

SCHEDULE A

NATIONAL INSTRUMENT 51-101 STANDARDS OF DISCLOSURE FOR OIL AND GAS ACTIVITIES

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**NATIONAL INSTRUMENT 51-101
STANDARDS OF DISCLOSURE
FOR OIL AND GAS ACTIVITIES**

PART 1 APPLICATION AND TERMINOLOGY

1.1 Definitions - In this Instrument:

- (a) annual information form means:
 - (i) a “current AIF”, as defined in NI 44-101;
 - (ii) in the case of a reporting issuer that is eligible to file, for the purpose of Part 3 of NI 44-101, a current annual report on Form 10-K or Form 20-F under the 1934 Act, such a current annual report so filed; or
 - (iii) a document prepared in Form 44-101F1 AIF and filed with the securities regulatory authority in the jurisdiction in accordance with securities legislation of that jurisdiction other than NI 44-101;
- (b) “BOEs” means barrels of oil equivalent;
- (c) “CICA” means The Canadian Institute of Chartered Accountants;
- (d) “CICA Accounting Guideline 5” means Accounting Guideline AcG-5 “Full cost accounting in the oil and gas industry” included in the CICA Handbook, as amended from time to time;
- (e) “CICA Handbook” means the Handbook of the CICA, as amended from time to time;
- (f) “COGE Handbook” means the “Canadian Oil and Gas Evaluation Handbook” prepared jointly by The Society of Petroleum Evaluation Engineers (Calgary Chapter) and the Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society), as amended from time to time;
- (g) “constant prices and costs” means the prices and costs used in an estimate that are:
 - (i) the reporting issuer's prices and costs as at the effective date of the estimation, held constant throughout the estimated lives of the properties to which the estimate applies;
 - (ii) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended,

those prices or costs rather than the prices and costs referred to in subparagraph (i);

- (h) “effective date”, in respect of information, means the date as at which, or for the period ended on which, the information is provided;
- (i) “FAS 19” means United States Financial Accounting Standards Board Statement of Financial Accounting Standards No. 19 “Financial Accounting and Reporting by Oil and Gas Producing Companies”, as amended from time to time;
- (j) “forecast prices and costs” means future prices and costs that are:
 - (i) generally accepted as being a reasonable outlook of the future;
 - (ii) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in subparagraph (i).
- (k) “foreign geographic area” means a geographic area outside North America within one country or including all or portions of a number of countries;
- (l) “Form 51-101F1” means Form 51-101F1 *Statement of Reserves Data and Other Oil and Gas Information*;
- (m) “Form 51-101F2” means Form 51-101F2 *Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor*;
- (n) “Form 51-101F3” means Form 51-101F3 *Report of Management and Directors on Oil and Gas Disclosure*;
- (o) “independent”, in respect of the relationship between a reporting issuer and a qualified reserves evaluator or auditor, has the meaning set out in the COGE Handbook;
- (p) “McfGEs” means thousand cubic feet of gas equivalent;
- (q) “NI 14-101” means National Instrument 14-101 *Definitions*;
- (r) “NI 44-101” means National Instrument 44-101 *Short Form Prospectus Distributions*;
- (s) “oil and gas activities”
 - (i) include:
 - (A) the search for crude oil or natural gas in their natural states and original locations;

- (B) the acquisition of property rights or properties for the purpose of further exploring for or removing oil or gas from reservoirs on those properties;
 - (C) the construction, drilling and production activities necessary to retrieve oil and gas from their natural reservoirs, and the acquisition, construction, installation and maintenance of field gathering and storage systems including lifting the oil and gas to the surface and gathering, treating, field processing and field storage; and
 - (D) the extraction of hydrocarbons from oil sands, shale, coal or other non-conventional sources and activities similar to those referred to in clauses (A), (B) and (C) undertaken with a view to such extraction; but
- (ii) do not include:
 - (A) transporting, refining or marketing oil or gas;
 - (B) activities relating to the extraction of natural resources other than oil and gas and their by-products; or
 - (C) the extraction of geothermal steam or of hydrocarbons as a by-product of the extraction of geothermal steam or associated geothermal resources;
- (t) “preparation date”, in respect of written disclosure, means the most recent date to which information relating to the period ending on the effective date was considered in the preparation of the disclosure;
- (u) “production group” means one of the following together, in each case, with associated by-products:
 - (i) light and medium crude oil (combined);
 - (ii) heavy oil;
 - (iii) associated gas and non-associated gas (combined); and
 - (iv) bitumen, synthetic oil or other products from non-conventional oil and gas activities.
- (v) “product type” means one of the following:
 - (i) in respect of conventional oil and gas activities:
 - (A) light and medium crude oil (combined);
 - (B) heavy oil;

- (C) natural gas excluding natural gas liquids; or
 - (D) natural gas liquids; and
- (ii) in respect of non-conventional oil and gas activities:
 - (A) synthetic oil;
 - (B) bitumen;
 - (C) coal bed methane; or
 - (D) hydrates.
- (w) “professional organization” means a self-regulatory organization of engineers, geologists, other geoscientists or other professionals whose professional practice includes reserves evaluations or reserves audits, that:
 - (i) admits members primarily on the basis of their educational qualifications;
 - (ii) requires its members to comply with the professional standards of competence and ethics prescribed by the organization that are relevant to the estimation, evaluation, review or audit of reserves data;
 - (iii) has disciplinary powers, including the power to suspend or expel a member; and
 - (iv) is either:
 - (A) given authority or recognition by statute in a Canadian jurisdiction; or
 - (B) accepted for this purpose by the securities regulatory authority or the regulator;
- (x) “qualified reserves auditor” means an individual who:
 - (i) in respect of particular reserves data or related information, possesses professional qualifications and experience appropriate for the estimation, evaluation, review and audit of the reserves data and related information; and
 - (ii) is a member in good standing of a professional organization;
- (y) “qualified reserves evaluator” means an individual who:
 - (i) in respect of particular reserves data or related information, possesses professional qualifications and experience appropriate for the estimation, evaluation and review of the reserves data and related information; and
 - (ii) is a member in good standing of a professional organization;

- (z) “qualified reserves evaluator or auditor” means a qualified reserves auditor or a qualified reserves evaluator;
- (aa) “reserves data” means the following estimates, as at the last day of the reporting issuer's most recent financial year:
 - (i) proved reserves and related future net revenue estimated:
 - (A) using constant prices and costs as at the last day of that financial year; and
 - (B) using forecast prices and costs; and
 - (ii) probable reserves and related future net revenue estimated using forecast prices and costs; and
- (bb) “supporting filing” means a document filed by a reporting issuer with a securities regulatory authority.

1.2 COGE Handbook Definitions

- (1) Terms used in this Instrument but not defined in this Instrument, NI 14-101 or the securities statute in the jurisdiction, and defined or interpreted in the COGE Handbook, have the meaning or interpretation ascribed to those terms in the COGE Handbook.
- (2) In the event of a conflict or inconsistency between the definition of a term in this Instrument, NI 14-101 or the securities statute in the jurisdiction and the meaning ascribed to the term in the COGE Handbook, the definition in this Instrument, NI 14-101 or the securities statute in the jurisdiction, as the case may be, shall apply.

1.3 Applies to Reporting Issuers Only - This Instrument applies only to reporting issuers engaged, directly or indirectly, in oil and gas activities.

1.4 Materiality Standard

- (1) This Instrument applies only in respect of information that is material in respect of a reporting issuer.
- (2) For the purpose of subsection (1), information is material in respect of a reporting issuer if it would be likely to influence a decision by a reasonable investor to buy, hold or sell a security of the reporting issuer.

PART 2 ANNUAL FILING REQUIREMENTS

- 2.1 Reserves Data and Other Oil and Gas Information** - A reporting issuer shall, not later than the date on which it is required by securities legislation to file audited financial statements for its most recent financial year, file with the securities regulatory authority the following:
1. **Statement of Reserves Data and Other Information** - a statement of the reserves data and other information specified in Form 51-101F1, as at the last day of the reporting issuer's most recent financial year and for the financial year then ended;
 2. **Report of Independent Qualified Reserves Evaluator or Auditor** - a report in accordance with Form 51-101F2 that is:
 - (a) included in, or filed concurrently with, the document filed under item 1; and
 - (b) executed by one or more qualified reserves evaluators or auditors each of whom is independent of the reporting issuer, who shall in the aggregate have:
 - (i) evaluated or audited at least 75 percent of the future net revenue (calculated using a discount rate of 10 percent) attributable to proved plus probable reserves, as reported in the statement filed or to be filed under item 1; and
 - (ii) reviewed the balance of such future net revenue; and
 3. **Report of Management and Directors** – except in British Columbia, a report in accordance with Form 51-101F3 that
 - (a) refers to the information filed or to be filed under items 1 and 2;
 - (b) confirms the responsibility of management of the reporting issuer for the content and filing of the statement referred to in item 1 and for the filing of the report referred to in item 2;
 - (c) confirms the role of the board of directors in connection with the information referred to in paragraph (b);
 - (d) is contained in, or filed concurrently with, the statement filed under item 1; and
 - (e) is executed by two senior officers and two directors of the reporting issuer.
- 2.2 News Release to Announce Filing** - A reporting issuer shall, concurrently with filing a statement and reports under section 2.1, disseminate a news release announcing that filing and indicating where a copy of the filed information can be found for viewing by electronic means.

- 2.3 Inclusion in Annual Information Form** - The requirements of section 2.1 may be satisfied by including the information specified in section 2.1 in an annual information form filed within the time specified in section 2.1.
- 2.4 Reservation in Report of Qualified Reserves Evaluator or Auditor**
- (1) If a qualified reserves evaluator or auditor cannot report on reserves data without reservation, the reporting issuer shall ensure that the report of the qualified reserves evaluator or auditor prepared for the purpose of item 2 of section 2.1 sets out the cause of the reservation and the effect, if known to the qualified reserves evaluator or auditor, on the reserves data.
 - (2) A report containing a reservation, the cause of which can be removed by the reporting issuer, does not satisfy the requirements of item 2 of section 2.1.

PART 3 RESPONSIBILITIES OF REPORTING ISSUERS AND DIRECTORS

- 3.1 Interpretation** - A reference to a board of directors in this Part means, for a reporting issuer that does not have a board of directors, those individuals whose authority and duties in respect of that reporting issuer are similar to those of a board of directors.
- 3.2 Reporting Issuer to Appoint Independent Qualified Reserves Evaluator or Auditor** - A reporting issuer shall appoint one or more qualified reserves evaluators or auditors, each of whom is independent of the reporting issuer, to report to the board of directors of the reporting issuer on its reserves data.
- 3.3 Reporting Issuer to Make Information Available to Qualified Reserves Evaluator or Auditor** - A reporting issuer shall make available to the qualified reserves evaluators or auditors that it appoints under section 3.2 all information reasonably necessary to enable the qualified reserves evaluators or auditors to provide a report that will satisfy the applicable requirements of this Instrument.
- 3.4 Certain Responsibilities of Board of Directors** - The board of directors of a reporting issuer shall
- (a) review, with reasonable frequency, the reporting issuer's procedures relating to the disclosure of information with respect to oil and gas activities, including its procedures for complying with the disclosure requirements and restrictions of this Instrument;
 - (b) review each appointment under section 3.2 and, in the case of any proposed change in such appointment, determine the reasons for the proposal and whether there have been disputes between the appointed qualified reserves evaluator or auditor and management of the reporting issuer;
 - (c) review, with reasonable frequency, the reporting issuer's procedures for providing information to the qualified reserves evaluators or auditors who report on reserves data for the purposes of this Instrument;

- (d) before approving the filing of reserves data and the report of the qualified reserves evaluators or auditors thereon referred to in section 2.1, meet with management and each qualified reserves evaluator or auditor appointed under section 3.2, to
 - (i) determine whether any restrictions affect the ability of the qualified reserves evaluator or auditor to report on reserves data without reservation; and
 - (ii) review the reserves data and the report of the qualified reserves evaluator or auditor thereon; and
- (e) review and approve
 - (i) the content and filing, under section 2.1, of the statement referred to in item 1 of section 2.1;
 - (ii) the filing, under section 2.1, of the report referred to in item 2 of section 2.1; and
 - (iii) the content and filing, under section 2.1, of the report referred to in item 3 of section 2.1.

3.5 Reserves Committee

- (1) The board of directors of a reporting issuer may, subject to subsection (2), delegate the responsibilities set out in section 3.4 to a committee of the board of directors, provided that a majority of the members of the committee
 - (a) are individuals who are not and have not been, during the preceding 12 months:
 - (i) an officer or employee of the reporting issuer or of an affiliate of the reporting issuer;
 - (ii) a person who beneficially owns 10 percent or more of the outstanding voting securities of the reporting issuer; or
 - (iii) a relative of a person referred to in clause (a)(i) or (ii), residing in the same home as that person; and
 - (b) are free from any business or other relationship which could reasonably be seen to interfere with the exercise of their independent judgement.
- (2) Despite subsection (1), a board of directors of a reporting issuer shall not delegate its responsibility under paragraph 3.4 (e) to approve the content or the filing of information.
- (3) A board of directors that has delegated responsibility to a committee pursuant to subsection (1) shall solicit the recommendation of that committee as to whether to approve the content and filing of information for the purpose of paragraph 3.4 (e).

3.6 British Columbia - Section 3.4 and section 3.5 do not apply in British Columbia.

PART 4 MEASUREMENT

4.1 Accounting Methods - A reporting issuer engaged in oil and gas activities that discloses financial statements prepared in accordance with Canadian GAAP shall use

- (a) the full cost method of accounting, applying CICA Accounting Guideline 5; or
- (b) the successful efforts method of accounting, applying FAS 19.

4.2 Requirements for Disclosed Reserves Data

- (1) A reporting issuer shall ensure that estimates of reserves or future net revenue contained in a document filed with the securities regulatory authority under this Instrument satisfy the following requirements:
 - (a) the estimates shall be
 - (i) prepared or audited by a qualified reserves evaluator or auditor;
 - (ii) prepared or audited in accordance with the COGE Handbook; and
 - (iii) estimated assuming that development of each property in respect of which the estimate is made will occur, without regard to the likely availability to the reporting issuer of funding required for that development;
 - (b) for the purpose of determining whether reserves should be attributed to a particular undrilled property, reasonably estimated future abandonment and reclamation costs related to the property shall be taken into account; and
 - (c) aggregate future net revenue shall be estimated deducting
 - (i) reasonably estimated future well abandonment costs; and
 - (ii) future income tax expenses (unless otherwise specified in this Instrument, Form 51-101F1 or Form 51-101F2).
- (2) The date or period with respect to which the effects of an event or transaction are recorded in a reporting issuer's annual financial statements shall be the same as the date or period with respect to which they are first reflected in the reporting issuer's annual reserves data disclosure under Part 2.

PART 5 REQUIREMENTS APPLICABLE TO ALL DISCLOSURE

5.1 Application of Part 5 - This Part applies to disclosure made by or on behalf of a reporting issuer

- (a) to the public;
- (b) in any document filed with a securities regulatory authority; or
- (c) in other circumstances in which, at the time of making the disclosure, the reporting issuer knows, or ought reasonably to know, that the disclosure is or will become available to the public.

5.2 Consistency with Reserves Data and Other Information - If a reporting issuer makes disclosure of information of a type that is required to be included in a statement filed with a securities regulatory authority under item 1 of section 2.1, the information shall be

- (a) prepared in accordance with Part 4; and
- (b) consistent with the corresponding information, if any, contained in the statement most recently filed by the reporting issuer with the securities regulatory authority under item 1 of section 2.1, except to the extent that such statement has been supplemented or superseded by a report of a material change filed by the reporting issuer with the securities regulatory authority.

5.3 Reserves and Resources Classification - Disclosure of reserves or resources shall be consistent with the reserves and resources terminology and categories set out in the COGE Handbook.

5.4 Oil and Gas Reserves and Sales - Disclosure of reserves or of sales of oil, gas or associated by-products shall be made only in respect of marketable quantities, reflecting prices for the product in the condition (upgraded or not upgraded, processed or unprocessed) in which it is to be, or was, sold.

5.5 Natural Gas By-Products - Disclosure concerning natural gas by-products (including natural gas liquids and sulphur) shall be made in respect only of volumes that have been or are to be recovered prior to the point at which marketable gas is measured.

5.6 Future Net Revenue Not Fair Value - Disclosure of an estimate of future net revenue, whether calculated without discount or using a discount rate, shall include a statement to the effect that the estimated values disclosed do not represent fair market value.

5.7 Consent of Qualified Reserves Evaluator or Auditor

- (1) A reporting issuer shall not disclose a report referred to in item 2 of section 2.1 that has been delivered to the board of directors of the reporting issuer by a qualified reserves evaluator or auditor pursuant to an appointment under section 3.2, or disclose information derived from the report or the identity of the qualified

reserves evaluator or auditor, without the written consent of that qualified reserves evaluator or auditor.

- (2) Subsection (1) does not apply to
 - (a) the filing of that report by a reporting issuer under section 2.1;
 - (b) the use of or reference to that report in another document filed by the reporting issuer under section 2.1; or
 - (c) the identification of the report or of the qualified reserves evaluator or auditor in a news release referred to in section 2.2.

5.8 Disclosure of Less Than All Reserves - If a reporting issuer that has more than one property makes written disclosure of any reserves attributable to a particular property

- (a) the disclosure shall include a cautionary statement to the effect that

“The estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation”; and
- (b) the document containing the disclosure of any reserves attributable to one property shall also disclose total reserves of the same classification for all properties of the reporting issuer in the same country (or, if appropriate and not misleading, in the same foreign geographic area).

5.9 Disclosure Concerning Prospects - If a reporting issuer discloses anticipated results from a prospect, the reporting issuer shall also disclose in writing, in the same document or in a supporting filing, in respect of the prospect

- (a) the location and basin name;
- (b) the reporting issuer's gross and net interest in the property, expressed in units of area (acres or hectares);
- (c) in the case of undeveloped property in which the reporting issuer holds a leasehold interest, the expiry date of that interest;
- (d) the name, geologic age and lithology of the target zone;
- (e) the distance to the nearest analogous commercial production;
- (f) the product types reasonably expected;
- (g) the range of pool or field sizes;
- (h) the depth of the target zone;
- (i) the estimated cost to drill and test a well to the target depth;

- (j) reasonably expected drilling commencement and completion dates;
- (k) the anticipated prices to be received for each product type reasonably expected;
- (l) reasonably expected marketing and transportation arrangements;
- (m) the identity and relevant experience of the operator;
- (n) risks and the probability of success; and
- (o) the applicable information specified in section 5.10.

5.10 Estimates of Fair Value of an Unproved Property, Prospect or Resource

- (1) If a reporting issuer discloses in writing an estimate of the fair value of an unproved property, prospect or resource, or discloses expected results from a prospect, the disclosure shall include all positive and negative factors relevant to the estimate or expectation.
- (2) If a reporting issuer discloses in writing an estimate of the fair value of an unproved property, prospect or resource
 - (a) in the case of an estimate of the fair value of an unproved property, except as provided in paragraph (b), the estimate shall be based on the first applicable item listed below, and that item shall be described as the basis of the estimate in the document containing the disclosure or in a supporting filing:
 - 1. the acquisition cost to the reporting issuer, provided that there have been no material changes in the unproved property, the surrounding properties, or the general oil and gas economic climate since acquisition;
 - 2. recent sales by others of interests in the same unproved property;
 - 3. terms and conditions, expressed in monetary terms, of recent farm-in agreements related to the unproved property;
 - 4. terms and conditions, expressed in monetary terms, of recent work commitments related to the unproved property;
 - 5. recent sales of similar properties in the same general area;
 - (b) in the case of an estimate of fair value to which none of the items listed in paragraph (a) applies
 - (i) the estimate shall be prepared or accepted by a professional valuator (who is not a “related party” of the reporting issuer within the meaning of the term as used in the CICA Handbook) applying valuation standards established by the professional body of which

the valuator is a member and from which the valuator derives professional standing;

- (ii) the estimate shall consist of at least three values that reflect a range of reasonable likelihoods (the low value being conservative, the middle value being the median and the high value being optimistic) reflecting courses of action expected to be followed by the reporting issuer;
- (iii) the estimate, and the identities of the professional valuator and of the professional body referred to in subparagraph (i), shall be set out in the document containing the disclosure or in a supporting filing; and
- (iv) the reporting issuer shall obtain from the professional valuator referred to in subparagraph (i)
 - (A) a report on the estimate that does not contain
 - (I) a disclaimer that materially detracts from the usefulness of the estimate; or
 - (II) a statement that the report may not be relied on; and
 - (B) the professional valuator's written consent to the disclosure of the report by the reporting issuer to the public.

5.11 Net Asset Value and Net Asset Value per Share - Written disclosure of net asset value or net asset value per share shall include a description of the methods used to value assets and liabilities and the number of shares used in the calculation.

5.12 Reserve Replacement - Written disclosure concerning reserve replacement shall include an explanation of the method of calculation applied.

5.13 Netbacks - Written disclosure of a netback

- (a) shall include separate netbacks for each product type by country (or, if appropriate and not misleading, by foreign geographic area);
- (b) shall reflect netbacks calculated by subtracting royalties and operating costs from revenues; and
- (c) shall state the method of calculation.

5.14 BOEs and McfGEs - If written disclosure includes information expressed in BOEs, McfGEs or other units of equivalency between oil and gas

- (a) the information shall be presented
 - (i) in the case of BOEs, using BOEs derived by converting gas to oil in the ratio of six thousand cubic feet of gas to one barrel of oil (6 Mcf:1 bbl);
 - (ii) in the case of McfGEs, using McfGEs derived by converting oil to gas in the ratio of one barrel of oil to six thousand cubic feet of gas (1 bbl:6 Mcf); and
 - (iii) with the conversion ratio stated;
- (b) if the information is also presented using BOEs or McfGEs derived using a conversion ratio other than a ratio specified in paragraph (a), the disclosure shall state that other conversion ratio and explain why it has been chosen;
- (c) if the information is presented using a unit of equivalency other than BOEs or McfGEs, the disclosure shall identify the unit, state the conversion ratio used and explain why it has been chosen; and
- (d) the disclosure shall include a cautionary statement to the effect that:

“BOEs [or 'McfGEs' or other applicable units of equivalency] may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf: 1 bbl [or 'An McfGE conversion ratio of 1 bbl: 6 Mcf'] is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead”.

5.15 Finding and Development Costs - If written disclosure is made of finding and development costs

- (a) those costs shall be calculated using the following two methods, in each case after eliminating the effects of acquisitions and dispositions:

Method 1:
$$\frac{a+b+c}{x}$$

Method 2:
$$\frac{a+b+d}{y}$$

- where
- a = exploration costs incurred in the most recent financial year
 - b = development costs incurred in the most recent financial year
 - c = the change during the most recent financial year in estimated future development costs relating to proved reserves

- d = the change during the most recent financial year in estimated future development costs relating to proved reserves and probable reserves
- x = additions to proved reserves during the most recent financial year, expressed in BOEs or other unit of equivalency
- y = additions to proved reserves and probable reserves during the most recent financial year, expressed in BOEs or other unit of equivalency

(b) the disclosure shall include

- (i) the results of both methods of calculation under paragraph (a) and a description of those methods;
- (ii) if the disclosure also includes a result derived using any other method of calculation, a description of that method and the reason for its use;
- (iii) for each result, comparative information for the most recent financial year, the second most recent financial year and the averages for the three most recent financial years;
- (iv) a cautionary statement to the effect that:

“The aggregate of the exploration and development costs incurred in the most recent financial year and the change during that year in estimated future development costs generally will not reflect total finding and development costs related to reserves additions for that year”; and

- (v) the cautionary statement required under paragraph 5.14(d).

PART 6 MATERIAL CHANGE DISCLOSURE

6.1 Material Change from Information Filed under Part 2

- (1) This Part applies in respect of a material change that, had it occurred on or before the effective date of information included in the statement most recently filed by a reporting issuer under item 1 of section 2.1, would have resulted in a significant change in the information contained in the statement.
- (2) In addition to any other requirement of securities legislation governing disclosure of a material change, disclosure of a material change referred to in subsection (1) shall
 - (a) identify the statement filed under Part 2 that contains the original information referred to in subsection (1); and
 - (b) discuss the reporting issuer's reasonable expectation of how the material change, had it occurred on or before the effective date referred to in

subsection (1), would have affected the reserves data or other information contained in the document identified under paragraph (a).

PART 7 OTHER INFORMATION

7.1 Information to be Furnished on Request - A reporting issuer shall, on the request of the regulator, deliver additional information with respect to the content of a document filed under this Instrument.

PART 8 EXEMPTIONS

8.1 Authority to Grant Exemption

- (1) The regulator or the securities regulatory authority may grant an exemption from this Instrument, in whole or in part, subject to such conditions or restrictions as may be imposed in the exemption.
- (2) Despite subsection (1), in Ontario only the regulator may grant an exemption.

PART 9 INSTRUMENT IN FORCE

9.1 Coming Into Force - This Instrument comes into force on September 30, 2003.

9.2 Transition - Despite section 9.1, this Instrument does not apply to a reporting issuer until the earlier of:

- (a) the date by which the reporting issuer is required under securities legislation to file audited annual financial statements for its financial year that includes or ends on December 31, 2003; and
- (b) the first date on which the reporting issuer files with the securities regulatory authority the statement referred to in item 1 of section 2.1.

FORM 51-101F1
STATEMENT OF RESERVES DATA
AND OTHER OIL AND GAS INFORMATION

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FORM 51-101F1
STATEMENT OF RESERVES DATA
AND OTHER OIL AND GAS INFORMATION

This is the form referred to in item 1 of section 2.1 of National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* ("NI 51-101").

GENERAL INSTRUCTIONS

- (1) *Terms for which a meaning is given in NI 51-101 have the same meaning in this Form 51-101F1.*
- (2) *Unless otherwise specified in this Form 51-101F1, information under item 1 of section 2.1 of NI 51-101 shall be provided as at the last day of the reporting issuer's most recent financial year or for its financial year then ended.*
- (3) *It is not necessary to include the headings or numbering, or to follow the ordering of Items, in this Form 51-101F1. Information may be provided in tables.*
- (4) *To the extent that any Item or any component of an Item specified in this Form 51-101F1 does not apply to a reporting issuer and its activities and operations, or is not material, no reference need be made to that Item or component. It is not necessary to state that such an Item or component is "not applicable" or "not material". Materiality is discussed in NI 51-101 and Companion Policy 51-101CP.*
- (5) *This Form 51-101F1 sets out minimum requirements. A reporting issuer may provide additional information not required in this Form 51-101F1 provided that it is not misleading and not inconsistent with the requirements of NI 51-101, and provided that material information required to be disclosed is not omitted.*
- (6) *A reporting issuer may satisfy the requirement of this Form 51-101F1 for disclosure of information "by country" by instead providing information by foreign geographic area in respect of countries outside North America as may be appropriate for meaningful disclosure in the circumstances.*

PART 1 DATE OF STATEMENT

Item 1.1 Relevant Dates

1. Date the statement.
2. Disclose the effective date of the information being provided.
3. Disclose the preparation date of the information being provided.

INSTRUCTIONS

- (1) *For the purpose of Part 2 of NI 51-101, and consistent with the definition of reserves data and General Instruction (2) of this Form 51-101F1, the effective date to be disclosed under section 2 of Item 1.1 is the last day of the reporting issuer's most recent financial year. It is the date of the balance sheet for the reporting issuer's most recent financial year (for example, "as at December 31, 20xx") and the ending date of the reporting issuer's most recent annual statement of income (for example, "for the year ended December 31, 20xx").*
- (2) *The same effective date applies to reserves of each category reported and to related future net revenue. References to a change in an item of information, such as changes in production or a change in reserves, mean changes in respect of that item during the year ended on the effective date.*
- (3) *The preparation date, in respect of written disclosure, means the most recent date to which information relating to the period ending on the effective date was considered in the preparation of the disclosure. The preparation date is a date subsequent to the effective date because it takes time after the end of the financial year to assemble the information for that completed year that is needed to prepare the required disclosure as at the end of the financial year.*
- (4) *Because of the interrelationship between certain of the reporting issuer's reserves data and other information referred to in this Form 51-101F1 and certain of the information included in its financial statements, the reporting issuer should ensure that its financial auditor and its qualified reserves evaluators or auditors are kept apprised of relevant events and transactions, and should facilitate communication between them.*
- (5) *If the reporting issuer provides information as at a date more recent than the effective date, in addition to the information required as at the effective date, also disclose the date as at which that additional information is provided. The provision of such additional information does not relieve the reporting issuer of the obligation to provide information as at the effective date.*

PART 2 DISCLOSURE OF RESERVES DATA

Item 2.1 Reserves Data (Constant Prices and Costs)

1. Breakdown of Proved Reserves (Constant Case) – Disclose, by country and in the aggregate, reserves, gross and net, estimated using constant prices and costs, for each product type, in the following categories:
 - (a) proved developed producing reserves;
 - (b) proved developed non-producing reserves;
 - (c) proved undeveloped reserves; and
 - (d) proved reserves (in total).
2. Net Present Value of Future Net Revenue (Constant Case) – Disclose, by country and in the aggregate, the net present value of future net revenue attributable to the reserves categories referred to in section 1 of this Item, estimated using constant prices and costs, before and after deducting future income tax expenses, calculated without discount and using a discount rate of 10 percent.
3. Additional Information Concerning Future Net Revenue (Constant Case)
 - (a) This section 3 applies to future net revenue attributable to proved reserves (in total) estimated using constant prices and costs.
 - (b) Disclose, by country and in the aggregate, the following elements of future net revenue estimated using constant prices and costs and calculated without discount:
 - (i) revenue;
 - (ii) royalties;
 - (iii) operating costs;
 - (iv) development costs;
 - (v) abandonment and reclamation costs;
 - (vi) future net revenue before deducting future income tax expenses;
 - (vii) future income tax expenses; and
 - (viii) future net revenue after deducting future income tax expenses.

- (c) Disclose, by production group, the net present value of future net revenue (before deducting future income tax expenses) estimated using constant prices and costs and calculated using a discount rate of 10 percent.

Item 2.2 Reserves Data (Forecast Prices and Costs)

1. Breakdown of Reserves (Forecast Case) – Disclose, by country and in the aggregate, reserves, gross and net, estimated using forecast prices and costs, for each product type, in the following categories:
 - (a) proved developed producing reserves;
 - (b) proved developed non-producing reserves;
 - (c) proved undeveloped reserves;
 - (d) proved reserves (in total);
 - (e) probable reserves (in total);
 - (f) proved plus probable reserves (in total); and
 - (g) if the reporting issuer discloses an estimate of possible reserves in the statement:
 - (i) possible reserves (in total); and
 - (ii) proved plus probable plus possible reserves (in total).
2. Net Present Value of Future Net Revenue (Forecast Case) – Disclose, by country and in the aggregate, the net present value of future net revenue attributable to the reserves categories referred to in section 1 of this Item, estimated using forecast prices and costs, before and after deducting future income tax expenses, calculated without discount and using discount rates of 5 percent, 10 percent, 15 percent and 20 percent.
3. Additional Information Concerning Future Net Revenue (Forecast Case)
 - (a) This section 3 applies to future net revenue attributable to each of the following reserves categories estimated using forecast prices and costs:
 - (i) proved reserves (in total);
 - (ii) proved plus probable reserves (in total); and
 - (iii) if paragraph 1(g) of this Item applies, proved plus probable plus possible reserves (in total).

- (b) Disclose, by country and in the aggregate, the following elements of future net revenue estimated using forecast prices and costs and calculated without discount:
 - (i) revenue;
 - (ii) royalties;
 - (iii) operating costs;
 - (iv) development costs;
 - (v) abandonment and reclamation costs;
 - (vi) future net revenue before deducting future income tax expenses;
 - (vii) future income tax expenses; and
 - (viii) future net revenue after deducting future income tax expenses.
- (c) Disclose, by production group, the net present value of future net revenue (before deducting future income tax expenses) estimated using forecast prices and costs and calculated using a discount rate of 10 percent.

Item 2.3 Reserves Disclosure Varies with Accounting

In determining reserves to be disclosed:

- (a) Consolidated Financial Disclosure – if the reporting issuer files consolidated financial statements:
 - (i) include 100 percent of reserves attributable to the parent company and 100 percent of the reserves attributable to its consolidated subsidiaries (whether or not wholly-owned); and
 - (ii) if a significant portion of reserves referred to in clause (i) is attributable to a consolidated subsidiary in which there is a significant minority interest, disclose that fact and the approximate portion of such reserves attributable to the minority interest;
- (b) Proportionate Consolidation – if the reporting issuer files financial statements in which investments are proportionately consolidated, the reporting issuer's disclosed reserves must include the reporting issuer's proportionate share of investees' oil and gas reserves; and
- (c) Equity Accounting – if the reporting issuer files financial statements in which investments are accounted for by the equity method, do not include investees' oil and gas reserves in disclosed reserves of the reporting issuer, but disclose the reporting issuer's share of investees' oil and gas reserves separately.

Item 2.4 Future Net Revenue Disclosure Varies with Accounting

1. Consolidated Financial Disclosure – If the reporting issuer files consolidated financial statements, and if a significant portion of the reporting issuer's economic interest in future net revenue is attributable to a consolidated subsidiary in which there is a significant minority interest, disclose that fact and the approximate portion of the economic interest in future net revenue attributable to the minority interest.
2. Equity Accounting – If the reporting issuer files financial statements in which investments are accounted for by the equity method, do not include investees' future net revenue in disclosed future net revenue of the reporting issuer, but disclose the reporting issuer's share of investees' future net revenue separately, by country and in the aggregate.

INSTRUCTIONS

- (1) *Do not include, in reserves, oil or gas that is subject to purchase under a long-term supply, purchase or similar agreement. However, if the reporting issuer is a party to such an agreement with a government or governmental authority, and participates in the operation of the properties in which the oil or gas is situated or otherwise serves as "producer" of the reserves (in contrast to being an independent purchaser, broker, dealer or importer), disclose separately the reporting issuer's interest in the reserves that are subject to such agreements at the effective date and the net quantity of oil or gas received by the reporting issuer under the agreement during the year ended on the effective date.*
- (2) *Future net revenue includes the portion attributable to the reporting issuer's interest under an agreement referred to in Instruction (1).*
- (3) *In the disclosure of "abandonment and reclamation costs" referred to in clause 3(b)(v) of Item 2.1 and in clause 3(b)(v) of Item 2.2 include, at minimum, well abandonment costs. The response to Item 6.4 will disclose total abandonment and reclamation costs and (in response to paragraph (d) of Item 6.4) the portion of total abandonment and reclamation costs, if any, not disclosed under clause 3(b)(v) of Item 2.1 and clause 3(b)(v) of Item 2.2.*

PART 3 PRICING ASSUMPTIONS

Item 3.1 Constant Prices Used in Estimates

For each product type, disclose the benchmark reference prices for the countries or regions in which the reporting issuer operates, as at the last day of the reporting issuer's most recent financial year, reflected in the reserves data disclosed in response to Item 2.1.

Item 3.2 Forecast Prices Used in Estimates

1. For each product type, disclose:
 - (a) the pricing assumptions used in estimating reserves data disclosed in response to Item 2.2:
 - (i) for each of at least the following five financial years; and
 - (ii) generally, for subsequent periods; and
 - (b) the reporting issuer's weighted average historical prices for the most recent financial year.
2. The disclosure in response to section 1 shall include the benchmark reference pricing schedules for the countries or regions in which the reporting issuer operates, and inflation and other forecast factors used.
3. If the pricing assumptions specified in response to section 1 were provided by a qualified reserves evaluator or auditor who is independent of the reporting issuer, disclose that fact and identify the qualified reserves evaluator or auditor.

INSTRUCTIONS

- (1) *Benchmark reference prices may be obtained from sources such as public product trading exchanges or prices posted by purchasers.*
- (2) *The defined terms "constant prices and costs" and "forecast prices and costs" include any fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended. In effect, such contractually committed prices override benchmark reference prices for the purpose of estimating reserves data. To ensure that disclosure under this Part is not misleading, the disclosure should reflect such contractually committed prices.*
- (3) *Under subsection 5.7(1) of NI 51-101, the reporting issuer must obtain the written consent of the qualified reserves evaluator or auditor to disclose his or her identity in response to section 3 of this Item.*

PART 4 RECONCILIATIONS OF CHANGES IN RESERVES AND FUTURE NET REVENUE

Item 4.1 Reserves Reconciliation

1. Provide the information specified in section 2 of this Item in respect of the following reserves categories:
 - (a) net proved reserves (in total);
 - (b) net probable reserves (in total); and
 - (c) net proved plus probable reserves (in total).
2. Disclose changes between the reserves estimates made as at the effective date and the corresponding estimates (“prior-year estimates”) made as at the last day of the preceding financial year of the reporting issuer:
 - (a) by country;
 - (b) for each of the following:
 - (i) light and medium crude oil (combined);
 - (ii) heavy oil;
 - (iii) associated gas and non-associated gas (combined); and
 - (iv) synthetic oil and other products from non-conventional oil and gas activities;
 - (c) separately identifying and explaining:
 - (i) extensions;
 - (ii) improved recovery;
 - (iii) technical revisions;
 - (iv) discoveries;
 - (v) acquisitions;
 - (vi) dispositions;
 - (vii) economic factors; and
 - (viii) production.

INSTRUCTIONS

- (1) *The reconciliation required under this Item 4.1 may be provided in respect of reserves estimated using either constant prices and costs or forecast prices and costs, with the price and cost case indicated in the disclosure.*
- (2) *For the purpose of this Item 4.1, it is sufficient to provide the information in respect of the products specified in paragraph 2(b), excluding solution gas, natural gas liquids and other associated by-products.*
- (3) *The COGE Handbook provides guidance on the preparation of the reconciliation required under this Item 4.1.*

Item 4.2 Future Net Revenue Reconciliation

1. Provide the information specified in section 2 of this Item in respect of estimates of future net revenue (estimated using constant prices and costs and calculated using a discount rate of 10 percent) attributable to net proved reserves (in total).
2. Disclose changes between the future net revenue estimates referred to in section 1 made as at the effective date and the corresponding estimates ("prior-year estimates") made as at the last day of the preceding financial year of the reporting issuer:
 - (a) by country;
 - (b) separately identifying and explaining:
 - (i) sales and transfers of oil, gas or other product types produced during the period net of production costs and royalties;
 - (ii) net change in sales and transfer prices and in production costs and royalties related to future production;
 - (iii) changes in previously estimated development costs incurred during the period;
 - (iv) changes in estimated future development costs;
 - (v) net change resulting from extensions and improved recovery;
 - (vi) net change resulting from discoveries;
 - (vii) changes resulting from acquisitions of reserves;
 - (viii) changes resulting from dispositions of reserves;
 - (ix) net change resulting from revisions in quantity estimates;

- (x) accretion of discount (10 percent of discounted future net revenue at the beginning of the financial year);
- (xi) net change in income taxes; and
- (xii) any other significant factors.

INSTRUCTIONS

- (1) *For the purpose of this Part 4, compute the effects of changes in prices and costs before the effects of changes in volumes, so that, in respect of constant prices and costs, volumes are reflected at prices as at the effective date.*
- (2) *Except in respect of clause 2(b)(xi) of Item 4.2, the information to be provided under this Part is pre-tax information.*
- (3) *For the purpose of clause 2(b)(xi) of Item 4.2, a “net change in income taxes” includes both income taxes incurred during the period and changes in estimated future income tax expenses.*

PART 5 ADDITIONAL INFORMATION RELATING TO RESERVES DATA

Item 5.1 Undeveloped Reserves

- 1. For proved undeveloped reserves:
 - (a) disclose for each product type the volumes of proved undeveloped reserves that were first attributed in each of the most recent five financial years and, in the aggregate, before that time; or
 - (b) discuss generally the basis on which the reporting issuer attributes proved undeveloped reserves, its plans (including timing) for developing the proved undeveloped reserves and, if applicable, its reasons for not planning to develop particular proved undeveloped reserves during the following two years.
- 2. For probable undeveloped reserves:
 - (a) disclose for each product type the volumes of probable undeveloped reserves that were first attributed in each of the most recent five financial years and, in the aggregate, before that time; or
 - (b) discuss generally the basis on which the reporting issuer attributes probable undeveloped reserves, its plans (including timing) for developing the probable undeveloped reserves and, if applicable, its reasons for not planning to develop particular probable undeveloped reserves during the following two years.

Item 5.2 Significant Factors or Uncertainties

1. Identify and discuss important economic factors or significant uncertainties that affect particular components of the reserves data.
2. Section 1 does not apply if the information is disclosed in the reporting issuer's financial statements for the financial year ended on the effective date.

INSTRUCTION

Examples of information that could warrant disclosure under this Item 5.2 include unusually high expected development costs or operating costs, the need to build a major pipeline or other major facility before production of reserves can begin, or contractual obligations to produce and sell a significant portion of production at prices substantially below those which could be realized but for those contractual obligations.

Item 5.3 Future Development Costs

1.
 - (a) Provide the information specified in paragraph 1(b) in respect of development costs deducted in the estimation of future net revenue attributable to each of the following reserves categories:
 - (i) proved reserves (in total) estimated using constant prices and costs;
 - (ii) proved reserves (in total) estimated using forecast prices and costs; and
 - (iii) proved plus probable reserves (in total) estimated using forecast prices and costs.
 - (b) Disclose, by country, the amount of development costs estimated:
 - (i) in total, calculated using no discount and using a discount rate of 10 percent; and
 - (ii) by year for each of the first five years estimated.
2. Discuss the reporting issuer's expectations as to:
 - (a) the sources (including internally-generated cash flow, debt or equity financing, farm-outs or similar arrangements) and costs of funding for estimated future development costs; and
 - (b) the effect of those costs of funding on disclosed reserves or future net revenue.
3. If the reporting issuer expects that the costs of funding referred to in section 2, could make development of a property uneconomic for that reporting issuer, disclose that expectation and its plans for the property.

PART 6 OTHER OIL AND GAS INFORMATION

Item 6.1 Oil and Gas Properties and Wells

1. Identify and describe generally the reporting issuer's important properties, plants, facilities and installations:
 - (a) identifying their location (province, territory or state if in Canada or the United States, and country otherwise);
 - (b) indicating whether they are located onshore or offshore;
 - (c) in respect of properties to which reserves have been attributed and which are capable of producing but which are not producing, disclosing how long they have been in that condition and discussing the general proximity of pipelines or other means of transportation; and
 - (d) describing any statutory or other mandatory relinquishments, surrenders, back-ins or changes in ownership.
2. State, separately for oil wells and gas wells, the number of the reporting issuer's producing wells and non-producing wells, expressed in terms of both gross wells and net wells, by location (province, territory or state if in Canada or the United States, and country otherwise).

Item 6.2 Properties With No Attributed Reserves

1. For unproved properties disclose:
 - (a) the gross area (acres or hectares) in which the reporting issuer has an interest;
 - (b) the interest of the reporting issuer therein expressed in terms of net area (acres or hectares);
 - (c) the location, by country; and
 - (d) the existence, nature (including any bonding requirements), timing and cost (specified or estimated) of any work commitments.
2. Disclose, by country, the net area (acres or hectares) of unproved property for which the reporting issuer expects its rights to explore, develop and exploit to expire within one year.

Item 6.3 Forward Contracts

1. If the reporting issuer is bound by an agreement (including a transportation agreement), directly or through an aggregator, under which it may be precluded from fully realizing, or may be protected from the full effect of, future market prices for oil or gas, describe

generally the agreement, discussing dates or time periods and summaries or ranges of volumes and contracted or reasonably estimated values.

2. Section 1 does not apply to agreements disclosed by the reporting issuer
 - (a) as financial instruments, in accordance with Section 3860 of the CICA Handbook; or
 - (b) as contractual obligations or commitments, in accordance with Section 3280 of the CICA Handbook.
3. If the reporting issuer's transportation obligations or commitments for future physical deliveries of oil or gas exceed the reporting issuer's expected related future production from its proved reserves, estimated using forecast prices and costs and disclosed under Part 2, discuss such excess, giving information about the amount of the excess, dates or time periods, volumes and reasonably estimated value.

Item 6.4 Additional Information Concerning Abandonment and Reclamation Costs

In respect of abandonment and reclamation costs for surface leases, wells, facilities and pipelines, disclose:

- (a) how the reporting issuer estimates such costs;
- (b) the number of net wells for which the reporting issuer expects to incur such costs;
- (c) the total amount of such costs, net of estimated salvage value, expected to be incurred, calculated without discount and using a discount rate of 10 percent;
- (d) the portion, if any, of the amounts disclosed under paragraph (c) of this Item 6.4 that was not deducted as abandonment and reclamation costs in estimating the future net revenue disclosed under Part 2; and
- (e) the portion, if any, of the amounts disclosed under paragraph (c) of this Item 6.4 that the reporting issuer expects to pay in the next three financial years, in total.

INSTRUCTION

Item 6.4 supplements the information disclosed in response to clause 3(b)(v) of Item 2.1 and clause 3(b)(v) of Item 2.2. The response to paragraph (d) of Item 6.4 should enable a reader of this statement and of the reporting issuer's financial statements for the financial year ending on the effective date to understand both the reporting issuer's estimated total abandonment and reclamation costs, and what portions of that total are, and are not, reflected in the disclosed reserves data.

Item 6.5 Tax Horizon

If the reporting issuer is not required to pay income taxes for its most recently completed financial year, discuss its estimate of when income taxes may become payable.

Item 6.6 Costs Incurred

1. Disclose each of the following, by country, for the most recent financial year (irrespective of whether such costs were capitalized or charged to expense when incurred):
 - (a) property acquisition costs, separately for proved properties and unproved properties;
 - (b) exploration costs; and
 - (c) development costs.
2. For the purpose of this Item 6.6, if the reporting issuer files financial statements in which investments are accounted for by the equity method, disclose by country the reporting issuer's share of investees' (i) property acquisition costs, (ii) exploration costs and (iii) development costs incurred in the most recent financial year.

Item 6.7 Exploration and Development Activities

1. Disclose, by country and separately for exploratory wells and development wells:
 - (a) the number of gross wells and net wells completed in the reporting issuer's most recent financial year; and
 - (b) for each category of wells for which information is disclosed under paragraph (a), the number completed as oil wells, gas wells and service wells and the number that were dry holes.
2. Describe generally the reporting issuer's most important current and likely exploration and development activities, by country.

Item 6.8 Production Estimates

1. Disclose, by country, for each product type, the volume of production estimated for the first year reflected in the estimates of future net revenue disclosed under Items 2.1 and 2.2.
2. If one field accounts for 20 percent or more of the estimated production disclosed under section 1, identify that field and disclose the volume of production estimated for the field for that year.

Item 6.9 Production History

1. To the extent not previously disclosed in financial statements filed by the reporting issuer, disclose, for each quarter of its most recent financial year, by country for each product type:
 - (a) the reporting issuer's share of average daily production volume, before deduction of royalties; and
 - (b) as an average per unit of volume (for example, \$/bbl or \$/Mcf):
 - (i) the prices received;
 - (ii) royalties paid;
 - (iii) production costs; and
 - (iv) the resulting netback.
2. For each important field, and in total, disclose the reporting issuer's production volumes for the most recent financial year, for each product type.

INSTRUCTION

In providing information for each product type for the purpose of Item 6.9, it is not necessary to allocate among multiple product types attributable to a single well, reservoir or other reserves entity. It is sufficient to provide the information in respect of the principal product type attributable to the well, reservoir or other reserves entity.

FORM 51-101F2
REPORT ON RESERVES DATA
BY
INDEPENDENT QUALIFIED RESERVES
EVALUATOR OR AUDITOR

This is the form referred to in item 2 of section 2.1 of National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* ("NI 51-101").

1. Terms to which a meaning is ascribed in NI 51-101 have the same meaning in this form.
2. The report on reserves data referred to in item 2 of section 2.1 of NI 51-101, to be executed by one or more qualified reserves evaluators or auditors independent of the reporting issuer, shall in all material respects be as follows:

Report on Reserves Data

To the board of directors of [name of reporting issuer] (the "Company"):

1. We have [audited] [evaluated] [and reviewed] the Company's reserves data as at [last day of the reporting issuer's most recently completed financial year]. The reserves data consist of the following:
 - (a)
 - (i) proved and proved plus probable oil and gas reserves estimated as at [last day of the reporting issuer's most recently completed financial year] using forecast prices and costs; and
 - (ii) the related estimated future net revenue; and
 - (b)
 - (i) proved oil and gas reserves estimated as at [last day of the reporting issuer's most recently completed financial year] using constant prices and costs; and
 - (ii) the related estimated future net revenue.
2. The reserves data are the responsibility of the Company's management. Our responsibility is to express an opinion on the reserves data based on our [audit] [evaluation] [and review].

We carried out our [audit] [evaluation] [and review] in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") prepared jointly by the Society of Petroleum Evaluation Engineers (Calgary Chapter) and the Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society).
3. Those standards require that we plan and perform an [audit] [evaluation] [and review] to obtain reasonable assurance as to whether the reserves data are free of material misstatement. An [audit] [evaluation] [and review] also includes assessing whether the

reserves data are in accordance with principles and definitions presented in the COGE Handbook.

4. The following table sets forth the estimated future net revenue (before deduction of income taxes) attributed to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent, included in the reserves data of the Company [audited] [evaluated] [and reviewed] by us for the year ended xxx xx, 20xx, and identifies the respective portions thereof that we have [audited] [evaluated] [and reviewed] and reported on to the Company's [management/board of directors]:

Independent Qualified Reserves Evaluator or Auditor	Description and Preparation Date of [Audit/ Evaluation/ Review] Report	Location of Reserves (Country or Foreign Geographic Area)	Net Present Value of Future Net Revenue (before income taxes, 10% discount rate)			
			Audited	Evaluated	Reviewed	Total
Evaluator A	xxx xx, 20xx	xxxx	\$xxx	\$xxx	\$xxx	\$xxx
Evaluator B	xxx xx, 20xx	xxxx	xxx	xxx	xxx	xxx
Totals			<u>\$xxx</u>	<u>\$xxx</u>	<u>\$xxx</u>	<u>\$xxx¹</u>

5. In our opinion, the reserves data respectively [audited] [evaluated] by us have, in all material respects, been determined and are in accordance with the COGE Handbook. We express no opinion on the reserves data that we reviewed but did not audit or evaluate.
6. We have no responsibility to update our reports referred to in paragraph 4 for events and circumstances occurring after their respective preparation dates.
7. Because the reserves data are based on judgements regarding future events, actual results will vary and the variations may be material.

Executed as to our report referred to above:

Evaluator A, City, Province or State / Country, Execution Date

[signed]

Evaluator B, City, Province or State / Country, Execution Date

[signed]

¹ This amount should be the amount disclosed by the reporting issuer in its statement of reserves data filed under item 1 of section 2.1 of NI 51-101, as its future net revenue (before deducting future income tax expenses) attributable to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent (required by section 2 of Item 2.2 of Form 51-101F1).

SCHEDULE B

National Instrument 13-101 System for Electronic Document Analysis and Retrieval (SEDAR), B.C. Reg. 378/96, is amended

(a) in Item 3 of section 2.3 (1) by striking out “a summary of the report.” and substituting “a summary of the report, provided that this paragraph 3 does not apply to a statement or report referred to in section 2.1 of National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities.”, and

(b) by adding the following to Part II B (a) of Appendix A:

18. Oil and Gas Annual Disclosure (NI 51-101).

SCHEDULE C

National Instrument 44-101 Short Form Prospectus Distributions, B.C. Reg. 424/2000, is amended

(a) by repealing Item 5 of section 10.2 (a) and substituting the following:

5. Oil and Gas Reports – Any technical report or certificate relating to oil and gas properties prepared in accordance with National Policy Statement No. 2-B Guide for Engineers and Geologists Submitting Oil and Gas Reports to Canadian Provincial Securities Administrators that the regulator requests be filed and that was not previously filed, if the preliminary short form prospectus is filed on or before June 30, 2005, the issuer is engaged in oil and gas activities (as defined in National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*) and:

- (i) the issuer has not filed and is not required to have filed (alone or in the preliminary short form prospectus or as part of another filed document) the statement referred to in Item 1 of section 2.1 of National Instrument 51-101;
- (ii) the preliminary short form prospectus does not include and is not required to include audited financial statements for a financial year ended on or after December 31, 2003;
- (iii) if the preliminary short form prospectus is filed on or before March 30, 2004 for an initial public offering of securities, it does not include financial statements for a financial year or interim period that ends on or after December 31, 2003; and
- (iv) if the preliminary short form prospectus is filed after December 31, 2003 and during the issuer’s first financial year, it does not include financial statements for an interim period that ends on or after December 31, 2003.,

(b) by repealing Item 9 of section 10.3 (a) and substituting the following:

9. Other Oil and Gas Reports – Any technical report or certificate relating to oil and gas properties prepared in accordance with National Policy Statement No. 2-B that the regulator requests be filed and that was not previously filed, if the short form prospectus is filed on or before June 30, 2005, the issuer is engaged in oil and gas activities (as defined in National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*) and:

- (i) the issuer has not filed and is not required to have filed (alone or in the short form prospectus or as part of another filed document) the statement referred to in Item 1 of section 2.1 of National Instrument 51-101;
- (ii) the short form prospectus does not include and is not required to include audited financial statements for a financial year ended on or after December 31, 2003;
- (iii) if the short form prospectus is filed on or before March 30, 2004 for an initial public offering of securities, it does not include financial statements for a financial year or interim period that ends on or after December 31, 2003; and
- (iv) if the short form prospectus is filed after December 31, 2003 and during the issuer's first financial year, it does not include financial statements for an interim period that ends on or after December 31, 2003.,

(c) by repealing Item 10 (i) of section 10.3 (a) and substituting the following:

- (i) deals with a mineral project or oil and gas activities of the issuer; and,

(d) in item 4.4 of Form 44-101F1 AIF by striking out “For issuers with oil and gas operations,” and substituting “For issuers with oil and gas operations, unless section 4.5 applies,”,

(e) in Form 44-101F1 AIF by adding the following item:

4.5 Issuers with Oil and Gas Activities – This Item 4.5 applies if the issuer is engaged in oil and gas activities (as defined in National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*) and:

- (a) has filed or is required to have filed (or has included or is required to have included in another filed document) audited annual financial statements for a financial year that ends on or after December 31, 2003;
- (b) has, prior to the date on which it is required to file audited financial statements for a financial year that ends on or after December 31, 2003, filed under Part 2 of National Instrument 51-101 (or included in another filed document) the statement referred to in Item 1 of section 2.1 of National Instrument 51-101; or
- (c) is including in this Form the statement referred to in Item 1 of section 2.1 of National Instrument 51-101, whether or not for the purpose of satisfying its filing obligations under National Instrument 51-101.

Disclose the following:

1. Reserves Data and Other Information

- (a) In the case of information that, for purposes of Form 51-101F1 *Statement of Reserves Data and Other Oil and Gas Information*, is to be prepared as at the end of a financial year, disclose that information as at the issuer's most recent financial year-end.
- (b) In the case of information that, for purposes of Form 51-101F1, is to be prepared for a financial year, disclose that information for the issuer's most recent financial year.
- (c) To the extent not reflected in the information disclosed in response to paragraphs (a) and (b), disclose the information contemplated by Part 6 of National Instrument 51-101, in respect of material changes that occurred after the issuer's most recent financial year-end.

2. Report of Qualified Reserves Evaluator or Auditor – Include with the information disclosed under section 1 the report of one or more qualified reserves evaluators or qualified reserves auditors, referred to in Item 2 of section 2.1 of National Instrument 51-101, on the reserves data included in the disclosure provided under paragraph 1 (a) of this Item.

3. Report of Management and Directors – Include with the information disclosed under section 1 the report of management and directors, referred to in Item 3 of section 2.1 of National Instrument 51-101, relating to that information.

INSTRUCTIONS

- (1) *Disclosure in this Form must be consistent with National Instrument 51-101.*
- (2) *Unless the information presented under paragraph 2 is included in the Form in satisfaction of the issuer's filing obligations under Part 2 of National Instrument 51-101, the issuer may require the written consent of a qualified reserves evaluator or qualified reserves auditor to disclose information in this Form, pursuant to section 5.7 of National Instrument 51-101.*

(f) in Form 44-101F3 Short Form Prospectus by adding the following to the Instructions set out before Item 1:

- (12) *Disclosure in a preliminary short form prospectus or short form prospectus must be consistent with National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities if the issuer is engaged in oil and gas activities (as defined in National Instrument 51-101) and:*
 - (a) *has filed or is required to have filed (or has included or is required to have included in another filed document) audited annual financial statements for a financial year that ends on or after December 31, 2003;*
 - (b) *has, prior to the date on which it is required to have filed audited financial statements for a financial year that ends on or after December 31, 2003, filed or is required to have filed (or has included or is required to have included in another filed document) the statement referred to in Item 1 of section 2.1 of National Instrument 51-101;*
 - (c) *is filing a preliminary short form prospectus or short form prospectus:*
 - (i) *that includes or is required to include audited financial statements for a financial year ended on or after December 31, 2003;*

- (ii) *after March 30, 2004 for an initial public offering of securities, and the prospectus includes financial statements for a financial year or interim period that ends on or after December 31, 2003; or*
- (iii) *after December 31, 2003 and during the issuer's first financial year, and the prospectus includes financial statements for an interim period that ends on or after December 31, 2003; or*
- (d) *indicates in the preliminary short form prospectus or short form prospectus that information disclosed therein is presented in accordance with National Instrument 51-101.,*
- (g) ***in the title of Item 10 of Form 44-101F3 Short Form Prospectus, by striking out "Resource Property" and substituting "Resource Issuers",***
- (h) ***in the marginal note to item 10.1 of Form 44-101F3 Short Form Prospectus by striking out "Resource Property" and substituting "Issuers with Mineral Projects",***
- (i) ***in item 10.1 of Form 44-101F3 Short Form Prospectus by striking out "Item 4.3 or 4.4, as appropriate, of Form 44-101F1" and substituting "Item 4.3 of Form 44-101F1" and by striking out "information required under Item 4.3 or 4.4, as appropriate." and substituting "information required under Item 4.3.",***
- (j) ***in Form 44-101F3 Short Form Prospectus by adding the following item:***

10.2 Oil and Gas Activities

- (1) Unless paragraph (2) applies, if a material part of the proceeds of a distribution is to be expended on a particular oil and gas property and if the current AIF does not contain the disclosure required under Item 4.4 of Form 44-101F1 for that property or the disclosure is inadequate or incorrect due to changes, disclose the information required under that Item 4.4.
- (2) (a) This paragraph applies to an issuer that is engaged in oil and gas activities (as defined in National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*) and that:
 - (i) has filed or is required to have filed (or has included or is required to have included in another filed document) audited annual financial statements for a financial year that ends on or after December 31, 2003;
 - (ii) has, prior to the date on which it is required to file audited financial statements for a financial year that ends on or after December 31, 2003, filed (or included in another filed document) the statement referred to in Item 1 of section 2.1 of National Instrument 51-101;
 - (iii) is filing the short form prospectus:
 - (A) including audited financial statements for a financial year ended on or after December 31, 2003;
 - (B) after March 30, 2004 in respect of an initial public offering of securities, and the prospectus includes financial statements for a financial year or interim period that ends on or after December 31, 2003; or
 - (C) after December 31, 2003 and during the issuer's first financial year, and the prospectus includes financial statements for an interim period that ends on or after December 31, 2003; or

- (iv) indicates in the preliminary short form prospectus or short form prospectus that information disclosed therein is presented in accordance with National Instrument 51-101.
- (b) To the extent not included in the current AIF or in a material change report filed subsequent to the filing of the current AIF, provide:
 - (i) the information that would be required under Item 4.5 of Form 44-101F1 if the AIF were being filed on the date of the preliminary short form prospectus or short form prospectus; and
 - (ii) any other information required in the statement referred to in Item 1 of section 2.1 of National Instrument 51-101:
 - (A) as at the end of, or for, the most recent financial year for which the short form prospectus includes an audited balance sheet of the issuer; or
 - (B) in the absence of a completed financial year referred to in clause (A), as at the most recent date as at which the short form prospectus includes an audited balance sheet of the issuer, and for the greatest portion of a financial year that includes the date of that balance sheet and for which the short form prospectus includes an audited income statement of the issuer.

SCHEDULE D

National Instrument 45-101 Rights Offerings, B.C. Reg. 165/2001, is amended in section 3.1 (1)

(a) in Item 4 by striking out “or National Policy Statement No. 2-B Guide for Engineers and Geologists Submitting Oil and Gas Reports to Canadian Provincial Securities Administrators or any successor instrument”, and

(b) by renumbering Item 5 as Item 6 and by adding the following item:

5. If the issuer is engaged in oil and gas activities (as defined in National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*) and the rights offering circular is sent to the reviewing authority on or before June 30, 2005, an oil and gas report prepared in accordance with National Policy Statement No. 2-B *Guide for Engineers and Geologists Submitting Oil and Gas Reports to Canadian Provincial Securities Administrators*, unless the issuer has filed or is required to have filed (or has included or is required to have included in another filed document) the statement referred to in Item 1 of section 2.1 of National Instrument 51-101.

SCHEDULE E

Multilateral Instrument 45-102 Resale of Securities, B.C. Reg. 269/2001, is amended in section 1.1

(a) *by adding the following definition:*

“NI 51-101” means National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*;;

(b) *by repealing paragraph (e) of the definition of “qualifying issuer”, and*

(c) *by adding the following paragraph to the definition of “qualifying issuer”:*

- (e.1) that has filed a current oil and gas report consistent with National Policy Statement No. 2-B Guide for Engineers and Geologists Submitting Oil and Gas Reports to Canadian Provincial Securities Administrators, if the issuer
 - (i) is engaged in oil and gas activities (as defined in NI 51-101),
 - (ii) is not qualified to file a short form prospectus under NI 44-101,
 - (iii) has not filed and is not required to have filed audited annual financial statements for a financial year that ends on or after December 31, 2003, and
 - (iv) has not, prior to the date on which it is required to file audited financial statements for a financial year that ends on or after December 31, 2003, filed under Part 2 of NI 51-101 or included in another filed document the statement referred to in Item 1 of section 2.1 of NI 51-101,.