

**AMENDED AND RESTATED
GENERAL BY-LAW**

BY-LAW NO. 1 OF

**TOUCHSTONE EXPLORATION INC.
(FORMERLY NAMED PETROBANK ENERGY AND RESOURCES LTD.)**

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AMENDED AND RESTATED
GENERAL BY-LAW
BY-LAW NO. 1

A by-law relating generally to the conduct of the business and affairs of

**TOUCHSTONE EXPLORATION INC.
(FORMERLY KNOWN AS PETROBANK ENERGY AND RESOURCES LTD.)**

(hereinafter called the "Corporation").

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

DIVISION 1
INTERPRETATION

1.01 Definitions

In the by-laws of the Corporation, unless the context otherwise specifies or requires:

- (a) "Act" means the Business Corporations Act of Alberta, as from time to time amended and every statute that may be substituted therefore and, in the case of such substitution, any references in the by-laws of the Corporation to provisions of the Act shall be read as references to the substituted provisions therefor in the new statute or statutes;
- (b) "appoint" includes "elect" and vice versa;
- (c) "articles" means the articles of incorporation, amalgamation or continuance of the Corporation, as from time to time amended or restated;
- (d) "board" means the board of directors of the Corporation;
- (e) "business day" means a day which is not a non-business day;
- (f) "by-laws" means this by-law and all other by-laws of the Corporation from time to time in force and effect;
- (g) "meeting of shareholders" includes an annual and a special meeting of shareholders;
- (h) "non-business day" means Saturday, Sunday and any other day that is a holiday as from time to time defined in The Interpretation Act of Alberta;
- (i) "Regulations" means the regulations under the Act as published or from time to time amended and every regulation that may be substituted therefore and, in the case of such substitution, any references in the by-laws of the Corporation to provisions of the Regulations shall be read as references to the substituted provisions therefore in the new regulations;
- (j) "signing officer" means, in relation to any instrument, any person authorized to sign the same on behalf of the Corporation by virtue of section 3.01 of this by-law or by a resolution passed pursuant thereto; and
- (k) "special meeting of shareholders" means a meeting of any particular class or classes of shareholders and a meeting of all shareholders entitled to vote at any annual meeting of shareholders at which special business is to be transacted.

Save as aforesaid, all terms which are contained in the by-laws of the Corporation and which are defined in the Act or the Regulations shall, unless the context otherwise specifies or requires, have the meanings given to such terms in the Act or the Regulations. Words importing the singular number include the plural and vice versa; the masculine shall include the feminine; and the word "person" shall include an individual, partnership, association, body corporate, body politic, trustee, executor, administrator and legal representative.

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.

DIVISION 2 BORROWING, BANKING AND SECURITIES

2.01 Borrowing Power

Without limiting the borrowing powers of the Corporation provided by the Act, the board may, without authorization of the shareholders:

- (a) borrow money on the credit of the Corporation;
- (b) issue, reissue, sell or pledge debt obligations of the Corporation;
- (c) subject to Section 45 of the Act, 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.

The directors may, by resolution, delegate all or any of the powers conferred on them by this section to a director, a committee of directors or an officer.

2.02 Banking Arrangements

The banking business of the Corporation including, without limitation, the borrowing of money and the giving of security therefor, shall be transacted with such banks, trust companies or other bodies corporate or organizations or any other persons as may from time to time be designated by or under the authority of the board. Such banking business or any part thereof shall be transacted under such agreements, instructions and delegations of power as the board may from time to time prescribe or authorize.

2.03 Voting Rights in Other Bodies Corporate

The signing officers of the Corporation may execute and deliver instruments of proxy and arrange for the issuance of voting certificates or other evidence of the right to exercise the voting rights attaching to any securities held by the Corporation. Such instruments, certificates or other evidence shall be in favour of such person or persons as may be determined by the officers executing such proxies or arranging for the issuance of such voting certificates or evidence of the right to exercise such voting rights. In addition, the board, or failing the board, the signing officers of the Corporation, may direct the manner in which and the person or persons by whom any particular voting rights or class of voting rights may or shall be exercised.

DIVISION 3
EXECUTION OF INSTRUMENTS

3.01 Authorized Signing Officers

Unless otherwise authorized by the board, deeds, transfers, assignments, contracts, obligations, certificates and other instruments may be signed on behalf of the Corporation by any one director or officer. In addition, the board may from time to time direct the manner in which and the person or persons by whom any particular instrument or class of instruments may or shall be signed. Any signing officer may affix the corporate seal to any instrument requiring the same, but no instrument is invalid merely because the corporate seal is not affixed thereto.

3.02 Cheques, Drafts and Notes

All cheques, drafts or orders for the payment of money and all notes and acceptances and bills of exchange shall be signed by such officer or person or persons, whether or not officers of the Corporation, and in such manner as the board may from time to time designate by resolution.

DIVISION 4
DIRECTORS

4.01 Number

The board shall consist of such number of directors as is fixed by the articles, or where the articles specify a variable number, shall consist of such number of directors as is not less than the minimum nor more than the maximum number of directors provided in the articles and as shall be fixed from time to time by resolution of the shareholders.

4.02 Election and Term

Subject to the articles or a unanimous shareholder agreement, the election of directors shall take place at each annual meeting of shareholders and all of the directors then in office, unless elected for a longer period of time (not to exceed the close of the third (3rd) annual meeting of shareholders following election), shall retire but, if qualified, shall be eligible for re-election. The number of directors to be elected at any such meeting shall, subject to the articles or a unanimous shareholder agreement, be the number of directors then in office, or the number of directors whose terms of office expire at the meeting, as the case may be, except that, if cumulative voting is not required by the articles and the articles otherwise permit, the shareholders may resolve to elect some other number of directors. Where the shareholders adopt an amendment to the articles to increase the number or minimum number of directors, the shareholders may, at the meeting at which they adopt the amendment, elect the additional number of directors authorized by the amendment. If an election of directors is not held at the proper time, the incumbent directors shall continue in office until their successors are elected. If the articles provide for cumulative voting, each director elected by shareholders (but not directors elected or appointed by creditors or employees) ceases to hold office at the annual meeting and each shareholder entitled to vote at an election of directors has the right to cast a number of votes equal to the number of votes attached to the shares held by him multiplied by the number of directors he is entitled to vote for, and he may cast all such votes in favour of one candidate or distribute them among the candidates in any manner. If he has voted for more than one candidate without specifying the distribution among such candidate, he shall be deemed to have divided his votes equally among the candidates for whom he voted.

4.03 Nomination of Directors

Subject only to the Act, 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 to the board may be made at any annual meeting of shareholders, or at any special meeting of shareholders

(but only if the election of directors is a matter specified in the notice of meeting given by or at the direction of the person calling such special meeting), (a) by or at the direction of the board or an authorized officer of the Corporation, 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 the shareholders made in accordance with the provisions of the Act or (c) by any person (a "**Nominating Shareholder**") (i) who, at the close of business on the date of the giving of the notice provided for below in this paragraph 4.03 of this DIVISION 4 and on the record date for notice of such meeting, is entered in the securities register 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 (ii) who complies with the notice procedures set forth below in this paragraph 4.03 of this DIVISION 4:

- (A) In addition to any other applicable requirements, for a nomination to be made by a Nominating Shareholder, such person must have given (a) timely notice thereof in proper written form to the Corporate Secretary of the Corporation at the principal executive offices of the Corporation in accordance with this paragraph 4.03 of this DIVISION 4, and (b) the representation and agreement with respect to each candidate for nomination as required by, and within the time period specified in, paragraph 4.03(D) of this DIVISION 4.
- (B) To be timely under paragraph 4.03(A)(a) of this DIVISION 4, a Nominating Shareholder's notice to the Corporate Secretary of the Corporation must be made (a) in the case of an annual meeting of shareholders, not less than 30 nor more than 65 days prior to the date of the annual meeting of shareholders; provided, however, that in the event that the annual meeting of shareholders is called for a date that is less than 50 days after the date (the "**Notice Date**") on which the first public announcement of the date of the annual meeting was made, notice by the Nominating Shareholder may be made not later than the tenth (10th) day following the Notice Date; and (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 called for other purposes), not later than the fifteenth (15th) day following the day on which the first public announcement of the date of the special meeting of shareholders was made. Notwithstanding the foregoing, the board may, in its sole discretion, waive any requirement in this paragraph (B).
- (C) To be in proper written form, a Nominating Shareholder's notice to the Corporate Secretary of the Corporation, under paragraph 4.03 (A)(a) of this DIVISION 4, must set forth (a) as to each person whom the Nominating Shareholder proposes to nominate for election as a director (i) the name, age, business address and residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class or series and number of shares in the capital of the Corporation which are controlled or which are owned beneficially or of record by the person 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, (iv) a statement as to whether such person would be "independent" of the Corporation (within the meaning of sections 1.4 and 1.5 of National Instrument 52-110 - *Audit Committees* of the Canadian Securities Administrators, as such provisions may be amended from time to time) if elected as a director at such meeting and the reasons and basis for such determination and (v) any other information relating to the person that would be required to be disclosed in a dissident's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and Applicable Securities Laws; and (b) as to the Nominating Shareholder giving the notice, (i) any information relating to such Nominating Shareholder that would be required to be made in a dissident's proxy circular in connection with solicitations of proxies for election of directors pursuant to the Act and Applicable Securities Laws, and (ii) the class or series and number of shares in the capital of the Corporation which are controlled or which are owned beneficially or of record by the Nominating Shareholder 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.

- (D) To be eligible to be a candidate for election as a director of the Corporation and to be duly nominated, a candidate must be nominated in the manner prescribed in this paragraph 4.03 of this DIVISION 4 and the candidate for nomination, whether nominated by the board or otherwise, must have previously delivered to the Corporate Secretary of the Corporation at the principal executive offices of the Corporation, not less than 5 days prior to the date of the Meeting of Shareholders, a written representation and agreement (in form provided by the Corporation) that such candidate for nomination, if elected as a director of the Corporation, will comply with all applicable corporate governance, conflict of interest, confidentiality, share ownership, majority voting and insider trading policies and other policies and guidelines of the Corporation applicable to directors and in effect during such person's term in office as a director (and, if requested by any candidate for nomination, the Corporate Secretary of the Corporation shall provide to such candidate for nomination all such policies and guidelines then in effect).
- (E) No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the provisions of this paragraph 4.03 of this DIVISION 4; provided, however, that nothing in this paragraph 4.03 of this DIVISION 4 shall be deemed to preclude discussion by a shareholder (as distinct from nominating directors) at a meeting of shareholders of any matter in respect of which it 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 the foregoing provisions and, if any proposed nomination is not in compliance with such foregoing provisions, to declare that such defective nomination shall be disregarded.
- (F) For purposes of this paragraph 4.03 of this DIVISION 4:
 - (a) **"Affiliate"**, when used to indicate a relationship with a person, shall mean a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such specified person;
 - (b) **"Applicable Securities Laws"** means the *Securities Act* (Alberta) and the equivalent legislation in the other provinces and in the territories 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 commissions and similar regulatory authorities of each of the applicable provinces and territories of Canada;
 - (c) **"Associate"**, when used to indicate a relationship with a specified person, shall mean (i) any corporation or trust of which such person owns beneficially, directly or indirectly, voting securities carrying more than 10% of the voting rights attached to all voting securities of such corporation or trust for the time being outstanding, (ii) any partner of that person, (iii) any trust or estate in which such person has a substantial beneficial interest or as to which such person serves as trustee or in a similar capacity, (iv) a spouse of such specified person, (v) any person of either sex with whom such specified person is living in conjugal relationship outside marriage or (vi) any relative of such specified person or of a person mentioned in clauses (iv) or (v) of this definition if that relative has the same residence as the specified person;
 - (d) **"Derivatives Contract"** shall mean a contract between two parties (the **"Receiving Party"** and the **"Counterparty"**) that is designed to expose the

Receiving Party to economic benefits and risks that correspond substantially to the ownership by the Receiving Party of a number of shares in the capital of the Corporation or securities convertible into such shares specified or referenced in such contract (the number corresponding to such economic benefits and risks, the “**Notional Securities**”), regardless of whether obligations under such contract are required or permitted to be settled through the delivery of cash, shares in the capital of the Corporation or securities convertible into such shares or other property, without regard to any short position under the same or any other Derivatives Contract. For the avoidance of doubt, interests in broad-based index options, broad-based index futures and broad-based publicly traded market baskets of stocks approved for trading by the appropriate governmental authority shall not be deemed to be Derivatives Contracts;

- (e) “**Meeting of Shareholders**” shall mean such annual shareholders meeting or special shareholders meeting, whether general or not, at which one or more persons are nominated for election to the board by a Nominating Shareholder;
- (f) “**owned beneficially**” or “**owns beneficially**” means, in connection with the ownership of shares in the capital of the Corporation by a person, (i) any such shares as to which such person or any of such person’s Affiliates or Associates owns at law or in equity, or has the right to acquire or become the owner at law or in equity, where such right is exercisable immediately or after the passage of time and whether or not on condition or the happening of any contingency or the making of any payment, upon the exercise of any conversion right, exchange right or purchase right attaching to any securities, or pursuant to any agreement, arrangement, pledge or understanding whether or not in writing; (ii) any such shares as to which such person or any of such person’s Affiliates or Associates has the right to vote, or the right to direct the voting, where such right is exercisable immediately or after the passage of time and whether or not on condition or the happening of any contingency or the making of any payment, pursuant to any agreement, arrangement, pledge or understanding whether or not in writing; (iii) any such shares which are beneficially owned, directly or indirectly, by a Counterparty (or any of such Counterparty’s Affiliates or Associates) under any Derivatives Contract (without regard to any short or similar position under the same or any other Derivatives Contract) to which such person or any of such person’s Affiliates or Associates is a Receiving Party; provided, however that the number of shares that a person owns beneficially pursuant to this clause (iii) in connection with a particular Derivatives Contract shall not exceed the number of Notional Securities with respect to such Derivatives Contract; provided, further, that the number of securities owned beneficially by each Counterparty (including their respective Affiliates and Associates) under a Derivatives Contract shall for purposes of this clause be deemed to include all securities that are owned beneficially, directly or indirectly, by any other Counterparty (or any of such other Counterparty’s Affiliates or Associates) under any Derivatives Contract to which such first Counterparty (or any of such first Counterparty’s Affiliates or Associates) is a Receiving Party and this proviso shall be applied to successive Counterparties as appropriate; and (iv) any such shares which are owned beneficially within the meaning of this definition by any other person with whom such person is acting jointly or in concert with respect to the Corporation or any of its securities; and
- (g) “**public announcement**” shall mean disclosure in a press release reported by a national news service in Canada, or in a document publicly filed by the Corporation or its agents under its profile on the System of Electronic Document Analysis and Retrieval at www.sedar.com.

- (G) Notice or any delivery given to the Corporate Secretary of the Corporation pursuant to this paragraph 4.03 of this DIVISION 4 may only be given by personal delivery, facsimile transmission or by email (provided that the Corporate Secretary of the Corporation has stipulated an email address for purposes of this notice, at such email address as stipulated from time to time), and shall be deemed to have been given and made only at the time it is served by personal delivery, email (at the address as aforesaid) or sent by facsimile transmission (provided that receipt of confirmation of such transmission has been received) to the Corporate Secretary at the address of the principal executive offices of the Corporation; 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 subsequent day that is a business day.
- (H) In no event shall any adjournment or postponement of a meeting of shareholders or the announcement thereof commence a new time period for the giving of a Nominating Shareholder's notice as described in paragraph 4.03(B) of this DIVISION 4 or the delivery of a representation and agreement as described in paragraph 4.03(D) of this DIVISION 4.

4.04 Removal of Directors

Subject to the Act and the articles, the shareholders may by ordinary resolution passed at a special meeting remove any director from office, except a director elected by employees or creditors pursuant to the articles or a unanimous shareholder agreement, and the vacancy created by such removal may be filled at the same meeting, failing which it may be filled by the board. However, if the articles provide for cumulative voting, no director shall be removed pursuant to this section where the votes cast against the resolution for his removal would, if cumulatively voted at an election of the full board, be sufficient to elect one or more directors.

4.05 Consent

A person who is elected or appointed a director is not a director unless:

- (a) he was present at the meeting when he was elected or appointed and did not refuse to act as a director, or
- (b) if he was not present at the meeting when he was elected or appointed:
 - he consented in writing to act as a director before his election or appointment or within ten (10) days after it, or
 - he has acted as a director pursuant to the election or appointment.

4.06 Vacation of Office

A director of the Corporation ceases to hold office when:

- (a) he dies or resigns;
- (b) he is removed in accordance with section 109 of the Act; or
- (c) he becomes disqualified under subsection 105(1) of the Act.

4.07 Committee of Directors

The directors may appoint from among their number a managing director, who must be a resident Canadian, or a committee of directors, however designated, of which at least one quarter of the members must be resident Canadians, and subject to section 115 of the Act may delegate to the managing director or such committee any of the powers of the directors. A committee may be comprised of one director.

4.08 Transaction of Business of Committee

Subject to the provisions of this by-law with respect to participation in a meeting by telephone, the powers of a committee of directors may be exercised by a meeting at which a quorum is present or by resolution in writing signed by all of the members of such committee who would have been entitled to vote on that resolution at a meeting of the committee. Meetings of such committee may be held at any place in or outside Alberta and may be called by any one member of the committee giving notice in accordance with the by-laws governing the calling of meetings of the board.

4.09 Procedure

Unless otherwise determined herein or by the board, each committee shall have the power to fix its quorum at not less than a majority of its members, to elect its chairman and to regulate its procedure.

4.10 Remuneration and Expenses

Subject to any unanimous shareholder agreement, the directors shall be paid such remuneration for their services as the board may from time to time determine. The directors shall also be entitled to be reimbursed for travelling and other expenses properly incurred by them in attending meetings of the board or any committee thereof. Nothing herein contained shall preclude any director from serving the Corporation in any other capacity and receiving remuneration therefor.

4.11 Vacancies

Subject to the Act, a quorum of the board may fill a vacancy among the directors, except a vacancy resulting from an increase in the number or minimum number of directors or from a failure to elect the number or minimum number of directors required by 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 required by 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.

4.12 Action by the Board

Subject to any unanimous shareholder agreement, the board shall manage the business and affairs of the Corporation. Notwithstanding a vacancy among the directors, a quorum of directors may exercise all the powers of the directors. If the Corporation has only one director, that director may constitute a meeting.

DIVISION 5 MEETING OF DIRECTORS

5.01 Place of Meeting

Meetings of the board may be held at any place within or outside Alberta.

5.02 Notice of Meeting

Unless the board has made regulations otherwise, meetings of the board may be summoned on forty eight (48) hours' notice, given verbally or in writing, and whether by means of telephone or telegraph, or any other means of communication. A notice of a meeting of directors need not specify the purpose of or the business to be transacted at the meeting except where the Act requires such purpose or business to be specified, including any proposal to:

- (a) submit to the shareholders any question or matter requiring approval of the shareholders;
- (b) fill a vacancy among the directors or in the office of auditor;
- (c) issue securities, except in the manner and on the terms authorized by the board;
- (d) declare dividends;
- (e) purchase, redeem or otherwise acquire shares issued by the Corporation, except in the manner and on the terms authorized by the board;
- (f) pay a commission for the sale of shares;
- (g) approve a management proxy circular;
- (h) approve any financial statements to be placed before the shareholders at an annual meeting; or
- (i) adopt, amend or repeal by-laws.

Provided, however, that a director may in any manner, and either before or after the meeting, waive notice of a meeting and attendance of a director at a meeting of the board shall constitute a waiver of notice of the meeting except where 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.

For the first meeting of the board to be held immediately following an election of directors no notice of such meeting shall be necessary, and for a meeting of the board at which a director is to be appointed to fill a vacancy in the board, no notice of such meeting shall be necessary to the newly elected or appointed director or directors in order to legally constitute the meeting, provided, in each case, that a quorum of the directors is present.

5.03 Adjourned Meeting

Notice of an adjourned meeting of the board is not required if the time and place of the adjourned meeting is announced at the original meeting.

5.04 Calling of the Meetings

Meetings of the board shall be held from time to time at such time and at such place as the board, the chairman of the board, the managing director, the president or any two directors may determine. Should more than one of the above-named call a meeting at or for substantially the same time, there shall be only one meeting held and such meeting shall occur at the time and place determined by, in order of priority, the board, any two directors, the chairman, or the president.

5.05 Regular Meetings

The board may, from time to time, appoint a day or days in any month or months for regular meetings of the board at a place and hour to be named. A copy of any resolution of the board fixing the place and

time of such regular meetings shall be sent to each director forthwith after being passed, and forthwith to each director subsequently elected or appointed, but no other notice shall be required for any such regular meeting except where the Act or this by-law requires the purpose thereof or the business to be transacted thereat to be specified.

5.06 Chairman

The chairman of any meeting of the board shall be the first mentioned of such of the following officers as have been appointed and who is a director and is present at the meeting: chairman of the board, managing director or president. If no such officer is present, the directors present shall choose one of their number to be chairman.

5.07 Quorum

Subject to the following section 5.08, the quorum for the transaction of business at any meeting of the board shall consist of a majority of the directors holding office or such greater number of directors as the board may from time to time determine.

5.08 One Quarter Canadian Representation at Meetings

Directors shall not transact business at a meeting of directors unless at least one quarter of the directors present are resident Canadians. Notwithstanding the foregoing, directors may transact business at a meeting of directors when less than one quarter of the directors present are resident Canadians if:

- (a) a resident Canadian director who is unable to be present approves in writing or by telephone or other communications facilities the business transacted at the meeting; and
- (b) the number of resident Canadian directors present at the meeting, together with any resident Canadian director who gives his approval under clause (a), totals at least one quarter of the directors present at the meeting.

5.09 Voting

Questions arising at any meeting of the board shall be decided by a majority of votes, and in the event of any equality of votes, the chairman of the meeting shall not be entitled to a second or casting vote.

5.10 Meeting by Telephone

A director may participate in a meeting of the board or a committee of the board by means of such telephone or other communication facilities as permit all persons participating in the meeting to hear each other, and a director participating in such meeting by such means is deemed to be present at the meeting.

5.11 Resolution in Lieu of Meeting

Notwithstanding any of the foregoing provisions of this by-law, a resolution in writing signed by all the directors entitled to vote on that resolution at a meeting of the board or a committee of directors is as valid as if it had been passed at a meeting of the board or committee of directors, as the case may be. A copy of every such resolution shall be kept with the minutes of the proceedings of the directors or committee of directors. Any such resolution in writing is effective for all purposes at such time as the resolution states regardless of when the resolution is signed and may be signed in counterpart.

5.12 Amendments to the Act

It is hereby affirmed that the intention of sections 4.07, 5.08 and 7.03 as they relate to Canadian representation is to comply with the minimum requirements of the Act and in the event that such minimum requirements shall be amended, deleted or replaced such that no, or lesser, requirements with respect to Canadian representation are then in force, such sections shall be deemed to be correspondingly amended, deleted or replaced without any further act of the directors or shareholders of the Corporation.

DIVISION 6 PROTECTION OF DIRECTORS, OFFICERS AND OTHERS

6.01 Conflict of Interest

A director or officer shall not be disqualified from his office, or be required to vacate his office, by reason only that he is a party to, or is a director or officer or has a material interest in any person who is a party to, a material contract or proposed material contract with the Corporation or a subsidiary thereof. Such a director or officer shall, however, disclose the nature and extent of his interest in the contract at the time and in the manner provided by the Act. Subject to the provisions of the Act, a director shall not by reason only of his office be accountable to the Corporation or to its shareholders for any profit or gain realized from such a contract or transaction, and such contract or transaction shall not be void or voidable by reason only of the director's interest therein, provided that the required declaration and disclosure of interest is properly made, the contract or transaction is approved by the directors or shareholders, if necessary, and it was fair and reasonable to the Corporation at the time it was approved and, if required by the Act, the director refrains from voting as a director on the contract or transaction.

6.02 Limitation of Liability

Every director and officer of the Corporation in exercising his powers and discharging his duties shall act honestly and in good faith with a view to the best interests of the Corporation and shall exercise the care, diligence and skills that a reasonably prudent person would exercise in comparable circumstances. Subject to the foregoing, no director or officer for the time being of the Corporation shall be liable for the acts, neglects or defaults of any other director or officer or employee or for joining in any 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 moneys of or belonging to the Corporation shall be placed out or invested or for any loss, conversion, misapplication or misappropriation of or any damage resulting for any dealings with any moneys, securities or other assets belonging to the Corporation or for any loss or damage arising from the bankruptcy, insolvency or tortious acts of any person with whom any of the moneys, securities or effects of the Corporation shall be deposited, or for any other loss, damage or misfortune whatever which may happen in the execution of the duties of his respective office or trust or in relation thereto; provided that nothing herein shall relieve any director or officer from the duty to act in accordance with the Act and the Regulations thereunder or from liability for any breach thereof. The directors for the time being of the Corporation shall not be under any duty or responsibility in respect of any contract, act or transaction whether or not made, done or entered into in the name or on behalf of the Corporation, except such as shall have been submitted to and authorized or approved by the board.

No act or proceeding of any director or officer or the board shall be deemed invalid or ineffective by reason of the subsequent ascertainment of any irregularity in regard to such act or proceeding or the election, appointment or qualification of such director or officer or board.

6.03 Indemnity

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 a person who acts or acted at the Corporation's request as

a director or officer of a body corporate of which the Corporation is or was a shareholder or creditor, and his heirs and legal representatives, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by him in respect 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:

- (a) he acted honestly and in good faith with a view to the best interests of the Corporation; and
- (b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, he had reasonable grounds for believing that his conduct was lawful.

The Corporation shall also indemnify such persons in such other circumstances as the Act permits or requires. Nothing herein contained shall limit the right of any person entitled to indemnity to claim indemnity apart from the provisions of this section 6.03.

6.04 Insurance

The Corporation may purchase and maintain insurance for the benefit of any person referred to in section 6.03 against any liability incurred by him:

- (a) in his capacity as a director or officer of the Corporation, except where the liability relates to his failure to act honestly and in good faith with a view to the best interests of the Corporation; or
- (b) in his capacity as a director or officer of the another body corporate where he acts or acted in that capacity at the Corporation's request, except where the liability relates to his failure to act honestly and in good faith with a view to the best interests of the body corporate.

DIVISION 7 OFFICERS

7.01 Election or Appointment

Subject to any unanimous shareholder agreement, the board may, from time to time, appoint a chairman of the board, a president, one or more vice-presidents, a secretary, a treasurer and such other officers as the board may determine, including one or more assistants to any of the officers so appointed. The board may specify the duties of and, in accordance with this by-law and subject to the provisions of the Act, delegate to such officers powers to manage the business and affairs of the Corporation. Except for a managing director and a chairman of the board who must be directors, an officer may, but need not be, a director and one person may hold more than one office.

7.02 Chairman of the Board

The chairman of the board shall, when present, preside at all meetings of the board, committees of directors and at all meetings of shareholders.

If no managing director is appointed, the board may assign to the chairman of the board any of the powers and duties that, by any provision of this by-law, are assigned to the managing director; and he shall, subject to the provisions of the Act, have such other powers and duties as the board may specify. During the absence or disability of the chairman of the board, his duties shall be performed and his powers exercised by the managing director, if any, or by the president.

7.03 Managing Director

The managing director, if any, shall be a resident Canadian and shall have, subject to the authority of the board, general supervision of the business and affairs of the Corporation; and he shall, subject to the provisions of the Act, have such other powers and duties as the board may specify.

7.04 President

The president shall, subject to the authority of the board and the managing director, if any, have such powers and duties as the board may specify. During the absence or disability of the managing director, or if no managing director has been appointed, the president shall also have the powers and duties of that office; provided, however, that unless he is a director he shall not preside as chairman at any meeting of the board or of a committee of directors.

7.05 Vice-President

During the absence or disability of the president, his duties shall be performed and his powers exercised by the vice-president or, if there is more than one, by the vice-president designated from time to time by the board or the president; provided, however, that a vice-president who is not a director shall not preside as chairman at any meeting of the board or of a committee of directors. A vice-president shall have such other powers and duties as the board or the president may prescribe.

7.06 Secretary

The secretary shall attend and be the secretary of all meetings of the board, shareholders and committees of directors and shall enter or cause to be entered in records kept for that purpose minutes of all proceedings thereat; he shall give or cause to be given, as and when instructed, all notices to shareholders, directors, officers, auditors and members of committees of the board; he shall be the custodian of the stamp or mechanical device generally used for affixing the corporate seal of the Corporation and of all books, papers, records, documents and instruments belonging to the Corporation, except when some other officer or agent has been appointed for that purpose; and he shall have such other powers and duties as the board or the chief executive officer, if any, may specify.

7.07 Treasurer

The treasurer shall keep proper accounting records in compliance with the Act and shall be responsible for the deposit of money, the safekeeping of securities and the disbursement of the funds of the Corporation; he shall render to the board whenever required an account of all his transactions and he shall have such other powers and duties as the board or chief executive officer, if any, or the president may specify.

7.08 General Manager or Manager

If elected or appointed, the general manager shall have, subject to the authority of the board, the managing director, if any, the chief executive officer, if any, and the president, full power to manage and direct the business and affairs of the Corporation (except such matters and duties as by law must be transacted or performed by the board and/or by the shareholders) and to employ and discharge agents and employees of the Corporation and may delegate to him or them any lesser authority. A general manager or manager shall conform to all lawful orders given to him by the board 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. Any agent or employee appointed by a general manager or manager shall be subject to discharge by the board.

7.09 Powers and Duties of Other Officers

The powers and duties of all other officers shall be such as the terms of their engagement call for or as the board, the managing director, if any, or the chief executive officer, if any, or the president may specify. Any of the powers and duties of an officer to whom an assistant has been appointed may be exercised and performed by such assistant, unless the board or the chief executive officer, if any, or the president otherwise directs.

7.10 Variation of Powers and Duties

The board may from time to time and subject to the provisions of the Act, vary, add to or limit the powers and duties of any officer.

7.11 Vacancies

If the office of any officer of the Corporation shall be or become vacant by reason of death, resignation, disqualification or otherwise, the board by resolution may appoint a person to fill such vacancy.

7.12 Remuneration and Removal

The remuneration of all officers appointed by the board shall be determined from time to time by resolution of the board. The fact that any officer or employee is a director or shareholder of the Corporation shall not disqualify him from receiving such remuneration as may be determined. All officers shall be subject to removal by resolution of the board at any time, with or without cause, notwithstanding any agreement to the contrary, provided however that this right of removal shall not limit in any way such officer's right to damages by virtue of such agreement or any other rights resulting from such removal in law or equity.

7.13 Agents and Attorneys

The Corporation, by or under the authority of the board, 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 sub-delegate) of management, administration or otherwise as may be thought fit.

7.14 Conflict of Interest

An officer shall disclose his interest in any material contract or proposed material contract with the Corporation in accordance with section 6.01.

7.15 Fidelity Bonds

The board may require such officers, employees and agent of the Corporation as the board deems advisable to furnish bonds for the faithful discharge of their powers and duties, in such forms and with such surety as the board may from time to time determine.

DIVISION 8 SHAREHOLDERS' MEETINGS

8.01 Annual Meetings

Subject to the Act, the annual meeting of shareholders shall be held at such time and on such day in each year and at such place or places as the board, the chairman of the board, the managing director or the president may from time to time determine, for the purpose of considering the financial statements and reports required by the Act to be placed before the annual meeting, electing directors, appointing auditors

if required by the Act or the articles, and for the transaction of such other business as may properly be brought before the meeting.

8.02 Special Meetings

The board shall have the power to call a special meeting of shareholders at any time.

8.03 Place of Meetings

Meetings of shareholders shall be held as provided for in the articles or failing any reference in the articles at such place inside or outside of Alberta as the board may determine.

8.04 Record Date for Notice

The board may fix in advance a date, preceding the date of any meeting of shareholders by not more than fifty (50) days and not less than twenty-one (21) days, as a record date for the determination of shareholders entitled to notice of the meeting. If no record date is fixed, the record date for the determination of the shareholders entitled to receive notice of the meeting shall be the close of business on the date immediately preceding the day on which the notice is given or, if no notice is given, the day on which the meeting is held.

8.05 Notice of Meeting

Notice of the time and place of each meeting of shareholders shall be sent not less than twenty-one (21) days and not more than fifty (50) days before the meeting to each shareholder entitled to vote at the meeting, each director and the auditor of the Corporation. Such notice may be sent by mail addressed to, or may be delivered personally to, the shareholder, at his latest address as shown in the records of the Corporation or its transfer agent, to the director, at his latest address as shown in the records of the Corporation or in the last notice filed pursuant to section 106 or 113 of the Act, or to the auditor, at his most recent address as shown in the records of the Corporation. A notice of meeting of shareholders sent by mail to a shareholder, director or auditor in accordance with the above is deemed to be served on the day on which it was deposited in the mail. A notice of a meeting is not required to be sent to shareholders who are not registered on the records of the Corporation or its transfer agent on the record date as determined according to section 8.04 hereof. Notice of a meeting of shareholders at which special business is to be transacted shall state the nature of such business in sufficient detail to permit the shareholder to form a reasoned judgment thereon and shall state the text of any special resolution to be submitted to the meeting. A special meeting and an annual meeting may be convened by one and the same notice and it shall not be an objection to the notice that it only convenes the second meeting contingently on any resolution being passed by the requisite majority at the first meeting.

8.06 Right to Vote

Subject to the provisions of the Act as to authorized representatives of any other body corporate, at any meeting of shareholders in respect of which the Corporation has prepared the list referred to in section 8.07 hereof, every person who is named in such list shall be entitled to vote the shares shown thereon opposite his name except to the extent that such person has transferred any of his shares after the record date set pursuant to section 8.04 hereof, or, if no record date is fixed, after the date on which the list referred to in section 8.07 is prepared, and the transferee, upon producing properly endorsed certificates evidencing such shares or otherwise establishing that he owns such shares, demands not later than ten (10) days before the meeting that his name be included to vote the transferred shares at the meeting. In the absence of a list prepared as aforesaid in respect of a meeting of shareholders, every person shall be entitled to vote at the meeting who at the close of business on the record date, or if no record date is set, at the close of business on the date preceding the date notice is sent, is entered in the securities' register as the holder of one or more shares carrying the right to vote at such meeting.

8.07 List of Shareholders Entitled to Notice

For every meeting of shareholders the Corporation shall prepare a list of shareholders entitled to receive notice of the meeting, arranged in alphabetical order, and showing the number of shares held by each shareholder. If a record date for the meeting is fixed pursuant to section 8.04 hereof by the board, the shareholders listed shall be those registered at the close of business on the record date. If no record date is fixed by the board, the shareholders listed shall be those listed at the close of business on the last business day immediately preceding the day on which notice of a meeting is given, or where no such notice is given, the day on which the meeting is held. The list shall be available for examination by any shareholder during usual business hours at the registered office of the Corporation or at the place where its central securities' register is maintained and at the place where the meeting is held.

8.08 Meetings Without Notice

A meeting of shareholders may be held without notice at any time and place permitted by the Act:

- (a) if all the shareholders entitled to vote thereat are present in person or represented by proxy or if those not present or represented by proxy waive notice of or otherwise consent to such meeting being held; and
- (b) if the auditors and the directors are present or waive notice of or otherwise consent to such meeting being held.

At such meetings any business may be transacted which the Corporation at a meeting of shareholders may transact. If the meeting is held at a place outside Canada, shareholders not present or represented by proxy, but who have waived notice of or otherwise consented to such meeting, shall also be deemed to have consented to a meeting being held at such place.

8.09 Waiver of Notice

A shareholder and any other person entitled to attend a meeting of shareholders may in any manner waive notice of a meeting of shareholders and attendance of any such person at a meeting of shareholders shall constitute a waiver of notice of the meeting except where such person 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.

8.10 Chairman, Secretary and Scrutineers

The chairman of the board or, in his absence, the president, if such an officer has been elected or appointed and is present, or otherwise a vice-president who is a shareholder of the Corporation shall be chairman of any meeting of shareholders. If no such officer is present within fifteen (15) minutes from the time fixed for holding the meeting, or declines to be chairman of the meeting, the persons present and entitled to vote shall choose one of their number to be chairman. If the secretary of the Corporation is absent, the chairman shall appoint some person, who need not be a shareholder, to act as secretary of the meeting. If desired, one or more scrutineers, who need not be shareholders, may be appointed by a resolution or by the chairman with the consent of the meeting.

8.11 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 auditors 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.

8.12 Quorum

A quorum at any meeting of shareholders (unless a greater number of persons are required to be present or a greater number of shares are required to be represented by the Act or by the articles or by any other by-law) shall be persons present not being less than two (2) in number and holding or representing not less than five (5%) per cent of the shares entitled to be voted at the meeting. If a quorum is present at the opening of any meeting of shareholders, the shareholders present or represented 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 the meeting of shareholders, the shareholders present or represented may adjourn the meeting to a fixed time and place but may not transact any other business.

8.13 Participation in Meeting by Telephone

A shareholder or any other person entitled to attend a meeting may participate in a meeting of shareholders by means of such telephone or other communication facilities as permit all persons participating in the meeting to hear each other, and a person participating in such a meeting by such means is deemed to be present at the meeting.

8.14 Proxyholders and Representatives

Votes at meetings of the shareholders may be given either personally or by proxy; or, in the case of a shareholder who is a body corporate or association, by an individual authorized by a resolution of the board or governing body of the body corporate or association to represent it at a meeting of shareholders of the Corporation, upon producing a certified copy of such resolution or otherwise establishing his authority to vote to the satisfaction of the secretary or the chairman.

A proxy shall be executed by the shareholder or his attorney authorized in writing or, if the shareholder is a corporation, under its corporate seal or by an officer or attorney thereof duly authorized, and is valid only at the meeting in respect of which it is given or any adjournment of that meeting. A person appointed by proxy need not be a shareholder.

8.15 Time for Deposit of Proxies

The board may specify in a notice calling a meeting of shareholders a time, preceding the time of such meeting by not more than forty-eight (48) hours exclusive of Saturdays and holidays, before which time proxies to be used at such meeting must be deposited. A proxy shall be acted upon only if, prior to the time so specified, it shall have been deposited with the Corporation or an agent thereof specified in such notice or, if no such time having been specified in such notice, it has been received by the secretary of the Corporation or by the chairman of the meeting or any adjournment thereof prior to the time of voting.

8.16 Joint Shareholders

If two or more persons hold shares jointly, any one of them present in person or duly represented at a meeting of shareholder may, in the absence of the other or others, vote the shares; but if two or more of those persons are present in person or represented and vote, they shall vote as one the shares jointly held by them.

8.17 Votes to Govern

Except as otherwise required by the Act, all questions proposed for the consideration of shareholders at a meeting of shareholders shall be determined by a majority of the votes cast and in the event of an equality of votes at any meeting of shareholders, either upon a show of hands or upon a ballot, the chairman shall have a second or casting vote.

8.18 Show of Hands

Subject to the Act, any question at a meeting of shareholders shall be decided by a show of hands, unless a ballot thereon is required or demanded as hereinafter provided. Upon a show of hands every person who is present and entitled to vote shall have one vote. Whenever a vote by show of hands shall have been taken upon a question, unless a ballot thereon is so required or demanded, a declaration by the chairman of the meeting that the vote upon the question has been carried or carried by a particular majority or not carried and an entry to that effect in the minutes of the meeting shall be prima facie evidence of the fact without proof of the number of the votes recorded in favour of or against any resolution or other proceeding in respect of the said question, and the result of the vote so taken shall be the decision of shareholders upon the said question.

8.19 Ballots

On any question proposed for consideration at a meeting of shareholders, a shareholder, proxyholder or other person entitled to vote may demand and the chairman may require that a ballot be taken either before or upon the declaration of the result of any vote by show of hands. If a ballot is demanded on the election of a chairman or on the question of an adjournment it shall be taken forthwith without an adjournment. A ballot demanded or required on any other question shall be taken in such manner as the chairman shall direct. A demand or requirement for a ballot may be withdrawn at any time prior to the taking of the ballot. If a ballot is taken each person present shall be entitled, in respect of the shares that he is entitled to vote at the meeting upon the question, to the number of votes as provided for by the articles or, in the absence of such provision in the articles, to one vote for each share he is entitled to vote. The result of the ballot so taken shall be the decision of the shareholders upon the question. The demand or requirement for a ballot shall not prevent the continuance of a meeting for the transaction of any business other than the question on which the ballot has been demanded or required.

8.20 Adjournment

The chairman at a meeting of shareholders may, with the consent of the meeting and subject to such conditions as the meeting may decide, adjourn the meeting from time to time and from place to place. If a meeting of shareholders is adjourned for less than thirty (30) days, it shall not be necessary to give notice of the adjourned meeting, other than by announcement at the time of the adjournment. Subject to the Act, if a meeting of shareholders is adjourned by one or more adjournments for an aggregate of thirty (30) days or more, notice of the adjourned meeting shall be given in the same manner as notice for an original meeting but, unless the meeting is adjourned by one or more adjournments for an aggregate of more than ninety (90) day, subsection 149(1) of the Act does not apply.

8.21 Resolution in Lieu of a Meeting

A resolution in writing signed by all the shareholders entitled to vote on that resolution at a meeting of shareholders is as valid as if it had been passed at a meeting of the shareholders; and a resolution in writing dealing with all matters required to be dealt with at a meeting of shareholders and signed by all the shareholders entitled to vote at such meeting, satisfies all the requirements of the Act relating to meetings of shareholders. A copy of every such resolution in writing shall be kept with minutes of the meetings of shareholders. Any such resolution in writing is effective for all purposes at such time as the resolution states regardless of when the resolution is signed and may be signed in counterpart.

8.22 Only One Shareholder

Where the Corporation has only one shareholder or only one holder of any class or series of shares, the shareholder present in person or duly represented constitutes a meeting.

DIVISION 9
SHARES

9.01 Non-Recognition of Trusts

Subject to the Act, the Corporation may treat the registered holder of any share as the person exclusively entitled to vote, to receive notices, to receive any dividend or other payment in respect of the share, and otherwise to exercise all the rights and powers of an owner of the share.

9.02 Certificates

The shareholder is entitled at his option to a share certificate that complies with the Act or a non-transferable written acknowledgement of his right to obtain a share certificate from the Corporation in respect of the securities of the Corporation held by him. Share certificates and acknowledgements of a shareholder's right to a share certificate, respectively, shall be in such form as described by the Act and as the board shall from time to time approve. A share certificate shall be signed manually by at least one director or officer of the Corporation or by or on behalf of a registrar, transfer agent or branch transfer agent of the Corporation, or by a trustee who certifies it in accordance with a trust indenture, and any additional signatures required on the share certificate may be printed or otherwise mechanically reproduced on it.

9.03 Replacement of Share Certificates

The board or any officer or agent designated by the board may in its or his discretion direct the issuance of a new share certificate or other such certificate in lieu of and upon cancellation of a certificate that has been mutilated or in substitution for a certificate claimed to have been lost, destroyed or wrongfully taken on payment of such reasonable fee and on such terms as to indemnity, reimbursement of expenses and evidence of loss and of title as the board may from time to time prescribe, whether generally or in any particular case.

9.04 Joint Holders

The Corporation is not required to issue more than one share certificate in respect of a share held jointly by several persons, and delivery of a certificate to one of several joint holders is sufficient delivery to all. Any one of such holders may give effectual* receipts for the certificate issued in respect thereof or for any dividend, bonus, return of capital or other money payable or warrant issuable in respect of such certificate.

DIVISION 10
TRANSFER OF SECURITIES

10.01 Registration of Transfer

If a share in registered form is presented for registration of transfer, the Corporation shall register the transfer if:

- (a) the share is endorsed by an appropriate person;
- (b) reasonable assurance is given that the endorsement is genuine and effective;
- (c) the Corporation has no duty to enquire into adverse claims or has discharged any such duty;
- (d) any applicable law relating to the collection of taxes has been complied with;
- (e) the transfer is rightful or is to a bona fide purchaser; and

- (f) the transfer fee, if any, has been paid.

10.02 Transfer Agents and Registrar

The board may from time to time by resolution appoint or remove one or more trust companies registered under the Trust Companies Act as its agent or agents to maintain a central securities' register or registers, and an agent or agents to maintain a branch securities' register or registers. Agents so appointed may be designated as transfer agent or registrar according to their functions, and a person may be appointed and designated with functions as both registrar and transfer or branch transfer agent. Registration of the issuance or transfer of a security in the central securities' register or in a branch securities' register is complete and valid registration for all purposes.

10.03 Securities' Registers

A central securities' register of the Corporation shall be kept at its registered office or at any other place in Alberta designated by the board to record the shares and other securities issued by the Corporation in registered form, showing with respect to each class or series of shares and other securities:

- (a) the names, alphabetically arranged, and the latest known address of each person who is or has been a holder;
- (b) the number of shares or other securities held by each holder; and
- (c) the date and particulars of the issuance and transfer of each share or other security.

A branch securities' register or registers may be kept either in or outside Alberta at such place or places as the board may determine. A branch securities' register shall only contain particulars of securities issued or transferred at that branch. Particulars of each issue or transfer of a security registered in a branch securities' register shall also be kept in the corresponding central securities' register.

10.04 Deceased Shareholders

In the event of the death of a holder, or of one of the joint holders, of any share, the Corporation shall not be required to make any entry in the securities' register in respect thereof or to make any dividend or other payments in respect thereof except upon production of all such documents as may be required by law and upon compliance with the reasonable requirements of the Corporation and its transfer agents.

DIVISION 11 DIVIDENDS AND RIGHTS

11.01 Dividends

Subject to the Act, the board may from time to time declare dividends payable to the shareholders according to their respective rights and interest in the Corporation. Dividends may be paid in money or property or by issuing fully-paid shares of the Corporation.

11.02 Dividend Cheques

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 shall be mailed by prepaid ordinary mail to such registered holder at his address recorded in the Corporation's securities' register or registers or such address as such holder otherwise directs. In the case of joint holders the cheque shall, unless such joint holders otherwise direct, be made payable to the order of all such joint holders and mailed to them at their recorded address. The mailing of such cheque as aforesaid, unless the same is not paid on due

presentation, 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.

11.03 Non-Receipt of Cheques

In the event of non-receipt of any dividend cheque by the person to whom it is sent as aforesaid, the Corporation shall issue to such person a replacement cheque for a like amount on such terms as to indemnity, reimbursement of expenses and evidence of non-receipt and of title as the board may from time to time prescribe, whether generally or in any particular case.

11.04 Unclaimed Dividends

No dividend shall bear interest against the Corporation. Any dividend unclaimed after a period of six (6) years from the date on which the same has been declared to be payable shall be forfeited and shall revert to the Corporation.

11.05 Record Date for Dividends and Rights

The board may fix in advance a date, preceding by not more than fifty (50) days the date for the payment of any dividend, as a record date for the determination of the persons entitled to receive payment of such dividend, provided that, unless waived as provided for in the Act, notice of any such record date is given, not less than seven (7) days before such record date, by newspaper advertisement in the manner provided in the Act and by written notice to each stock exchange in Canada, if any, on which the Corporation's shares are listed for trading. Where no record date is fixed in advance as aforesaid, the record date for the determination of the persons entitled to receive payment of any dividend shall be at the close of business on the day on which the resolution relating to such dividend is passed by the board.

DIVISION 12 INFORMATION AVAILABLE TO SHAREHOLDERS

12.01 Confidential Information

Except as provided by the Act, no shareholders shall be entitled to obtain information respecting any details or conduct of the Corporation's business which in the opinion of the directors it would be inexpedient in the interests of the Corporation to communicate to the public.

12.02 Conditions of Access to Information

The directors may from time to time, subject to rights conferred by the Act, determine whether and to what extent and at what time and place and under what conditions or regulations the documents, books and registers and accounting records of the Corporation or any of them shall be open to the inspection of shareholders and no shareholders shall have any right to inspect any document or book or register or account record of the Corporation except as conferred by statute or authorized by the board or by a resolution of the shareholders.

12.03 Registered Office and Separate Records Office

The registered office of the Corporation shall be at a place within Alberta and at such location therein as the board may from time to time determine. The records office will be at the registered office or at such location, if any, within Alberta, as the board may from time to time determine.

DIVISION 13
NOTICES

13.01 Method of Giving Notices

A notice or document required by the Act, the Regulations, the articles or the by-laws to be sent to a shareholder or director of the Corporation may be sent by prepaid mail addressed to, or may be delivered personally to:

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

A notice or document sent by mail in accordance with the foregoing to a shareholder or director of the Corporation is deemed to be received by him 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 did not receive the notice or document at the time or at all.

13.02 Notice to Joint Shareholders

If two or more persons are registered as joint holders of any share, any notice may be addressed to all of such joint holders but notice addressed to one of such persons shall be sufficient notice to all of them.

13.03 Persons Entitled by Death or Operation of Law

Every person who, by operation of law, transfer, death of a shareholder or any other means whatsoever, shall become entitled to any share, shall be bound by every notice in respect of such share which shall have been duly given to the shareholders from whom he derives his title to such share prior to his name and address being entered on the securities' register (whether such notice was given before or after the happening of the event upon which he became so entitled) and prior to his furnishing to the Corporation the proof of authority or evidence of his entitlement prescribed by the Act.

13.04 Non-Receipt of Notices

If a notice or document is sent to a shareholder in accordance with section 13.01 and the notice or document is returned on three (3) consecutive occasions because the shareholder cannot be found, the Corporation is not required to send any further notice or documents to the shareholder until the shareholder informs the Corporation in writing of his new address; provided always, that in the event of the return of a notice of a shareholders' meeting mailed to a shareholder in accordance with section 13.01 the notice shall be deemed to be received by the shareholder on the date deposited in the mail notwithstanding its return.

13.05 Omissions and Errors

Subject to the Act, the accidental omission to give any notice to any shareholder, director, officer, auditor or member of a committee of the board or the non-receipt of any notice by any such person or any error in any notice not affecting the substance thereof shall not invalidate any action taken at any meeting held pursuant to such notice or otherwise founded thereon.

13.06 Signature on Notices

Unless otherwise specifically provided, the signature of any director or officer of the Corporation to any notice or document to be given by the Corporation may be written, stamped, typewritten or printed or partly written, stamped, typewritten or printed.

13.07 Waiver of Notice

If a notice or document is required by the Act or the Regulations, the articles, the by-laws or otherwise to be sent, the sending of the notice or document may be waived or the time for the notice or document may be waived or abridged at any time with the consent in writing of the person entitled to receive it.

DIVISION 14
MISCELLANEOUS

14.01 Directors to Require Surrender of Share Certificates

The directors in office when a Certificate of Continuance is issued under the Act are hereby authorized to require the shareholders of the Corporation to surrender their share certificate, or such of their share certificates as the directors may determine, for the purpose of cancelling the share certificates and replacing them with new share certificates that comply with section 48 of the Act, in particular, replacing existing share certificate with share certificates that are not negotiable securities under the Act. The directors in office shall act by resolution under this section 14.01 and shall in their discretion decide the manner in which they shall require the surrender of existing share certificates and the time within which the shareholders must comply with the requirement and the form or forms of the share certificates to be issued in place of the existing share certificates. The directors may take such proceedings as they deem necessary to compel any shareholders to comply with a requirement to surrender his share certificate or certificates pursuant to this section. Notwithstanding any other provision of this by-law, but subject to the Act, the director may refuse to register the transfer of shares represented by a share certificate that has not been surrendered pursuant to a requirement under this section.

14.02 Financial Assistance to Shareholders, Employees and Others

The Corporation may give financial assistance by means of a loan, guarantee or otherwise:

- (a) to any person in the ordinary course of business if the lending of money is part of the ordinary business of the Corporation;
- (b) to any person on account of expenditures incurred or to be incurred on behalf of the Corporation;
- (c) to a holding body corporate if the Corporation is a wholly-owned subsidiary of the holding body corporate;
- (d) to a subsidiary body corporate of the Corporation;
- (e) to employees of the Corporation or any of its affiliates:
 - to enable them to purchase or erect or ,to assist them in purchasing or erecting living accommodation for their own occupation; or
 - in accordance with a plan for the purchase of shares of the Corporation or any of its affiliates to be held by a trustee; or
- (f) to any person if all the shareholders have consented to giving the financial assistance;

- (g) and, subject to the Act:
- (h) to a shareholder or director of the Corporation or of an affiliated corporation;
- (i) to an associate of a shareholder or of a director of the Corporation or of an affiliated corporation;
or
- (j) to any person for the purpose of or in connection with a purchase of a share issued or to be issued by the Corporation or an affiliated corporation.

14.03 Notification of changes of 3% or more holdings

If and for so long as the Corporation has any shares admitted to trading on the AIM Market of London Stock Exchange PLC, a holder with a direct or indirect legal or beneficial interest, including by way of a position in financial instruments and any interest of the family of such person, of 3% or more in any class of shares in the Corporation must notify the Corporation without delay of any relevant changes to its holdings in the Corporation. Relevant changes mean changes to holdings above 3% (on a non-diluted basis) which increase or decrease such holdings through any single percentage and "family" and "financial instruments" have the meaning given to them in the AIM Rules for Companies in force from time to time.

14.04 Severability

The invalidity or unenforceability of any provision of this by-law shall not affect the validity or enforceability of the remaining provisions of this by-law.

These amended and restated by-laws were made and adopted by the board as evidenced by the signature of the following officers, effective the 26th day of June, 2017.

(signed) "*Paul R. Baay*"

Chief Executive Officer

(signed) "*Thomas E. Valentine*"

Corporate Secretary

CONFIRMED by the Shareholders as evidenced by the signature of the following officer, in accordance with the Act, the 22nd day of May, 2013, as amended by Section 14.03 as approved by the Shareholders the 19th day of June, 2017.

(signed) "*Thomas E. Valentine*"

Corporate Secretary