

**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 must be provided as at the last day of the **reporting issuer's** most recent financial year or for the 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, and that **contingent resource data** and **prospective resource data** only appears in an appendix to Form 51-101F1.*
- (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.*
- (7) *A **reporting issuer** disclosing financial information in a currency other than the Canadian dollar must, clearly and as frequently as is necessary to avoid confusing or misleading readers, disclose the currency in which the financial information is disclosed.*
- (8) *The **COGE Handbook** provides guidance about reporting using units of measurement. **Reporting issuers** should not, without compelling reason, switch between imperial units of measure (such as barrels) and Système International (SI) units of measurement (such as tonnes) within or between disclosure documents.*

## **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 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.*
- (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 statement 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 (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. Also disclose the same information on a unit value basis (e.g., \$/Mcf or \$/bbl using *net reserves*) using a discount rate of 10 percent and calculated before deducting *future income tax expenses*. This unit value disclosure requirement may be satisfied by including the unit value disclosure for each category of *proved reserves* and for *probable reserves* in the disclosure referred to in paragraph 3(c) of Item 2.1.
  
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 *product type*, in each case with associated *by-products*, and on a unit value basis for each *product type*, in each case with associated *by-products* (e.g., \$/Mcf or \$/bbl using *net reserves*), 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.

#### INSTRUCTIONS

- (1) Disclose all of the **reserves** in respect of which the **reporting issuer** has a direct or indirect ownership, working or royalty interest. These concepts are explained in sections 5.5.4(a) “Ownership Considerations” and 7.5 “Interests” of volume 1 of the **COGE Handbook**, section 5.2 “Ownership Considerations” of volume 2 of the **COGE Handbook** and, with respect to an entitlement to share **production** under a **production** sharing agreement, section 4.0 “Fiscal Regimes” of the chapter entitled “Reserves Recognition For International Properties” of volume 3 of the **COGE Handbook**.
  
- (2) Do not include, in the **reserves data** a **product type** 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 **product type** 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 the **product type** received by the **reporting issuer** under the agreement during the year ended on the **effective date**.

- (3) **Future net revenue** includes the portion attributable to the **reporting issuer's** interest under an agreement referred to in Instruction (2).
- (4) If the **reporting issuer's** disclosure of **reserves** would, to a reasonable person, be misleading, if stated without an explanation of the **reporting issuer's** ownership of or control over those **reserves**, explain the nature of the **reporting issuer's** ownership of or control over **reserves** disclosed in the statement filed or to be filed under item 1 of section 2.1 of **NI 51-101**.

## **Item 2.2 Supplementary Disclosure (Constant Prices and Costs)**

The *reporting issuer* may supplement its disclosure of *reserves data* under Item 2.1 by also disclosing estimates of *reserves*, *resources* other than *reserves*, or both, together with estimates of associated *future net revenue*, determined using constant prices and costs rather than *forecast prices and costs* for each applicable product type.

### **INSTRUCTION**

*For this purpose,*

- (a) *a constant price is,*
  - (i) *if the reporting issuer is legally bound to supply the product at a particular price, that price; or*
  - (ii) *in every other case, the price that is the unweighted arithmetic average of the first-day-of-the-month price for that product for each of the 12 months preceding the effective date; and*
- (b) *the costs to be used are to be reasonably estimated on the basis of existing economic conditions without escalation or adjustment for inflation.*

**Item 2.3 Repealed (July 1, 2015)**

**Item 2.4 Repealed (July 1, 2015)**

## **PART 3      PRICING ASSUMPTIONS**

### **Item 3.1      Constant Prices Used in Supplementary Estimates**

If supplementary disclosure under Item 2.2 is made, the *reporting issuer* must disclose, for each *product type*, the constant price used.

### **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 2.1:
    - (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 must 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 term "**forecast prices and costs**" includes 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) *Repealed (July 1, 2015)*

## **PART 4 RECONCILIATION OF CHANGES IN RESERVES**

### **Item 4.1 Reserves Reconciliation**

1. Provide the information specified in section 2 of this Item in respect of the following *reserves* categories:
  - (a) *gross proved reserves* (in total);
  - (b) *gross probable reserves* (in total); and
  - (c) *gross 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) *bitumen*;
    - (ii) *coal bed methane*;
    - (iii) *conventional natural gas*;
    - (iv) *gas hydrates*;
    - (v) *heavy crude oil*;
    - (vi) *light crude oil* and *medium crude oil* combined;
    - (vii) *natural gas liquids*;
    - (viii) *shale gas*;
    - (ix) *synthetic crude oil*;
    - (x) *synthetic gas*;
    - (xi) *tight oil*;
  - (c) separately identifying and explaining each of the following:
    - (i) extensions and improved recovery;
    - (ii) technical revisions;



- (iii) discoveries;
- (iv) acquisitions;
- (v) dispositions;
- (vi) economic factors;
- (vii) *production*.

## **INSTRUCTIONS**

- (1) *The reconciliation required under this Item 4.1 must be provided in respect of reserves estimated using **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.*
- (4) ***Reporting issuers** must not include infill drilling reserves in the category of technical revisions specified in clause 2(c)(ii). Reserves additions from infill drilling must be included in the category of extensions and improved recovery in clause 2(c)(i) (or, alternatively, in an additional separate category under paragraph 2(c) labelled “infill drilling”).*
- (5) *If the **reporting issuer** first became engaged in **oil and gas activities** only after the last day of its preceding financial year and no evaluation report in respect of its reserves as at that date is available to the **reporting issuer**, so that there is no opening data to be reconciled, the **reporting issuer** need not provide the reconciliation otherwise required under this Part but must disclose the reason for its absence.*

## **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 three financial years; and

- (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 deferring the development of particular *proved undeveloped reserves* beyond 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 three financial years; and
  - (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 deferring the development of particular *probable undeveloped reserves* beyond two years.

#### *INSTRUCTIONS*

- (1) *The phrase “first attributed” refers to the initial allocation of an undeveloped volume of oil or gas reserves by a reporting issuer. Only previously unassigned undeveloped volumes of oil or gas reserves may be included in the first attributed volumes for the applicable financial year. For example, if in 2011 a reporting issuer allocated by way of acquisition, discovery, extension and improved recovery 300 MMcf of proved undeveloped conventional natural gas reserves, that would be the first attributed volume for 2011.*
- (2) *The discussion of a reporting issuer’s plans for developing undeveloped reserves, or the reporting issuer’s reasons for deferring the development of undeveloped reserves, must enable a reasonable investor to assess the efforts made by the reporting issuer to convert undeveloped reserves to developed reserves.*

#### **Item 5.2 Significant Factors or Uncertainties Affecting Reserves Data**

Identify and discuss significant economic factors or significant uncertainties that affect particular components of the *reserves data*.

#### *INSTRUCTIONS*

- (1) *A reporting issuer must, under this Item, include a discussion of any significant abandonment and reclamation costs, unusually high expected development costs or operating costs, 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.*
- (2) *If the information required by this Item is presented in the reporting issuer's financial statements and notes thereto for the most recent financial year ended, the reporting issuer satisfies this Item by directing the reader to that presentation.*

**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 *forecast prices and costs*; and
  - (ii) *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
  - (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.

**INSTRUCTION**

*If the reporting issuer holds interests in different formations under the same surface area pursuant to separate leases, disclose the method of calculating the **gross** and **net** area. A general description of the method of calculating the disclosed area will suffice.*

**Item 6.2.1**      **Significant Factors or Uncertainties Relevant to *Properties with No Attributed Reserves***

Identify and discuss significant economic factors or significant uncertainties that have affected or are reasonably expected to affect the anticipated development or production activities on *properties with no attributed reserves*.

**INSTRUCTIONS**

- (1) *A reporting issuer must, under this Item, include a discussion of any significant **abandonment and reclamation costs**, unusually high expected **development costs** or **operating costs**, 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.*

- (2) *If the information required by this Item is presented in the **reporting issuer's** financial statements and notes thereto for the most recent financial year ended, the **reporting issuer** satisfies this Item by directing the reader to that presentation.*

**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. A *reporting issuer* may satisfy the requirement in section 1 by including the information required by that section in its financial statements for the financial year ended on the *effective date*.
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 Repealed (July 1, 2015)**

**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**

Disclose, by country for the most recent financial year ended each of the following:

- (a) *property acquisition costs*, separately for *proved properties* and *unproved properties*;
- (b) *exploration costs*;
- (c) *development costs*.

**INSTRUCTION**

*If the costs specified in paragraphs (a), (b) and (c) are presented in the **reporting issuer's** financial statements and the notes to those statements for the most recent financial year ended, the **reporting issuer** satisfies this Item by directing the reader to that presentation.*

**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, *service wells* and *stratigraphic test 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 *gross proved reserves* and *gross probable reserves* disclosed under Item 2.1.
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. Disclose, for each quarter of its most recent financial year, by country for each *product type*:
  - (a) the *reporting issuer's* share of average *gross* daily *production* volume; 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. Resulting netbacks may be disclosed on the basis of units of equivalency between **oil** and **gas** (e.g. **BOE**) but if so that must be made clear and disclosure must comply with section 5.14 of **NI 51-101**.*

## **PART 7      OPTIONAL DISCLOSURE OF CONTINGENT RESOURCES DATA AND PROSPECTIVE RESOURCES DATA**

### INSTRUCTIONS

(1) *A **reporting issuer** may disclose **contingent resources data** or **prospective resources data** in a statement of the **reserves data** and other information filed under item 1 of section 2.1 of **NI 51-101**, however, that data must only be disclosed as an appendix to that statement.*

(2) *The following cautionary statement must be included in bold font and appear proximate to the **risked** net present value of **future net revenue** associated with **contingent resources** or **prospective resources**:*

An estimate of risked net present value of future net revenue of [contingent resources][and][prospective resources] is preliminary in nature and is provided to assist the reader in reaching an opinion on the merit and likelihood of the company proceeding with the required investment. It includes [contingent resources][and][prospective resources] that are considered too uncertain with respect to the [chance of development][and][chance of discovery] to be classified as reserves. There is uncertainty that the risked net present value of future net revenue will be realized.

(3) *A **reporting issuer** may not rely on subsection 5.9(3) of **NI 51-101** for disclosure required to be included in this Part.*

(4) *If a **reporting issuer's** disclosure of **contingent resources** or **prospective resources** would, to a reasonable person, be misleading if not accompanied by an explanation of the **reporting issuer's** ownership of or control over those **resources**, explain the nature of the **reporting issuer's** ownership of or control over all **contingent resources** and **prospective resources** disclosed in the statement filed or to be filed under item 1 of section 2.1 of **NI 51-101**.*

(5) *A **reporting issuer's** disclosure respecting the value of **prospective resources** or **contingent resources** that are not in the **development pending project maturity***

*sub-class must be **risked** and must include an explanation of the factors considered respecting the **chance of commerciality**, which includes both **chance of discovery** and **chance of development** in the case of **prospective resources** and **chance of development** in the case of **contingent resources**.*

#### **GUIDANCE**

- (1) *A **reporting issuer** is subject to sections 5.9 and 5.17 of **NI 51-101** when providing disclosure of **contingent resources data** or **prospective resources data** in this **Form**.*
- (2) *A **reporting issuer** providing disclosure of **contingent resources data** or **prospective resources data** in this **Form** must have an evaluation process for **contingent resources** or **prospective resources** that
  - (a) *is at least as rigorous as would be the case for **reserves data**, and*
  - (b) *is recognized as well-established in the oil and gas industry.**
- (3) *An evaluation process described in subsection (2) is not needed if a reasonable **qualified evaluator or auditor** would conclude that it is not necessary in the circumstances.*
- (4) *All public disclosure by **reporting issuers** is subject to the general prohibition against misleading statements. The disclosure of development on-hold, development unclarified or development not viable **contingent resources**, or **prospective resources**, in the statement of **reserves data** and other oil and gas information might be misleading where there is a significant degree of uncertainty and risk associated with those estimates.*

#### **Item 7.1 Contingent Resources Data**

1. If a *reporting issuer* discloses *contingent resources* in the statement filed under item 1 of section 2.1 of *NI 51-101*, the *reporting issuer* must disclose all of the following:
  - (a) the *risked 2C contingent resources volumes, gross and net*, for each *product type*, and classified in each applicable *project maturity sub-class*;
  - (b) if *contingent resources* in the *development pending project maturity sub-class* are disclosed, the *risked net present value of future net revenue* of the *2C contingent resources* in the *development pending project maturity sub-class*, calculated using *forecast prices and costs* for each *product type*, before deducting *future income taxes* and using discount rates of 0 percent, 5 percent, 10 percent, 15 percent and 20 percent.
2. Disclose the numeric value of the chance of development risk and describe the method of



all of the following:

- (a) quantifying the *chance of development* risk;
- (b) estimating the *contingent resources* adjusted for *chance of development* risk and the associated *risked* net present value of *future net revenue*.

### **Item 7.2 Prospective Resources Data**

1. If a *reporting issuer* discloses *prospective resources* in the statement filed under item 1 of section 2.1 of *NI 51-101*, disclose the best estimate *prospective resources*, *gross* and *net*, for each *product type*.
2. Disclose the numeric value of the *chance of discovery* and *chance of development* and describe the method of all of the following:
  - (a) quantifying the *chance of discovery* and *chance of development*;
  - (b) estimating the *prospective resources* adjusted for *chance of discovery* and *chance of development*.

### **Item 7.3 Forecast Prices Used in Estimates**

1. For each *product type*, disclose the pricing assumptions used in estimating *contingent resources data* and *prospective resources data* disclosed in response to Item 7.1 for each of the five years following the most recently completed financial year.
2. The disclosure in response to section 1 must 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. The pricing assumptions included in section 1 must be the same as the pricing assumptions disclosed in response to Part 3 of this *Form 51-101F1*.

### **INSTRUCTIONS**

- (1) *Benchmark reference prices may be obtained from sources such as public product trading exchanges or prices posted by purchasers.*
- (2) *The defined term "**forecast prices and costs**" includes 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. Such contractually committed prices must be used, instead of benchmark reference prices for the purpose of estimating **contingent resources data** and **prospective resources data**, unless a reasonable investor would find the use those contractually committed prices misleading.*

**Item 7.4 Supplemental Contingent Resources Data**

The *reporting issuer* may supplement its disclosure of *contingent resources data* under Item 7.1 by also disclosing estimates of *contingent resources* together with estimates of associated *risked* net present value of *future net revenue*, determined using *constant prices and costs* rather than *forecast prices and costs* for each applicable *product type*.

[Amended July 1, 2015]