NI 51-101 Oil and Gas Review Information Session



February 4, 2016

Agenda



- 1. Introduction
- 2. Oil and Gas Regulatory Framework
- 3. Disclosure Commentary
- 4. Topics of Interest
- 5. Questions and Comments
- 6. Contact Information

Introduction Alberta Securities Commission



- The Alberta Securities Commission (ASC)
 - Responsible for administering Alberta's securities laws
 - Entrusted to foster a fair and efficient capital market and to protect investors
 - Encourages effective and compliant disclosure, based upon the provision of balanced, authentic, relevant and reliable information
- Member of the Canadian Securities Administrators (CSA)
 - Works to improve, coordinate and harmonize regulation of Canada's capital markets

Introduction Petroleum



- Within Corporate Finance Division
- Priorities
 - Review disclosure for compliance with securities legislation
 - Develop and maintain legislation and technical guidance
 - Be helpful and responsive
- Staff
 - Craig Burns, P.Geo., Manager, Petroleum
 - **Tim Kravinchuk**, P.Eng., Senior Petroleum Evaluation Engineer
 - Floyd Williams, P.Eng., Senior Petroleum Evaluation Engineer
 - Richard Bush, C.E.T., Petroleum Analyst

Introduction Petroleum



Recent activities

- Amendments to National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities (NI 51-101), related forms and the Companion Policy 51-101CP Standards of Disclosure for Oil and Gas Activities (51-101CP) (Amendments)
 - Published December 2014, effective July 1, 2015
- CSA Staff Notice 51-345 Disclosure of Abandonment and Reclamation Costs in National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities and Related Forms
 - Published November 2015
- 2015 Oil and Gas Review Report
 - Published December 2015
 - www.asc.ca/Publications/2015 Oil%20and%20Gas%20Review.pdf

Agenda



- 1. Introduction
- 2. Oil and Gas Regulatory Framework
 - a) Legislation
 - b) Guidance
- 3. Disclosure Commentary
- 4. Topics of Interest
- 5. Questions and Comments
- 6. Contact Information

Oil and Gas Regulatory Framework Legislation



- Securities Act (Alberta)
- NI 51-101
 - General disclosure standards and specific annual disclosure requirements for reporting issuers (RIs) engaged in oil and gas activities
 - Enacted September 2003
 - Amendments effective July 1, 2015
 - Five related forms for filing on SEDAR

Oil and Gas Regulatory Framework Legislation



- 51-101F1 Statement of Reserves Data and Other Oil and Gas Information¹ (Form 51-101F1) New content with Amendments
- 51-101F2 Report on [Reserves Data][,] [Contingent Resources Data] [and]
 [Prospective Resources Data] by Independent Qualified Reserves Evaluator or Auditor¹ (Form 51-101F2) New content and title
- 51-101F3 Report of Management and Directors on Oil and Gas Disclosure¹ (Form 51-101F3) **New content**
- 51-101F4 Notice of Filing of 51-101F1 Information² Unchanged
- 51-101F5 Notice of Ceasing to Engage in Oil and Gas Activities³ (Form 51-101F5) New form

¹See section 2.1 of NI 51-101; to be filed with securities regulatory authority for the most recent financial year ²For RIs that file the reports required under section 2.1 of NI 51-101 in their annual information form ³See section 6.2 of NI 51-101

Oil and Gas Regulatory Framework Guidance



- 51-101CP
 - CSA's views on interpretation and application of NI 51-101 and forms
- Staff notices including
 - CSA
 - 51-324 *Revised Glossary to NI 51-101* (CSA Staff Notice 51-324)
 - 51-327 *Revised* Guidance on Oil and Gas Disclosure (CSA Staff Notice 51-327)
 - 51-345 Disclosure of Abandonment and Reclamation Costs in National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities and Related Forms (CSA Staff Notice 51-345) (New)
 - ASC
 - 51-702 Establishing Reserves Estimates in Oil and Gas Accumulations

Oil and Gas Regulatory Framework Guidance



- Canadian Oil and Gas Evaluation Handbook (COGE Handbook)
 - Technical standard for NI 51-101, referenced in
 - Section 5.2(1)(a)(iii) reserves
 - Section 5.3 terminology
 - Section 5.9(2)(b) resources other than reserves (ROTR)
 - Section 5.10(1)(c) analogous information
 - Form 51-101F2
 - Per section 1.1 of NI 51-101
 - Amended from time to time (effective on publishing)

Oil and Gas Regulatory Framework Guidance



Recent amendments

- Detailed guidelines for estimation and classification of bitumen resources (Bitumen Guidelines), published April 2014
- Guidelines for estimation and classification of resources other than reserves (ROTR Guidelines), published July 2014

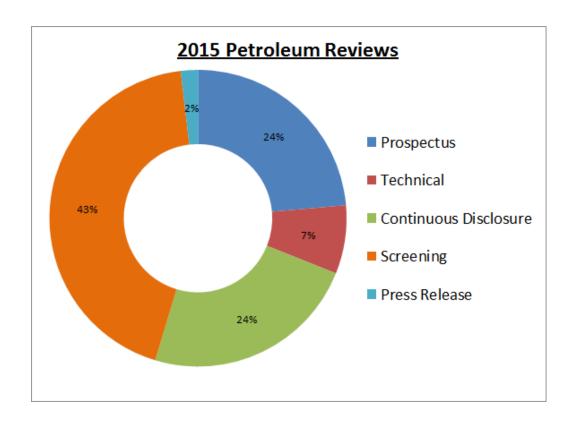
Agenda



- 1. Introduction
- 2. Oil and Gas Regulatory Framework
- 3. Disclosure Commentary
 - a) Overview
 - b) Resources Other Than Reserves
 - c) Type Wells (Type Curves), Drilling Locations and Associated Information
- 4. Topics of Interest
- 5. Questions and Comments
- 6. Contact Information



- We review disclosure
- Main review types
 - Screening
 - Continuous disclosure
 - Prospectus
 - Short form
 - Long form
 - Press release
 - Technical





- Purpose is to ascertain compliance with securities legislation
 - Securities Act (Alberta)
 - Section 92(4.1) prohibits misleading statements
 - NI 51-101
 - COGE Handbook



Review outcomes

- No action
- Advisory comment(s) Most common
- Amend and restate request
- Issuer placed in default
- Management cease trade order
- Cease trade order
- Enforcement referral



- Frequent deficiencies observed during recent reviews involve
 - Resources other than reserves
 - Type wells (type curves), drilling locations and associated information



- Mostly contingent resources and prospective resources
- Risk and uncertainty
 - Reserves have uncertainty only
 - ROTR have risk and uncertainty
- Per section 5.9(1)(d) of NI 51-101
 - Disclose risks and level of uncertainty for anticipated results in either
 - Same document
 - Supporting filing



- Per section 5.7(2) of 51-101CP
 - Disclosure under section 5.9(1)(d)
 - Reasonable
 - Meaningful
 - Appropriate to size
 - Expressed either
 - Quantitatively as probabilities
 - Qualitatively by description



- Per section 5.9(2)(d)(iii) of NI 51-101
 - Specific significant positive and negative factors required if disclosure under section 5.9(1)(d) includes either
 - ROTR estimate in which the RI has or intends to acquire an interest
 - Estimated value attributable to estimated quantity
 - Examples per section 5.7(3)(c) of 51-101CP
 - Lack of infrastructure
 - Abandonment and reclamation costs
 - Legal, capital, political, technological or business factors



- Per Item 6.2.1 of Form 51-101F1
 - Identify and discuss significant economic factors or uncertainties on properties with no reserves assigned



Deficient disclosure example per section 5.9(1)(d) of NI 51-101

Significant risks and uncertainties that may affect the Company's contingent resources and associated future net revenue include:

- material changes to existing taxation or royalty rates;
- changes to environmental laws and regulations;
- fluctuations in product pricing;
- changes to capital expenditures and operating costs;
- surface access issues;
- receipt of regulatory approvals;
- availability of services and processing facilities; and
- unforeseen production performance issues.



- May be analogous information
 - Section 5.10 of NI 51-101
 - Section 5.8 of 51-101CP
 - Section 2(a) of CSA Staff Notice 51-327
- Recall section 92(4.1) of Securities Act (Alberta)
 - Prohibition on misleading statements
 - Misleading by omission specifically prohibited
- Ensure a factual and balanced approach



Observations

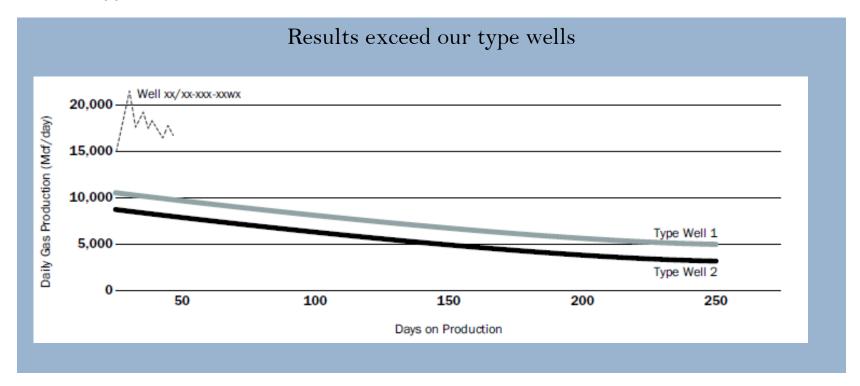
- Attribution
 - Disclosure must be prepared by a qualified reserves evaluator or auditor
 - Sections 5.2(1)(a)(ii), 5.9(2)(a) and 5.10(1)(c) of NI 51-101
 - Indicate source
- COGE Handbook
 - Disclosure must be prepared in accordance with the COGE Handbook
 - Sections 5.2(1)(a)(iii), 5.9(2)(b) and 5.10(1)(c) of NI 51-101
 - Confirm compliance
 - Terminology and category per section 5.3 of NI 51-101
 - See section 5.7(3)(b) of 51-101CP



- Methodology
 - Recall analogous information requirements
 - Section 5.3.5 of volume 1 of the COGE Handbook discusses certainty levels
 - Long term results shouldn't vary from certainty levels
 - 1P, 2P, 3P
 - 1C, 2C, 3C



- Deficient disclosure examples
 - Type wells





Drilling locations

Current drilling inventory consists of approximately 4,000 low-risk locations.

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4. Topics of Interest

- a) Overview
- b) Abandonment and Reclamation Costs
- c) Resources Other Than Reserves
- d) Product types
- e) Reclassification of Reserves
- f) Reserves Reconciliation
- g) Modifications to Forms 51-101F2 and 51-101F3
- h) Ceasing to Engage in Oil and Gas Activities
- 5. Questions and Comments
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Topics of Interest Overview



- Topic rationale
 - Staff observations through disclosure reviews
 - Discussions with capital market participants
 - Information we think you should be aware of
 - Inquiries



- Changes with Amendments include
 - Abandonment and reclamation costs (ARC)
 - New defined term
 - Added to section 1.1 of NI 51-101

Abandonment and reclamation costs

All costs associated with the process of restoring a reporting issuer's property that has been disturbed by oil and gas activities to a standard imposed by applicable government or regulatory authorities.



- Future net revenue (FNR)
 - **New** definition (term previously in CSA Staff Notice 51-324)
 - Added to section 1.1 of NI 51-101

Future net revenue

A forecast of revenue, estimated using *forecast prices and costs* or constant prices and costs, arising from the anticipated development and *production* of *resources*, net of the associated royalties, *operating costs*, *development costs* and *abandonment and reclamation costs*.

- All disclosed FNR must be net of ARC for all categories of
 - Reserves
 - ROTR



- Disclosure of future net revenue (FNR) mandated in
 - Form 51-101F1
 - Unchanged Item 2.1(2), disclosure of net present value (NPV) of FNR by country in aggregate for categories in Item 2.1(1)
 - Proved developed producing reserves
 - Proved developed non-producing reserves
 - Proved undeveloped reserves
 - Proved reserves (in total)
 - Probable reserves (in total)
 - Proved plus probable reserves (in total)
 - If possible reserves disclosed
 - Possible reserves (in total)
 - Proved plus probable plus possible reserves (in total)



- **New** Part 7, if contingent resources in the development pending sub-class are disclosed
- Form 51-101F2
 - Unchanged for proved plus probable reserves
 - New for contingent resources in the development pending sub-class, if disclosed, per Amendments



- Disclosure of ARC mandated in
 - Form 51-101F1
 - Unchanged Item 2.1(3)(b)(v), disclosure by country in aggregate for categories in 2.1(3)(a)
 - **New** Instruction (1) of Item 5.2 <u>Significant Factors or Uncertainties Affecting</u> <u>Reserves Data</u>, discussion of significant ARC (wells, facilities, pipelines etc.)
 - New Instruction (1) of Item 6.2.1 <u>Significant Factors or Uncertainties</u>
 Relevant to Properties With No Attributed Reserves, discussion of ARC (wells, facilities, pipelines etc.)
- ARC requirements summarized in new CSA Staff Notice 51-345

Topics of Interest Resources Other Than Reserves



- Disclosure is generally optional
 - Exceptions include
 - 1. If material per section 1.4 Materiality Standard of NI 51-101
 - Information required concerning properties with no reserves per Part 6
 Other Oil and Gas Information of Form 51-101F1
 - 3. Prospectus disclosure if material under NI 51-101

Topics of Interest Resources Other Than Reserves



1. Section 1.4(2) of NI 51-101

[...]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 a *reporting issuer*.

2. Part 6 of Form 51-101F1

- Item 6.2 <u>Properties With No Attributed Reserves</u>
- Item 6.2.1 <u>Significant Factors or Uncertainties Relevant to Properties</u>
 With No Attributed Reserves

Topics of Interest Resources Other Than Reserves



- 3. Prospectus disclosure
 - Item 5.5 <u>Issuers with oil and gas operations</u> of Form 41-101F1
 - Section 5.10 <u>Prospectus Disclosure</u> of 51-101CP
 - (2) Disclosure of Resources [...] the general securities disclosure obligation of "full, true and plain" disclosure of all material facts in a prospectus would require the disclosure of resources that are material to the reporting issuer, even if the disclosure is not mandated by NI 51-101.
- Also see section 5.7(1) <u>Disclosure of Resources Generally</u> of 51-101CP



- New Part 7 Optional Disclosure of Contingent Resources
 Data and Prospective Resources Data of Form 51-101F1
 - Requirements include
 - Estimates disclosed as an appendix to Form 51-101F1
 - Estimates risked for chance of commerciality
 - Best estimates



Contingent resource estimates in applicable project maturity sub-class

TOTAL PETROLEUM INITIALLY-IN-PLACE (PIIP)	DISCOVERED PIIP	COMMERCIAL	PRODUCTION	PROJECT MATURITY Sub-Classes
			RESERVES	On Production Approved for Development
		SUB-COMMERCIAL.	CONTINGENT RESOURCES	Approved for Development Justified for Development Development Pending Development on Hold Development Unclarified Development not Viable
	UNRECOVERABLE			chang
	UNDISCOVERED		PROSPECTIVE RESOURCES	ncreasing
	SIGNO	_	UNREÇOVERABLE	<u>↑</u>

Modified from the ROTR Guidelines

- NPV of FNR for development pending sub-class of contingent resources
- Cautionary statement that clarifies the uncertainty



- Some considerations
 - Section 2.1(2)(b)(ii) of NI 51-101 replaced
 - Estimates disclosed as an appendix to Form 51-101F1 evaluated or audited by <u>independent</u> qualified reserves evaluator or auditor
 - Per unchanged section 5.9(2), <u>independence</u> not required for disclosure outside Form 51-101F1
 - Guidance (4) of new Part 7
 - Disclosure beyond development pending sub-class might be misleading where significant uncertainty and risk exists



- Per unchanged section 5.9(1) <u>Disclosure of Resources Other than</u>
 Reserves
 - 5.9(1)(d) requires risks and level of uncertainty for all disclosure
 - See section 5.7(2) of 51-101CP
- Per new section 5.9(2)(d)(iii.1) of NI 51-101
 - Accompany disclosure with
 - Estimated cost to achieve commercial production
 - Project timeline
 - Recovery technology
 - If based on conceptual or pre-development study



- Changes with Amendments include
 - All product types now defined in section 1.1 of NI 51-101
 - Most sourced from the COGE Handbook and modified
 - Hydrocarbon sources and recovery processes now emphasized

Old	New
conventional activities light & medium crude oil (combined) heavy oil natural gas excluding natural gas liquids natural gas liquids	bitumen coal bed methane conventional natural gas gas hydrates heavy crude oil light crude oil & medium crude oil combined
non-conventional activities synthetic oil bitumen coal bed methane hydrates shale oil shale gas	natural gas liquids shale gas synthetic crude oil synthetic gas tight oil



New product type tight oil

Tight oil

Crude oil:

- (a) contained in dense organic-rich rocks, including low-permeability shales, siltstones and carbonates, in which the *crude oil* is primarily contained in microscopic pore spaces that are poorly connected to one another, and
- (b) that typically requires the use of hydraulic fracturing to achieve economic *production* rates.



Definition added for product type shale gas

Shale gas

Natural gas:

- (a) contained in dense organic-rich rocks, including low-permeability shales, siltstones and carbonates, in which the *natural gas* is primarily adsorbed on the kerogen or clay minerals, and
- (b) that usually requires the use of hydraulic fracturing to achieve economic *production* rates.



- New section 1.1(4) <u>Additional Disclosure</u> of 51-101CP
 - Supplement disclosure with specific information
 - Choose closest product type
 - Mustn't be misleading
- Some considerations
 - Disclose
 - Crude oil typically requiring hydraulic fracturing to be economic as product type tight oil
 - Natural gas usually requiring hydraulic fracturing to be economic as product type shale gas

Topics of Interest Reclassification of Reserves



 Section 5.3.3 <u>Commercial Risk</u> of volume 1 of the COGE Handbook

... stimated recoverable quantities must be associated with a project(s) that has demonstrated commercial viability [...] the chance of commerciality is effectively 100%.

- See section 5.3.2 <u>Commercial Status</u> of volume 1 of the COGE Handbook for commerciality criteria
- Reclassification of reserves to contingent resources
 - See section 2.5.5 <u>Project Maturity Sub-Classes for Contingent</u>
 <u>Resources</u> of volume 2 of the COGE Handbook

Topics of Interest Reserves Reconciliation



- Item 4.1 of Form 51-101F1
 - Requires annual reconciliation of
 - Gross proved reserves (in total)
 - Gross probable reserves (in total)
 - Disclosure required by
 - Country
 - Product type per Item 4.1(2)(b)
 - Reserve change category per Item 4.1(2)(c)
 - Opening and closing balance is needed to reconcile product types, so
 can't reconcile those added or repealed with Amendments
 - Explanations for changes required per Item 4.1(2)(c); consider footnotes

Topics of Interest Modifications to Forms 51-101F2 and 51-101F3



- Per section 2.1(2) <u>Report of Independent Qualified Reserves</u>
 <u>Evaluator or Auditor of NI 51-101</u>
 - Annual filing of report in accordance with Form 51-101F2 required
 - Form 51-101F2 Report on [Reserves Data][,] [Contingent Resources Data] [and] [Prospective Resources Data] by Independent Qualified Reserves Evaluator or Auditor
 - Title and content modified with Amendments for contingent resources and prospective resources

Topics of Interest Modifications to Forms 51-101F2 and 51-101F3



- Per section 2.1(3) Report of Management and Directors of NI 51-101
 - Annual filing of report in accordance with Form 51-101F3 required
 - Form 51-101F3 Report of Management and Directors on Oil and Gas Disclosure
 - Content modified with Amendments; now includes two alternatives
 - [Alternative A: Reserves Data to Report or Contingent Resources Data or Prospective Resources Data to Report]
 - [Alternative B: No Reserves to Report and No Resources Other than Reserves to Report]

Topics of Interest Ceasing to Engage in Oil and Gas Activities



- New Form 51-101F5 with Amendments per new section 6.2
 Ceasing to Engage in Oil and Gas Activities of NI 51-101
 - 51-101F5 Notice of Ceasing to Engage in Oil and Gas Activities

A reporting issuer must file with the securities regulatory authority a notice prepared in accordance with Form 51-101F5 not later than 10 days after ceasing to be engaged, directly or indirectly, in oil and gas activities.

See section 1.1 of NI 51-101 for new definition of oil and gas activities

Contact Information



Please contact us regarding NI 51-101 matters.

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