Waiver of Notice. Notice of any meeting of shareholders or the time for the giving of any such notice or any irregularity in any meeting or in the notice thereof may be waived by any shareholder, the duly appointed proxy of any shareholder, any director or the auditor of the Corporation in writing or by facsimile or other form of recorded electronic transmission addressed to the Corporation or in any other manner and any such waiver may be validly given either before or after the meeting to which such waiver relates. Attendance of a shareholder or any other person entitled to attend at a meeting of shareholders is a waiver of notice of such meeting, except when he or she attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

49. Omission of Notice. The accidental omission to give notice of any meeting of shareholders to or the non-receipt of any notice by any person shall not invalidate any resolution passed or any proceeding taken at any such meeting.

50. Record Dates. Subject to subsection (3) of section 134 of the Act, the directors may, within the period prescribed by the Act, fix in advance a date as the record date for the determination of shareholders (i) entitled to receive payment of a dividend, (ii) entitled to participate in a liquidation distribution, (iii) entitled to receive notice of a meeting of shareholders, (iv) entitled to vote at a meeting of shareholders, or (v) for any other purpose.

If no record date is fixed,

- (a) the record date for the determination of shareholders entitled to receive notice of a meeting of shareholders shall be
 - (i) at the close of business on the last business day preceding the day on which the notice is given; or
 - (ii) if no notice is given, the day on which the meeting is held; and
- (b) the record date for the determination of shareholders for any purpose other than to establish a shareholder's right to receive notice of a meeting or to vote shall be at the close of business on the day on which the directors pass the resolution relating to that purpose.

51. Chairman of the Meeting. In the absence of the Chairman of the Board (if any), the President (if any) and any Vice-President (who is a director), the shareholders present and entitled to vote shall elect a director of the Corporation as chairman of the meeting and if no director is present or if all the directors present decline to take the chair then the shareholders present shall elect one of their number to be chairman.

52. Votes. Votes at meetings of shareholders may be cast either personally or by proxy. Subject to the Act and Paragraph 53, every question submitted to any meeting of shareholders shall be decided on a show of hands, except when a ballot is required by the chairman of the meeting or is demanded by a shareholder or proxyholder entitled to vote at the meeting or is otherwise required by the Act. A shareholder or proxyholder may demand a ballot either before or after any vote by a show of hands. At every meeting at which shareholders are entitled to vote, each shareholder present on his own behalf and every proxyholder present shall have one vote. Upon any ballot at which shareholders are entitled to vote, each shareholder present on his own behalf or by proxy shall (subject to the provisions, if any, of the articles) have one vote for every share registered in the name of such shareholder. In the case of an equality of votes under this paragraph, the chairman of the meeting shall not have a second or casting vote in addition to the vote or votes to which he or she may be entitled as a shareholder or proxyholder.

At any meeting, unless a ballot is demanded, an entry in the minutes for the applicable meeting, following a vote on the applicable resolution by a show of hands, to the effect that the chairman of the meeting declared a resolution to be carried or defeated is, in the absence of evidence to the contrary, proof of the fact, without proof of the number or proportion of the votes recorded in favour of or against the resolution, although the chairman may direct that a record be

kept of the number or proportion of votes in favour of or against the resolution for any purpose the chairman of the meeting considers appropriate.

If at any meeting a ballot is demanded on the election of a chairman for the meeting or on the question of adjournment or termination, the ballot shall be taken forthwith without adjournment. If a ballot is demanded on any other question or as to the election of directors, the ballot shall be taken in such manner and either at once or later at the meeting or after adjournment as the chairman of the meeting directs. The result of a ballot shall be deemed to be the resolution of the meeting at which the ballot was demanded. A demand for a ballot may be withdrawn.

53. Electronic Voting. Any person participating in a meeting of shareholders by telephonic, electronic or other communication facility under Paragraph 45 or Paragraph 46 and entitled to vote at that meeting may vote, in accordance with the Act, by means of the telephonic, electronic or other communication facility that the Corporation has made available for that purpose. Despite Paragraph 52, any vote referred to in Paragraph 52 may be held, in accordance with the Act, entirely by means of a telephonic, electronic or other communication facility, if the Corporation makes available such a communication facility, in accordance with the Act.

54. Right to Vote. Unless the articles otherwise provide, each share of the Corporation entitles the holder of such share to one vote at a meeting of shareholders.

Where a body corporate or a trust, association or other unincorporated organization is a shareholder of the Corporation, any individual authorized by a resolution of the directors of the body corporate or the directors, trustees or other governing body of the association, trust or unincorporated organization, to represent it at meetings of shareholders of the Corporation shall be recognized as the person entitled to vote at all such meetings of shareholders in respect of the shares held by such body corporate or by such trust, association or other unincorporated organization and the chairman of the meeting may establish or adopt rules or procedures in relation to the recognition of a person to vote shares held by such body corporate or by such trust, association or other unincorporated organization.

Where a person holds shares as a personal representative, such person or his or her proxy is the person entitled to vote at all meetings of shareholders in respect of the shares so held by him or her, and the chairman of the meeting may establish or adopt rules or procedures in relation to the recognition of such person to vote the shares in respect of which such person has been appointed as a personal representative.

Where a person mortgages, pledges or hypothecates his or her shares, such person or such person's proxy is the person entitled to vote at all meetings of shareholders in respect of such shares so long as such person remains the registered owner of such shares unless, in the instrument creating the mortgage, pledge or hypothec, the person has expressly empowered the person holding the mortgage, pledge or hypothec to vote in respect of such shares, in which case, subject to the articles, such holder or such holder's proxy is the person entitled to vote in respect of the shares and the chairman of the meeting may establish or adopt rules or procedures in relation to the recognition of the person holding the mortgage, pledge or hypothec as the person entitled to vote in respect of the applicable shares.

Where two or more persons hold shares jointly, one of those holders present at a meeting of shareholders may in the absence of the others vote the shares, but if two or more of those persons who are present on their own behalf or by proxy, vote, they shall vote as one on the shares jointly held by them and the chairman of the meeting may establish or adopt rules or procedures in that regard.

55. Proxies. Every shareholder, including a shareholder that is a body corporate or a trust, association or other unincorporated organization, entitled to vote at a meeting of shareholders may by means of a proxy appoint a proxyholder or one or more alternate proxyholders, who are not required to be shareholders, to attend and act at the meeting in the manner and to the extent authorized by the proxy and with the authority conferred by the proxy.

An instrument appointing a proxyholder shall be in written form executed by the shareholder or by such shareholder's duly authorized attorney or be in the form of an electronic document executed as contemplated by the Act by the shareholder or by his duly authorized attorney and shall conform with the requirements of the Act and is valid only at the meeting in respect of which it is given or any adjournment of that meeting. An instrument appointing a proxyholder may be in any form which complies with the requirements of the Act.

The directors may specify in a notice calling a meeting of shareholders a time not exceeding 48 hours, excluding Saturdays and holidays, preceding the meeting or an adjournment of the meeting before which time proxies to be used at the meeting must be deposited with the Corporation or its agent.

The chairman shall conduct the proceedings at the meeting and the chairman's decision in any matter or thing, including, without limitation, any question regarding the validity or invalidity of any instruments of proxy and any question as to the admission or rejection of a vote, shall be conclusive and binding upon the shareholders.

56. Adjournment. The chairman of the meeting may with the consent of the meeting adjourn any meeting of shareholders from time to time to a fixed time and place and if the meeting is adjourned by one or more adjournments for an aggregate of less than 30 days it is not necessary to give notice of the adjourned meeting other than by announcement at the time of an adjournment. If a meeting of shareholders is adjourned by one or more adjournments for an aggregate of 30 days or more, notice of the adjourned meeting shall be given as for an original meeting but, unless the meeting is adjourned by one or more adjournments for an aggregate of more than 90 days, subsection (1) of section 149 of the Act does not apply.

Any adjourned meeting shall be duly constituted if held in accordance with the terms of the adjournment and a quorum is present thereat. The persons who formed a quorum at the original meeting are not required to form the quorum at the adjourned meeting. If there is no quorum present at the adjourned meeting, the original meeting shall be deemed to have terminated forthwith after its adjournment. Any business may be brought before or dealt with at any adjourned meeting that might have been brought before or dealt with at the original meeting in accordance with the notice calling the same.

57. Quorum. Two persons present and holding or representing by proxy at least twenty five per cent (25%) of the shares entitled to vote at the meeting shall be a quorum. If a quorum is present at the opening of a meeting of shareholders, the shareholders present may proceed with

the business of the meeting, notwithstanding that a quorum is not present throughout the meeting. If a quorum is not present at the opening of any meeting of shareholders, the shareholders present may adjourn the meeting to a fixed time and place but may not transact any other business.

58. Persons Entitled to be Present. The only persons entitled to be present at a meeting of shareholders shall be those entitled to vote thereat, the directors and auditor of the Corporation and others who, although not entitled to vote, are entitled or required under any provision of the Act or the articles or by-laws to be present at the meeting. Any other person may be admitted only on the invitation of the chairman of the meeting or with the consent of the meeting.

59. Resolution in Lieu of Meeting. A resolution in writing signed by all the shareholders entitled to vote on that resolution is as valid as if it had been passed at a meeting of the shareholders except where a written statement is submitted by a director under subsection (2) of section 110 of the Act or by an auditor under subsection (5) of section 168 of the Act.

SHARES AND TRANSFERS

60. Issuance. Subject to the articles and to section 28 of the Act, shares in the Corporation may be issued at the times and to the persons and for the consideration that the directors determine; provided that a share shall not be issued until the consideration for the share is fully paid in money or in property or past service that is not less in value than the fair equivalent of the money that the Corporation would have received if the share had been issued for money.

61. Security Certificates. Security certificates (if any) shall (subject to compliance with section 49 of the Act) be in such form as the directors may from time to time by resolution approve and such certificates shall be signed manually, or the signature shall be printed or otherwise mechanically reproduced on the certificate, by at least one director or officer of the Corporation or by a registrar, transfer agent or branch transfer agent of the Corporation or an individual on their behalf, or by a trustee who certifies it in accordance with a trust indenture, and any additional signatures required on a security certificate may be printed or otherwise mechanically reproduced thereon. If a security certificate contains a printed or mechanically reproduced signature of a person, the Corporation may issue the security certificate, notwithstanding that the person has ceased to be a director or an officer of the Corporation, and the security certificate is as valid as if he or she were a director or an officer at the date of its issue.

62. Agent. The directors may from time to time by resolution appoint or remove an agent to maintain a central securities register and one or more branch securities registers for the Corporation.

63. Dealings with Registered Holder. Subject to the Act, the Corporation may treat the registered owner of a security as the person exclusively entitled to vote, to receive notices, to receive any interest, dividends or other payments in respect of the security, and otherwise to exercise all the rights and powers of an owner of the security.

64. Surrender of Security Certificates. Subject to the Act, no transfer of a security issued by the Corporation shall be registered unless or until the security certificate representing the security to be transferred has been presented for registration or, if no security certificate has been issued

by the Corporation in respect of such security, unless or until a duly executed transfer in respect thereof has been presented for registration.

65. Defaced, Destroyed, Stolen or Lost Security Certificates. In case of the defacement, destruction, theft or loss of a security certificate, the fact of such defacement, destruction, theft or loss shall be reported by the owner to the Corporation or to an agent of the Corporation (if any), on behalf of the Corporation, with a statement verified by oath or statutory declaration as to the defacement, destruction, theft or loss and the circumstances concerning the same and with a request for the issuance of a new security certificate to replace the one so defaced (together with the surrender of the defaced security certificate), destroyed, stolen or lost. Upon the giving to the Corporation (or if there be an agent, hereinafter in this paragraph referred to as the "Corporation's agent", then to the Corporation and Corporation's agent) of a bond of a surety company (or other security approved by the directors) in such form as is approved by the directors or by any officer of the Corporation, indemnifying the Corporation (and the Corporation's agent if any) against all loss, damage or expense, which the Corporation and/or the Corporation's agent may suffer or be liable for by reason of the issuance of a new security certificate to such shareholder, and provided the Corporation or the Corporation's agent does not have notice that the security has been acquired by a bona fide purchaser, a new security certificate may be issued in replacement of the one defaced, destroyed, stolen or lost, if such issuance is ordered and authorized by any officer of the Corporation or by the directors.

66. Enforcement of Lien for Indebtedness. Subject to subsection (8) of section 49 of the Act, if the articles of the Corporation provide that the Corporation has a lien on the shares registered in the name of a shareholder or the shareholder's legal representative for a debt of that shareholder to the Corporation, such lien may be enforced by the sale of the shares thereby affected or by any other action, suit, remedy or proceeding authorized or permitted by law or by equity and, pending such enforcement, the Corporation may refuse to register a transfer of the whole or any part of such shares. No sale shall be made until such time as the debt ought to be paid and until a demand and notice in writing stating the amount due and demanding payment and giving notice of intention to sell on default shall have been served on the holder or such shareholder's legal representative of the shares subject to the lien and default shall have been made in payment of such debt for seven days after service of such notice. Upon any such sale, the proceeds shall be applied, firstly, in payment of all costs of such sale, and, secondly, in satisfaction of such debt and the residue (if any) shall be paid to the shareholder or as such shareholder shall direct. Upon any such sale, the directors may enter or cause to be entered the purchaser's name in the securities register of the Corporation as holder of the shares, and the purchaser shall not be bound to see to the regularity or validity of, or be affected by, any irregularity or invalidity in the proceedings, or be bound to see to the application of the purchase money, and after the purchaser's name or the name of the purchaser's legal representative has been entered in the securities register, the validity of the sale shall not be impeached by any person.

67. Electronic, Book-Based or Other Non-Certificated Registered Positions. For greater certainty but subject to subsection (1) of section 49 of the Act, a registered securityholder may have his holdings of securities of the Corporation evidenced by an electronic, book-based, direct registration service or other non-certificated entry or position on the register of securityholders to be kept by the Corporation in place of a physical security certificate pursuant to a registration system that may be adopted by the Corporation, in conjunction with its transfer agent (if any). This by-law shall be read such that a registered holder of securities of the Corporation pursuant

to any such electronic, book-based, direct registration service or other non-certificated entry or position shall be entitled to all of the same benefits, rights, entitlements and shall incur the same duties and obligations as a registered holder of securities evidenced by a physical security certificate. The Corporation and its transfer agent may adopt such policies and procedures and require such documents and evidence as they may determine necessary or desirable in order to facilitate the adoption and maintenance of a security registration system by electronic, book-based, direct registration system or other non-certificated means.

DIVIDENDS

68. Dividends. The directors may from time to time by resolution declare and the Corporation may pay dividends on its issued shares, subject to the provisions (if any) of the Corporation's articles.

The directors shall not declare and the Corporation shall not pay a dividend if there are reasonable grounds for believing that:

- (a) the Corporation is, or would after the payment be, unable to pay its liabilities as they become due; or
- (b) the realizable value of the Corporation's assets would thereby be less than the aggregate of its liabilities and stated capital of all classes.

The Corporation may pay a dividend by issuing fully paid shares of the Corporation and, subject to section 42 of the Act, the Corporation may pay a dividend in money or property.

69. Joint Shareholders. In case several persons are registered as the joint holders of any securities of the Corporation, any one of such persons may give effectual receipts for all dividends and payments on account of dividends, principal, interest and/or redemption payments in respect of such securities.

70. Dividend Payments. A dividend payable in money shall be paid by cheque to the order of each registered holder of shares of the class or series in respect of which it has been declared and mailed by prepaid ordinary mail to such registered holder at the recorded address of such registered holder, or, paid by electronic funds transfer to the bank account designated by the registered holder, unless such holder otherwise directs. In the case of joint holders, the cheque or payment shall, unless such joint holders otherwise direct, be made payable to the order of all of such joint holders and, if more than one address is recorded in the Corporation's security register in respect of such joint holding, the cheque shall be mailed to the first address so appearing. The mailing of such cheque as aforesaid, unless the same is not paid on due presentation, or the electronic funds transfer as aforesaid, shall satisfy and discharge the liability for the dividend to the extent of the sum represented thereby plus the amount of any tax which the Corporation is required to and does withhold. In the event of non-receipt of any dividend cheque or payment by the person to whom it is sent as aforesaid, the Corporation shall issue to such person a replacement cheque or payment for a like amount on such terms as to indemnity, reimbursement of expenses and evidence of non-receipt and of title as any officer or the directors may from time to time prescribe, whether generally or in any particular case.

VOTING SECURITIES IN OTHER BODIES CORPORATE

71. All securities of or other interests in (i) any other body corporate or (ii) any trust, association or other unincorporated organization carrying voting rights and held from time to time by the Corporation may be voted at all meetings of shareholders, unitholders, bondholders, debenture holders or holders of such securities or other interests, as the case may be, of such other (i) body corporate or (ii) trust, association or other unincorporated organization, and in such manner and by such person or persons as the directors of the Corporation shall from time to time determine and authorize by resolution. Any officer of the Corporation may also from time to time execute and deliver for and on behalf of the Corporation proxies and arrange for the issuance of voting certificates or other evidence of the right to vote in such names as such officer may determine, without the necessity of a resolution or other action by the directors.

NOTICES, ETC.

72. Service. Any notice or document required by the Act, the articles, the by-laws or otherwise to be sent to any shareholder or director of the Corporation may be delivered personally to or sent by pre-paid mail addressed to:

- (a) the shareholder at the shareholder's latest address as shown in the records of the Corporation or its transfer agent; and
- (b) the director at the director's latest address as shown in the records of the Corporation or in the last notice filed under section 106 or 113 of the Act.

A notice or document sent by mail as contemplated by this Paragraph 72 to a shareholder or director of the Corporation shall be deemed to have been received by the shareholder or director (as the case may be) at the time it would be delivered in the ordinary course of mail, unless there are reasonable grounds for believing that the shareholder or director (as the case may be) did not receive the notice or document at that time or at all.

Notwithstanding the foregoing, provided that the addressee has consented in writing and has designated an information system for the receipt of electronic documents as contemplated by the Act, the Corporation may satisfy the requirements to send any notice or document referred to above, subject to the Act, by creating an electronic document and providing such electronic document to the applicable specified information system or otherwise posting or making such document available on a generally accessible electronic source, such as a web site, and providing written notice of the availability and location of that electronic document, unless otherwise prescribed by the Act. Any such electronic document shall be deemed to have been sent to and received by the addressee when it enters the information system of the addressee or, if posted or otherwise made available through a generally accessible electronic source, when the addressee receives written notice of the availability and location of that electronic document.

73. Failure to Locate Shareholder. If the Corporation sends a notice or document to a shareholder and the notice or document is returned on two consecutive occasions because the shareholder cannot be found, the Corporation is not required to send any further notices or documents to the shareholder until the shareholder informs the Corporation in writing of the shareholder's new address.

74. Shares Registered in More than one Name. All notices or documents shall, with respect to any shares in the capital of the Corporation registered in more than one name, be sent to whichever of such persons is named first in the records of the Corporation and any notice or document so sent shall be sufficient notice of delivery of such document to all the holders of such shares.

75. Persons Becoming Entitled by Operation of Law. Every person who by operation of law, transfer or by any other means whatsoever shall become entitled to any shares in the capital of the Corporation shall be bound by every notice or document in respect of such shares which prior to his or her name and address being entered on the records of the Corporation in respect of such shares shall have been duly sent to the person or persons from whom such person derives his or her title to such shares.

76. Signatures upon Notices. The signature of any director or officer of the Corporation upon any notice need not be a manual signature.

77. Computation of Time. Where a given number of days' notice or notice extending over any period is required to be given under any provisions of the articles or by-laws of the Corporation, the day the notice is sent shall, unless it is otherwise provided by applicable law, be counted in such number of days or other period.

78. Proof of Service. A certificate of any officer of the Corporation in office at the time of the making of the certificate or of an agent of the Corporation as to facts in relation to the mailing or delivery or sending of any notice or document to any shareholder, director, officer or auditor of the Corporation or any other person or publication of any notice or document shall be conclusive evidence thereof and shall be binding on every shareholder, director, officer or auditor of the Corporation or other person, as the case may be.

CUSTODY OF SECURITIES

79. All securities (including warrants) owned by the Corporation may be lodged (in the name of the Corporation) with a chartered bank or a trust company or in a safety deposit box or with such other depositories or in such other manner as may be determined from time to time by any officer or the directors.

All securities (including warrants) belonging to the Corporation may be issued and held in the name of a nominee or nominees of the Corporation (and if issued or held in the names of more than one nominee shall be held in the names of the nominees jointly with right of survivorship) and shall be endorsed in blank with endorsement guaranteed in order to enable transfer thereof to be completed and registration thereof to be effected.

EXECUTION OF CONTRACTS, ETC.

80. Contracts, documents or instruments requiring the signature of the Corporation may be signed by any director or officer alone or any person or persons authorized by resolution of the directors and all contracts, documents or instruments so signed shall be binding upon the Corporation without any further authorization or formality. The directors are authorized from time to time by resolution to appoint any officer or officers or any other person or persons on behalf of the Corporation either to sign contracts, documents or instruments generally or to sign specific contracts, documents or instruments.

The corporate seal (if any) of the Corporation may be affixed by any director or officer to contracts, documents or instruments signed by such director or officer as aforesaid or by an officer or officers, person or persons appointed as aforesaid by resolution of the directors.

The term "contracts, documents or instruments" as used in this by-law shall include notices, deeds, mortgages, hypothecs, charges, cheques, drafts, orders for the payment of money, notes, acceptances, bills of exchange, conveyances, transfers and assignments of property, real or personal, immovable or movable, agreements, releases, receipts and discharges for the payment of money or other obligations, conveyances, transfers and assignments of securities and all paper writings.

The signature or signatures of any director or officer or any other person or persons appointed as aforesaid by resolution of the directors may be printed, engraved, lithographed or otherwise mechanically or electronically reproduced upon all contracts, documents or instruments executed or issued by or on behalf of the Corporation and all contracts, documents or instruments on which the signature or signatures of any of the foregoing persons shall be so reproduced shall be as valid to all intents and purposes as if they had been signed manually and notwithstanding that the persons whose signature or signatures is or are so reproduced may have ceased to hold office at the date of the delivery or issue of such contracts, documents or instruments.


FISCAL PERIOD

81. The fiscal period of the Corporation shall terminate on such day in each year as the board may from time to time by resolution determine.

MADE the 17th day of December, 2020.



Lindsay R. Link
President and Chief Operating Officer



Michael D. Olinek
Chief Financial Officer

CALFRAC WELL SERVICES LTD.

BY-LAW NO. 2

A by-law respecting the borrowing of money, the giving of guarantees and the giving of security by CALFRAC WELL SERVICES LTD. (hereinafter called the "*Corporation*").

IT IS HEREBY ENACTED as a by-law of the Corporation as follows:

In addition to, and without limiting such other powers which the Corporation may by law possess, the directors of the Corporation may from time to time:

- (a) borrow money on the credit of the Corporation;
- (b) issue, reissue, sell or pledge debt obligations of the Corporation, including without limitation, bonds, debentures, notes or other evidences of indebtedness or guarantee of the Corporation, whether secured or unsecured;
- (c) give a guarantee on behalf of the Corporation to secure performance of an obligation of any individual, partnership, association, body corporate, trustee, executor, administrator or legal representative;
- (d) mortgage, hypothecate, pledge or otherwise create an interest in or charge on all or any property of the Corporation, owned or subsequently acquired, to secure payment of a debt or performance of any other obligation of the Corporation; and
- (e) delegate to one or more directors, a committee of directors or one or more officers of the Corporation as may be designated by the directors, all or any of the powers conferred by the foregoing clauses of this by-law to such extent and in such manner as the directors shall determine at the time of each such delegation.

In the event any provision of any other by-law of the Corporation now in force is inconsistent with or in conflict with any provision of this by-law, the provisions of this by-law shall prevail to the extent necessary to remove the inconsistency or conflict.

This by-law shall remain in force and be binding upon the Corporation as regards any party acting on the faith thereof until a copy, certified by the Secretary of the Corporation, of a by-law repealing or replacing this by-law shall have been received by such party and duly acknowledged in writing.

ENACTED the 17th day of December, 2020.



Lindsay R. Link
President and Chief Operating Officer



Michael D. Olinek
Chief Financial Officer

CALFRAC WELL SERVICES LTD.

BY-LAW NO. 3

A by-law relating to the advance notice of nominations of directors of Calfrac Well Services Ltd. (hereinafter referred to as the "*Corporation*").

IT IS HEREBY ENACTED as a by-law of the Corporation as follows:

1. Nomination Procedures. Subject only to the provisions of the Act, Applicable Securities Laws and the articles of the Corporation, only persons who are nominated in accordance with the following procedures shall be eligible for election as directors of the Corporation. Nominations of persons for election as directors of the Corporation may be made at any annual meeting of shareholders or at any special meeting of shareholders if one of the purposes for which the special meeting was called is the election of directors. Such nominations may be made in the following manner:
 - (a) by or at the direction of the Board, including pursuant to a notice of meeting;
 - (b) by or at the direction or request of one or more shareholders pursuant to a proposal made in accordance with the provisions of the Act, or a requisition of a meeting of shareholders by one or more shareholders made in accordance with the provisions of the Act; or
 - (c) by any person (a "*Nominating Shareholder*") who:
 - (i) complies with the notice procedures set forth below in this by-law; and
 - (ii) at the close of business on the date of the giving of notice by the Nominating Shareholder in accordance with the notice procedures set forth below in this by-law and on the record date for notice of such meeting, is entered in the securities register of the Corporation as a holder of one or more shares carrying the right to vote at such meeting or who beneficially owns shares that are entitled to be voted at such meeting and provides evidence of such beneficial ownership to the Corporate Secretary of the Corporation.
2. Timely Notice. In addition to any other applicable requirements, for a nomination to be made by a Nominating Shareholder, the Nominating Shareholder must have given timely notice thereof in proper written form to the Corporate Secretary of the Corporation in accordance with the procedures set forth below in this by-law.
3. Manner of Timely Notice. To be timely, a Nominating Shareholder's notice to the Corporate Secretary of the Corporation must be given:
 - (a) in the case of an annual meeting (including an annual and special meeting) of shareholders, not less than thirty (30) days prior to the date of the meeting; provided, however, in the event that the meeting is to be held on a date that is less than fifty (50) days after the date on which the first public announcement of the

date of the meeting was made, notice by the Nominating Shareholder shall be made not later than the close of business on the tenth (10th) day following the date of such public announcement;

- (b) in the case of a special meeting (which is not also an annual meeting) of shareholders called for the purpose of electing directors (whether or not also called for other purposes), notice by the Nominating Shareholder shall be made not later than the close of business on the fifteenth (15th) day following the date of such public announcement; and
- (c) in the case of an annual meeting of shareholders or a special meeting of shareholders called for the purpose of electing directors (whether or not also called for other purposes) where notice-and-access is used to deliver proxy-related materials to shareholders, not less than forty (40) days prior to the date of the meeting (and, in any event, not prior to the date on which the first public announcement of the date of the meeting was made); provided, however, in the event that the meeting is to be held on a date that is less than fifty (50) days after the date on which the first public announcement of the date of the meeting was made, (i) in the case of an annual meeting of shareholders, notice by the Nominating Shareholder shall be made not later than the close of business on the tenth (10th) day following the date of such public announcement, and (ii) in the case of a special meeting of shareholders, notice by the Nominating Shareholder shall be made not later than the close of business on the fifteenth (15th) day following the date of such public announcement.

The adjournment or postponement of a meeting of shareholders or the announcement thereof shall commence a new time period for the giving of a Nominating Shareholder's notice as described above.

4. Proper Form of Notice. To be in proper written form, a Nominating Shareholder's notice to the Corporate Secretary of the Corporation must set forth or include:
 - (a) as to each person whom the Nominating Shareholder proposes to nominate for election as a director of the Corporation (a "*Proposed Nominee*"):
 - (i) the name, age and business and residential address of the Proposed Nominee;
 - (ii) the principal occupation, business or employment of the Proposed Nominee and the name and principal business of any company in which such employment is carried on, both present and within the five years preceding the date of the notice;
 - (iii) whether the Proposed Nominee is a "resident Canadian" within the meaning of the Act;
 - (iv) the number of securities of each class or series of voting securities of the Corporation beneficially owned, or controlled or directed, directly or

indirectly, by the Proposed Nominee as of the record date for the meeting of shareholders (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice;

- (v) a description of any relationship, agreement, arrangement or understanding, including financial compensation and indemnity related relationships, agreements, arrangements or understandings, between the Nominating Shareholder and the Proposed Nominee, or any affiliates or associates of, or any person or entity acting jointly or in concert with, the Nominating Shareholder or the Proposed Nominee with respect to the Proposed Nominee's nomination and election as a director;
 - (vi) whether the Proposed Nominee is party to any existing or proposed relationship, agreement, arrangement or understanding with any competitor of the Corporation or any other third party which may give rise to a real or perceived conflict of interest between the interests of the Corporation and the interests of the Proposed Nominee; and
 - (vii) any other information relating to the Proposed Nominee that would be required to be disclosed in a dissident's proxy circular or other filings required to be made in connection with solicitations of proxies for election of directors pursuant to the Act or any Applicable Securities Laws.
- (b) as to the Nominating Shareholder:
- (i) the name and business and residential address of such Nominating Shareholder;
 - (ii) the number of securities of each class or series of voting securities of the Corporation beneficially owned, or controlled or directed, directly or indirectly, by such Nominating Shareholder, or any other person with whom such Nominating Shareholder is acting jointly or in concert with respect to the Corporation or any of its securities, as of the record date for the meeting of shareholders (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice;
 - (iii) any derivatives or other economic or voting interests in the Corporation and any hedges implemented with respect to the nominating shareholders' interests in the Corporation;
 - (iv) any proxy, contract, arrangement, understanding or relationship pursuant to which the Nominating Shareholder has the right to vote any shares of the Corporation;
 - (v) whether such Nominating Shareholder intends to deliver a proxy circular and/or form of proxy to any shareholder of the Corporation in connection with such nomination or otherwise solicit proxies or votes from shareholders of the Corporation in support of such nomination; and

- (vi) any other information relating to such Nominating Shareholder that would be required to be disclosed in a dissident's proxy circular or other filings required to be made in connection with solicitations of proxies for election of directors pursuant to the Act or any Applicable Securities Laws; and
- (c) a written consent duly signed by the Proposed Nominee to being named as a nominee for election to the Board and to serving as a director of the Corporation if elected.

The Corporation may require any Proposed Nominee to furnish such other information as may be reasonably required by the Corporation to determine, pursuant to Applicable Securities Laws, the independence, or lack thereof, of such proposed nominee, provided that such disclosure request does not go beyond that required of management nominees for election as directors of the Corporation. References to "Nominating Shareholder" in this Section 4 shall be deemed to refer to each shareholder that nominates or proposes to nominate a person for election as a director of the Corporation in the case of a nomination proposal where more than one shareholder is involved in making such nomination proposal. All information provided in a Nominating Shareholders' notice will be made publicly available to shareholders of the Corporation.

5. Notice to be Updated. In addition, to be considered timely and in proper written form, a Nominating Shareholder's notice shall be promptly updated and supplemented, if necessary, so that the information provided or required to be provided in such notice shall be true and correct as of the record date for the meeting.
6. Eligibility for Nomination as a Director. No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the procedures set forth in this by-law. The requirements of this by-law shall apply to any Proposed Nominee to be brought before a meeting by a shareholder whether such Proposed Nominees are to be included in the Corporation's management information circular under the Act and Applicable Securities Laws or presented to shareholders by means of an independently financed proxy solicitation. The requirements of this by-law are included to provide the Corporation notice of a shareholder's intention to bring one or more Proposed Nominees before a meeting and shall in no event be construed as (i) imposing upon any shareholder the requirement to seek approval from the Corporation as a condition precedent to nominate such Proposed Nominee before a meeting or (ii) deeming to preclude discussion by a shareholder (as distinct from the nomination of directors) at a meeting of shareholders of any matter in respect of which such shareholder would have been entitled to submit a proposal pursuant to the provisions of the Act. The Chair of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures set forth in this by-law and, if any proposed nomination is determined not to be in compliance with such procedures, to declare that such defective nomination shall be disregarded.
7. Definitions. For purposes of this by-law:

- (a) "*Act*" means the *Canada Business Corporations Act* and the regulations made thereunder, as from time to time amended, and in the case of such amendment any reference in the by-laws shall be read as referring to the amended provisions thereof;
- (b) "*Applicable Securities Laws*" means the applicable securities legislation of each relevant province and territory of Canada, as amended from time to time, the rules, regulations and forms made or promulgated under any such statute and the published national instruments, multilateral instruments, policies, bulletins and notices of the securities commission and similar regulatory authority of each relevant province and territory of Canada;
- (c) "*Board*" means the board of directors of the Corporation;
- (d) "*close of business*" means 5:00 p.m. (Calgary time) on a business day in Calgary, Alberta; and
- (e) "*public announcement*" means disclosure in a press release reported by a national news service in Canada, or in a document publicly filed by the Corporation under its profile on the System for Electronic Document Analysis and Retrieval at www.sedar.com.

Terms used in this by-law that are defined in the Act shall have the meanings given to those terms in the Act.

- 8. **Delivery of Notice.** Notwithstanding any other provision of this by-law or any other by-law of the Corporation, notice given to the Corporate Secretary of the Corporation pursuant to this by-law may only be given by personal delivery or by electronic mail (at such e-mail address as may be stipulated from time to time by the Corporate Secretary of the Corporation for purposes of this notice), and shall be deemed to have been given and made only at the time it is served by personal delivery to the Corporate Secretary at the address of the principal executive offices of the Corporation or, in the case of electronic mail, at the time it is sent to the Corporate Secretary at the email address as aforesaid; provided that if such delivery or electronic communication is made on a day which is a not a business day or later than 5:00 p.m. (Calgary time) on a day which is a business day, then such delivery or electronic communication shall be deemed to have been made on the next following day that is a business day.
- 9. **Board Discretion.** Notwithstanding the foregoing, the Board may, in its sole discretion, waive any requirement in this by-law.

ENACTED by the Board on the 17th day of December, 2020.



Lindsay R. Link
President and Chief Operating Officer



Michael D. Olinek
Chief Financial Officer