



National Instrument 43-101: Understanding the disclosure standards

Roundup Short Course 2023
January 20, 2023

Presented by:

- British Columbia Securities Commission, BCSC
- Ontario Securities Commission, OSC
- Dentons Canada

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Today's Presenters



Brian Abraham



Victoria Addison



Kimberly Burns



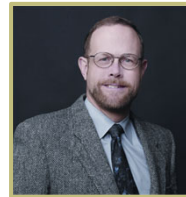
Vanessa MacLean



Craig Waldie



Darin Wasylik



James Whyte



Victoria Yehl

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Key Takeaways

- Increase understanding of why NI 43-101 exists, and what to consider when disclosing information about a mineral project
- NI 43-101 is principle-based; not every circumstance is detailed in the rule
- NI 43-101 is just **a part** of Securities Law
- All the regulators try to provide guidance whenever we can, & share interpretations of what we see via staff notices, short courses, calls etc.
- Feel free to reach out and contact us to ask questions or clarify disclosure requirements
- When in doubt, read NI 43-101, Form 43-101F1, & Companion Policy 43-101CP

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Agenda

9:00 – 10:00	1: Regulatory Environment for Mining Disclosure: Victoria Yehl, BCSC
10:00 – 10:20	BREAK
10:20 – 11:00	2: Disclosure - what it is, what matters: Darin Wasyluk, BCSC
11:00 – 11:45	3: The QP – are you one, what you are responsible for: Darin Wasyluk, BCSC
11:45 – 1:00	LUNCH BREAK
1:00 – 1:45	4a: Qualified Person Role and Obligations: Brian Abraham, Dentons
	4b: Secondary Market Liability and other bits: Kimberly Burns, Dentons
1:45 – 2:30	5a: Technical Reports – Basics, Tips & Tricks: Victoria Addison, BCSC
	5b: Current Common Disclosure problems: Vanessa MacLean, BCSC
2:30 – 2:50	BREAK
2:50 – 3:30	6: What else in securities law should you know: James Whyte, OSC
3:30 – 4:15	7: Disclosure Reviews – What happens when?: Craig Waldie, OSC
4:15 – 5:00	8: Potpourri & General Q&A: All Presenters

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1: REGULATORY ENVIRONMENT FOR MINING DISCLOSURE

Victoria Yehl, P. Geo.
Manager, Mining BC Securities Commission

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What Will We Cover

Canadian securities regulatory framework

Canada's role in mining capital formation

Why regulate mining disclosure

The Core Principles of NI 43-101

AND MUCH MUCH MORE...

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Canadian Securities Law

- **Securities Laws exist to protect investors (the public) from:**
 - Unfair, Improper, or Fraudulent Practices*; and
 - Foster Fair & Efficient Capital Markets
- **This is done by requiring Companies (Issuers) to provide, in specific filings, disclosure that is:**
 - Consistent;
 - Comparable; and
 - Decision-useful information

* In this case, "Practices" means disclosure

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Canadian Securities Commissions



13 Provincial/Territorial Agencies

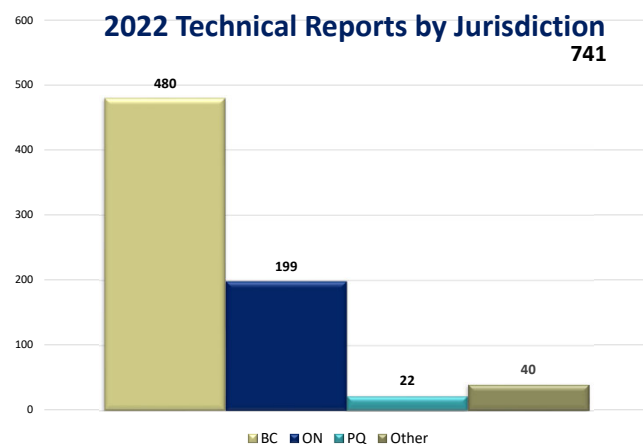
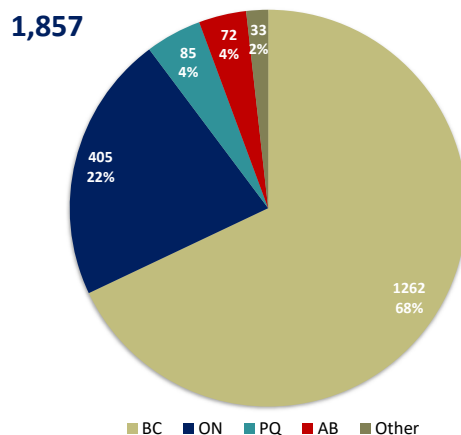
- Report to provincial or territorial governments
- Generally self-funded
- British Columbia, Alberta, Ontario, and Quebec regulate majority of mining issuers
- Issuers have a “principal regulator”

Canadian Securities Administrators

- Umbrella organization
- Role is to coordinate & harmonize
- Develop National Instruments (i.e. NI 43-101)

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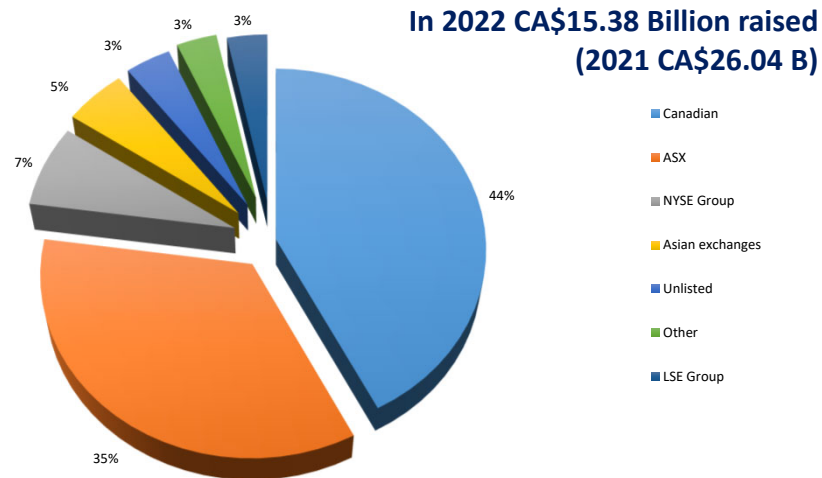
Mining Companies in Canada 2022



Sources: CSA Data + S&P Global Market Intelligence

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Canada's Role in Mining Capital Formation



Sources: CSA Data + S&P Global Market Intelligence

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World v. Canada Mining Companies

- At the end of 2022 S&P identifies 2,978 mining companies worldwide
 - These include listings on ~55 different exchanges & private companies
- Canada is home to ~1,800 or 60.4% of mining companies
 - These include TSX, TSX-V, CSE, NEO listed & private companies

Country	# of Companies	World %
Canada	1,800	60.4
Australia (ASX)	760	25.5
Hong Kong/Asia	140	4.7
London/Europe	100	3.3
USA	90	3.0

Sources: CSA Data + S&P Global Market Intelligence

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Year-over-Year Capital Raises

	2017	2018	2019	2020	2021	2022
Canada	43%	53%	45%	50%	43%	43%
Australia	25%	30%	38%	39%	37%	35%
USA	2%	5%	1%	2%	5%	7%
Asia	7%	4%	6%	2%	3%	5%
London	13%	7%	3%	3%	4%	3%
Total CA\$	11.32 B	11.23 B	11.43 B	13.37 B	26.04 B	F 15.67 B

Sources: CSA Data + S&P Global Market Intelligence

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Why Do We Have Mining Disclosure Rules?

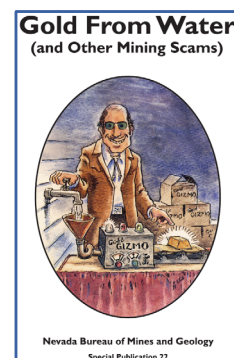
■ Mining is capital intensive and risky

- Companies need access to risk capital
- Investors rely on Company information
- Mining has numerous intrinsic risks
- Being misled is not an acceptable risk

■ We Regulate Disclosure to:

- Protect investors
- Maintain integrity of capital markets

Nothing happens without money and confidence!



Once public confidence is lost it is very hard to get it back

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Its not just Canada that regulates mining disclosure



Source: Committee for Mineral Reserves Int'l Report Standards 'CRIRSCO'

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Mining Disclosure Standards before NI 43-101

National Policy No. 22

*Use of Information and Opinion RE Mining and Oil and Properties By Registrants and Others
(In reports, letters or other publications)*

- Standards includes in NP No. 2-A
- Name information sources and opinions by reference to a person or a publication
- Technical data and opinions in writing and by a 'qualified' engineer, geologist, prospector
- Persons making a report or offering opinions must disclose 'conflicting' financial interests
- Quote facts & opinions verbatim and not out of context Omission of unfavorable facts is misleading

National Policy No 2-A

Guide for Engineers, Geologists and Prospectors Submitting Reports on Mining Properties To Canadian Provincial Securities Administrators (accompanying a prospectus)

- Reports must be engineering documents
- Professionally affiliated authors must affix seal
- Accepted with a prospectus & only if by a 'qualified' engineer, geologist or prospector with three years practical experience
- When proceeds go to the 'property' the 'author' must be free of any association with the issuer
- Author must provide consent for use in prospectus.
- Reports must include a dated, signed authors' certificate

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Canadian Disclosure Legacy

The VSE & ASE dominated by resource focused 'venture' stage issuers through 1970's, 80's and 90's

Very colourful history:

- 1979 Brown Farris & Jefferson study
- 1980-81 New Cinch Uranium
- May 1987 Forbes Article "Scam Capital of the World"
- 1989 BuMax/ Metaxa Gold
- 1996 Cartaway Resources
- 1997 Bre-X

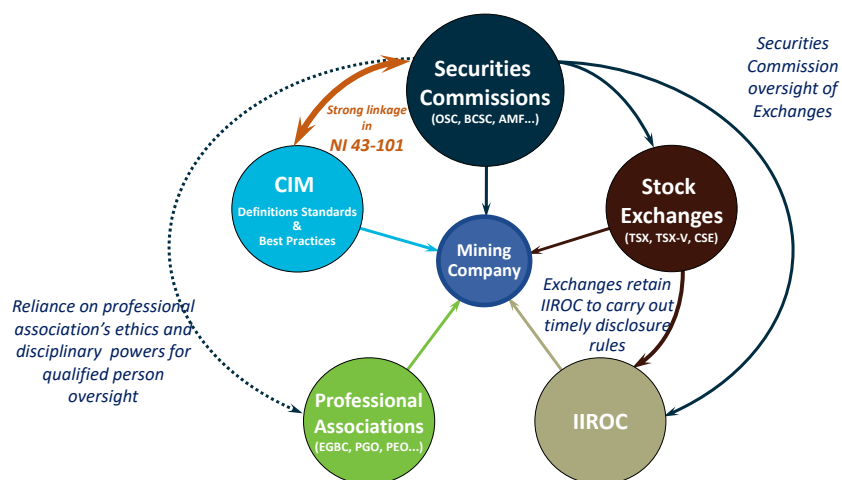


If anyone tries to peddle you anything listed on the Vancouver Stock Exchange, hang up fast. There isn't any gold in Vancouver, but there's plenty of brass.

Scam capital of the world

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Canadian Mining Securities Regulatory Framework



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Codifying Core Principles

Proposed National Instrument 43-101 published for comment July 3, 1998

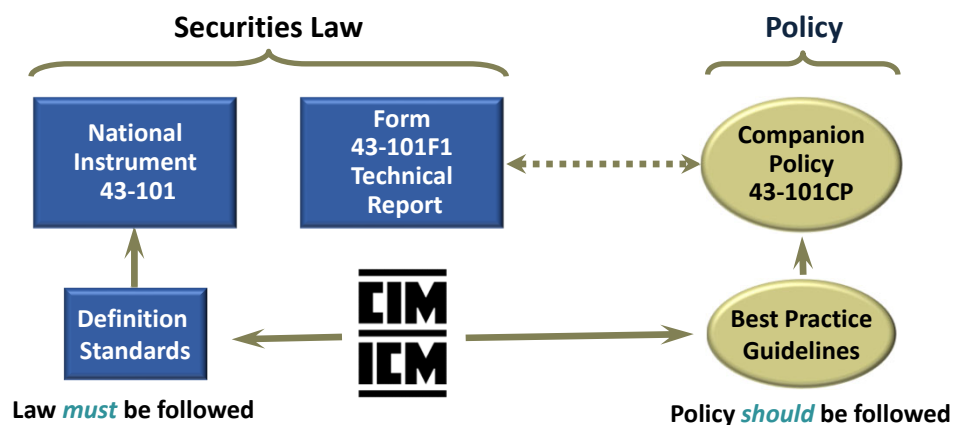
- Disclosure based on information prepared by a 'Qualified Person'
- 'Qualified person' is an engineer, geologist, geophysicist, or other geoscientist, five years of appropriate experience, member of a professional association
- Disclosure of exploration information, resources and reserves use applicable resource and reserve categories. Categories derived from Sept 1996 Ad Hoc Committee Report of the CIM
- File an engineering report prepared in accordance with the instrument when issuer becomes a reporting issuer and at the time of filing certain disclosure and offering documents
- File an engineering report with filing a press release disclosing for the first-time reserves or resources

1999 Mining Standards Task Force recommended:

- Formalize 'Qualified Person' in securities regulations
- Establish 'best practice' guidelines for mineral exploration, development programs and mining operations
- Establish standards for reporting resource and reserve estimates and exploration and mining activities
- Accreditation and quality control standards for analytical laboratories
- Establish standards for technical reports that disclose exploration information
- Increased attention to regulatory oversight of the mining industry and enforcement of securities laws

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National Instrument 43-101



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Main Role of NI 43-101 = ‘Good’ Disclosure

Objective:

To enhance accuracy and integrity of mining disclosure through national standards

Requires that public disclosure of technical information is:

- Balanced and not misleading
- Understandable to a reasonably informed investor (the public)
- Based on reliable and verified data
- Based on reasonable assumptions which are clearly explained
- Consistent in its use of standardized terms and definitions
- Unbiased and identifies the potential risks and uncertainties
- Signed off by a professional (QP) who takes responsibility for the information

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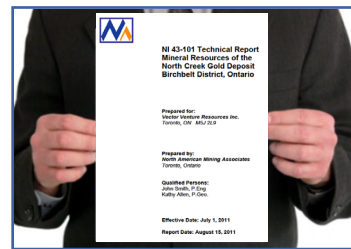
The Core Principles of NI 43-101



Qualified Person



**CIM Definition Standards
&
CIM Best Practices**



**Technical Report
inc. current personal
inspection**

- QPs play a **“gatekeeper”** role in **public protection** and maintaining confidence in **public markets**
- NI 43-101 only functions as intended if QPs understand their role in upholding the **public interest**

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NI 43-101: What it is Meant to Be

- **Disclosure Rule**
- **Requires that public reporting of technical information is:**
 - Understandable to a reasonably informed investor (public)
 - Consistent in its presentation & use of standardized terms and definitions
 - Based on reasonable assumptions that are clearly explained
aka “state the basis”
 - Identifies the potential risks and uncertainties, as reasonably known
 - Engages a Qualified Person, who takes responsibility for the information

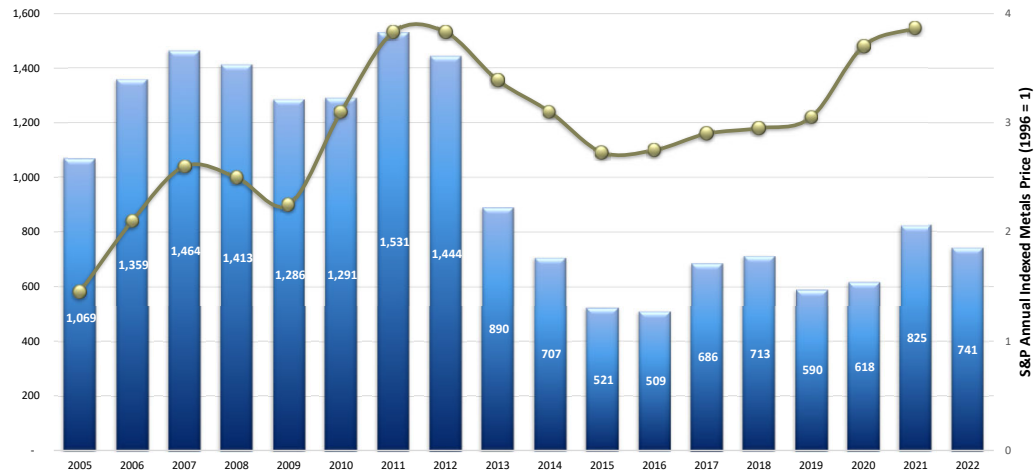
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NI 43-101: What it is NOT meant to be

- **It is not a guarantee of good work**
 - It places an obligation on the issuer to have work done by a QP
 - The QP is supposed to do it right
- **It is not a cookbook for mineral estimation**
 - The rule sets disclosure standards, not estimation practices
 - It is designed so others can review and judge the QP’s work
- **It is not a vetting process at the regulatory agency**
 - Just because a technical report is filed does not mean it is compliant
 - It is the issuer's responsibility to comply

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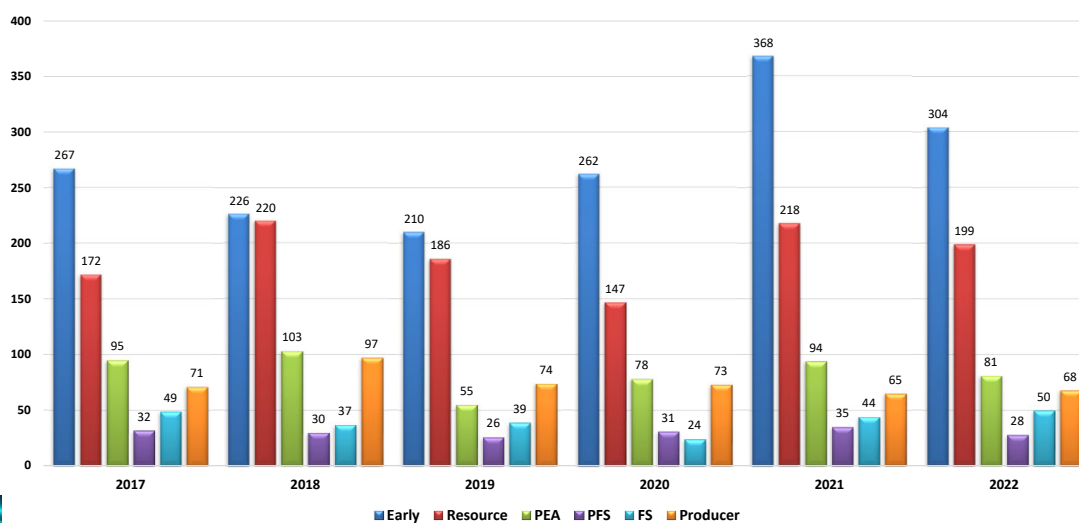
Technical Reports Filed Per Year (2005 to 2022)



Source: CSA Data + S&P Global annual indexed metals price

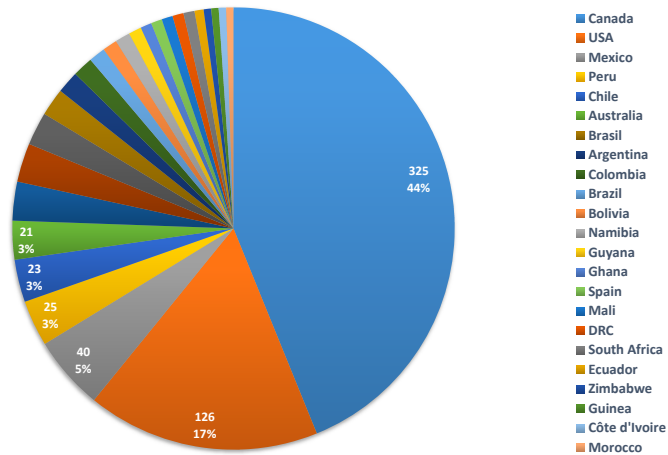
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Technical Report by type



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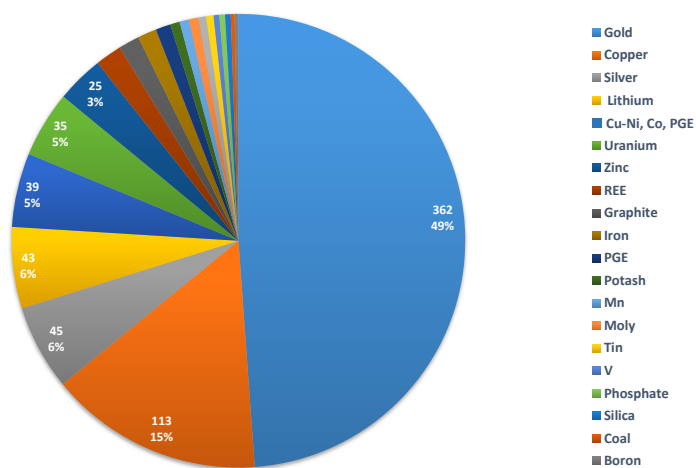
2022 Technical Reports by Country



Source: CSA Data

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2022 Technical Reports by Commodity



Source: CSA Data

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Other Important Rules

- **Distribution Rules: NI 41-101**
 - Require a prospectus to distribute securities
 - Companies become “reporting issuers”
 - Prospectus exemptions (NI 45-106)
- **Continuous Disclosure Rules: NI 51-102**
 - Required periodic disclosure
 - quarterly financial statements
 - management discussion and analysis
 - Timely disclosure of “material changes”
 - news that may affect share price
- **Industry-Specific Rules**
 - NI 43-101, Standards of Disclosure for Mineral Projects
 - NI 51-101, Standards of Disclosure for Oil and Gas Activities

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What's New

In 2022 the CSA published **Consultation Paper 43-401 *Consultation on National Instrument 43-101 Standards of Disclosure for Mineral Projects***

- Consultation Paper 43-401 sought feedback from any interested party about some of the disclosure issues seen by the regulators around mineral projects.
- **No amendments or revisions** to NI 43-101 were proposed
- The Paper asked 38 questions in 12 different areas as the last major changes to NI 43-101 were in 2011
- The CSA received 85 responses to the consultation paper

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In case you missed it:

The Consultation Paper focused on 12 areas for feedback:

- | | |
|--|---|
| A. Improvement & Modernization Questions | G. Exploration Information |
| B. Data Verification | H. Mineral Resource / Reserve Estimation |
| C. Historical Estimates | I. Environmental & Social Disclosure |
| D. Preliminary Economic Assessments | J. Rights of Indigenous Peoples |
| E. Qualified Person Definition | K. Capital/Op. Costs & Economic Analysis |
| F. Current Personal Inspections | L. Everything & Anything Else about NI 43-101 & Form 43-101F1 |

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Next Steps

- Review and consider all comments received
- Contemplate what, if any, amendments are needed
- If amendments are necessary, Publish Notice and Request for Comments on any proposed amendments to NI 43-101 and Form 43-101F1

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JORC update – Ongoing since 2020

JORC update consist of two parallel tracks:



1. Competent person framework and requirements

- June 2022: *"JORC Competent Person - A Baseline Review in a Global Context"*

2. JORC Code disclosure revisions

- July 2022: *"JORC Code Review - Summary of Proposed Changes"*

Progress update from November 2022

- Ongoing discussions with the market operator (ASX) and the regulator (ASIC)
- JORC will provide further details on the update in early 2023

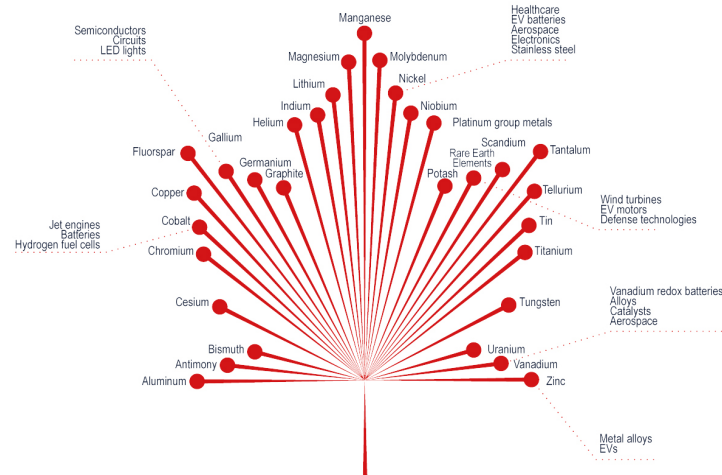
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Canadian Critical Mineral Strategy

- Full strategy rolled out December 9, 2022
- 31 minerals are listed, with six prioritized including:
 - Lithium
 - Graphite
 - Nickel
 - Cobalt
 - Copper
 - Rare Earth Elements
- Available at: www.canada.ca/en/campaign/critical-minerals-in-canada/canadian-critical-minerals-strategy.html

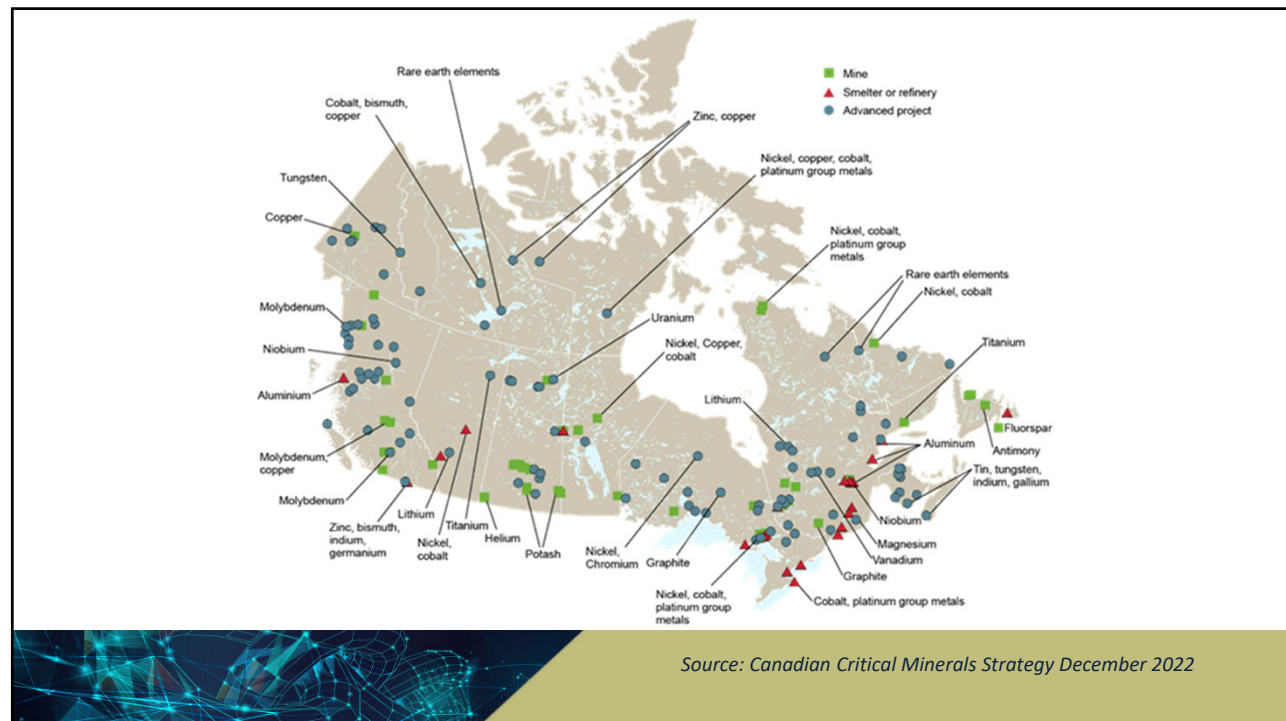
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Canadian Critical Minerals



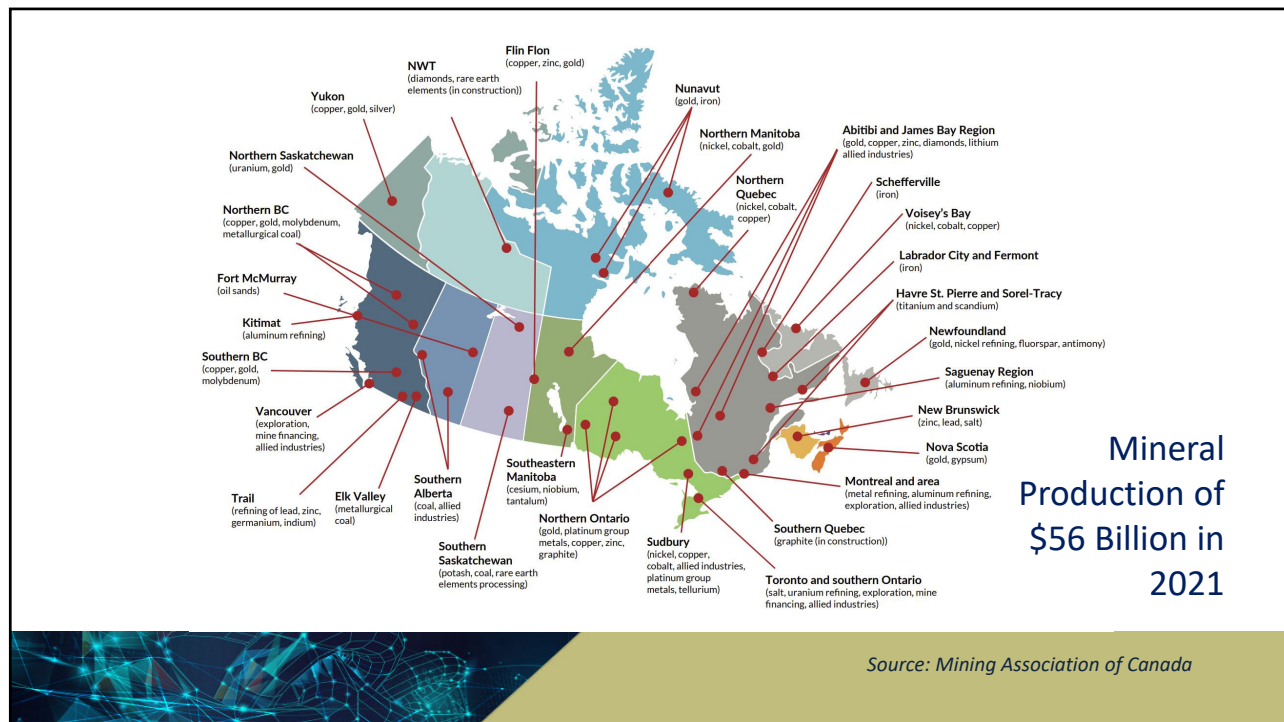
Source: Canadian Critical Minerals Strategy December 2022

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Source: Canadian Critical Minerals Strategy December 2022

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Note of Caution!

- With a budgetary commitment from the Government of Canada to support the advancement of the Critical Minerals Strategy it could be easy to promote
- We anticipate “overly promotional” disclosure statements in corporate presentations, investor materials, etc. as this strategy advances – think everything Tesla Gigafactory in 2016 to 2018

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What we will discuss today

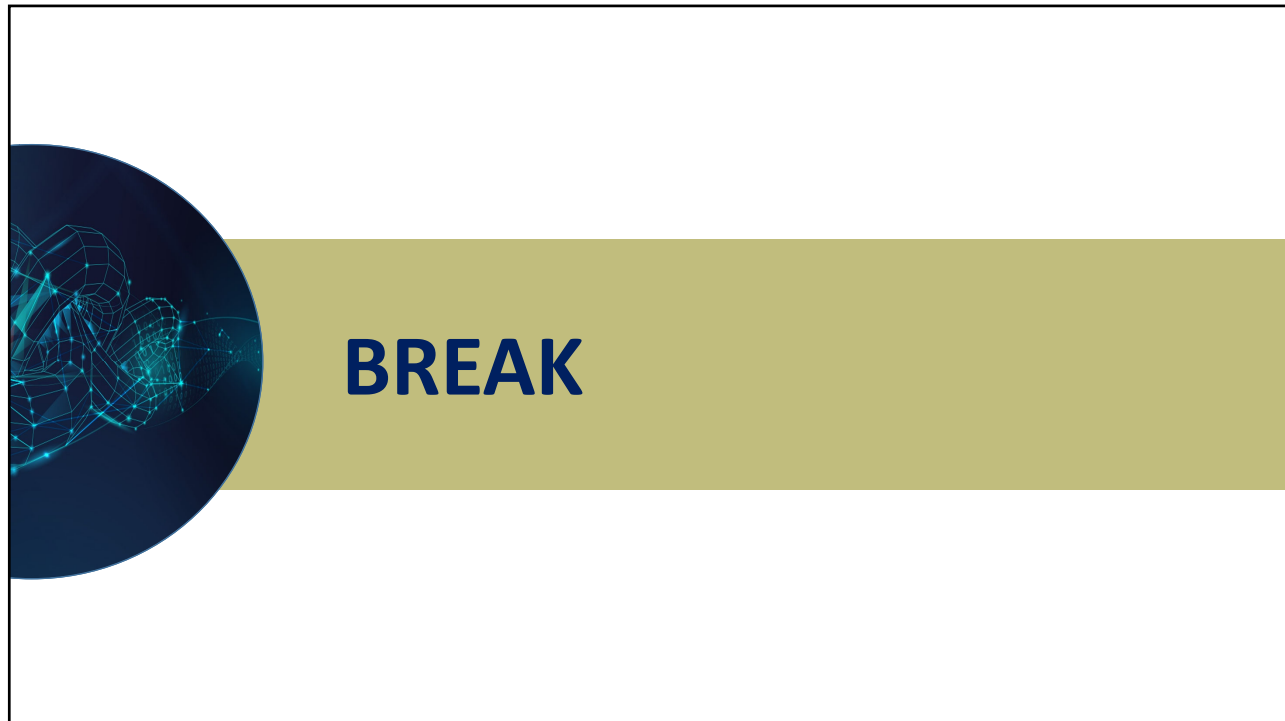
- High level information you need to know when making disclosure about mineral projects – the principles of disclosure
- The critical elements of NI 43-101 and Form 43-101F1 that you need to keep in mind for all disclosure
- Some of the most common disclosure problems we see, and how we suggest you can avoid them
- A summary of information about what's going on in disclosure space

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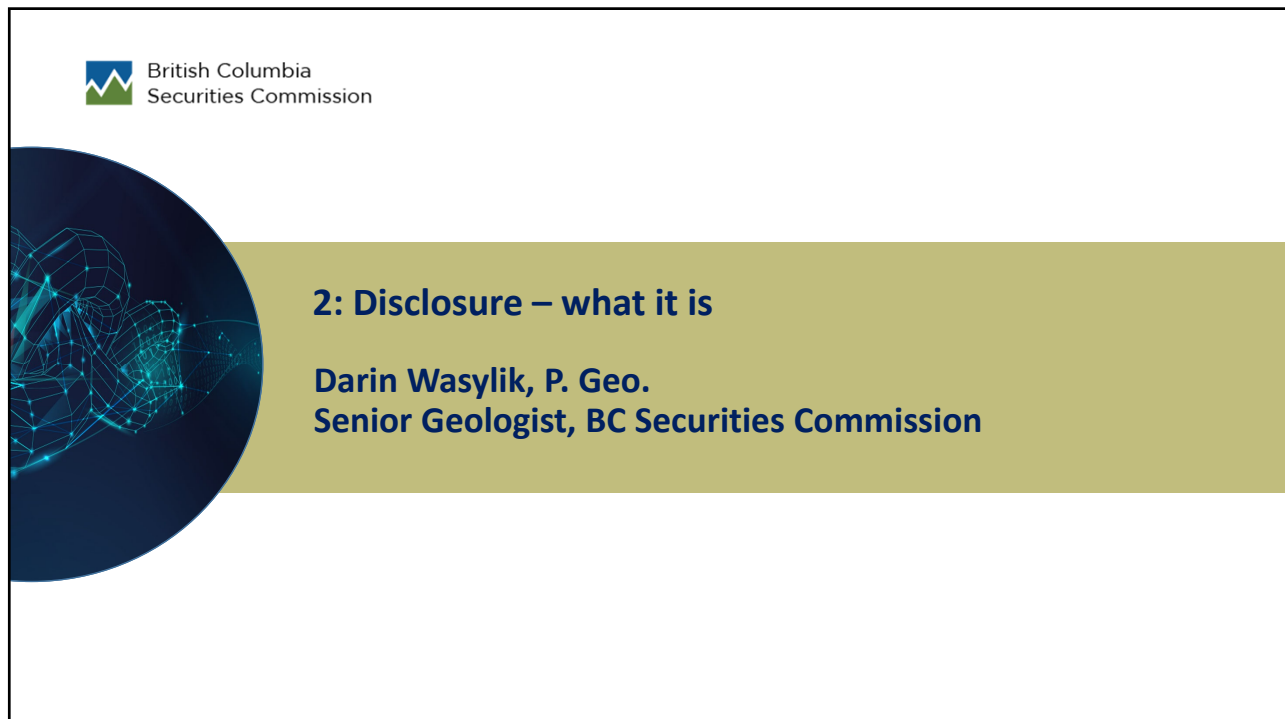
Resources

- BCSC at: www.bcsc.bc.ca specifically www.bcsc.bc.ca/mining
- OSC at: www.osc.ca
- AMF (Autorité des Marchés Financiers) at: <https://lautorite.qc.ca/grand-public>
- SEDAR (System for Electronic Document Analysis and Retrieval) at: www.sedar.com
- IIROC (Investment Industry Regulatory Organization of Canada) at: www.iiroc.ca or the new combined IIROC & MFDA
- CIM at <https://mrmr.cim.org/>
- CRIRSCO (Committee for Mineral Reserves International Reporting Standards) at: www.criresco.com
- Dentons at: www.dentons.com

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“Disclosure” Under NI 43-101

Disclosure means:

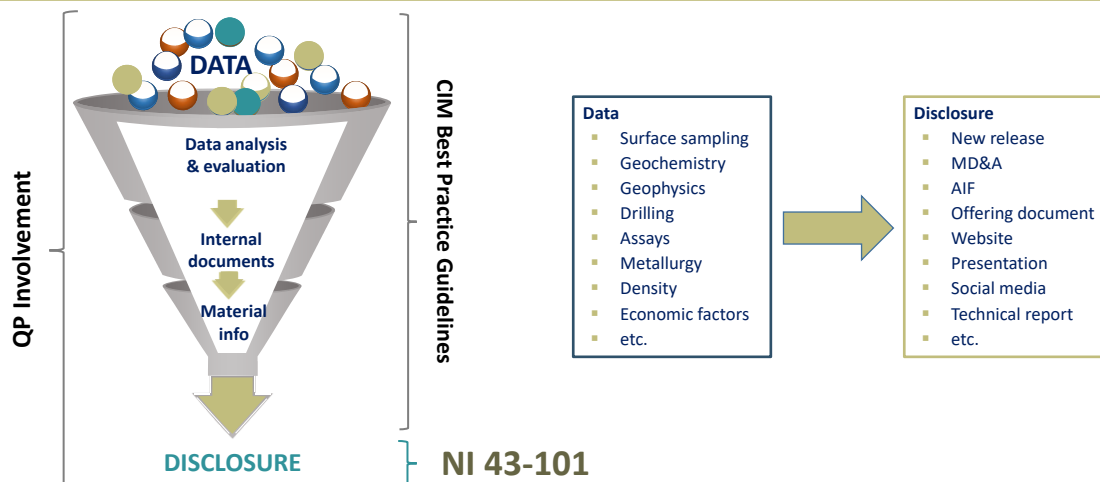
- any oral statement or written information
- made by, or on behalf of the company
- intended to be, or reasonably likely to be, made available to the public in a jurisdiction of Canada
- whether or not filed under securities legislation ... including **websites**



Disclosure reviews by regulators look at many different public documents

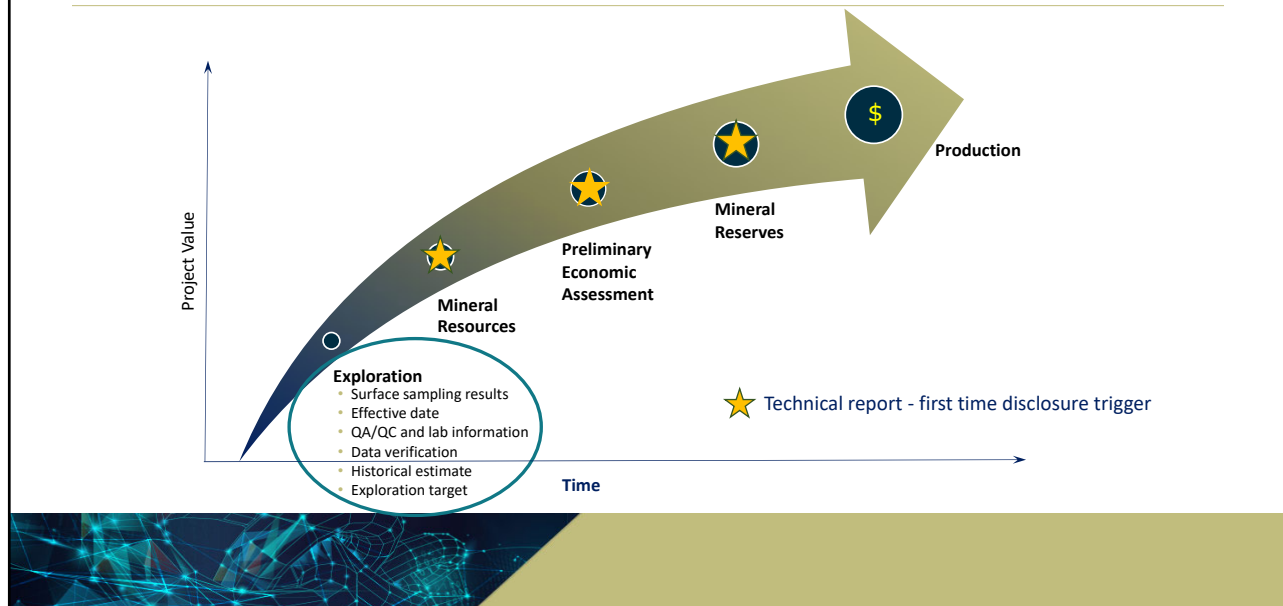
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Process: From Data to Disclosure



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Mineral Project Stage — Exploration



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Exploration Information

Do:

- ✓ Describe the type of samples
- ✓ Include drill hole location information
- ✓ Report higher grade zone within interval
- ✓ Report all the results - good and bad
- ✓ Provide the name and location of the lab, analytical method, and comment on the QA/QC procedure
- ✓ Report historical estimates and exploration targets correctly, including cautionary language

Do not:

- ✗ Report visual estimates of grade
- ✗ Selectively report “up to” results
- ✗ Omit stating true widths of drill intervals
- ✗ Stretch assay results beyond support
- ✗ Misrepresent a geophysical or geochemical anomaly as a deposit
- ✗ Report gross metal values
- ✗ Report economics on an historical estimate or exploration target

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Exploration Results

- Analytical method (ICP, AA, fire assay, etc.)
- Name and location of Laboratory
- Lab certification/accreditation or lack thereof
- Comment on QA/QC
- Note any non-standard sampling, preparation or procedures
- Provide relevant statistical details (range & distribution)
- Selective disclosure prohibited (NO “values up to...”)
- Gross metal value NOT acceptable

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Analytical Results

- Source of information
- Geophysical and geochemical anomalies
(an anomaly does not mean you have found a mineral deposit)
- Sampling (provide details: type, number, location...)
- Drilling (Report results for all holes, not just the best, true width, hole locations)
- Report good and bad results
- Clearly distinguish between new and previously disclosed results

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Visual Observations

- **Prohibited:**
 - Visual estimates of grade (e.g. 1% copper)
 - Visual estimates of mineralization (e.g. 5% chalcopyrite)
- **Not Prohibited:**
 - Factual observations (e.g. visible gold)
 - Photos
- **NOT RECOMMENDED** (recommend waiting for assay results)
- **Strongly recommend pre-filing with IIROC**

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Overly Promotional

WORLD CLASS DISCOVERY!

Word Class Deposit!

BONANZA GRADES!

Abundant Visible Gold!

Exceptionally High Grade Results!

- Avoid superlatives
- Lots of warnings issued (don't rely on other news releases)
- CEO/President "quotes" common offender

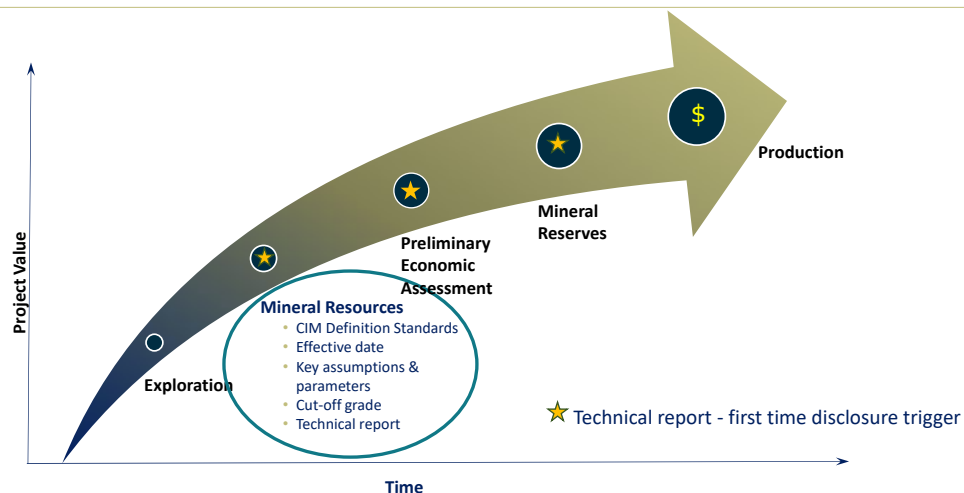
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DO NOT Use These Phrases:

- ***“The following information is not compliant with NI 43-101...”***
ALL disclosure MUST be compliant with NI 43-101
- ***“NI 43-101 compliant... [drilling, sampling, etc.]”***
NI 43-101 only regulates disclosure NOT how to conduct the work
- ***“This information should not be relied upon”***
If information cannot be relied upon, it is not suitable for disclosure

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Mineral Project Stage — Mineral Resource



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Mineral Resource

- **Definition of a Mineral Resource** see CIM Definition Standards - May 2014
 - Concentration or occurrence of solid material of economic interest in or on the Earth's crust
 - Form, grade or quality, and quantity is such that it has **Reasonable Prospects for Eventual Economic Extraction (RPEEE)**
 - Location, quantity, grade or quality, continuity and other geological characteristics are known, estimated or interpreted from specific geological evidence and knowledge, including sampling

Additional Guidance:

- Tonnes & grade figures are not precise calculations and should be referred to as "estimates"
- Round-off the estimate to a reasonable number of significant figures (i.e. 2 to 3)

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Mineral Resources

Disclosing Mineral Resources s. 2.2 and s. 3.4 of NI 43-101

- When disclosing Mineral Resources include:
 - CIM categories of mineral resources (inferred, indicated, and measured)
 - Quantity and grade of each resource category
 - Inferred resources reported separately from other categories
 - Tonnes and grade for each category if the contained metal is disclosed
 - Effective date of the resource estimate
 - Key assumptions, parameters, and methods used
 - Any known risks that could materially affect potential development
 - Statement that "*mineral resources that are not mineral reserves do not have demonstrated economic viability*" if results of an economic analysis of resources is disclosed

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Mineral Resource Estimates

Do:

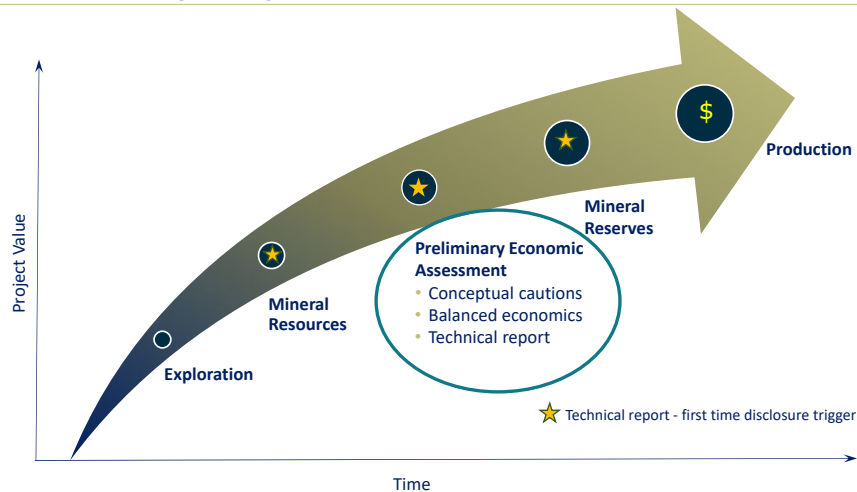
- ✓ Provide the effective date
- ✓ Report both tonnes and grade
- ✓ Provide key assumptions, parameters, and methods
- ✓ Constrain the resource estimate
- ✓ State how equivalent grades were calculated
- ✓ Make use of section 3.5 of NI 43-101

Do not:

- ✗ Report only contained metal
- ✗ Report gross metal values
- ✗ Use non-compliant resource modifiers, or report resource estimates without categories
- ✗ Misuse the term "ore"
- ✗ Add inferred resources to other categories of resources
- ✗ Ignore CIM Definition Standards and CIM Best Practice Guidelines

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Mineral Project Stage — Preliminary Economic Assessment (PEA)



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Preliminary Economic Assessment

- **Definition of a “preliminary economic assessment”** s. 1.1 of NI 43-101
 - Means a study, other than a prefeasibility (PFS) or feasibility study (FS), that includes an economic analysis of the **potential viability** of mineral resources
- **Appropriate uses of a PEA**
 - Road map for planning and strategic decision making
 - Preparing for a prefeasibility study
 - Public disclosure to raise capital and advance the mineral project

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Preliminary Economic Assessment

Disclosing a PEA s. 2.3(3) of NI 43-101

May disclose the results of a PEA that includes inferred resources if the disclosure states with equal prominence:

- *PEA is preliminary in nature*
- *Includes inferred resources that are too speculative geologically to have the economic considerations applied to them*
- *No certainty that the PEA will be realized*

Also:

- *State the basis and assumptions for the PEA*
- *Describe the impact of the PEA on any prefeasibility or feasibility study*

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Limitations of a PEA

- Underestimates the costs and complexities of the project
- Sets expectations for NPV, IRR, etc. that may not be achieved in PFS/FS
- Often uses overly optimistic metal recoveries and metal price assumptions
- Over reliance on converting inferred resources to indicated resources
- Early permitting process may restrict changes to the mine design
- May be misleading if the PEA treats inferred resources as mineral reserves (e.g., inappropriate PEA after mineral reserves)
- High risk of project failure if the PEA is used as the basis for making a production decision

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Production Decision Without Mineral Reserves

Guidance [Part 4.2(6) of Companion Policy 43-101CP]

- Decision is the responsibility of the issuer and its management and board
- Doesn't trigger a technical report to support the production decision
- Decision is typically based on at least a prefeasibility study establishing mineral reserves which reduces the risk of economic and technical failure
- Without disclosing the added risks, the issuer may be misleading investors

Quarterly MD&A

- Disclose that the production decision is not based on a technical report supporting mineral reserves

How do you avoid making misleading disclosure?

- Clearly state the **risks**:
 - Production decision is not based on demonstrated economic viability (i.e. reserves)
 - Such projects have a much higher risk of economic or technical failure
 - Project failure may adversely impact the issuer's future profitability

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Caution About Production Decisions based on PEA

Risks	<i>"The Company advises that it has not based its production decision on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit."</i>
Impact of risks	<i>Historically, such projects have a much higher risk of economic and technical failure. There is no guarantee that production will begin as anticipated or at all or that anticipated production costs will be achieved.</i> <i>Failure to commence production would have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve the anticipated production costs would have a material adverse impact on the Company's cash flow and future profitability."</i>
PEA caution	<i>The Company further cautions that the PEA is preliminary in nature. No mining study has been completed. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that the PEA will be realized."</i>

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Preliminary Economic Assessment

Do:

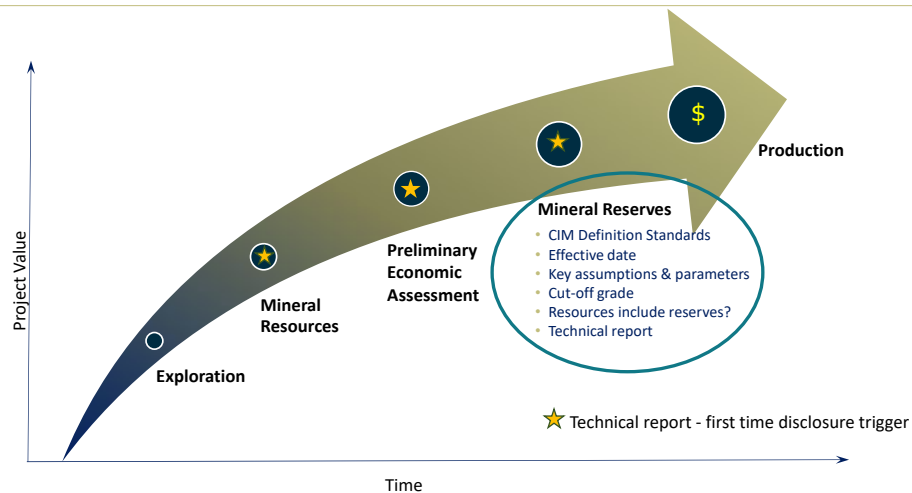
- ✓ Provide a clear statement of the main assumptions
- ✓ Prepare analysis on a 100% equity basis
- ✓ Include required cautionary language (s. 2.3(3)(a) and s. 3.4(e) of NI 43-101)
- ✓ Use a reasonable range for the sensitivity analyses
- ✓ Use the correct terms (PEA, PFS, FS) for the type of mining study being prepared

Do not:

- ✗ Disclose an economic analysis on an exportation target or historical estimate
- ✗ Report only pre-tax values
- ✗ Use an unrealistic discount rate(s)
- ✗ Combine the outcomes of a PEA with the outcomes based on mineral reserves
- ✗ Misuse the PEA-level study
- ✗ Omit risks related to mining from mineral resources instead of reserves

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Mineral Project Stage — Mineral Resource



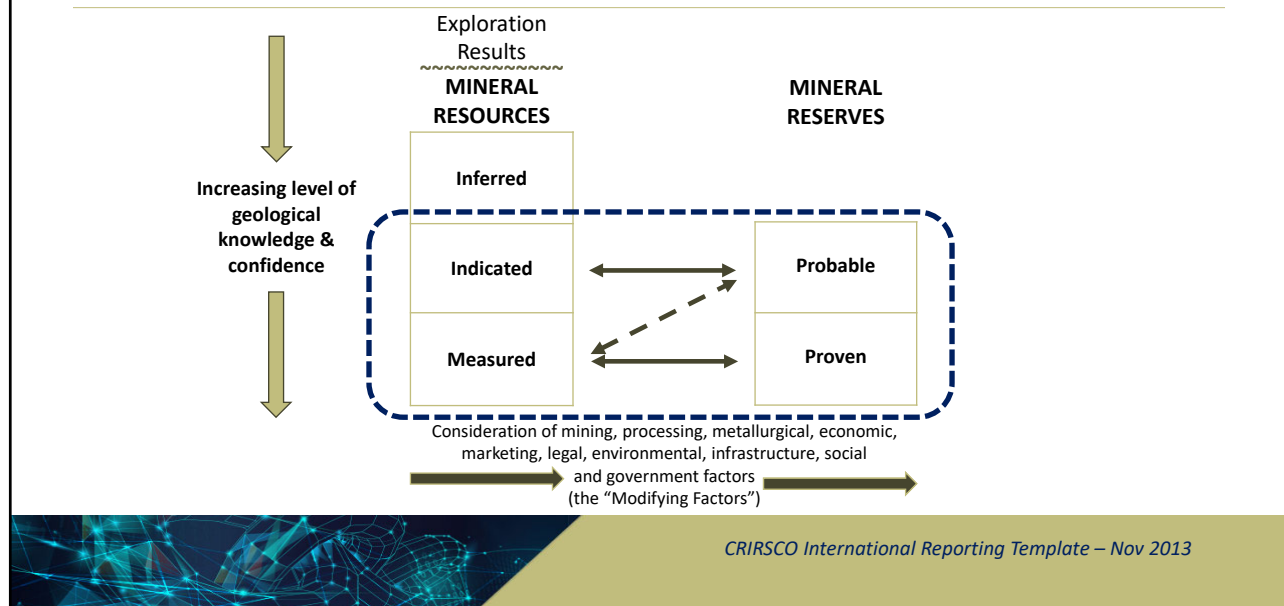
63

Mineral Reserves

- **Definition of a mineral reserve** [CIM Definition Standards - May 2014]
 - Economically mineable part of a measured and/or indicated mineral resource after taking account of all relevant **Modifying Factors**
 - Includes diluting materials and allowances for losses which may occur during mining
 - Reserves are defined by studies at prefeasibility (PFS) or feasibility (FS) level that **demonstrate** at the time of reporting extraction could be justified

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Relationship between Resources & Reserves



65

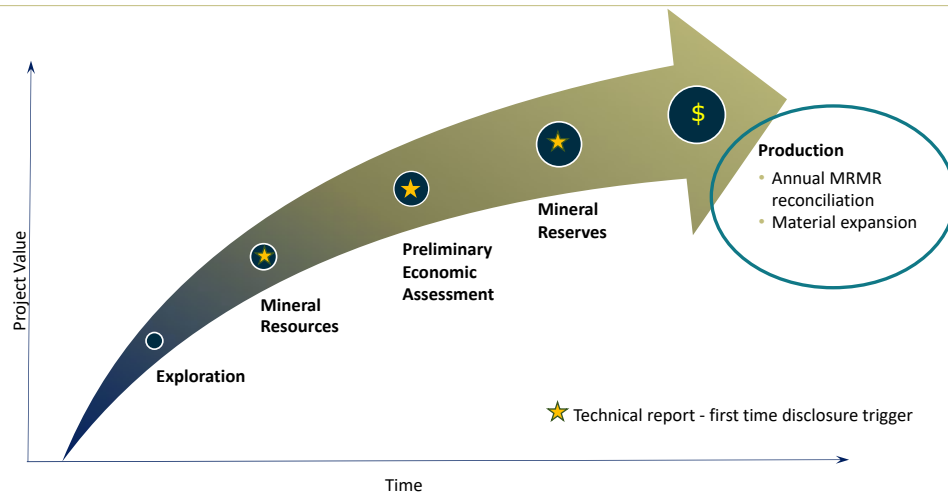
Mineral Reserves

Disclosing Mineral Reserves [s. 2.2 and s. 3.4 of NI 43-101]

- When disclosing Mineral Reserves include:
 - CIM categories of mineral reserves (proven and probable reserves)
 - Quantity and grade of each reserve category
 - Effective date of the reserve estimate
 - Key assumptions, parameters, and methods used
 - Any known risks that could materially affect potential development
 - Statement whether mineral reserves are **included** or **excluded** from mineral resources
 - Statement that "*mineral resources that are not mineral reserves do not have demonstrated economic viability*" if results of an economic analysis of mineral resources is disclosed

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Mineral Project Stage — Production



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Annual Resource & Reserve Estimates — Updates and Reconciliation

Annual Information Form (AIF) requires disclosure of mineral resource and mineral reserve estimates as of the company's financial year end

▪ **Projects in production**

- Provide an annual update of resource and reserve estimates
- Good disclosure should also include reconciliation to the previous year's estimates
- Annual estimates from a producing mine do not trigger a new technical report [see Part. 4.2(10) of 43-101CP]

▪ **Projects not in production**

- AIF discloses the most recent resource and reserve estimates with effective dates

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Production Results - Additional Disclosure

Production Cost Reporting

- Must clearly set out what costs are and are not included in the calculation. This provides investors with the ability to compare results of different companies which use different calculations
- Gold producers should follow the World Gold Council Production Cost Standard to provide further transparency into the costs associated with producing gold
- All-In Sustaining Costs (AISC) and All-In Costs – used by most major Canadian gold producers

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3: The Qualified Person, what is it

Darin Wasylik, P. Geo.
Senior Geologist, BC Securities Commission

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What is the Qualified Person?

- What is the Qualified Person?
- How do I know if I am ready to be the Qualified Person?
- What is the role of the Qualified Person
- What are my responsibilities and to whom?

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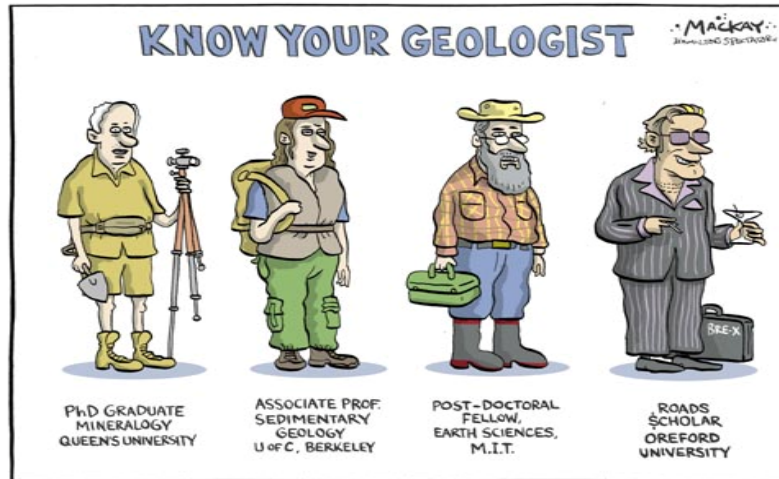
I'm a Professional Geoscientist/Engineer

Okay, so now what?

- Registration as a P.Geo./P.Eng. is just one step in launching your career
- Each jurisdiction of Canada has professional association(s) that govern (part of law) being a professional geoscientist
- The titles of geoscientist, geologist, geochemist, geophysicist, engineer etc. are "restricted use", meaning you need to be licensed to call yourself one
- You need to consider what it means to have passed any exams required, to follow your code of ethics, and adhere to all laws in the jurisdiction you are operating

72

We all know many types of Geos (& Engs)



Source: Graeme Mackay Editorial Cartoons

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I'm registered, so I am a QP right?

No, P. Geo./P. Eng. does not equal QP

- The QP is an EXPERT
- You obtain a P.Geo./P.Eng. after having had worked under other professionals, as a GIT/EIT or equivalent, learning how to be a professional
- When you've achieved your P.Geo. you have achieved the minimum threshold to work 'unsupervised'
- Acting as the QP, is in addition to being a P.Geo. or P.Eng.
- The Qualified Person is the expert required by National Instrument 43-101 Standards of Disclosure for Mineral Projects required to take responsibility for all scientific and technical information about a mineral project

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Experts are:

The definition of an expert is:

“a person who has a comprehensive and authoritative knowledge of or skill in a particular area” or “someone with a broad and deep understanding and competence in terms of knowledge, skill and experience through practice and education in a particular field”

The CSA’s definition of a Qualified Person embodies the principles of what makes an expert, who then acts as a gatekeeper for the public

Sources: Merriam-Webster, Cambridge ED

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All licensed professions have experts:

Notably ***you are not expert*** on the day you achieve your registration:

- Lawyers – you do not sit “first chair” in a murder trial the day you are called to the bar, even if you articulated as a litigator
- Accountants – you do not act as a Chief Auditor the day you pass your CFE, even if you were a candidate with an audit firm
- Doctors – you do not perform heart transplants the day you pass your boards, even if you were a surgical resident

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Qualified Person definition:

in s. 1.1 of NI 43-101

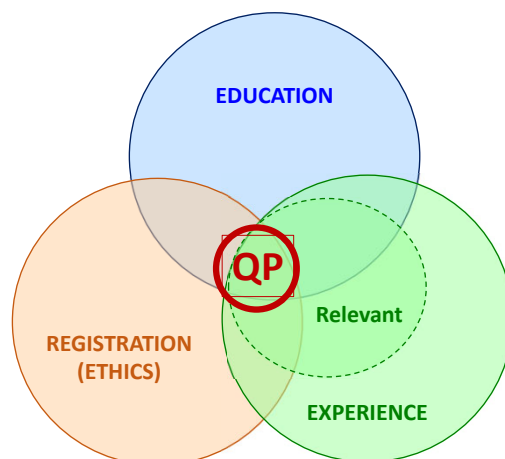
Is a core principle of the NI 43-101 Disclosure Standard

“Qualified Person” means an individual who:

- (a) is an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, relating to mineral exploration or mining;
- (b) has at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice;
- (c) has experience relevant to the subject matter of the mineral project and the technical report; and
- (d) is in good standing with a professional association

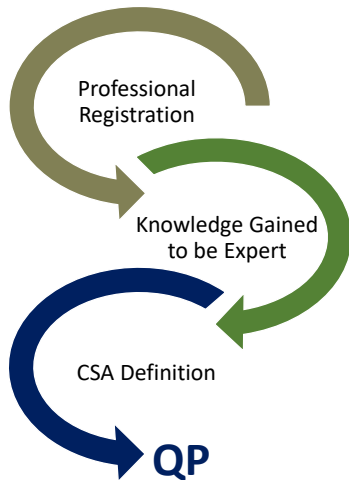
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The requirements must intersect:



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The Path to being a Qualified Person



- Recognized professional designation, in a recognized professional association
- This means following your C of E is a paramount part of being a QP
- Exposure, Practice, Learning and Gaining Professional Competence
→ these activities develop “Expertise”
- Can be done by following Industry Best Practices, norms
- Actively maintaining knowledge and competency
- Due Diligence

Self-test that includes, *in addition to* professional registration:

- Specific education, that underlies area of practice
- Specific level of experience as a professional & relevant to the subject matter or the project/report (5 years)

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Being the Qualified Person is a self-test

The CIM Definition Standards on Mineral Resources and Mineral Reserves provides an additional requirement, stating:

“The Qualified Person should be clearly satisfied that they could face their peers and demonstrate competence and relevant experience in the commodity, type of deposit and situation under consideration.”

‘Back of a napkin’ knowledge is not likely what peers would accept; you should only act as the Qualified Person where your peers would agree with your logic and judgement and knowledge; in areas that you have trained to practice and have achieved skill in as a professional

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I'm still not sure what my role as the QP is

- Again, the role of the QP is one of the foundational principles, along with the CIM Definition Standards, and the technical report of NI 43-101
- The qualified person acts a **gatekeeper** for the public
- A gatekeeper is charged with ensuring that disclosure is based on reliable information, reflects sound professional opinions formulated having applied industry best practices & using consistent terms
- This expert gatekeeper is to level the playing field by providing information so that there is opportunity to compare projects and inform the public's investment decisions; this provides confidence in the capital markets

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But really, does it matter?

You know if I stretch it a little?

YES!

When you act as the Qualified Person you are providing certification and consenting to the public that the information you provide is accurate and based on expertise and industry norms

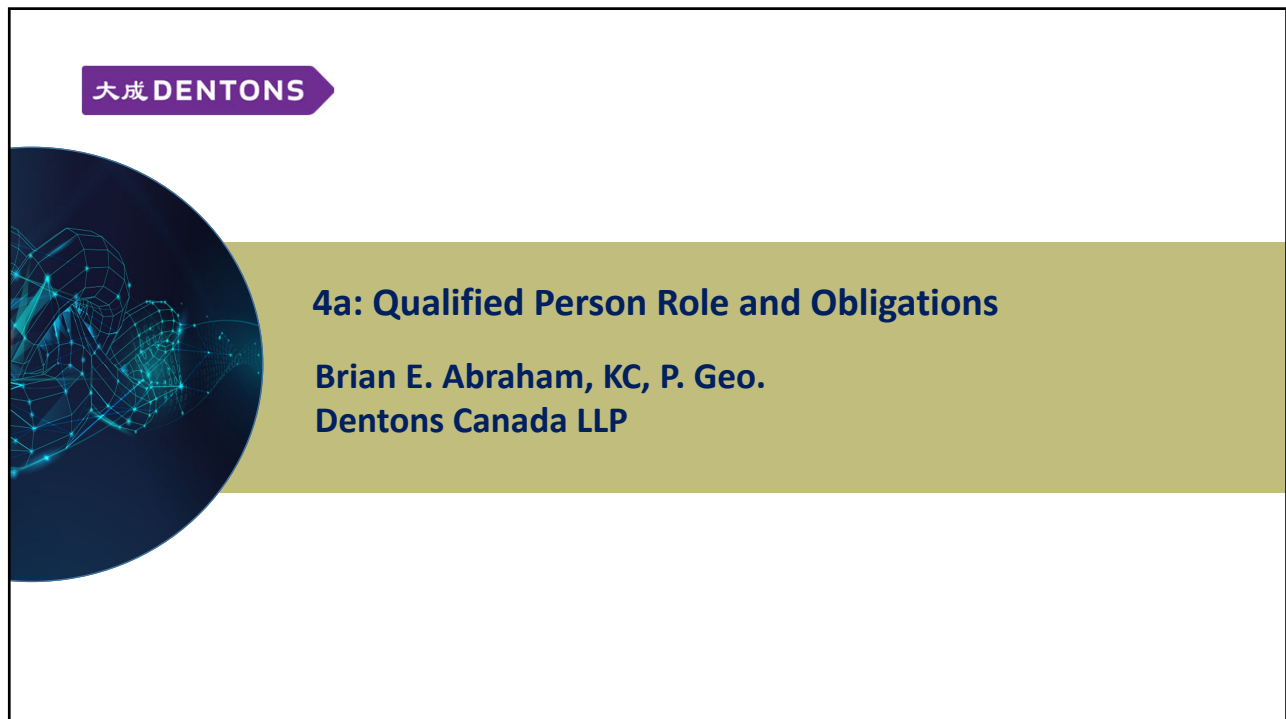
If you act as the QP outside of your expertise you may potentially be held accountable under the Securities Act (civil and secondary market liability) and even Criminally (fraud etc.)

Misrepresentations and errors may result in limitations to your professional license, sanctions, or even removal of your license (your ability to work)

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Professional Governance Act

- Effective June 2, 2020
- Governs engineers, geoscientists, foresters, applied biologists, agrologists and applied science technologists
- Sets standards for ethics, duties, responsibilities and governance structures
- Engineering and Geoscience firms are now regulated
- Mandatory continuing education, 60 hours per year on a three-year rolling average
- Each year commences July 1 and ends June 30
- Annual area of practice verification required

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Engineers and Geoscientists of British Columbia

Code of Ethics

- Registrants MUST:
 - (1) hold paramount safety, health and welfare of the public, including the protection of the environment and the promotion of health and safety in the workplace;
 - (4) have regard for applicable standards, policies, plans and practices established by the government or Engineers and Geoscientists British Columbia (note the government now has the right to impose them);
 - (6) provide accurate information in respect of qualification and experience; and
 - (12) undertake work and documentation with due diligence and in accordance with any guidance developed to standardize professional documentation for the applicable profession
- Note that the CIM Best Practices, likely fall within item 12

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NI 43-101 Certificates and Consents

- Section 8.1 requires certificates, and relevant experience is a common issue
- Section 8.3 addresses consents, a separate document from the certificate
- Limit the consent to the relevant report or disclosure



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EGBC Sanctions

- Cancellation or suspensions of registration
- Requirement to take courses
- Limit practice to a given area only
- Practice under supervision of a recognized person
- Pay costs and expenses of hearing
- Use of words “engineer and geoscientist”



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EGBC Decisions

Glen Macdonald, P.Geo. – October 2020

- Allowing or participating in acquiescing to the disclosure of misleading information
- QP for the issuer
- Disclosure of information regarding “reserves” contrary to Section 2.2(a) of NI 43 101
 - “Inferred reserve” of 6 million grams of gold
- News release failing to properly describe inferred resource and identify the source of information
 - Relevance and reliability
 - Key assumptions parameters and methods
 - Insufficient work to treat it as a resource
- Negligent by not maintaining competence in relation to NI 43 101
- Result: four months’ suspension, requirement to pass the exam, costs of \$5,000, not to act as a QP



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EGBC Decisions

Continued

Vivian Park, P.Geo. – October 2019

- Represented report as compliant with CIM definition standards
- Relied on expert reports without reading them and verifying them
- Alleged unprofessional conduct, incompetence or negligence in the preparation of a technical report, resource estimation when not qualified, misrepresented prior technical information
 - Relied on experts who are not QPs
 - Relied on report prepared for another issuer
 - Failed to disclose data verification, sample preparation methods, assaying procedures, quality control, relied on data insufficient to justify disclosure, acted contrary to the code of ethics
- Result: three-month suspension, probation for one year as a QP, act on resources and reserves only under QP supervision, complete course on mineral project reporting under NI 43 101



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EGBC Decisions

Continued

Robert Unger, P.Eng. – June 2020

- Ignored correspondence from association
- Attempted to use proposed hearing on past unrelated grievance
- Need for deterrence
- Hearing for failing to respond to a practice review questionnaire
- Result: a \$5,000 fine, Association costs of \$10,969.64 (60% of its actual costs) and completion of a practice review questionnaire prior to reinstatement

Todd Martin – April 6, 2022

- In a geotechnical matter, Martin agreed to pay a fine of \$25,000 and an additional \$69,000 towards the legal costs of EGBC. Resigned in January of 2020 and should he reapply there are many steps that he will have to successfully complete

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EGBC Decisions

Continued

Stephen Rice – August 10, 2021

- The Mount Polley TSF failure
- Ordered, should he reapply for registration, to complete the professional practice exam, be subject to peer review, and undergo a practice review
- Ordered to pay the maximum fine of \$25,000 and costs in the amount of \$107,500

Ginger Rogers – April 1, 2020

- Regarding soil testing data, the panel found that Ms. Rogers demonstrated unprofessional conduct by knowingly submitting falsified soil testing data to Alberta Environment & Parks on the wastewater that was discharged from a meat processing facility
- She did not attend the disciplinary hearing nor offer a defence
- Professional Engineers & Geoscientists of Alberta suspended her in Mar 2019 until Mar 19 2022
- Must complete practice online seminar & professional practice exam and undergo a practice review within 12 months of reinstatement and legal costs of \$20,826

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EGBC Decisions

Continued

Elwyn (Ted) Burch – December 6, 2018

- Geotechnical work and the registrant was found to have demonstrated unprofessional conduct, incompetence or negligence by fixing his seal to reports in a landslide assessment assurance statement when he represented work could be done for the issuance of a development permit and he was not qualified to do so
- Acknowledged a demonstration of unprofessional conduct, incompetence or negligence in preparing the reports
- In a consent order he agreed to the cancellation of his registration, and should he reapply, he would have to complete a professional practice exam and professional engineering and geoscience practice in BC online seminar and not provide landslide assessment services or slope stability analysis services, pay \$3,000 towards investigation and legal costs
- It was noted that he had previously been the subject of another disciplinary matter

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EGBC Decisions

Continued

David Howard Drover – September 2019

- Advised to get legal representation but declined
- Provided material immaterial to the substance of the complaint
- Drover sent unprofessional emails in tone and content and acted in an abusive, harassing and vulgar manner during an AGM and published blogs that were unprofessional in tone and content
- The Alberta Professional Engineers and Geologists cancelled his registration as did Engineers and Geoscientists BC

Eric Chrysanthous – September 6, 2018

- A decision posted September 6, 2018. In this instance Chrysanthous communications found that the content of his communications included threats of violence, allegations of dishonesty and professional impropriety that are a significant departure from the standard of professional conduct
- The panel found that the threatening tone of the communications caused harm to the individuals named in the communications and caused harm to the integrity of the profession
- His membership in the association was cancelled and he was required to pay costs

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EGBC Decisions

Continued

Seyed Mahdi Deheshtian – June 30, 2017

- Deheshtian was found to have emailed another engineer unprofessional and derogatory remarks directed at that engineer
- He posted reviews of the other engineer's work on websites and stated that the other engineer was fraudulent, untrustworthy and unethical in circumstances in which Deheshtian knew or ought to have known that there was no justification in those statements
- He refused to retract the statements made on the website
- He agreed to a consent order to pay a fine of \$7,000, complete an anger management workshop and pay costs of \$3,000

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EGBC Decisions

Continued

John Brittain – November 21, 2022

- Convicted of four counts of murder in 2020, registration cancelled

EGBC Bylaws

- Registrant's conduct in another jurisdiction, when known to EGBC, requires a disciplinary panel hearing
- If it is minor or little added benefit to EGBC, Investigation Committee can decide whether to hold a hearing

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B.C. Securities Commission – QcX Gold Corp. Decision

April 29, 2022, Findings Decision

QcX Gold Corp. (formerly First Mexican Gold Corp.), James Arthur Robert Voisin and John Charles Archibald
[Sanctions decision October 11, 2022]

September 9, 2014	Voisin, the CEO and director of QcX, sends email to technical services firm ("B") with a request that they do a quick resource model
September 11, 2014	B contacts Voisin requesting more survey information for drill hole 27. Voisin states that drill hole 27 was given a specific collar location. Voisin agrees that the document to be prepared is not for public reference
September 25, 2014	B emails Voisin with an estimate of the explanation of the methodology
September 26, 2014	B delivers what is referenced as the "First Estimate" which has a number of qualifications in it. Apparently, Voisin at no time advises Archibald, the QP, that the First Estimate was not for public usage

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QcX Gold Corp. Decision continued

October 28, 2014	Archibald prepares a report which is filed on SEDAR. Archibald at no time spoke to B with respect to his report. The report makes no mention of B in it and Archibald, in his certificate, states that he is qualified, and that he wasn't aware of any material fact or material change, the omission to disclose which makes the technical report misleading and that the report was prepared in accordance with NI 43-101 and the F1 Form
December 8, 2014	The Archibald report was filed on SEDAR
December 22, 2014	Voisin contacts B for a Second Estimate
January 6, 2015	B sent Voisin the Second Estimate which reduced the gold estimate by 72% and the silver estimate by 83%, partly on the basis that original drill hole collar locations were incorrect.
November 2015	The Commission conducted a review of QcX's disclosure and identified 10 specific deficiencies. The Commission instructed QcX to file a revised technical report within 10 days or immediately issue a news release disclosing the report was not compliant with F1 and NI 43-101

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QcX Gold Corp. Decision continued

November 30, 2016	QcX did not file a revised report or issue a news release until November 30, 2016 after QcX had received the Second Estimate
	Archibald did acknowledge that he did not have the experience to prepare resource estimates and the Commission advised QcX they objected to Archibald acting as a QP for a revised technical report
December 18, 2016	B provided QcX with a Third Estimate which was consistent with the Second Estimate. QcX did not disclose the Third Estimate in a news release or at all. QcX subsequently terminated its engagement with B and retained a new consultant who produced a further resource estimate (the final estimate) on November 3, 2017
January 29, 2016 to November 23, 2016	Voisin sold shares in 53 transactions for proceeds of \$86,018. This was after he received the Second Estimate and before QcX published its November 30, 2016 news release stating that the Archibald report should not be relied upon
December 9, 2016 to September 26, 2017	Voisin sold shares of QcX in 77 transactions for total proceeds of \$76,482. This was after he received the Third Estimate and before the report containing the final estimate was filed
November 3, 2017	A new report by a new consultant was filed which as significantly lower than the original Archibald report

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QcX Gold Corp. Decision continued

- In 2022 Findings Decision, the Commission reviewed the Companion Policy and while it did not have the force of law, held that it provided an interpretation of certain aspects of NI 43-101. Section 4.2(1)(j)(i) of NI 43-101 requires an issuer to file a technical report for first time disclosure of resource or material change in relation to the issuer
- The Commission also referenced section 5.1 of the Companion Policy dealing with a QP that was to be responsible for all items of the report. The Commission found that the QP should make whatever investigations are necessary to reasonably rely on the estimates
- The Commission stated that “clear, timely and accurate disclosure is the cornerstone of fair and efficient securities markets”. An element of the standard set within NI 43-101 is the definition of the characteristics of QP which may vary depending on the nature of the report and the information required, however, the area of the report prepared by the QP has to be based on the QP’s knowledge, education and experience

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QcX Gold Corp. Decision continued

- The Commission also addressed what they described as key provisions of the Securities Act being a material change which is a change in the business operations or capital of the issuer that might be expected to have a significant effect on the market price or value of the security of the issuer. A material fact means when used in relation to the security issued, the fact that would reasonably be expected to have a significant effect on the market price or value of the security
- Section 168.1 prohibits false or misleading statements
- Note that the burden of proof is set out in the FH vs. McDougal 2008 decision of the Supreme Court of Canada and that the burden of proof is not 'beyond a reasonable doubt' which is the criminal threshold, but simply a balance of probabilities
- The Commission found that statements made by Archibald in the report were material and that the time and circumstances in which they were made either false or misleading or omitted facts that were necessary to make the statements in the report not false or misleading contrary to section 168.1(1)(b) of the Act
- The Commission found that Archibald did not possess the required experience to prepare resource estimates as he did not have the experience relevant to the subject matter of the mineral project and the technical report and as such the report was false and misleading and that his certification was a misrepresentation



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QcX Gold Corp. Decision continued

- Archibald was responsible for the preparation and content of the report and in stating that he prepared the resource estimate was not true and that he failed to name the consultant as a source of the data as required by the F1 Form.
- A reader of the report would not know that the resource estimate was entirely the work of someone else and although Archibald was not aware that Voisin had told the consultant that the estimate would not be made public, Archibald still provided a statement that he was responsible for the content of the report.
- Archibald stated that he was not aware of any material fact that would make the report misleading when he omitted the fact that he had used the First Estimate without the consultant's knowledge or consent and without reviewing it with her.
- In dealing with QcX, the elements as set out in section 168.1(1)(b) the executive director must prove to establish a breach of the Act or that QcX provided information, any record filed under the Act that in a material respect and that the time in light of the circumstances under which it is made is false and misleading or omits facts necessary to make the information not false or misleading.
- QcX knew when the report was filed that it omitted facts necessary to make the information not false or misleading and that QcX breached NI 43-101 and specifically sections 5.1 and 8.3(1)(a). The Commission also found QcX failed to disclose the material change



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QcX Gold Corp. Decision continued

- The Commission also found that a revised report which demonstrated that the material resource was not commercially viable would reasonably be expected to impact the market price of QcX securities
- QcX chose to conceal the receipt of the lower estimates from the public and when the retraction was issued November 30 2016, it did not explain the reason for the retraction and there was no means to assess the potential commercial viability of the property
- The Commission also found that Voisin contravened the same provisions as QcX as he was the decisionmaker and was aware of the second and third reports which disclosed the information that the First Estimate was inaccurate. The Commission found the due diligence defence was not available to Voisin and they referred to Voisin's assurances to the consultant that any resource estimate would not be a public document, he ignored the consultant's warning that the First Estimate should only be used with caution, he failed to ask Archibald if he had prepared a resource estimate in the past, he failed to pass on to Archibald his communications with the consultant and to ensure that Archibald spoke to the consultant and that Voisin knew that the resource estimate had been prepared by Archibald alone when it actually came from the consultant
- In the matter of Voisin's insider trading, the Commission found that Voisin was aware of the Second Estimate which corrected the First Estimate as did the Third Estimate also corrected the First Estimate and that the November 30 2016 news release retracting the First Estimate was incomplete and materially misleading since it did not disclose the basis of the retraction for the first report

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QcX Gold Corp. Decision continued

- Archibald was unaware when he was given the information by Voisin on the First Estimate that the information provided to Voisin was given with the understanding that it would never be made public and was for internal purposes only. QcX was responsible in failing to retain a QP with the necessary qualifications and to obtain the consents of all the parties to the disclosure, including the failure to obtain the consent of the engineer who prepared the First Estimate on the understanding that it would never be a public document nor form part of a public document
- One matter that did come up in the hearing and the decision was that Archibald was disciplined by the Association of Professional Geoscientists of Ontario for his activities in this matter on a hearing held June 4, 2018
- Archibald acknowledged that the facts were true and that he demonstrated unprofessional conduct & incompetence by approving a news press release and by preparing a NI 43-101 report and he agreed that he was guilty of the charges. The Ontario discipline committee ordered that he be suspended for three months, rather than the six months that were sought, that he must pass a course on mineral resources or mineral reserve estimation as contemplated by NI 43-101 & until he successfully passes it to the satisfaction of the Association Registrar of such course & that after completing his suspension, regardless of the jurisdiction, his reports shall be peer reviewed by a peer acceptable to the Registrar & that his name be published. The committee also found that there was no damages to third parties which, given the use of the report, seems a somewhat unusual finding

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QcX Gold Corp. Decision continued

- The B.C. Securities Commission decision (after the findings of April 29, 2022) was handed down on October 11, 2022
- The executive director submitted that the sanctions against QcX were not in the public interest since Voisin and Archibald had nothing further to do with the company and only the shareholders would suffer if QcX were to be sanctioned
- The decision also considered the Eron Mortgage Corporation decision which set out a number of factors to be considered including:
 - the seriousness of the conduct;
 - the harm suffered by investors;
 - damage done to the integrity of capital markets;
 - how the respondent was enriched;
 - mitigation;
 - past conduct;
 - risk to the markets;
 - fitness to be registrant;
 - demonstration of consequences of inappropriate conduct; and
 - deterrence and orders made by the Commission in the past

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QcX Gold Corp. Decision continued

- Voisin stated that he believed the Second and Third Estimates were incorrect and that is why they were not disclosed
- Archibald took the position that he had already been sanctioned by his Association (PGO) and given his inability to pay any fine and his age (being 75), and Voisin also taking the same position about a lack of ability to pay a fine and his age, the panel found that there was a willingness to circumvent the rules and standards which were designed to protect the investing public. Further that Voisin, as a director and CEO of the issuer, and Archibald as a Professional Geoscientist, should have stood as gatekeepers to uphold the relevant standards when they did not. Archibald stated that he had almost no money and limited opportunities to earn income, Voisin said the same thing. Other decisions in the past were considered and while no sanctions were sought against QcX, Voisin was given a permanent market ban and ordered to pay \$36,790, the amount apparently of profit made from the share sales and was to pay an administrative penalty of \$130,000
- Archibald was prohibited for a period of 10 years from the marketplace and ordered to pay an administrative penalty of \$75,000

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Securities Commissions

Receipt of a Letter

- In the event that you or a client receives a letter from the Securities Commission, I would strongly encourage you to review of the contents of the letter very carefully and determine what is an appropriate response which can include a retraction or modification or putting out news releases or other forms of ultimate resolution
- I would encourage an early engagement with the regulators since they will not go away and are not to be ignored. It is important to understand the exact nature of the problem before contacting the regulators

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TSX Disclosure Policy

- There are some other matters to consider in terms of disclosure, for example, the TSX Disclosure Policies need also be considered about technical reports since there are some differences between those requirements of the Exchange and requirements of the Securities Commissions

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SK 1300

- I would point out that with the advent of SK 1300 in the United States, that there is a significant movement to more standardization around the world about mining disclosure, however, one key item that I would point out is that the QP in 1300K is not the same definition of a QP in 43-101. In the US, the QP does not need to be independent and the requirements for registration are not as stringent as those in Canada



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4b: SECONDARY MARKET LIABILITY, and other bits

Kimberly E. Burns, Partner
Dentons Canada LLP

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Secondary Market Liability

- **What is secondary market liability?**
 - Defined terms for misrepresentation and expert are found in the securities legislation (SML is in Part 16.1 of the *BC Securities Act*)
- **Why do we have this concept in Canada?**
- **What is the process for the public, the issuer, and the expert when there is a misrepresentation?**
 - Strike suit barrier
 - No reliance requirement
 - Class actions – Class Proceeding Act



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Secondary Market Liability

- **How to protect yourself:**
 - Due Diligence
 - Forward looking information
 - Investor had knowledge (anti-sandbagging)
 - Corrective action can be a partial defense
- **Tools to consider for your practice**
 - Learn your Code of Ethics and Professional Governance Act
 - Continuous knowledge and monitoring of your clients
 - Forward Looking Information



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LIFE

▪ Listed Issuer Financing Exemption

- This is a detailed and nuanced exemption, we are providing an overview only, please review the legislation and commentary
- What are the restrictions on availability?
- Process and requirements to use it?
- Statutory liability for the issuance?
- Note that the TSX-V continues to apply the exchange 4 month hold to 10% shareholders
- See our summary at www.dentons.com/en/insights/articles/2022/

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Thank you


Dentons Canada LLP
Vancouver, British Columbia

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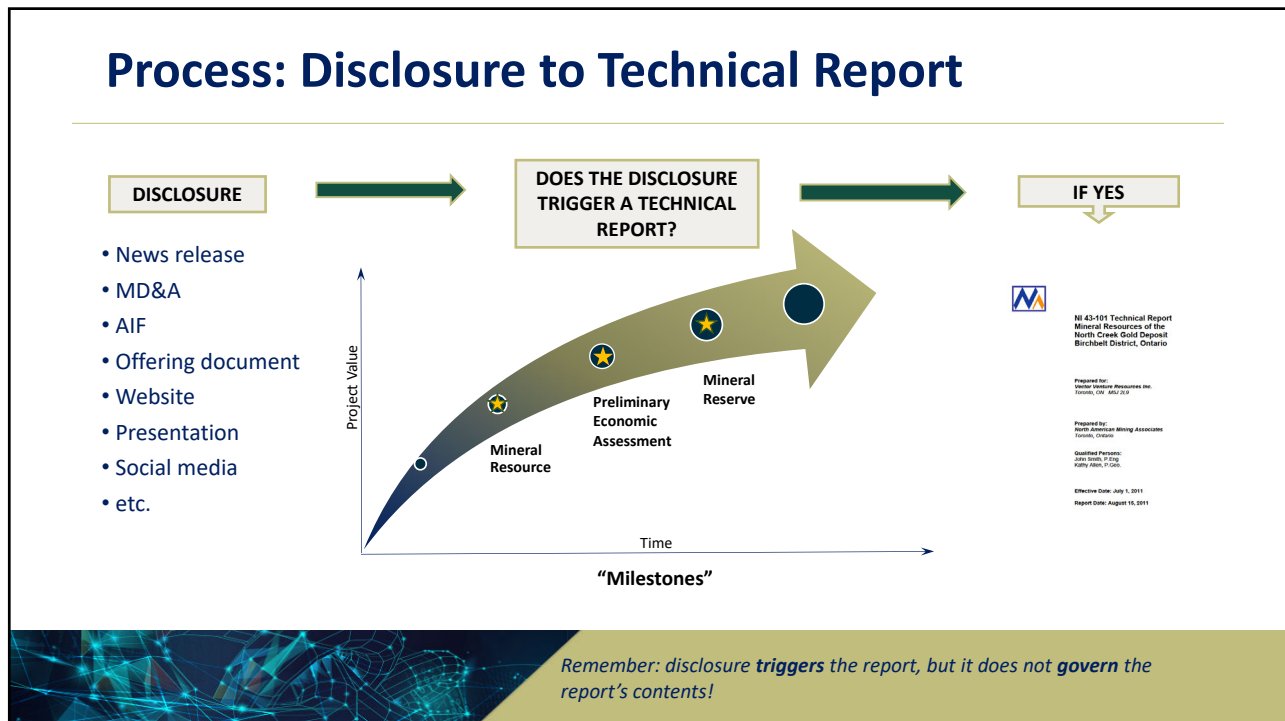
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5a: TECHNICAL REPORTS BASICS Tips & Tricks

Victoria Addison, P. Eng.
Senior Engineer, BC Securities Commission

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Milestones Trigger Technical Reports

Property Milestones

- **First time disclosure of:**
 - Mineral resources
 - Preliminary economic assessment
 - Mineral reserves
- **Material change to any of the above**

Company Milestones

- **First time reporting in Canada**
- Filing of any of the following where the material technical information is not already supported by a current technical report:
 - Preliminary long form prospectus
 - Preliminary short form prospectus
 - 1st time or material change to MR/PEA/MR
 - Information or proxy circular
 - Offering memorandum
 - Rights offering circular
 - Annual Information Form
 - Valuation required by securities legislation
 - TSX Venture offering document
 - Take-over bid circular

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Independent Technical Reports

Section 5.3 of NI 43-101

- **ALL QPs signing the technical report must be independent for the following triggers:**
 - First-time reporting issuer in Canada
 - Filing a preliminary long form prospectus
 - First time disclosure of a mineral resource, PEA, or mineral reserve
 - >100% change to an existing mineral resource or mineral reserve
- **Exemption from independence for a “producing issuer”**
 - Gross revenue >\$30 million in recent fiscal year; and
 - Gross revenue >\$90 million in last three fiscal years



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Some Misconceptions about Independence

- **QPs must be independent for ALL disclosure**
 - The independence requirement in s. 5.3 of NI 43-101 applies only to technical reports, not to routine disclosure
- **ALL technical reports need independent authors**
 - Section 5.3 of NI 43-101 spells out the times the authors must be independent
- **You cannot have a mixture of independent and non-independent authors**
 - If a report does not require independent authors, any mixture is acceptable
 - But...if it does require independent authors, they all must be independent

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Not All Technical Reports are Created Equal

- The quality of the technical report all comes down to the integrity, honesty, competence and experience of the QPs preparing the technical report



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Form 43-101F1

Item 1: Summary	Item 15: Mineral Reserve Estimates
Item 2: Introduction	Item 16: Mining Methods
Item 3: Reliance on Other Experts	Item 17: Recovery Methods
Item 4: Property Description and Location	Item 18: Project Infrastructure
Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography	Item 19: Market Studies and Contracts
Item 6: History	Item 20: Environmental Studies, Permitting and Social or Community Impact
Item 7: Geological Setting and Mineralization	Item 21: Capital and Operating Costs
Item 8: Deposit Types	Item 22: Economic Analysis
Item 9: Exploration	Item 23: Adjacent Properties
Item 10: Drilling	Item 24: Other Relevant Data and Information
Item 11: Sample Prep., Analyses and Security	Item 25: Interpretation and Conclusions
Item 12: Data Verification	Item 26: Recommendations
Item 13: Mineral Processing and Metallurgical Testing	Item 27: References
Item 14: Mineral Resource Estimates	

Early Stage: Must use all headings of Items 1-14 & 23-27
 Advanced Stage: Must use all headings of Items 1-27

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Items 15-22: Advanced Property Technical Reports

Item 15: Mineral Reserve Estimates

- Key assumptions, parameters, methods, and modifying factors

Item 16: Mining Methods

- Current or proposed mining method, Geotech, hydrological & other parameters

Item 17: Recovery Methods

- Test or operating results in relation to recoverability, flowsheet, plant design, and requirements for energy, water and process materials

Item 18: Infrastructure

- A summary of infrastructure and logistic requirements, as applicable

Item 20: Environmental Studies, Permitting and Social or Community Impact

- Discuss reasonably available information on environmental, permitting and social or community factors related to the project

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Items 15-22: Advanced Property Technical Reports

continued

Item 21: Capital and Operating Costs

- Summary of costs, with the major components in tabular form

Item 22: Economic Analysis

- A clear statement of and justification for the principal assumptions
- Annual cash flow forecasts, NPV, IRR and Payback
- Include taxes – you may provide both pre-and post-tax metrics, sensitivity on significant factors

Other Requirements for Economic Studies: PEAs

- S. 2.3(3) of NI 43-101 – requires disclosure that a PEA including inferred resources must have cautionary statements
- S. 3.4(e) of NI 43-101 – requires statements that mineral resources are not mineral reserves & do not demonstrate economic viability
- Part 3.5 of 43-101CP – mandates disclosure is factual, complete, and balanced. ***Do not present or omit information in a manner that is misleading***

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Technical Reports must contain all Material Information

What does that really mean?

- Even though a particular event (a resource estimate, for instance) *triggers* the report, it's not the only piece of information the report must support
- It means the report must be a full description of what's really going on at the property
- It also means there is no mechanism for a previous technical report to be "incorporated by reference" or relied on for disclosure of previous events
- The Instrument says:
 - s. 1.1 – the definition of "technical report" says it "includes, in summary form, all material information" about the property
 - s. 8.1(2)(i) – the QP's certificate must state that the report "contains all material information" needed to ensure it's not misleading...you have to mean it when you sign it

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Misconceptions About Technical Reports

- Technical reports are “approved” by the regulator before being publicly filed on SEDAR
- The company has a “43-101” report, so it must be a good property
- The technical report is over 500 pages long so it must be an advanced property and close to being in production; it is a summary document
- How could the project fail? – it had a “43-101” technical report!

Remember:

- NI 43-101 sets standards for disclosure of technical information
- The QP is responsible for the methods, assumptions, and judgements used for verifying, interpreting, and reporting of the technical information

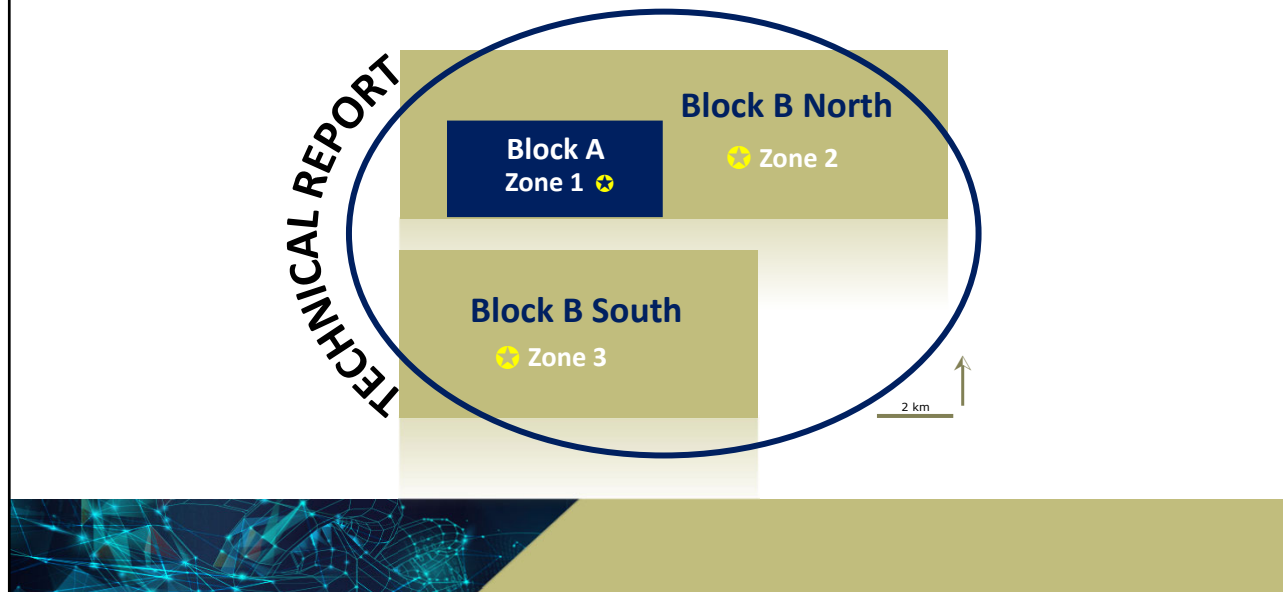
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Mineral Property with Multiple Deposits

- Can an issuer file separate technical reports for different deposits on the same mineral property?
- No – unless there is clearly a reason for the two deposits to be developed separately (for example, infrastructure, permitting, or patchwork ownership)
- Companion Policy says:
 - Part 1.1(6) - a property includes claims that are **contiguous** or in close proximity that any underlying deposits would likely be developed using common infrastructure
 - Part 4.2(8) - a technical report when filed must be complete and current and there should only be one current technical report on a property at any point in time

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Example: Single Technical Report



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High-Level Fatal Flaw Checklist – All Stage Reports

- **QP certificates**
 - QPs relevant experience
 - Independence, when required
 - Current Personal Inspection - who, when, & what
- **Summary section**
 - Clear, concise, & complete
- **Reliance on other experts**
 - Only legal, political, environmental, or tax
- **Exploration Targets & Historical Estimates**
 - Basis, source, and cautionary statements
 - Not treated as a mineral resource
- **Data verification**
 - Steps taken by QP to verify the data
- **Mineral Resources & Reserves**
 - Reasonable assumptions & cut-off grades
 - Metallurgical recovery considered
 - 2014 CIM Definition Standards
 - Constraints applied
- **Mining Study Level & Economic Analysis**
 - PEA, PFS, and FS are used properly
 - Taxes, discount rate, sensitivities
- **Environmental, Permits, & Social Impacts**
 - Permitting challenges identified
 - Social license issues highlighted
- **Risks**
 - Potential property-specific impacts are clearly identified

Note: These are only some potential pitfalls

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Self-Assessment Questions for the QP Author

- Would the vast majority of my peers agree with my logic in defining, classifying, and reporting the mineral estimates?
- Are my assumptions for eventual economic extraction reasonable and realistic?
- Have I considered approximate mining parameters and costs for reporting the resource estimates?
- Would informed investors understand the assumptions, factors, procedures used?
- Does the project's stage of development reflect the level of confidence in the underlying data?
- Have I considered and used all representative data, and if not, have I considered the advantages & risks in not doing so?
- Have I applied realistic and justifiable mining and processing factors in determining the mine plan and schedule for reporting the reserve estimates?
- Have I adequately presented the significant areas of risk and uncertainty and potential ways that these could be addressed in future work and studies?

Modified from Mark Noppé - Xstract Mining Consultants - March 2014

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Tips for QPs preparing Technical Reports

Do:

- ✓ Make sure you have relevant experience
- ✓ Know the purpose of the technical report (i.e. the triggering event)
- ✓ Use the 2014 CIM Definition Standards
- ✓ Follow the 2019 CIM Best Practice Guidelines as appropriate
- ✓ Review CSA Staff Notices (e.g. CSA SN 43-307 on PEAs)
- ✓ Include a concise & complete summary of significant findings
- ✓ Describe the risks and uncertainties
- ✓ Have the draft report **peer reviewed**

Do not:

- ✗ Assume all technical reports are reviewed by regulators when filed
- ✗ Forget the audience reading the report
- ✗ Use the technical report as a data dump
- ✗ Forget that there is only one current technical report at a point in time
- ✗ Neglect a proper summary section
- ✗ Ignore QP independence requirements
- ✗ Disclaim responsibility for technical data

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What if the Disclosure Doesn't Comply?

NI 43-101 is enforceable under the *Securities Act*

▪ Possible outcomes:

- Clarifying news release
- Amending and refileing a technical report
- Filing a technical report that should have been filed earlier (triggered)
- Company placed on the default list
- Referral to compliance/enforcement for further investigation
- Cease trade order

▪ Other possible outcomes:

- Class action lawsuit filed under civil liability provisions of the Securities Act
- Complaint forwarded to the QP's professional association


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When All Else Fails, Read the Instructions

- 1) Objective of a technical report is to provide a summary of the material information about the mineral property
- 2) Look at (aka read) NI 43-101 definitions and rules
- 3) Report should be understandable to a reasonable investor
- 4) Items 1 to 14 and 23 to 27 for all properties, with 15 to 22 for "advanced properties"
- 5) Each report replaces the previous report, may summarize existing information, but QP still takes responsibility
- 6) QP determines the level of detail necessary for the report
- 7) Limited disclaimers allowed for information by non-QP experts
- 8) Appendices are not required
- 9) Remember to file the QP certificates and consents



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5b: Common Disclosure Problems

Vanessa MacLean, P. Geo.
Senior Geologist, BC Securities Commission

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Some of the most common issues:

- Historical Estimates
- Metal Equivalents
- Grade x Width
- Data Verification
- Current Personal Inspections



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What is a Historical Estimate?



Definition:



“An estimate of the quantity, grade, or metal or mineral content of a deposit that an issuer has not verified as a current mineral resource or mineral reserve, and which ***was prepared before the issuer acquiring***, or entering into an agreement to acquire, an interest in the property that contains the deposit” - **s. 1.1 of NI 43-101**



Fran, 2017

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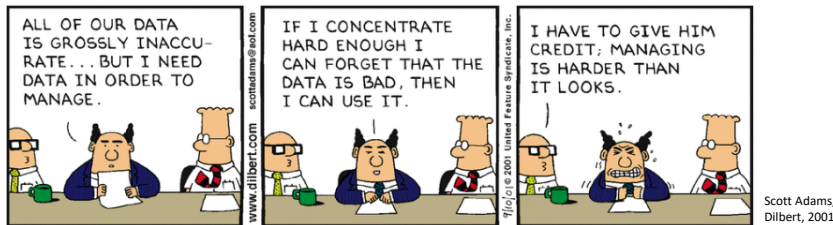
Historical Estimates – How To Disclose

An issuer may disclose an historical estimate, using the *original terminology*, if the disclosure includes:

- | | |
|---|---------------------|
| 1) The ORIGINAL Source & Date of the estimate | – s. 2.4(a) |
| 2) States the Relevance & Reliability | – s. 2.4(b) |
| 3) Provide Key Assumptions and methods used etc. (if known) | – s. 2.4(c) |
| 4) Give Categories: as in s. 1.2/1.3 of NI 43-101 or not | – s. 2.4(d) |
| 5) Include more recent estimates | – s. 2.4(e) |
| 6) Comments on what work needs to be done to upgrade | – s. 2.4(f) |
| 7) Required cautionary statements | – s. 2.4(g)(i)&(ii) |

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Historical Estimates – Main Pitfalls



- ✗ No source, date & original classification (inc. grade & tonnage) including misuse of “ore” as a classification
- ✗ Does not include the key assumptions – s. 2.4(c) of NI 43-101
- ✗ Lack of required cautionary language – s. 2.4(g) of NI 43-101
- ✗ Using terms such as “not NI 43-101 compliant”
- ✗ Not providing the planned work required to verify the historical estimate
- ✗ Recalculating or adding the historical estimated to a current resource
- ✗ Disclosing an economic analysis based on a historical estimate – s. 2.3 of NI 43-101

If s. 2.4 of NI 43-101 is not followed –
you may trigger a Technical Report



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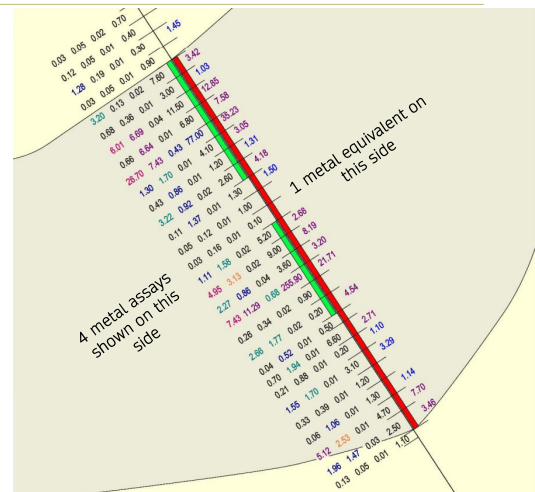
Metal Equivalents: AuEq, AgEq, CuEq, NiEq, etc.

Definition:

Mineralization that is comprised of several metals of interest that are converted to a single number

Why do people do it?

- Allows for simpler presentation of many grades in terms of a single equivalent
- To aid in delineating a body by using a single number
- Often seen in disclosure for polymetallic deposits



Fahey 2019 CSA Global

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Metal Equivalents (AuEq, AgEq, CuEq, NiEq, etc.)

- Some issuers have disclosed equivalent grades calculated entirely by price-weighting. Price-weighting, without taking the differential recovery of each component element into account, is considered potentially misleading
- Algebraically, a price-weighted equivalent grade is simply a gross dollar value divided by a metal price. It is denominated in metal units rather than in dollars but is otherwise indistinguishable from a gross metal value
- Gross values are restricted by s. 2.3(1)(c) of NI 43-101

Without considering recoveries, an equivalent grade overstates the amount of metal that may eventually be obtained

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Metal Equivalents – Example

Drill hole	From (m)	To (m)	Length (m)	Ag (g/t)	Au (g/t)	Pb %	Sb %	Zn %	AgEq (g/t)
XX-2022-01	29.0	33.0	4.0	131.50	0.84	2.12	1.85	4.59	824.2
including	30.0	32.0	2.0	261.00	1.62	4.20	3.70	9.10	1,634.3
XX-2022-02	43.0	48.0	5.0	26.10	0.13	0.09	0.18	0.14	78.7
including	46.0	48.0	2.0	62.50	0.21	0.19	0.42	0.29	172.6
PRICE USED (USD)				\$18.00/ oz	\$1,950/ oz	\$1.00 /lb	\$4.50 /lb	\$1.50 /lb	

The calculation assumes 100% metallurgical recovery, and is a proxy for a gross in situ metal value

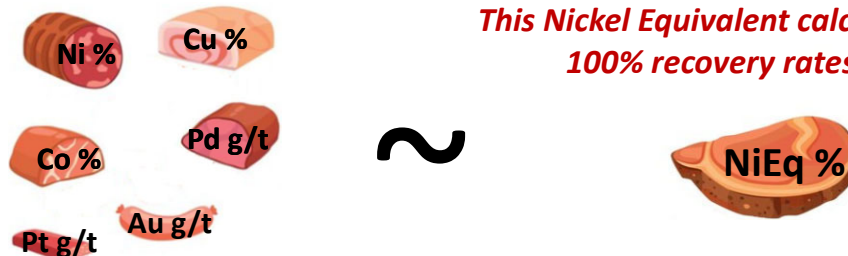
In presenting the AgEq and providing the note below it, the company has:

- Not included metallurgical recovery
- Not all metals would be present in the same concentrate – Zn for example
- They've stated "Indicative of gross in situ metal value" restricted by s. 2.3(1)(c) of NI 43-101

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Metal Equivalents – Example

Drill hole	From (m)	To (m)	Width (m)	Ni %	Cu%	Co%	(Pd+Pt+Au) g/t	Pd g/t	Pt g/t	Au g/t	NiEq %
XX_22_02	184	187.7	3.7	2.33	1.85	0.06	0.45	0.21	0.21	0.03	3.54
XX_22_02	185.3	187.7	2.4	3.49	2.73	0.09	0.64	0.3	0.3	0.04	5.27
XX_22_02	185.3	187.0	1.8	4.79	3.67	0.12	0.87	0.41	0.41	0.05	7.2
XX_22_02	185.3	185.9	0.6	8.21	1.6	0.24	1.62	0.8	0.79	0.03	10.11
PRICE				\$8.5/lb	\$4.25/lb	\$25/lb		\$1,700/oz	\$1,100/oz	\$1,800/oz	



This Nickel Equivalent calculation assumes 100% recovery rates of metals

100% recovery rates do not account for losses during processing

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Metal Equivalents – continued

Additionally, one could sum all assays including those that may not be recoverable and report a meaningless equivalent value:

2.7 g/t AuEq @ 0.5 m using:

0.1 % Cu	25 ppm	Mo
0.9 g/t Au	60 ppm	Co
17 g/t Ag	1,000 ppm	REE
0.10 % Pb	12 %	Fe
0.2 % Zn	80 ppm	U
500 ppm Li	7 ppm	Re

Or **Equivalent Grade** used to turn one type of deposit into another: e.g. Disclosing a AuEq grade for a Cu-Mo porphyry system with very minor gold content

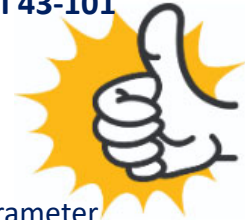


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Metal Equivalents – how to disclose

Misleading grade equivalents can be avoided: use s. 2.3(1)(d) of NI 43-101 and calculate them using:

- results of metallurgical test work
- if test work not available – **including reasonable assumptions** for recoveries from analogue deposits
- **CIM's guidance** on equivalents: use of a grade equivalent or a value parameter should be for the **sole purpose of preparing the outlines of potentially economic mineralization**. Subsequent grade estimations should be carried out for each element separately
- Foreign codes & guidance inc. **JORC, SAMREC, & SME** offer similar requirements for disclosure of equivalents. All of these are guidance for disclosure of equivalent grades



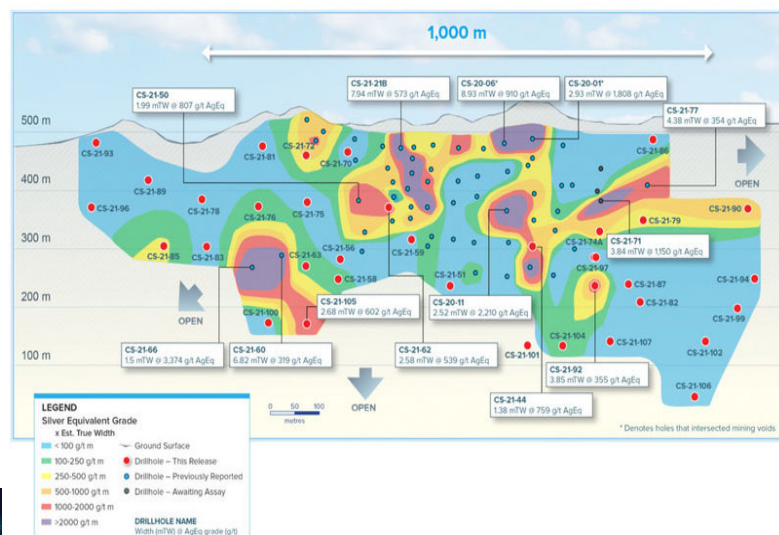
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Grade x Width

Grams-Metres, g-m, Grade Thickness, Grade x Thickness, GxT etc.

When is this suitable for disclosure?

- When disclosing geological interpretations or for illustrating vectoring
- If the disclosure of drillhole intervals are reported separately, and not used as a proxy for a model or value



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Grade x Width

Additions to “Top Intercepts” tables:
Why is this problematic?

- Disclosure of Grade x Thickness (GxT) provides an unclassified quantity or an ‘accumulation’ of metal contrary to s. 2.3(1)(a) of NI 43-101
- A “larger” number is presented, than the factual assay for the interval (with no RPEEE)
- GxT also implies economic mineralization or a value contrary to s. 2.3(1)(c) of NI 43-101, and multiplying the GxT by a metal price will give a dollar amount to the drill intercept

Au (ppm) x Length

Best Intercepts of the 2022 Program					
Hole ID	From	To	Au (ppm)	G x T	Length
2022_XX-01	38.65	45.65	87.3	611.2	7.00
including	38.65	40.1	411.5	596.6	1.45
2022_XX-01	81.15	89.45	215.7	1790.5	8.30
including	81.15	82.7	714.5	1107.5	1.55
including	87.75	89.05	505.6	657.2	1.30
2022_XX-02	211.15	224.8	61.8	843.1	13.65
including	212.1	213.05	565	536.8	0.95
including	218.65	220.25	116.1	185.8	1.60
including	221.45	222.45	56.9	56.9	1.00
including	222.85	223.6	34.2	25.6	0.75
2022_XX-03	33.65	46.35	78.5	996.7	12.70
including	34.7	35.65	31.8	30.2	0.95
including	37.45	39	454.7	704.7	1.55
including	42.85	43.85	202.9	202.9	1.00
2022_XX-04	68.8	76	247.7	1783.1	7.20
including	71.5	73.5	830.3	1660.6	2.00
including	74.35	74.9	201.4	11.8	0.55

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Grade x Width – Charts that Imply Value

- A drill intercept has no ‘value’ on its own; not selectively recoverable
- No explanation of the deposit, if there is a deposit. Was this down-dip or across mineralization?
- A single intercept says nothing about continuity, or volume of mineralization, mining methods, recoveries, costs or prospects for economic extraction
- Visually this offers a ‘ranking’ implying that one intercept is better than another

TOP GOLD INTERCEPTS				
BY EXPLORERS ON OUR WATCHLIST: WEEK TO 03/25				
Company	Drill Hole ID	Gold (g/t)	Interval (m)	Grade x Width (g-m)
Gold Co. #1	DDH001	69.15	14.15 fr 326	978
Gold Co. #2	DDH001	68.23	6 fr 57	409
Gold Co. #3	DDH001	52.7	7.4 fr 297	390
Gold Co. #4	DDH001	0.78	385.2 fr 240	300
Gold Co. #5	DDH001	3.42	68.4 fr 614	234
Gold Co. #6	DDH001	45.6	5 fr 1,427	228
Gold Co. #7	DDH001	31.7	7 fr 150	222
Gold Co. #8	DDH001	3.05	67 fr 533	204
Gold Co. #9	DDH001	1.486	136.8 fr 0	203
Gold Co. #10	DDH001	0.55	347.47 fr 3	191

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Data Verification

Defined Section 1.1 of NI 43-101

- The process of confirming how data was generated and that it accurately copied from the source: it is suitable for disclosure. **Not just required in a technical report but required for all disclosure**, see s. 3.2 of NI 43-101

Item 12 of Form 43-101F1

- Requires a description of the procedures and steps taken by the QP to verify the data used in the technical report, including limitations or failures to verify data, and the QP's opinion on the adequacy of the data for the purpose of the technical report

There is a link between Data Verification & the Current Personal Inspection

- Item 2(d) in Form 43-101F1 requires a description of the details of the current personal inspection on the property by each qualified person that may be integral to Data Verification

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Data Verification in a Technical Report

The level of data verification needs to reflect what the data supports

- No data verification *likely means* no mineral resource estimate
- **Describe the data verification steps by the QP**
 - What the QP did to verify the data used in the technical report
 - Any limitations or failure to verify, and why
 - QP's opinion on the adequacy of the data for the purposes of the technical report
- **Example of QP's opinion on data verification:**

"Based on the data verification performed, it is the QP's opinion that the collar coordinates, downhole surveys, lithologies, and assay results are considered suitable to support the mineral resource estimation"



Blackwell, 2018

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Examples of Data Verification Steps

Current Personal Inspection:

- Locating Drill Hole Collars or Sampling Grids
- Logging and Sampling Procedures & Facilities Checks
- Core Storage & Handling Checks
- Inspection of drill core recovery and mineralization
- Confirmation sampling
- Laboratory visits, if considered appropriate

Other:

- Transcription of Drill Collar Coordinates
- Down-hole deviation survey checks
- Review of survey reports
- Lithology and alteration – checking original drill logs
- Assay data – checking of original certificates
- Other Error Checking of data results

"Assume nothing...check everything...trust no one."
Harry Parker, AMEC - May 10, 2004

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Current Personal Inspection – Importance

- It enables the QP(s) to be familiar with conditions on the property
- QPs can observe the geology & mineralization, verify the work done and, recommend an appropriate exploration or development program
- A current personal inspection is required even for properties with poor exposure
- It is the company's responsibility to arrange for a QP to carry out a current personal inspection



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Current Personal Inspections

Qualified Person(s) may not self-exempt from a Current Personal Inspection

- At least one QP is required to conduct a current personal inspection (s. 6.2 of NI 43-101)
- Relief from a current personal inspection is only provided through a formal application for **Exemptive Relief** prior to filing the technical report

However, CSA Staff do not think it is appropriate under any circumstance to consider exemptive relief for a current personal inspection for a technical report that discloses:


- An estimate of current mineral resources
- A preliminary economic assessment
- An estimate of current mineral reserves
- A current personal inspection need not always be completed by an independent QP, see the independence triggers of s. 5.3 of NI 43-101

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BREAK

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OSC
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6: Securities Legislation: What's left when you tear NI 43-101 out of the *Securities Act*

James Whyte, P. Geo.
Senior Geologist, Ontario Securities Commission

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The Securities Act:...*the democratic part*



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Securities Act

- An Act of the provincial Legislature
- Sets up the provincial securities regulator and determines its powers
- Sets out procedural rules and rulemaking power
- Creates licensing of brokers and oversight of exchanges
- Makes general laws around distribution of securities
- Defines offences
- Creates civil liability for officers, directors, and experts



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General distribution and trading rules

- Distributing securities into the province's capital markets will normally require a prospectus, unless a distribution is exempt
 - Private companies, accredited investors, close business associates, etc.
- General regulation about mechanics of trades
- High-level continuous disclosure requirements
 - Prohibits trading on undisclosed information
- Offences
 - "Catchall" clause: any act that "contravenes...securities law"



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Rulemaking Power

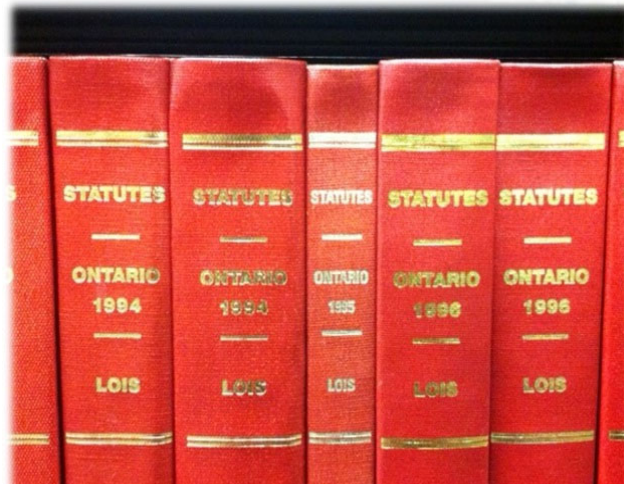
- “The Commission may make rules in respect of the following matters:”
 - For example, Ontario’s Act has about eight and a half pages of subjects
- This is how we get National Instruments (and Multilateral Instruments, and Policies, and other such things)
 - In practice, staff of all the securities regulators get together to develop a single national rule, and the rulemaking authority in each province or territory then follows its Act to proclaim the new rule.

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The Instruments:...*the bureaucratic part*

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The Act



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The Rules



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What Rules look like

- An Instrument
 - The legal text of the rule
 - It's the thing that would be interpreted by a Commission panel or a court
- Forms
 - Forms for any filing the rule requires
 - The Instrument (which is the law) specifies that each Form be used
- Companion Policy
 - Major rules are normally written with a Companion Policy
 - It's statement of Commission policy explaining how the rule should be interpreted
 - This is a policy – it does not have the force of law

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Prospectus Rules

NI 41-101 General Prospectus Requirements

- No distribution of securities without a prospectus
- **Full, true, and plain disclosure of all material facts**
- Some distributions are exempt (private companies, accredited investors)
- Certification by Issuer (corporately), underwriters, and promoters
 - Puts them on the hook for that full, true, and plain disclosure
- Prospectus Long Form (Form 41-101F1)
- Required documents
 - Lots of stuff! But, significantly, a technical report (or reports) to support any mineral project disclosure.

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Prospectus Forms

Form 41-101F1 *Information Required in a Prospectus*

- **Full, true, and plain disclosure of all material facts**
- If it's a mining (or mineral exploration) company, FTP means discussion of the company's material mineral projects in Item 5.4 of the Form
 - That triggers a technical report under NI 43-101
- **If it's an oil and gas company, FTP means including Form 51-101F1 Statement of Reserves Data and the other NI 51-101 filings.**
 - Form 51-101F2, QREs report, and Form 51-101F3, Management and Directors' report
- **Expert's certificates from QPs (mining) or QREs (hydrocarbons)**

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Continuous Disclosure Rule

NI 51-102 *Continuous Disclosure Obligations*

- This is the securities rule a public company lives with day-to-day, governing how it keeps the market informed about its business
- The principle is that once a company is a reporting issuer, it must report regularly on its operations and finances, and episodically on any important new information

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Continuous Disclosure Rule

- **NI 51-102 *Continuous Disclosure Obligations***
 - Regular periodic disclosure (annual and quarterly)
 - Immediately announce any material change by news release
 - Acts prohibit trading on an undisclosed material change
- **Requires several forms that can contain mineral project disclosure:**
 - Form 51-102F1 *Management Discussion and Analysis*
 - Form 51-102F2 *Annual Information Form*
 - Form 51-102F3 *Material Change Report*
 - Form 51-102F4 *Business Acquisition Report*
 - Form 51-102F5 *Information Circular*

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Continuous Disclosure Rule

- Other requirements don't really touch on mineral project disclosure
- Interim and annual financial statements
 - Governed by generally accepted accounting principles
- "Forward Looking Information" and future-oriented financial information
 - Must have a "reasonable basis"
 - Must state the material factors or assumptions the information is based on
 - Projections under NI 43-101 and NI 51-101 are partly carved out
- Form 51-102F6 and F6V, Statement of Executive Compensation

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Continuous Disclosure Forms

▪ Management Discussion and Analysis (“MD&A”)

- Quarterly, with interim and annual financial statements
- Item 1.4, “Discussion of Operations” always has some scientific or technical information from a mining company.

▪ Annual Information Form (“AIF”)

- Annual, information as at the end of the company’s financial year
- For companies with material mineral project interests, Item 5.4
 - Item 5.4 is also the perfect summary for a technical report – use it!
 - The AIF is a technical report trigger in NI 43-101
- For oil and gas companies, Item 5.5 – either include your 51-101 forms or incorporate them by reference

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Continuous Disclosure Forms

▪ Material Change Report

- The rule instructs companies that have a material change to issue a news release “**immediately**”, and file a material change report within 10 days
- There are “box-tick” type headings at the start of the form but the best way to comply is to append the news release...presuming it’s comprehensive!
- We generally take the position that a new resource or reserve estimate is a material change

▪ Business Acquisition Form (“BAR”)

- Explains significant acquisitions to the market
 - “Significant” is based on revenue and/or asset tests in the rule
- Might need valuation information – and that could be scientific or technical information on a mineral project

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Continuous Disclosure Forms

Information Circular

- If the corporation calls a security-holders meeting, it must file an information circular
- Item 14, “Particulars of Matters to be Acted Upon” could include mineral project disclosure – typically shareholder approval for an acquisition
 - Must have “sufficient detail” for a “reasoned judgement” on a vote
 - Significant acquisitions may need prospectus-level disclosure – and if that’s a mineral property, that means Item 5.4 of the AIF again and a technical report trigger

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Prospectus rules requiring CD compliance

- **NI 44-101 Short Form Prospectus Distributions**
 - For companies that are already reporting issuers
 - The company needs to have a complete and current CD record
 - Form 44-101F1
 - Must have filed an Annual Information Form
 - **Still needs certified full, true, and plain disclosure**
 - Issuer incorporates CD by reference in the prospectus
- **NI 44-102 Shelf Distributions**
 - Another short form distribution using the same form
- **Both of these can trigger the requirement to file a technical report if there is mineral project information**

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Business Combination Rules

▪ NI 62-104 *Takeover Bids and Issuer Bids*

- Rules govern timing, market actions, obligations of bidder and target
- But also: Five different forms from bidder or target company
 - Must have the material information security holders need to make their decisions on tendering
 - **That could be mineral project information**
 - Bid circulars are a technical report trigger in NI 43-101 (s. 4.2 (1)(i))
 - Other circulars (like the director's circular) may have mineral resource or reserve estimates that trigger a technical report

▪ MI 61-101 *Protection of Minority Shareholders in Special Transactions*

- The law in AB, SK, MB, ON, QC, NB
- May require a valuation, which is a technical report trigger in NI 43-101

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Foreign Disclosure Documents

▪ NI 71-102 *Continuous Disclosure and Other Exemptions Relating to Foreign Issuers*

- Applies to companies domiciled in other countries that are reporting issuers in Canada (mostly those that trade on a Canadian market)
- "SEC Foreign Issuers" that trade in the U.S.A.
- "Designated Foreign Issuers" from a list of 15 other countries where capital markets have regulations comparable to ours
- Allows these issuers to file their foreign securities disclosure to meet their obligations under NI 51-102 and for early warning or insider reporting
 - Mineral project disclosure must still meet NI 43-101 rules
 - The corresponding documents will trigger technical report requirements just as a Canadian form would

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Summary

- The Mining Rule, NI 43-101, tells you how to disclose information about a mineral project, not when, what, or why
- The Oil and Gas Rule, NI 51-101, requires public companies with oil and gas activities to file a Statement of Reserves Data, and some other declarations, once a year
- It also tells you how to disclose information about oil and gas activities
- But it's other securities legislation – the Securities Act, and rules made under the authority of the Act, that instruct public companies on when to disclose information and what that information should be

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Summary

- The Continuous Disclosure rule, NI 51-102, is the rule that will most often affect your work, because it's the one that governs routine disclosure by a public company in the resource industry
 - There's periodic disclosure, like the MD&A and the Annual Information Form
 - And there's episodic disclosure, like material change reports
- Rules governing prospectuses and bid documents also require public companies to disclose information about mineral projects or oil and gas assets
 - And if they ask for "prospectus-level disclosure" it must be full, true, and plain

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7: DISCLOSURE REVIEWS

Craig Waldie, P. Geo.
Senior Geologist, Ontario Securities Commission

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Types of Disclosure Reviews

1) Prospectus Review

- Prospectus is a key investor protection tool:
 - Prospectus must provide full, true, and plain disclosure of all material facts
 - Officers, directors, underwriters, and experts (i.e. QP) may be liable for a misrepresentation
- Forms of prospectus offerings:
 - Long form (IPO)
 - Initial comment letter sent within 10 business days
 - Short form (Company incorporates by reference previously filed documents into the prospectus)
 - Initial comment letter sent within 3 business days



Key: Use of proceeds needs to align with technical report recommendations

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Types of Disclosure Reviews

2) Continuous Disclosure (CD) Review

- Main objectives
 - Compliance - Assess the company's technical disclosure for compliance with the rules
 - Education - Help companies understand their disclosure obligations
- Full review
 - Broad in scope and based on selected risk criteria
 - Review of website, news releases, AIF, MD&A, technical reports, social media, etc.
- Issue oriented review (IOR)
 - Focused on a specific technical issue based on complaints, news releases, etc.
 - Example: website corporate presentations

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Disclosure Review Process

Formal comment letter is sent electronically to the company

- Outlines specific disclosure concerns identified by staff
- Requests the company explain, clarify, or retract disclosure, or other corrective action
- Staff will typically comment on issues such as:
 - Non-compliance with NI 43-101 or disclosure not based on industry best practices
 - Website disclosure that includes economic projections unsupported by a technical report
 - Technical reports that do not comply with Form 43-101F1
- Company is generally requested to respond in writing in 5-10 business days
- Disclosure review process may involve multiple comment & response letters
- Staff may also conclude that the company is in "default" of a specific filing obligation

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Sample Comment Letter



Ontario
Securities
Commission

Commission des
valeurs mobilières
de l'Ontario

22nd Floor
20 Queen Street West
Toronto ON M5H 3S8

22^e étage
20, rue Queen ouest
Toronto ON M5H 3S8

December 5, 2022

The Corporate Finance branch of the Ontario Securities Commission has recently selected the Company for an issue-oriented review of its continuous disclosure record.

Our review is being conducted under section 20.1 of the Securities Act (Ontario). On the basis of this review, OSC staff has concluded that the Company is in default (the Default) of certain NI 43-101 continuous disclosure obligations under Ontario securities law.

Failure to file a technical report

As noted in CSA Staff Notice 43-309 *Review of Website Investor Presentations by Mining Issuers*, disclosure on the Company's website of potential economic projections and outcomes may trigger the filing of a technical report to support the economic analysis disclosure. Examples of the economic analysis on the Company's website not supported by a technical report include:

September 2022 investor presentation on the Golden Hope project which discloses:

- Annual gold production (82,000 ounces per year)
- Mine life (12 years)
- Initial capital costs (\$540 million)
- NPV and IRR (\$300 million and 25%)
- Payback (3 years)

Immediate action required

By December 19, 2022, the Company should do one of the following:

- a) Remedy the Default, or
- b) Advise us that it does not intend to dispute staff's conclusions regarding the Default and provide a detailed timeframe as to when the Company intends to remedy the Default, or
- c) Advise us that it intends to dispute staff's conclusions regarding the Default.

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Dealing with the Regulator

Do:

- ✓ Read the rules before you call the regulator or respond to staff comments
- ✓ Address the regulator's concerns – cooperation isn't necessarily capitulation
- ✓ Provide proposed solutions to deal with the disclosure issues – we may agree
- ✓ Remember that NI 43-101 applies to all written disclosure, not just formal filings

Do not:

- ✗ Assume that a strong offence will be a good defense
- ✗ Justify your disclosure because someone else did it that way
- ✗ Think that your situation is unique, and compliance is not required
- ✗ Take the position that capital and operating costs & economic analysis are not "scientific and technical information"

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Top 5 Deficiencies: NI 43-101 (Rule)

2.4 Disclosure of historical estimates

- Lack of source and date, main assumptions if known, cautionary language

3.3 Requirements for written disclosure of exploration information

- Missing assay procedures, name of lab, QA/QC, true widths, higher grade intervals

2.3 Restricted disclosure

- Omitting PEA cautions for inferred, exploration target ranges

2.2 All disclosure of mineral resources or mineral reserves

- No resource and reserve categories, only reporting contained metal, adding inferred

3.1 Written disclosure to include name of qualified person

- Lack of providing the QP's name and relationship to the company with all disclosure

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Top 5 Deficiencies: Technical Report (Form 43-101F1)

Item 3: Reliance on other experts

- Must be limited to reliance on legal, political, environmental, or tax (not technical)

Item 12: Data verification

- Lack of data verification by the QP, & lack of QP's opinion on adequacy of the data

Item 11: Sample preparation, analyses and security

- Missing QA/QC info., assay & analytical procedures, name of lab, sample preparation

Item 10: Drilling

- Missing location, azimuth, and dip of drill holes, true widths, higher grade intervals

Item 14: Mineral resource estimates

- Lack of key assumptions, parameters, methods, and no discussion of material risks

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So What if the Disclosure Doesn't Comply?

NI 43-101 is enforceable under the Securities Act

▪ Possible outcomes:

- News release clarifying and/or retracting previous disclosure
- Amending and refiling a technical report
- Filing a technical report that should have been filed earlier
- Company placed on the default list
- Cease trade order or management cease trade order
- Referred to enforcement for further investigation

▪ Other possible outcomes:

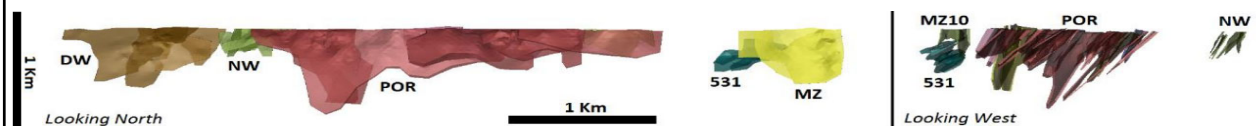
- Class action lawsuit filed under civil liability provisions of the Securities Act
- Complaint forwarded to the QP's professional association

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Example: Global “Unconstrained” Resource

“New Mineral Resource of 130 million tonnes @ 1.06 g/t gold for 4.4 million ounces using a 0.5 g/t gold cut-off grade”

Longitudinal section covering the 7 km mineralized trend and related zones



Note: The global resource model follows a bulk gold scenario and is not constrained by a pit shell

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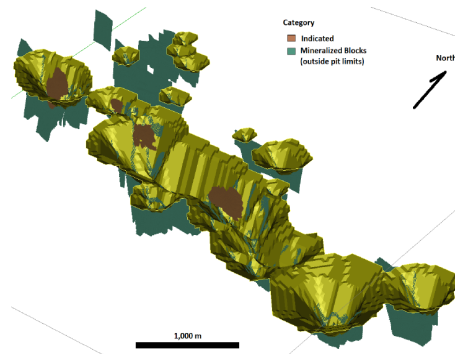
Clarification: Revised “Pit Constrained” Resource

“In-Pit” Mineral Resource of 83 million tonnes @ 1.05 g/t gold for 2.8 million ounces using a 0.5 g/t gold cut-off grade

Based on a review by staff of the securities commission, the Company has revised the previously disclosed resource estimate by applying reasonable technical and economic parameters in accordance with the CIM Definition Standards

The Company is therefore providing a revised “In-Pit” mineral resource estimate which **reduces the contained gold ounces by 36%**

Investors are advised not to rely on the previous global resource estimate



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Spotting Bad (Science) Disclosure

1. Sensationalized headlines
2. Misinterpreted results
3. Conflict of interest
4. Correlation vs. causation
5. Speculative language
6. Sample size too small
7. Unrepresentative samples
8. No control group used
9. No blind testing used
10. ‘Cherry-picked’ results
11. Unrepeatable results
12. No peer review

A ROUGH GUIDE TO SPOTTING

• BAD SCIENCE •

- 1. SENSATIONALIZED HEADLINES**
Headlines of articles are commonly designed to entice readers into clicking on and reading the article. As such, they often employ the kinds of research in which they sensationalize and misrepresent them.
- 2. MISINTERPRETED RESULTS**
Many articles sometimes distort or misrepresent the findings of research for the sake of a good story, intentionally or otherwise. If possible, try to read the original research, rather than relying on the article based on it for information.
- 3. CONFLICT OF INTERESTS**
Before companies employ scientists to carry out any public research, what the client and company must disclose is that the scientist is not an independent third party. Researchers can also be misperceived for personal or financial gain.
- 4. CORRELATION & CAUSATION**
In many instances of correlation in isolation, correlation between two variables doesn't necessarily mean that one caused the other. Correlation has increased since the 1980s, and people have been misled by lack of proper causal chain warning.
- 5. SPECULATIVE LANGUAGE**
Speculation from researchers who lack the necessary data to support their claims is often used to make a story more exciting. Be on the look out for words such as 'may', 'could', 'might', and others, as it is to verify the research provides hard evidence and any conclusions they provide.
- 6. SAMPLE SIZE TOO SMALL**
In many cases, the smaller a sample size, the lower the confidence in the results from that sample. Conclusions drawn should be considered with caution, as they may be based on a small number of samples that are unreliable. It may be cause for suspicion if a single sample was provided but omitted.
- 7. UNREPRESENTATIVE SAMPLES**
In human trials, researchers will try to select individuals that are representative of a large population. If the sample is different from the population, the results may not be as effective.
- 8. NO CONTROL GROUP USED**
In clinical trials, results from one subject should be compared to a control group that is given the substance being tested. Without a control group, it is difficult to determine if the results are due to the treatment or other factors.
- 9. NO BLIND TESTING USED**
To prevent any bias, subjects should not know if they are in the control or treatment group. This is done by having the subjects be unaware of which group they are in, and the results are only revealed after the testing is complete.
- 10. 'CHERRY-PICKED' RESULTS**
This involves selecting data from experiments which supports the conclusion of the research, while ignoring data that does not. If a research paper draws conclusions from a selection of its results, not all, it may be cherry-picking.
- 11. UNREPLICABLE RESULTS**
Results should be replicable by independent researchers, and should meet a wide range of conditions. Some studies are based on a single study, which is not enough to support a conclusion. Replicable results are those that can be repeated by other researchers.
- 12. JOURNALS & CITATIONS**
Research published in peer-reviewed journals is more likely to be reliable. However, some journals are not peer-reviewed, and some are not reputable. It is important to check the credibility of the journal and the researchers before accepting their findings.

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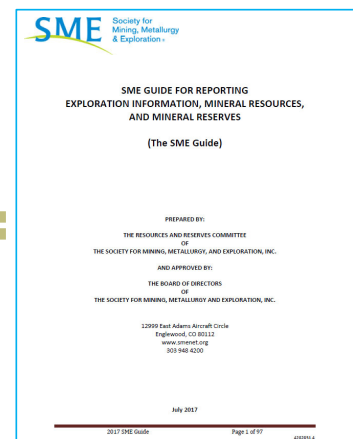
Current Events in Disclosure: POTPOURRI AND GENERAL Q&A

All Presenters

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Securities & Exchange Commission S-K 1300

- S-K 1300 sets out the disclosure requirements SEC registrants **must** follow in their 'core' documents filed with the SEC
- The rule refers to alignment with CRIRSCO, but does not specifically reference the 2017 SME Guide for Reporting



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Securities & Exchange Commission S-K 1300

S-K 1300 does check many of the NI 43-101 'boxes'

- ☑ Qualified person
- ☑ Materiality standard
- ☑ Exploration information
- ☑ Exploration target
- ☑ Historical estimate
- ☑ Reasonable metal price
- ☑ Mineral resource
- ☑ Inferred in an economic analysis
- ☑ Prefeasibility study
- ☑ Mineral reserve
- ☑ Technical report summary

ONLY Multi-jurisdictional Disclosure System (MJDS) eligible companies are **exempt** from S-K 1300 requirements
(approx. 30-40 "seasoned" Canadian mining companies)

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Securities & Exchange Commission S-K 1300

Scope of S-K 1300 versus NI 43-101

▪ S-K 1300

- Applies only to SEC registrants
- Applies only to certain SEC filings – 10-K, 20-F, S-3, S-4, F-1, F-3, Reg. A
- Excludes disclosure in websites, press releases, corporate presentations and other marketing materials
- Only Technical Report Summaries must be attributed to a qualified person
- MJDS exemptions for eligible Canadian companies

▪ NI 43-101

- Applies to all 'issuers' including private companies
- All technical disclosure must comply, including websites, social media etc.
- All technical disclosure must be attributed to a qualified person
- MJDS exemption for eligible US companies

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Securities & Exchange Commission S-K 1300

Question:

Would a qualified person under S-K 1300 be '*acceptable*' under NI 43-101?

It is possible, however . . .

- No independence requirement under S-K 1300
- No specific academic degree requirements under S-K 1300 (defers to professional associations)
- No list of acceptable professional associations
- No requirement to name the qualified person, except in certain circumstances

Cross-listed companies will need to make sure their QP's meet all the specific requirements and designations under NI 43-101

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Securities & Exchange Commission S-K 1300

Question:

Would mineral resources reports under S-K 1300 be '*acceptable*' under NI 43-101?

Yes, however...

- MRE's require an 'initial assessment' under S-K 1300
 - "Initial Assessment is a preliminary economic and technical study to support the disclosure of a mineral resource. It is a basically a "PEA" without reporting the DCF metrics
- Disclosure of an initial assessment with an economic analysis is permitted
 - May include inferred resources but must also report excluding inferred resources

CSA Staff Observations:

- 1) It 'appears' that more rigor is required for estimating resources
- 2) Economic analysis disclosure may trigger a technical report under NI 43-101 for cross-listed companies

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Securities & Exchange Commission S-K 1300

Question:

Would a Technical Report Summary prepared under S-K 1300 be '*acceptable*' under NI 43-101?

It may be possible, however...

- Table of contents is different, but in general the disclosure items are similar.
- No qualified person certificates are required.
- Filing is only required annually, with the Annual Report (Form-20F)

CSA Staff have yet to review many 'Technical Report Summaries'. Proceed with caution.



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Securities & Exchange Commission S-K 1300

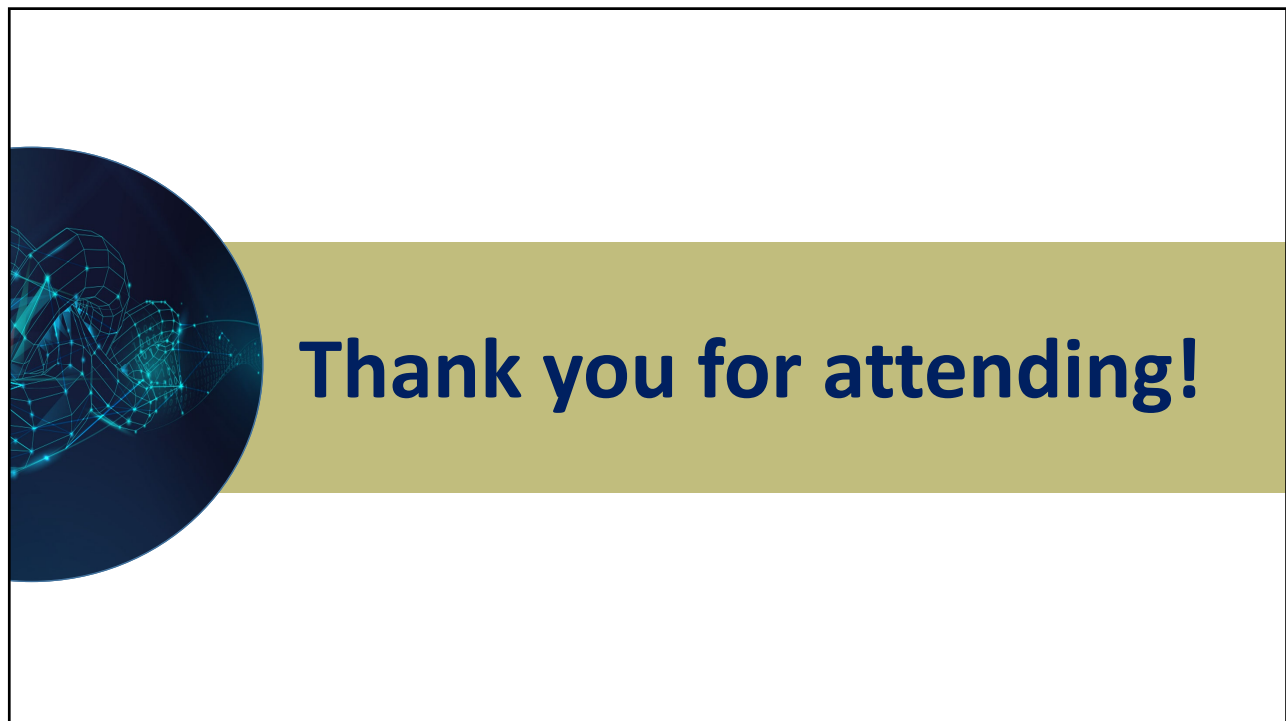
S-K 1300 Technical Report Summary versus NI 43-101, Form 43-101F1 Technical Report

SEC Table of Contents (229.601)	NI 43-101F1 Table of Contents	
1 Executive Summary	1 Summary	All Properties
2 Introduction	2 Introduction	
3 Property Description	4 Property Description and Location	
4 Accessibility, Climate, Local Resources, Infrastructure and Physiography	5 Accessibility, Climate, Local Resources, Infrastructure and Physiography	
5 History	6 History	
6 Geological Setting, Mineralization, and Deposit	7 Geological Setting and Mineralization	
7 Exploration	8 Deposit Types	
8 Sample Preparation, Analyses, and Security	9 Exploration	
9 Data Verification	10 Drilling	
10 Mineral Processing and Metallurgical Testing	11 Sample Preparation, Analyses and Security	
11 Mineral Resource Estimates	12 Data Verification	"Advanced Property" (Reserves based on a PFS or FS), or Resources (a PEA))
12 Mineral Reserve Estimates	13 Mineral Processing and Metallurgical Testing	
13 Mining Methods	14 Mineral Resource Estimates	
14 Processing and Recovery Methods	15 Mineral Reserve Estimates	
15 Infrastructure	16 Mining Methods	
16 Market Studies	17 Recovery Methods	
17 Environmental Studies, Permitting, and Plans, Negotiations, or Agreements with Local Individuals or Groups	18 Project Infrastructure	
18 Capital and Operating Costs	19 Market Studies and Contracts	
19 Economic Analysis	20 Environmental Studies, Permitting and Social or Community Impact	
20 Adjacent Properties	21 Capital and Operating Costs	All Properties
21 Other Relevant Data and Information	22 Economic Analysis	
22 Interpretation and Conclusions	23 Adjacent Properties	
23 Recommendations	24 Other Relevant Data and Information	
24 References	25 Interpretation and Conclusions	
25 Reliance on Information Provided by the Registrant	26 Recommendations	
	27 References	
	3 Reliance on Other Experts	

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Speaker Bios

Brian Abraham, KC, P. Geo. – Dentons Canada LLP

Brian Abraham, K.C., P. Geo. is the chair of Dentons' Canadian Mining group. His practice involves all phases of mining from exploration, development and production through to reclamation. He provides advice on all forms of title reviews, options, leases, purchase and joint-venture agreements. He also advises on socioeconomic, engineering, consulting, construction, operator, equity and debt financing, smelter, processing agreements, and reclamation agreements. He is also a member of the Engineers and Geoscientists of British Columbia, the Law Societies of British Columbia and Yukon. Within his practice area, Brian acts domestically and internationally for junior explorers, developers and producers as well as mining consultants, organizations, syndicates and financiers (debt and equity) in private and public financing. He has also participated in background studies for mineral legislation in British Columbia and other Canadian jurisdictions and has advised foreign governments regarding the preparation and implementation of mining legislation.

Victoria Addison, B.Sc., LLM, P. Eng. – British Columbia Securities Commission

Victoria is a mining engineer with over 20 years of work experience characterized by a balanced exposure to the mining industry. She has taken site-based and corporate roles in open-pit optimization and design, production planning, mine management, technical due diligence, and most recently, in executive leadership. Victoria has participated in various mining technical studies and been involved with multiple NI 43-101 technical reports (PEA, PFS, FS). Victoria's expertise covers gold, silver, lead, zinc, and copper projects, and she has worked on various mining projects from conceptual studies to production.

Victoria holds a Bachelor of Science degree with honors from Kwame Nkrumah University of Science & Technology (Ghana) and a Master of Law degree with distinction from Dundee University, Scotland. Victoria is a registered professional engineer with EGBC.

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Speaker Bios

Kimberly E. Burns, Partner – Dentons Canada LLP

Working with Vicki and this team on the short course is a highlight of my year. I am a results-driven corporate lawyer with genuine enthusiasm for my practice and for building – and fostering – lasting connections with people. As a partner in Dentons Canada's Corporate group, I have extensive experience advising clients on public and private mergers and acquisitions, commercial agreements, corporate governance matters, international structuring, and partnering agreements. I balance the ebb and flow of transactional work with ongoing strategic advice for the executive teams of a variety of Canadian and international clients, mainly in the mining, cannabis, and entertainment sectors.

Vanessa MacLean, P. Geo. – British Columbia Securities Commission

Vanessa is a Geologist who joined the BC Securities Commission in 2022 after working in senior roles for Barrick and for De Beers Exploration Canada. During her time with Barrick she worked with the Canadian Exploration team to identify projects of interest across the Superior craton, organized exploration programs and managed a team of geologists. She additionally worked at the Hemlo mine site and completed belt scale targeting and worked to improve the geological and mineralization controls at the mine. Prior to working with Barrick she was a Project Lead Geologist for De Beers Canadian Exploration group and a Mine Site Geologist at the Ekati Mine in the Northwest Territories. Vanessa holds a Bachelor of Science in Geology from Simon Fraser University and a Master of Science in Geology from Laurentian University. Vanessa lives on the Sunshine Coast, BC and has a dog named Monty.

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Speaker Bios

Craig Waldie, P. Geo. – Ontario Securities Commission

Craig is a Senior Geologist at the Ontario Securities Commission specializing in NI 43-101 compliance reviews of prospectuses, technical reports, and other regulatory filings of mining companies. Prior to joining the OSC in 2006, Craig spent over 20 years in the mineral exploration and mining industry working domestically and internationally for multinational senior mining companies and as VP Exploration for several junior mining companies. Craig is a registered P. Geo. in Ontario with a M.Sc. in Mineral Exploration from Queen's University and a B.Sc. in Earth Science from the University of Waterloo.

Darin Wasylik, P. Geo. – British Columbia Securities Commission

Darin joined the BCSC as a Senior Geologist in January 2013 after almost 10 years working with Junior Exploration and Mining Companies. Darin has international experience in the exploration and development of gold, copper, and zinc properties and has worked on a variety of mineral projects from target generation at grassroots level through to feasibility, production and reconciliation.

Darin has a Bachelor of Science Degree with honors in Geology from Acadia University in Nova Scotia and is a registered professional geoscientist with EGBC.



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Speaker Bios

James Whyte, P. Geo. – Ontario Securities Commission

James Whyte is a Senior Geologist at the Ontario Securities Commission, responsible for reviewing mineral project disclosure – and very occasionally oil and gas disclosure - by public companies. He was formerly Senior Staff Writer in the Toronto bureau of The Northern Miner, the weekly newspaper of the North American mining industry. He has experience in mineral exploration, as a staker, geophysical operator, sampler, and geologist, and in environmental and geotechnical consulting for the construction and real-estate business.

Jim is a registered Professional Geoscientist in Ontario, a geochemist by training, and a bushrat by heritage, with a B.Sc. in geology from the University of Toronto and an M.Sc. in geochemistry from Queen's University.

Victoria Yehl, M.Sc., P. Geo. – British Columbia Securities Commission

Victoria (Vicki) joined the BC Securities Commission as a Senior Geologist in 2016 after over 20 years with Teck Resources Limited. In April 2022, Vicki became the Manager, Mining after Chris Collins' retirement. During her time at Teck, Vicki worked around the world as part of the Exploration, Energy (Oil Sands), Exploration Business Development and Corporate Development teams on a wide range of mining projects and commodities. She spent time as an underground production geologist at the Polaris Zinc Mine, led Teck's global diamond exploration, worked on Teck's oil sands projects, and participated in multiple property evaluations, partnerships, acquisitions, and farm-outs.

Vicki holds a Bachelor of Science in Geology from University of Toronto, a Master of Science in Geology from Queen's University, and a Graduate Diploma in Business Administration (Mining) from Simon Fraser University. Finally, Vicki is also a registered professional geoscientist with EGBC.



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