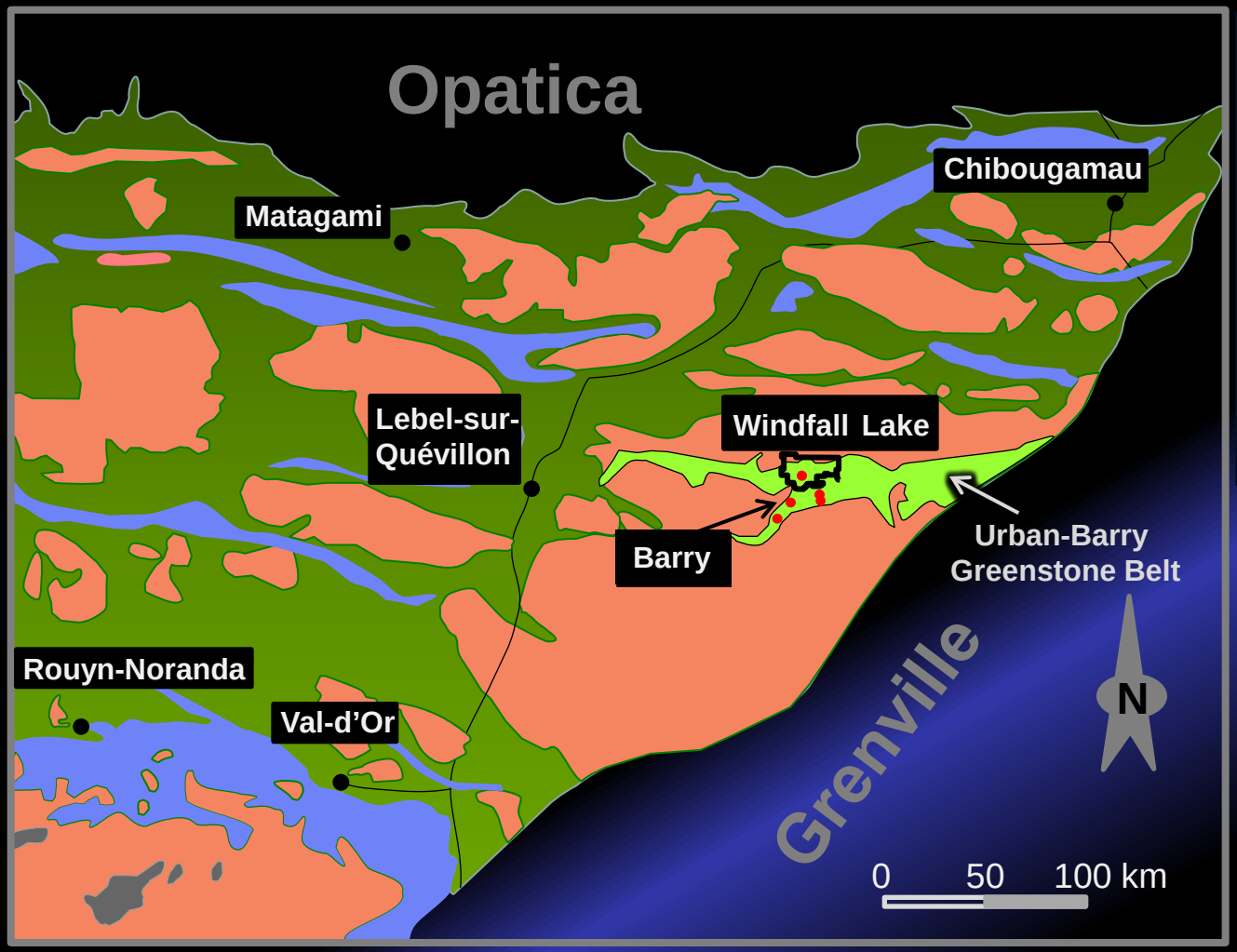
Modèle géologique et implications régionales du projet aurifère Windfall, Abitibi

Ceinture de roches vertes d'Urban-Barry



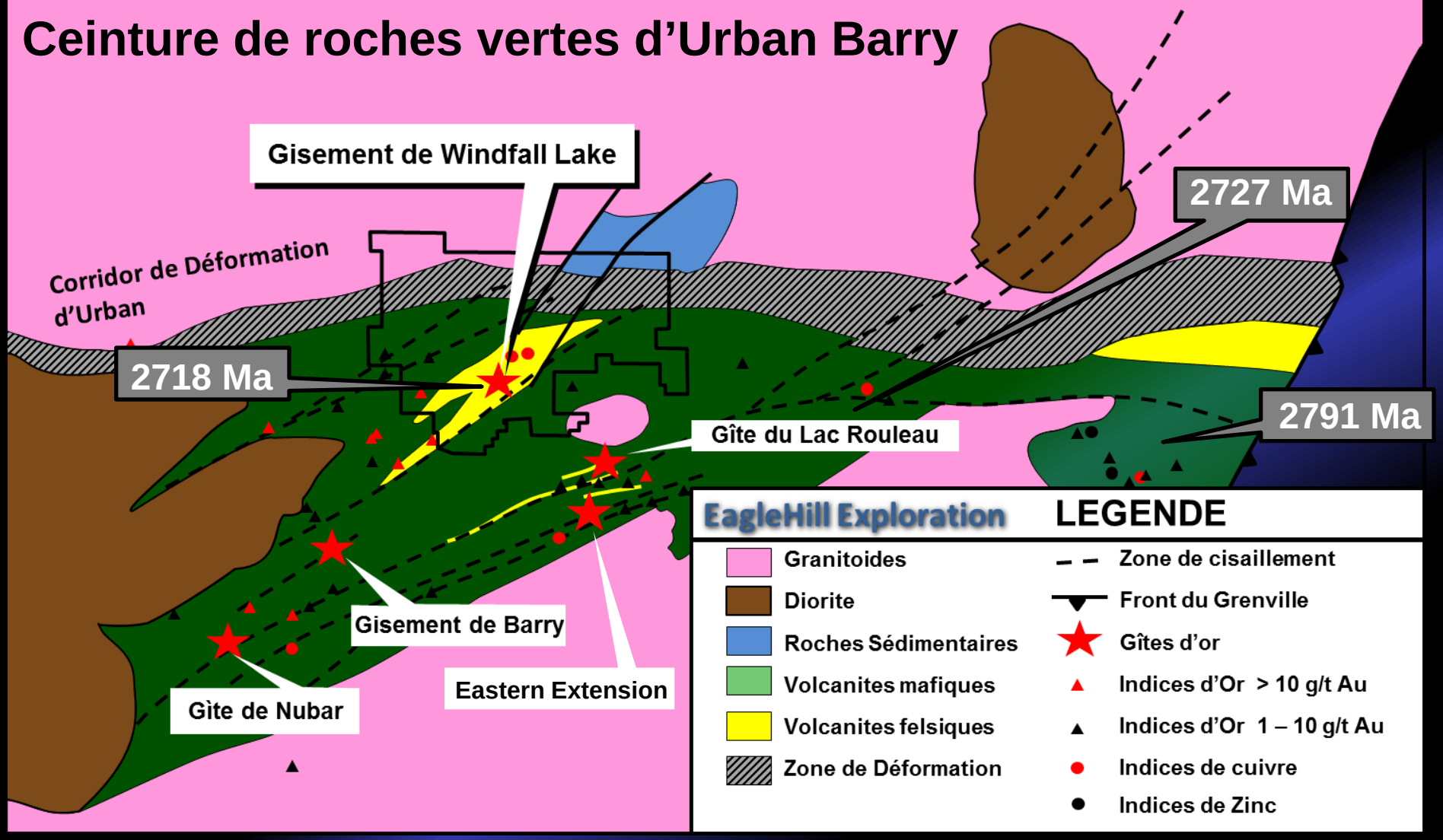
Situé entre Val-d'Or et Chibougamau

Accès toute l'année

Rampe d'exploration

Plus de 600 DDH

Ceinture de roches vertes d'Urban Barry

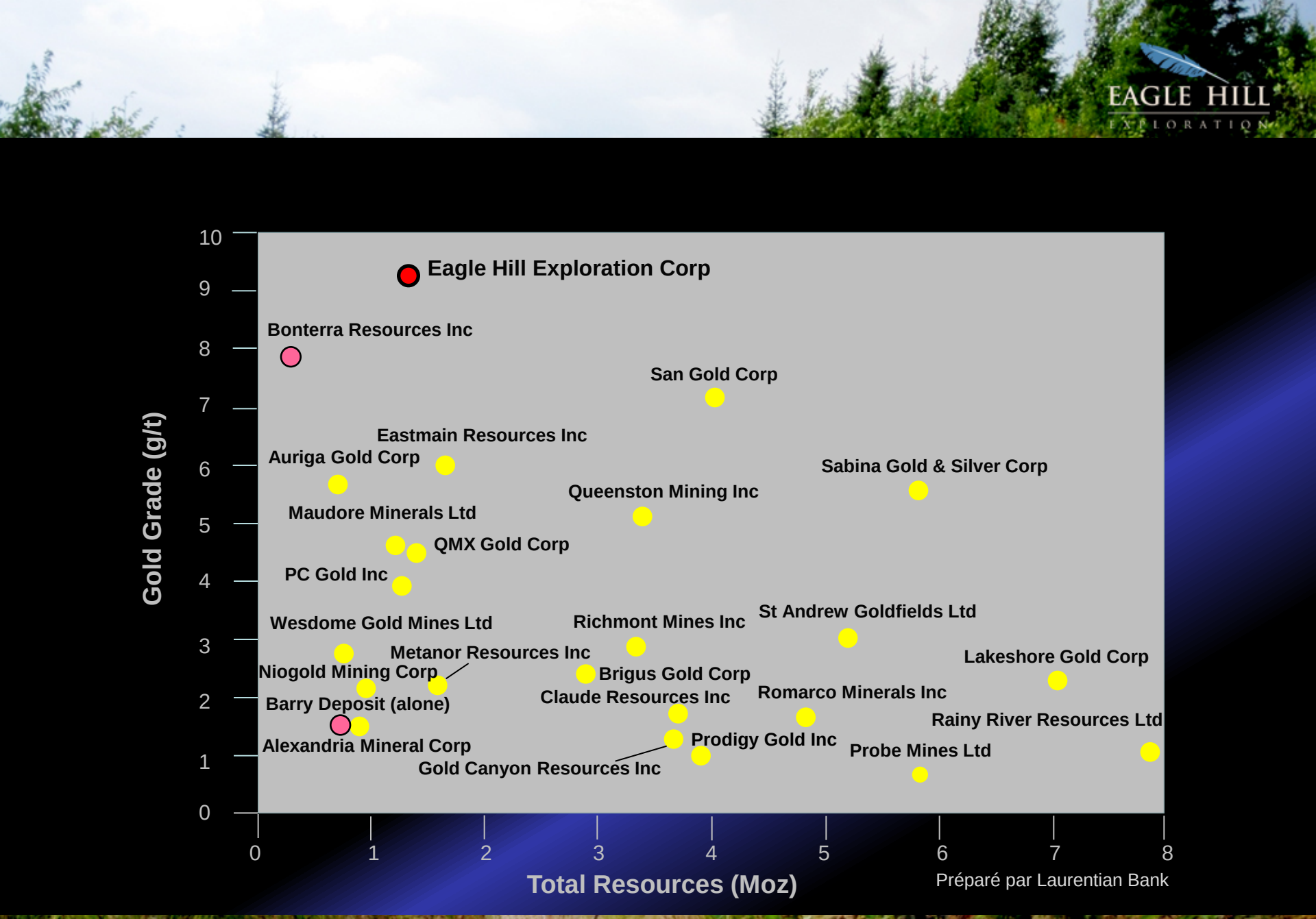


ESTIMÉ DE LA RESSOURCE MINÉRALE – Windfall Lake

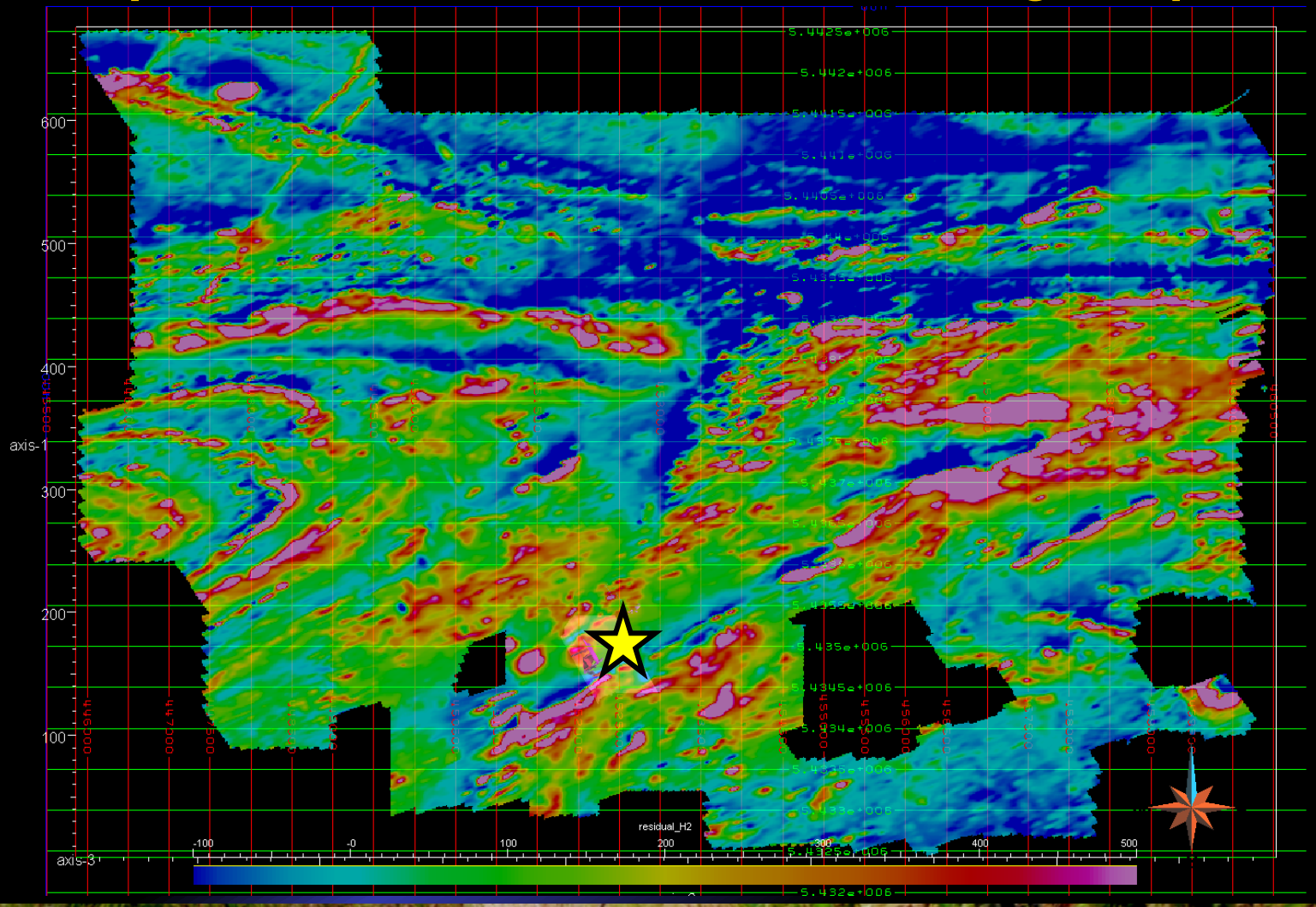
Classification/Zone	Quantity (000 tonnes)	Grade Gold (gpt)	Contained Gold (000 ounces)
Indicated			
Main Zone	1,665	10.05	538
F17 Zone	–	–	–
F51 Zone	–	–	–
Total Indicated	**1,665**	**10.05**	**538**
Inferred			
Main Zone	2,659	8.95	768
F17 Zone	178	7.62	44
F51 Zone	69	4.49	10
Total Inferred	**2,906**	**8.76**	**822**

Cut-off grade 3.0 gpt. Assuming an UG mining scenario, gold price at US$1,200 per ounce and a recovery of 97%.

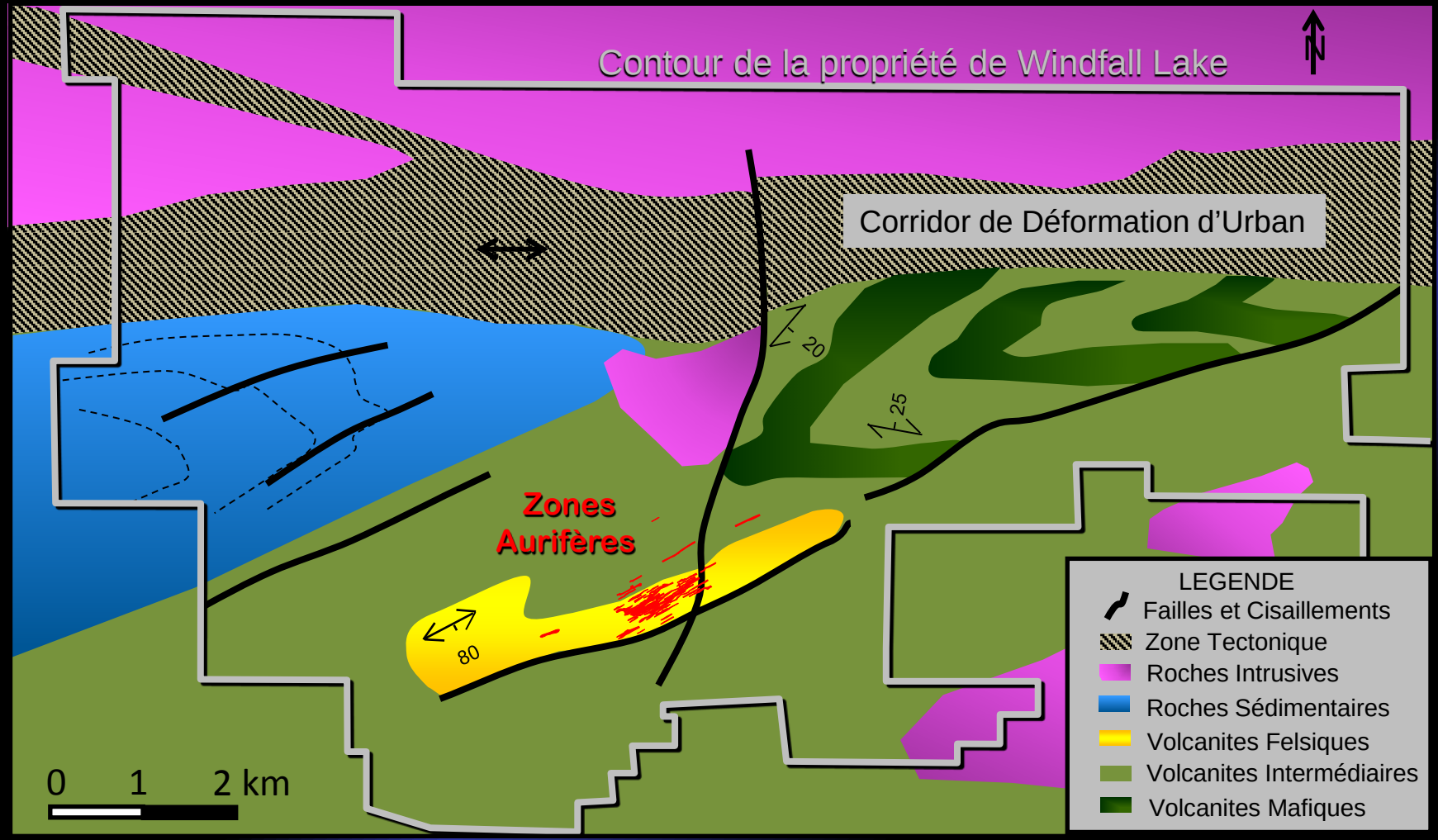
SRK Consulting (Canada) Inc.
July 25, 2012.


EAGLE HILL
EXPLORATION
Gold Grade (g/t)
Total Resources (Moz)
0
1
2
3
4
5
6
7
8
9
10
Eagle Hill Exploration Corp
Bonterra Resources Inc
San Gold Corp
Eastmain Resources Inc
Auriga Gold Corp
Sabina Gold & Silver Corp
Queenston Mining Inc
Maudore Minerals Ltd
QMX Gold Corp
PC Gold Inc
St Andrew Goldfields Ltd
Wesdome Gold Mines Ltd
Richmont Mines Inc
Metanor Resources Inc
Lakeshore Gold Corp
Niogold Mining Corp
Brigus Gold Corp
Romarco Minerals Inc
Claude Resources Inc
Barry Deposit (alone)
Rainy River Resources Ltd
Prodigy Gold Inc
Alexandria Mineral Corp
Probe Mines Ltd
Gold Canyon Resources Inc
Préparé par Laurentian Bank

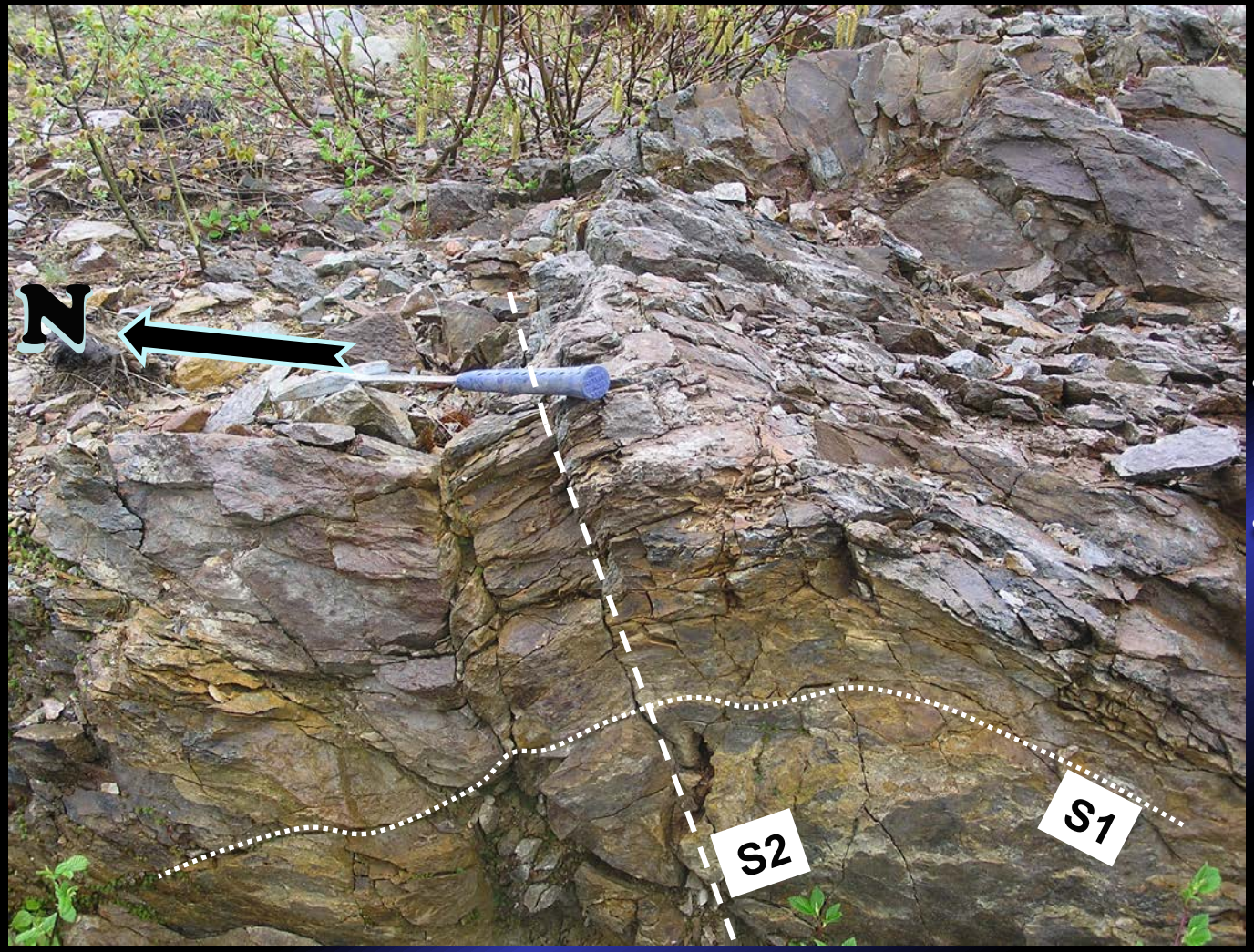
Propriété de Windfall Lake – Carte magnétique



Géologie de la propriété de Windfall Lake



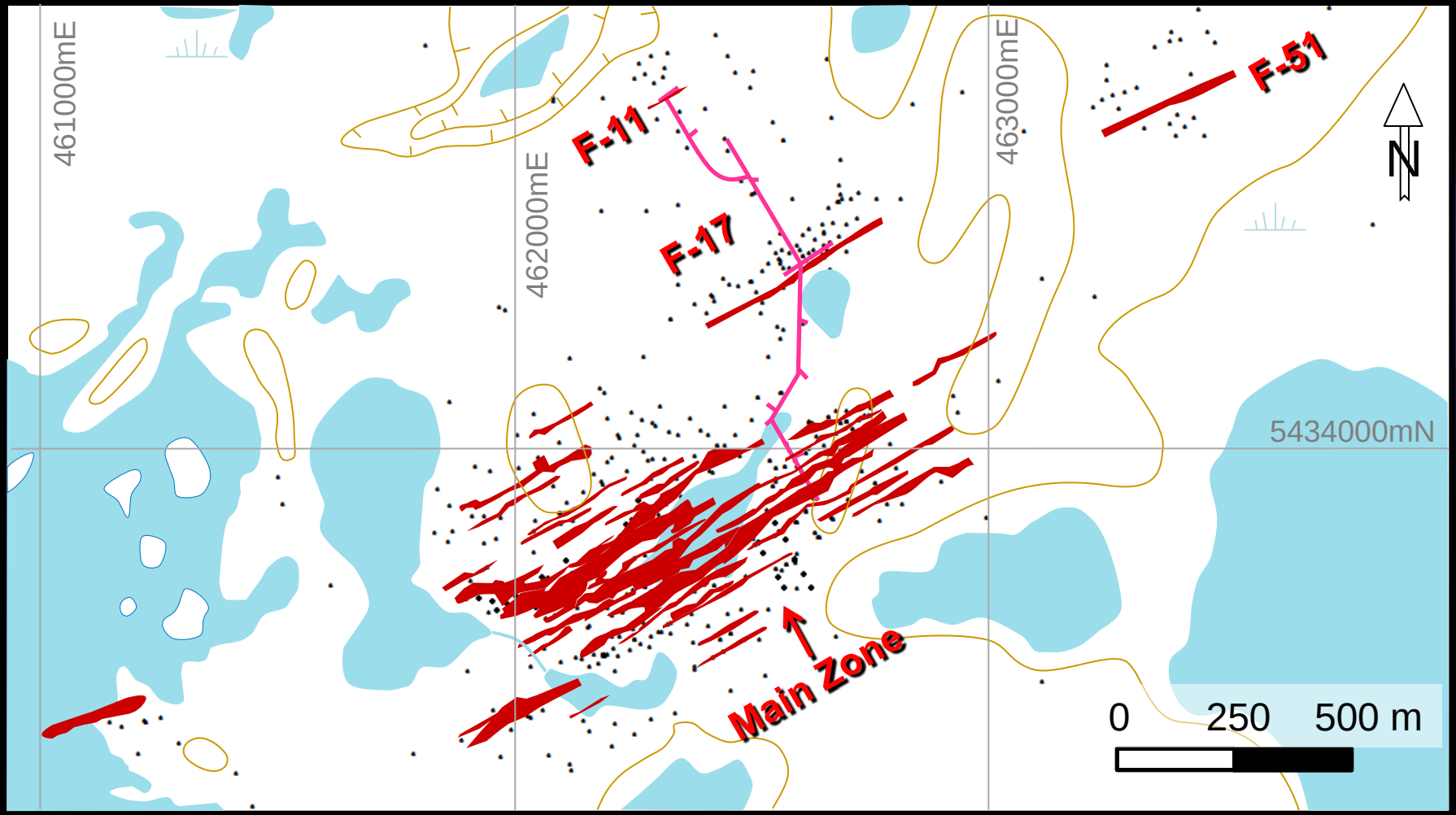
Fabriques Tectoniques Principales – vue vers l'ENE

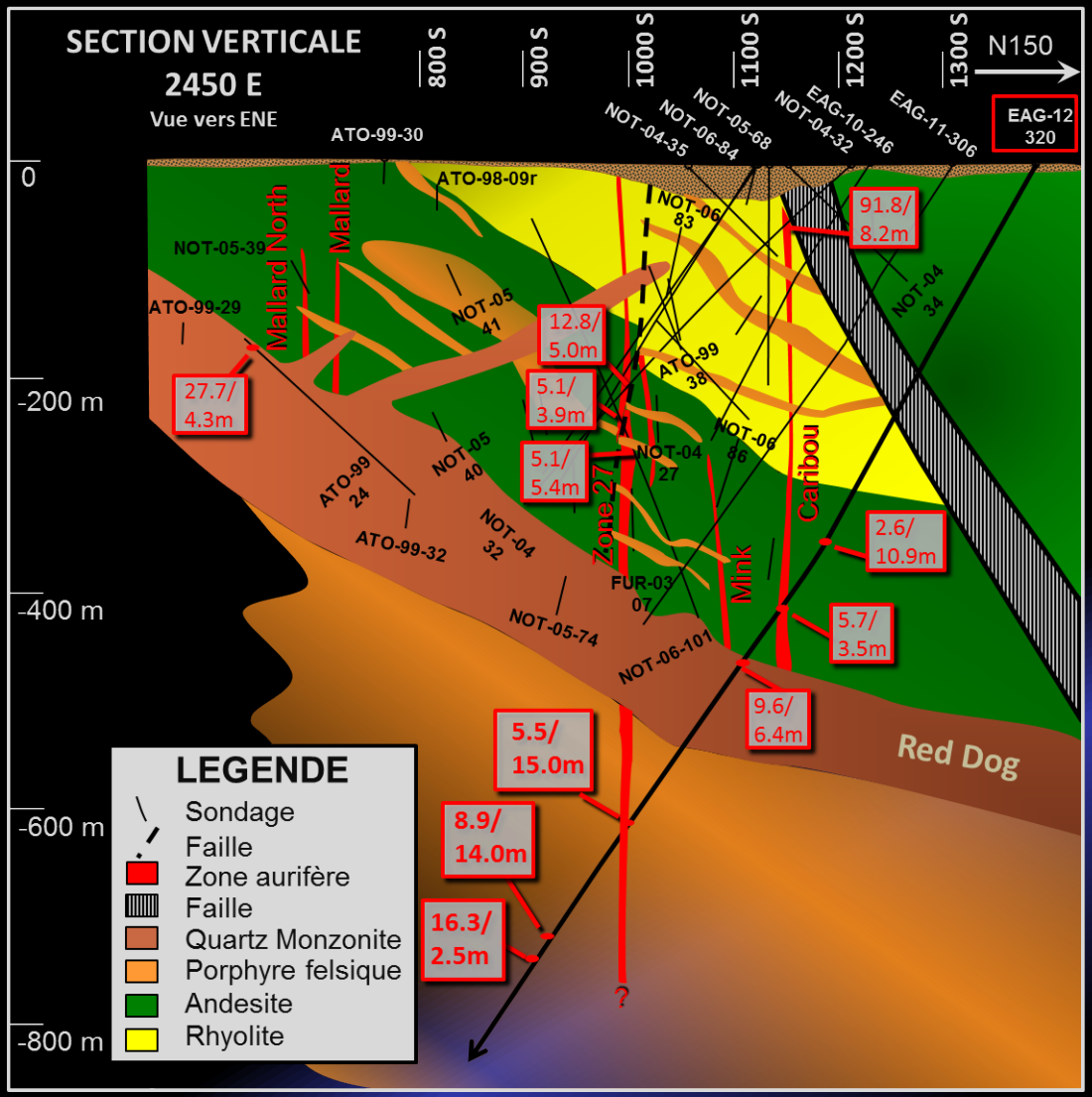


2 premières phases
De deformation
=
Géometrie
des roches volcaniques

- **S1:** Pendage faible
  Chevauchement
- **S2:** ENE / pendage fort
  Foliation Régionale

Zones aurifères à Windfall Lake





Stockwork de Py-Tm

Alteration sericite-silice

Zones verticales

Premier événement aurifère parallèlle à S1 –veines plissées

Jusqu'à 87 g/t Au en rainures

Deuxième événement aurifère – Principal :
Épais Stockwork de Pyrite et Cisaillements ENE

Zone Caribou

9.9 m @ 18.8 g/t Au

Zone F-17

4.0 m @ 24.1 g/t Au

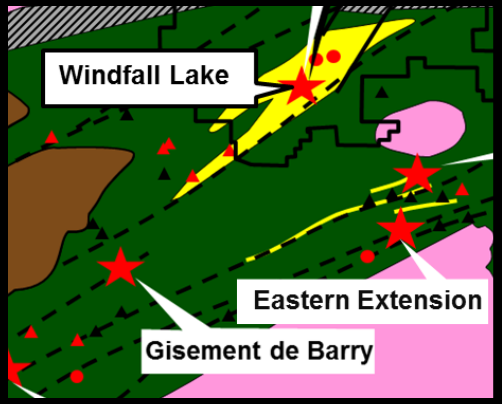
Tourmaline associée à la minéralisation en Pyrite

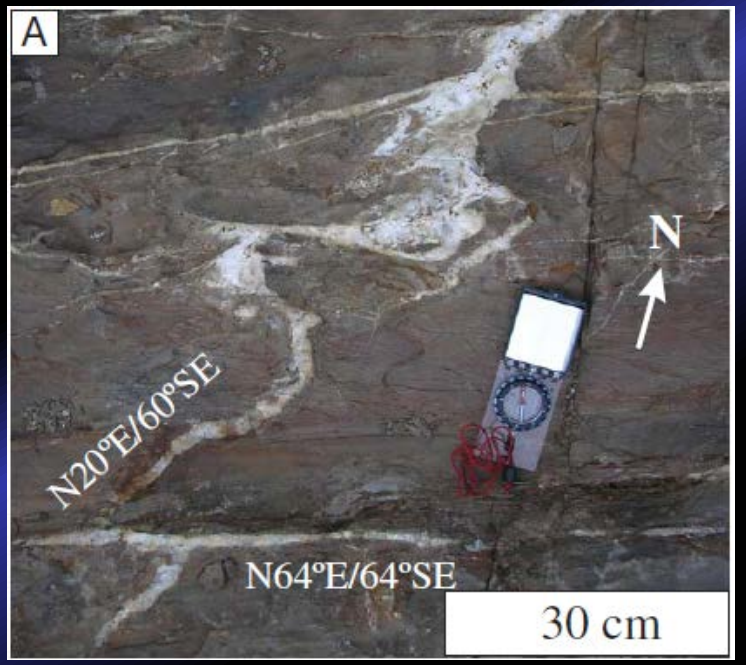
Résultats de forage – EAG-11-259

DDH	FROM	TO	Au	Comments
EAG-11-259	393.0	394.0	1.21	v1b ; 5% py qzcbcl ff bx
EAG-11-259	394.0	395.0	8.60	v1b ; 3-5% py qzcbcl ff bx
EAG-11-259	395.0	396.0	58.50	v1b ; 10-15% py ; 1% cp qzcl ff bx ; mettalic sieve
EAG-11-259	396.0	397.0	4.00	v1b ; 3% py qz(cb)(cl) v + ff bx
EAG-11-259	397.0	398.1	1.64	v1b ; 2-3% py qzcl ff bx
EAG-11-259	398.1	399.0	3.71	t1bl ; 2% py ff bx
EAG-11-259	399.0	400.0	10.05	t1bl ; 15% py qzclser ff bx ; mettalic sieve
EAG-11-259	400.0	401.0	4.87	t1bl ; 5% py + tr cp qzcl(cb) ff bx
EAG-11-259	401.0	402.0	11.35	t1bl ; 10-15% py qz(cb) v + QzCBser(cl) ff bx ; mettalic sieve
EAG-11-259	402.0	403.0	66.40	t1bl ; 15% py + 1% cp qz(cb) v + ff bx ; mettalic sieve
EAG-11-259	403.0	404.0	11.20	t1bl ; 5% py qzcbser ff bx
EAG-11-259	404.0	405.0	13.10	t1bl ; 10% py ser+ qzser ff bx ; mettalic sieve
EAG-11-259	405.0	406.0	10.20	t1bl ; 10-15% py qz(cb) v + ff bx + qztlsercb ff bx ; mettalic sieve
EAG-11-259	406.0	407.0	18.65	t1bl ; 10-15% py + tr cp ff bx ; mettalic sieve
EAG-11-259	407.0	408.0	14.45	t1bl ; 10-15% py + 1% cp qzcl(cb) ff bx + v + inj qzcbslser 20cm ; mettalic sieve
EAG-11-259	408.0	409.0	1.44	t1bl ; ser+ ; 5-7% py dis + ff bx ; double split
EAG-11-259	409.0	410.0	3.91	t1bl ; 5-7% py inj qzcb(tl)cl + ff bx + dis
EAG-11-259	410.0	411.0	5.30	t1bl ; 7-10% py qzser ff bx + inj qzcbcl(tl) ; mettalic sieve
EAG-11-259	411.0	412.0	4.63	t1bl ; 7-10% py inj qzsercl(tl) 10DEG TCA + ff bx ; mettalic sieve
		19 m	13.32	Uncut
		19 m	10.35	Cut to 1 oz/t

GISEMENT DE BARRY

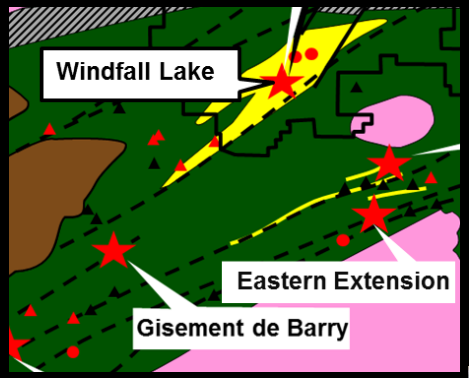
De SGS, 2010

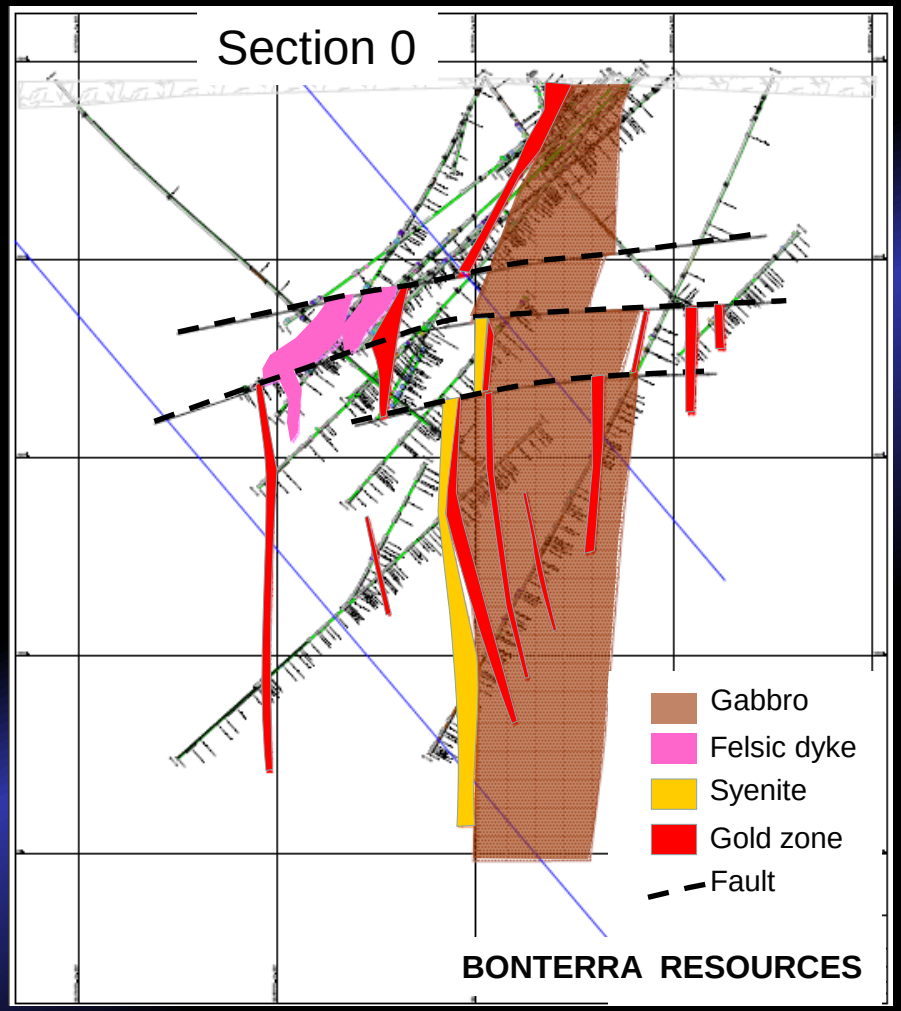




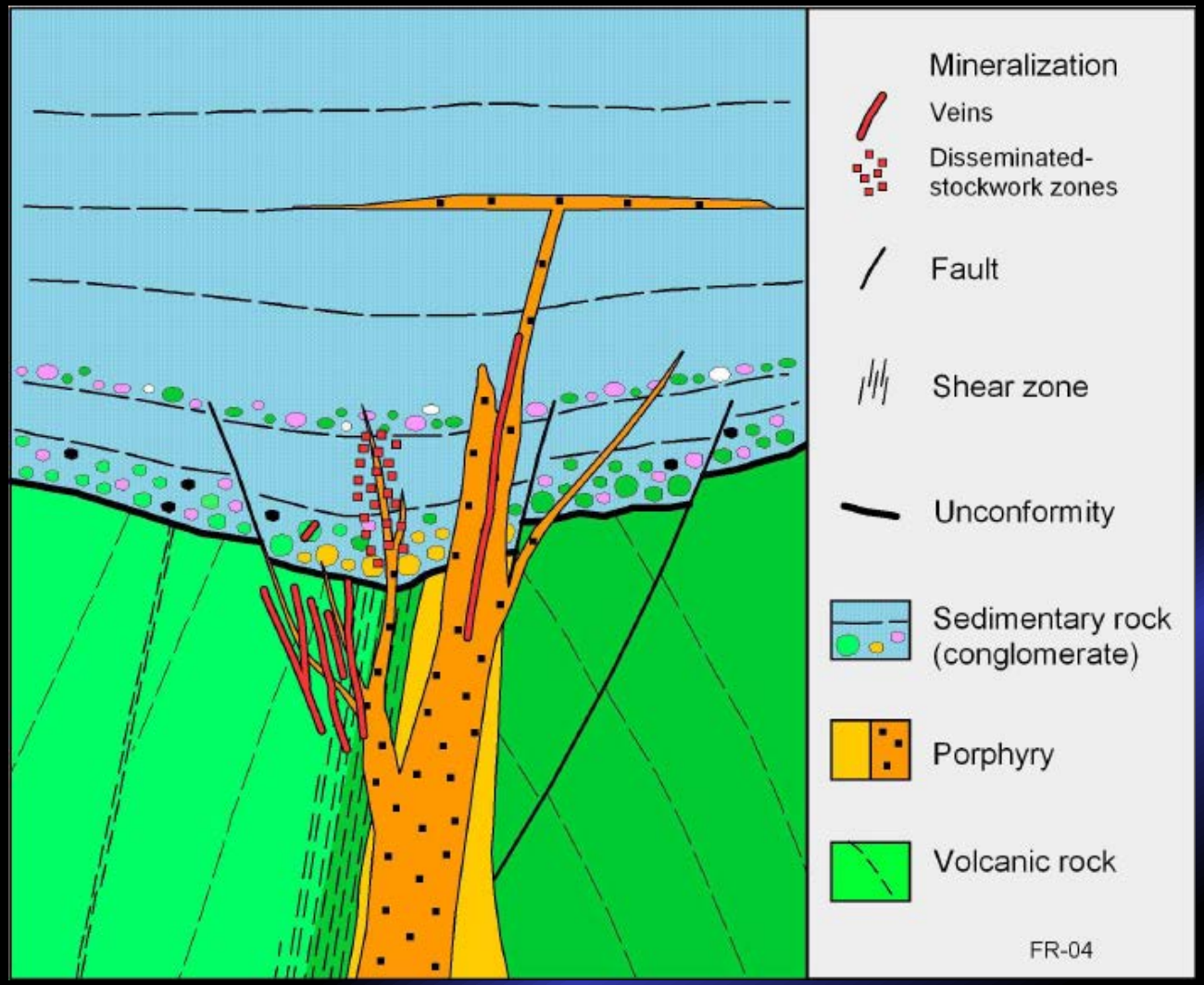
De Kitney et al., 2011

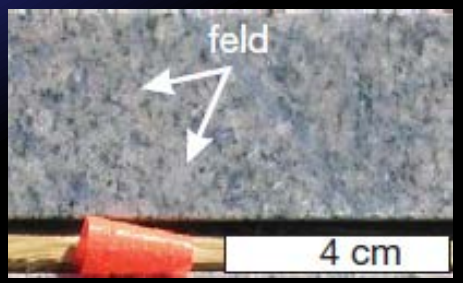
Zone aurifère Eastern Extension





Rôle des intrusions dans le secteur de Windfall Lake Barry et Eastern Ext.





EAGLE HILL EXPLORATION

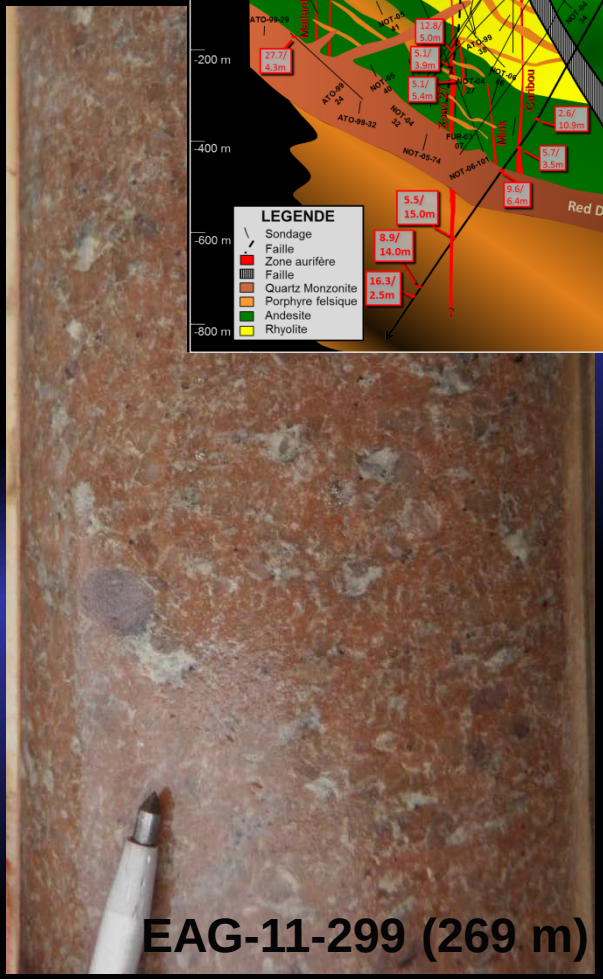
DYKE DE PORPHYRES GROS YEUX DE QUARTZ

EAG-12-320 (897 m)

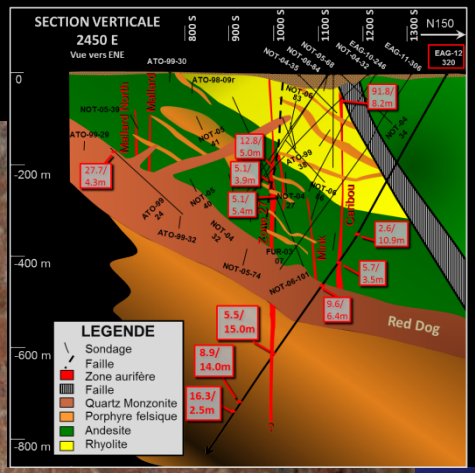
DYKE DE PORPHYRES PETITS YEUX DE QUARTZ

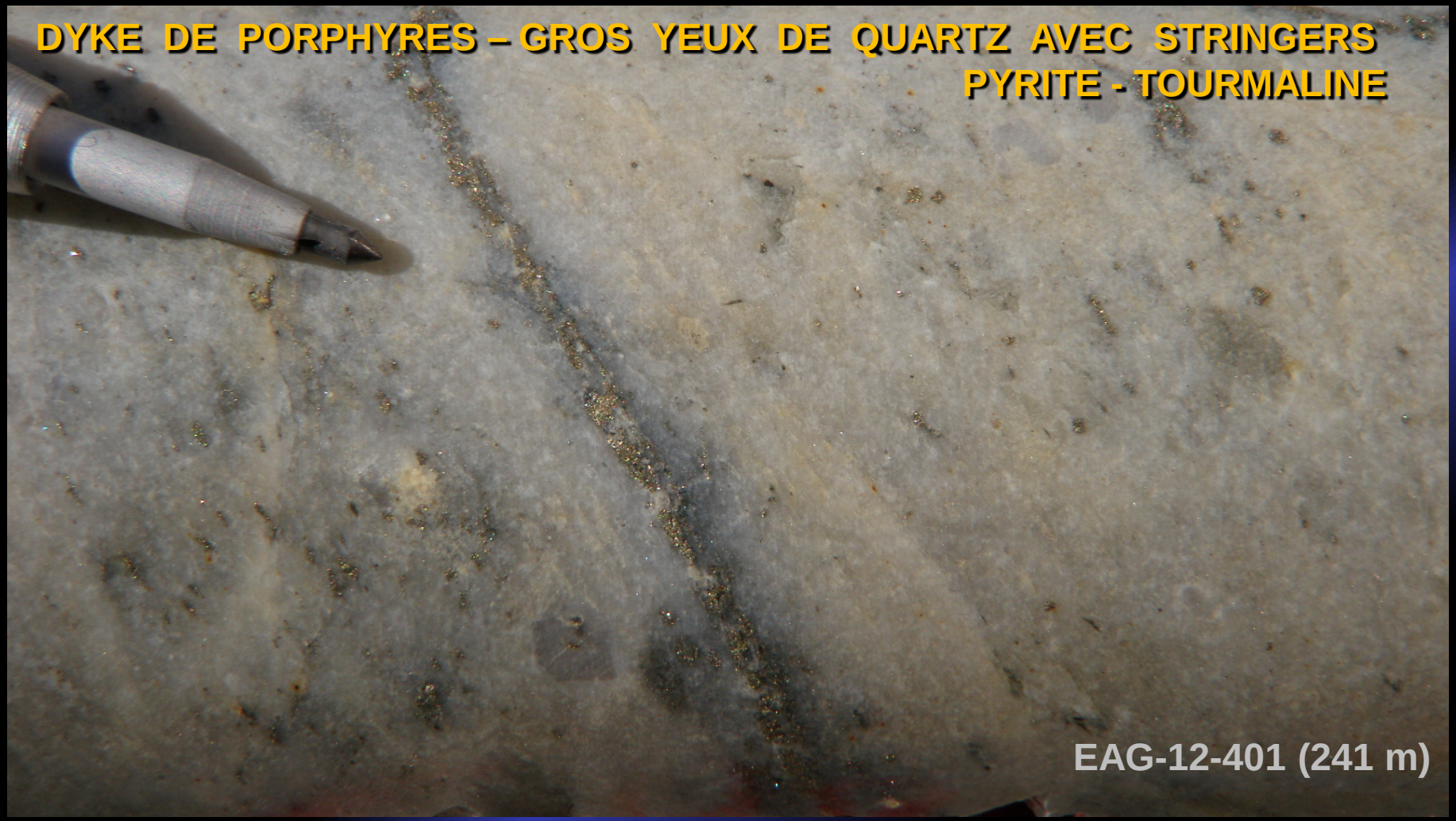
EAG-12-427 (452 m)

RED DOG

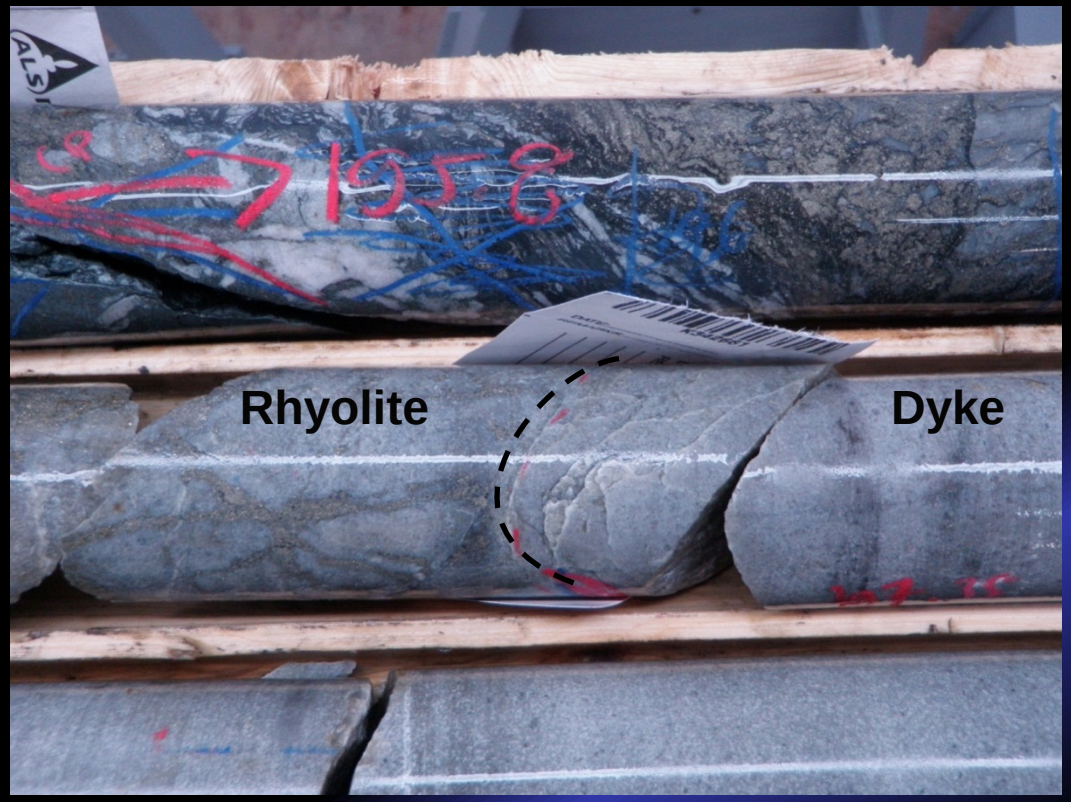


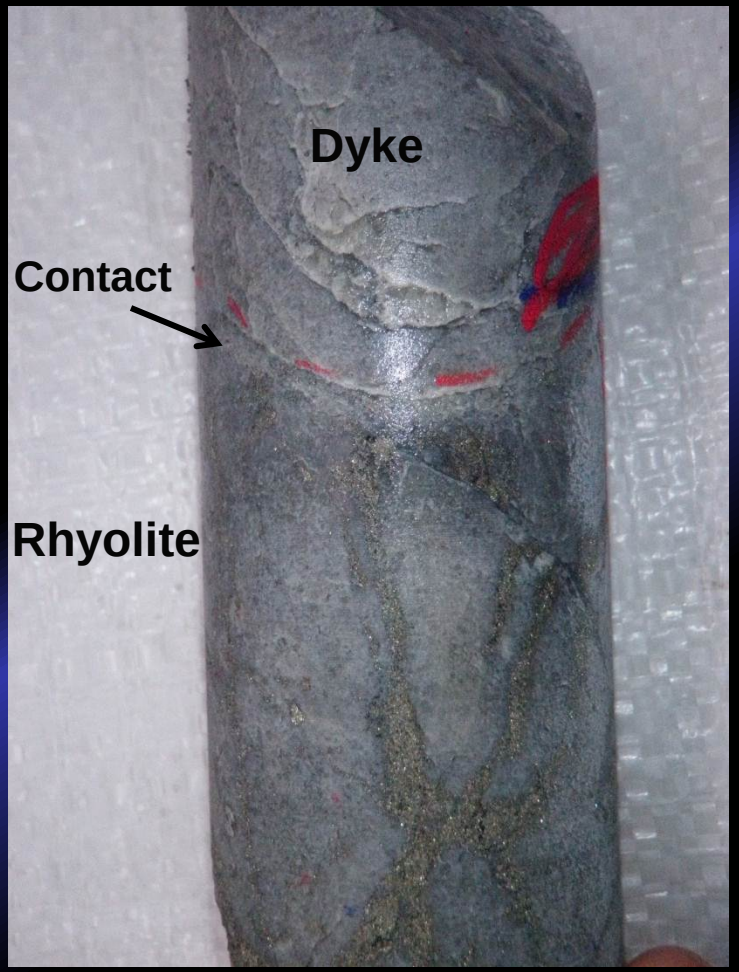
EAG-11-299 (269 m)



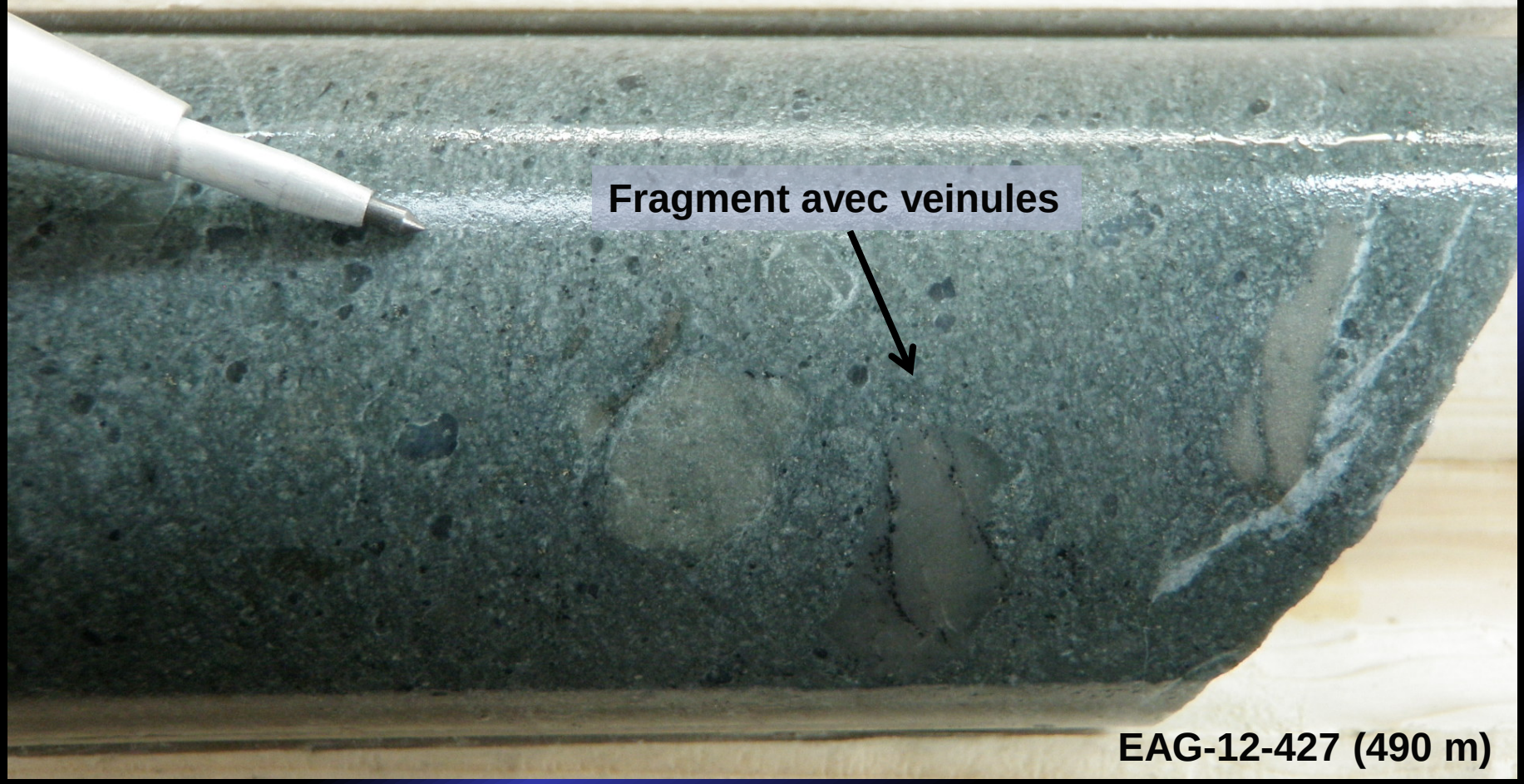

DYKE DE PORPHYRES – GROS YEUX DE QUARTZ AVEC STRINGERS
PYRITE - TOURMALINE
EAG-12-401 (241 m)

Dyke de porphyre recoupant le stockwork de pyrite – tourmaline

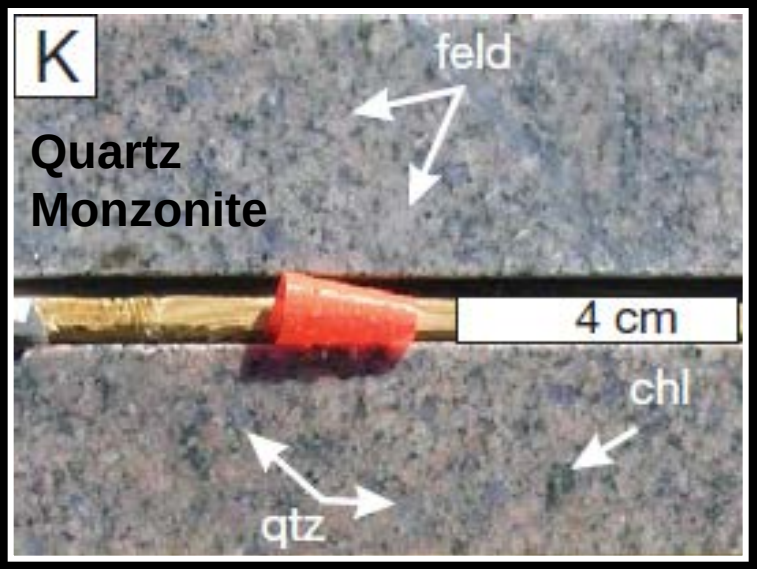




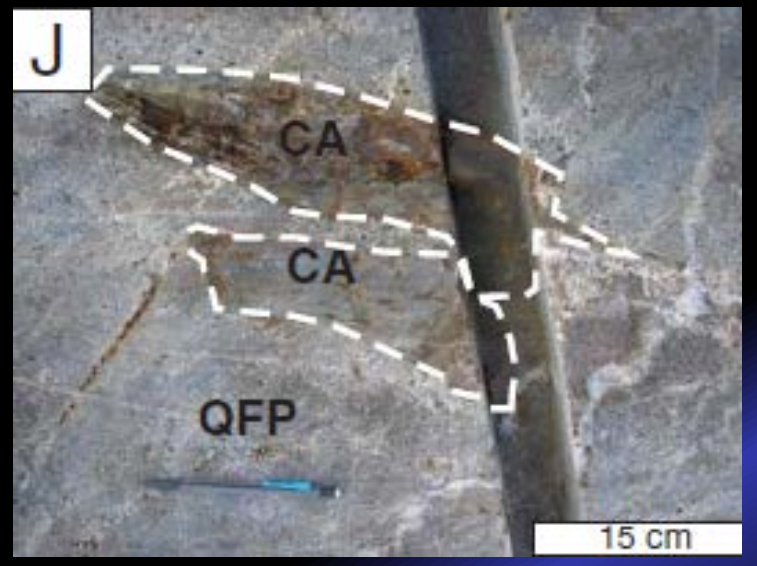
DYKE DE PORPHYRES – PETITS YEUX DE QUARTZ AVEC FRAGMENTS



GISEMENT D'OR DE BARRY
LES INTRUSIONS

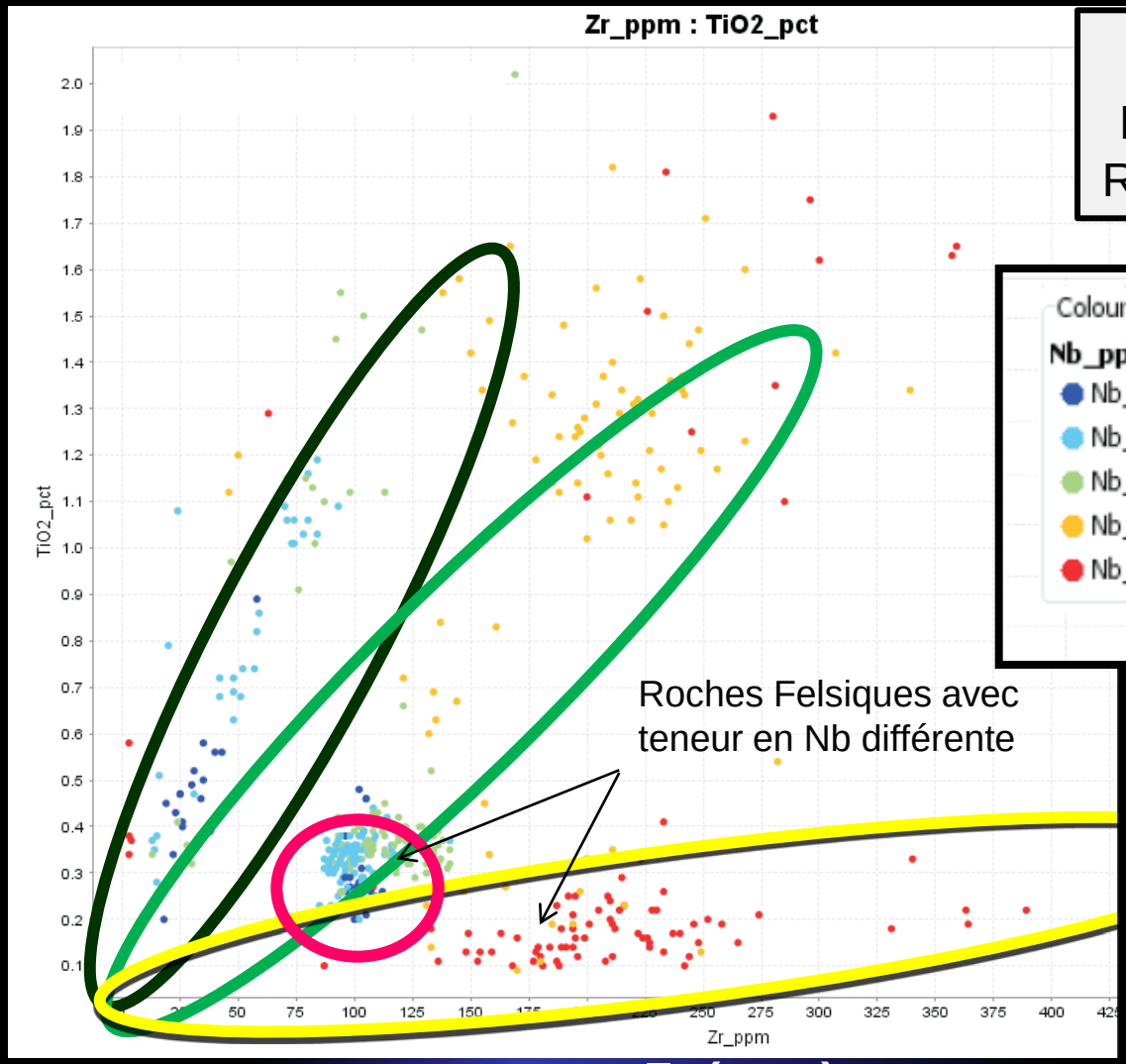


Diorite 3
Pré-minéral



QFP
Post-minéral

De Kitney et al., 2011
et SGS, 2010

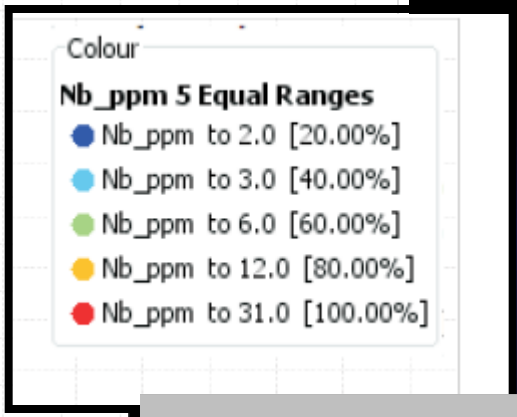


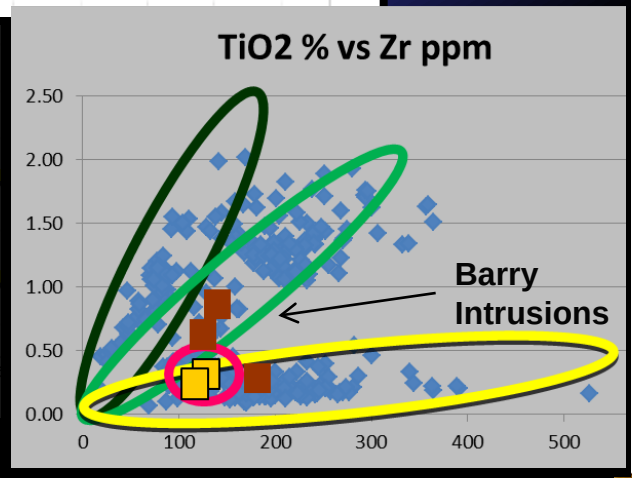
TiO2 (%)

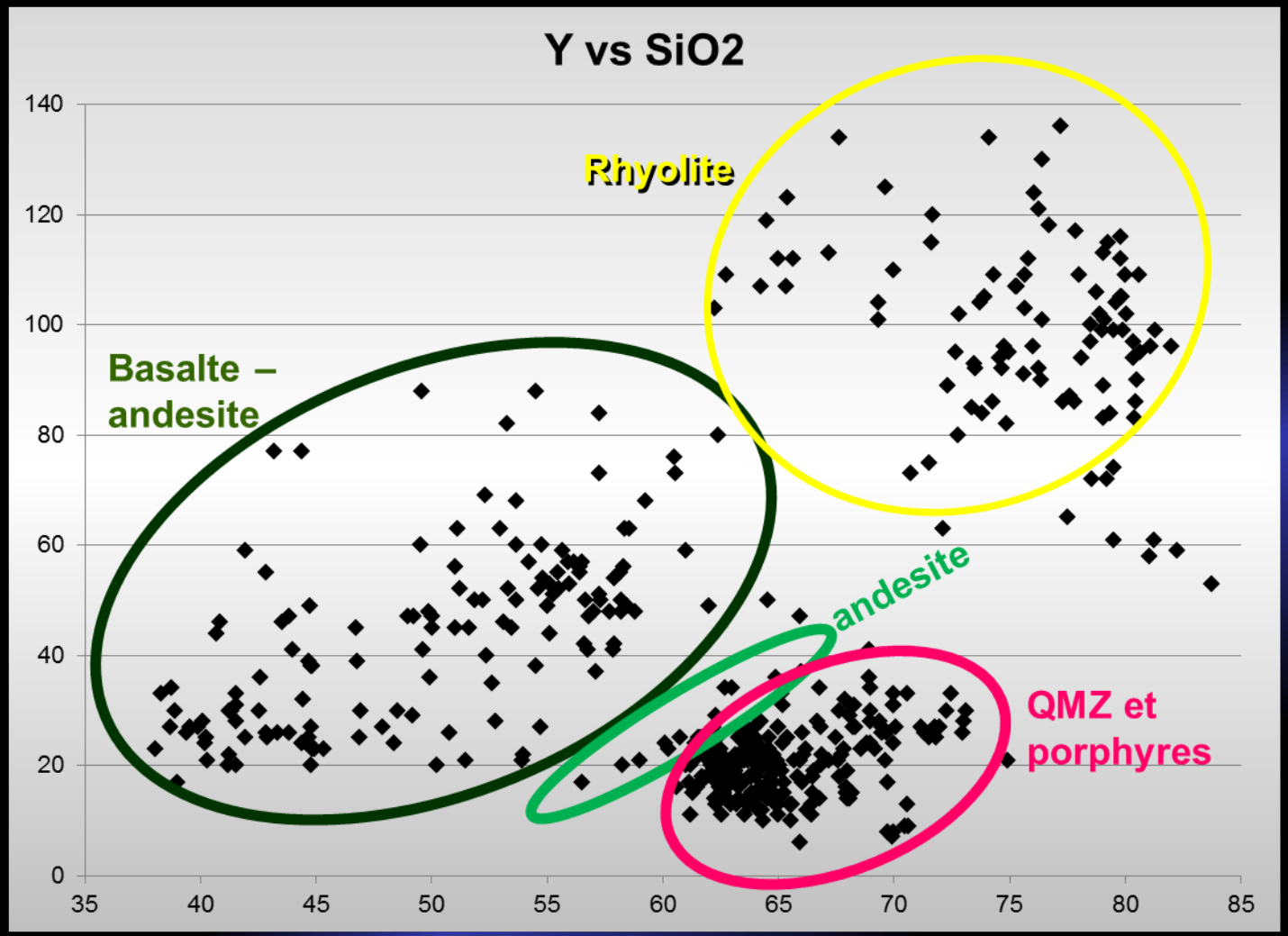
Zr (ppm)

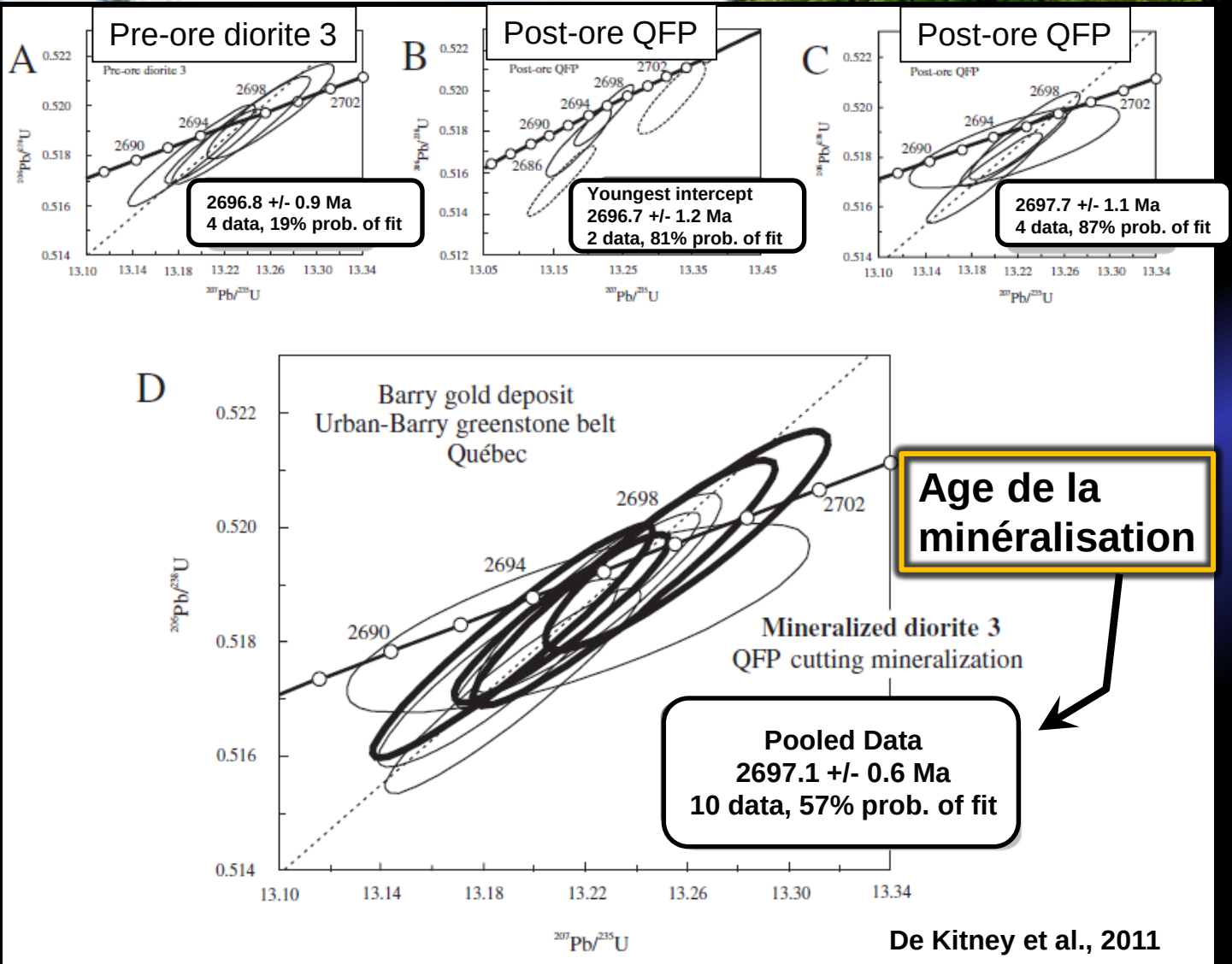
Ratio Zr/Y:

Roches Volcaniques	< 5
Red Dog - Porphyres:	5-15

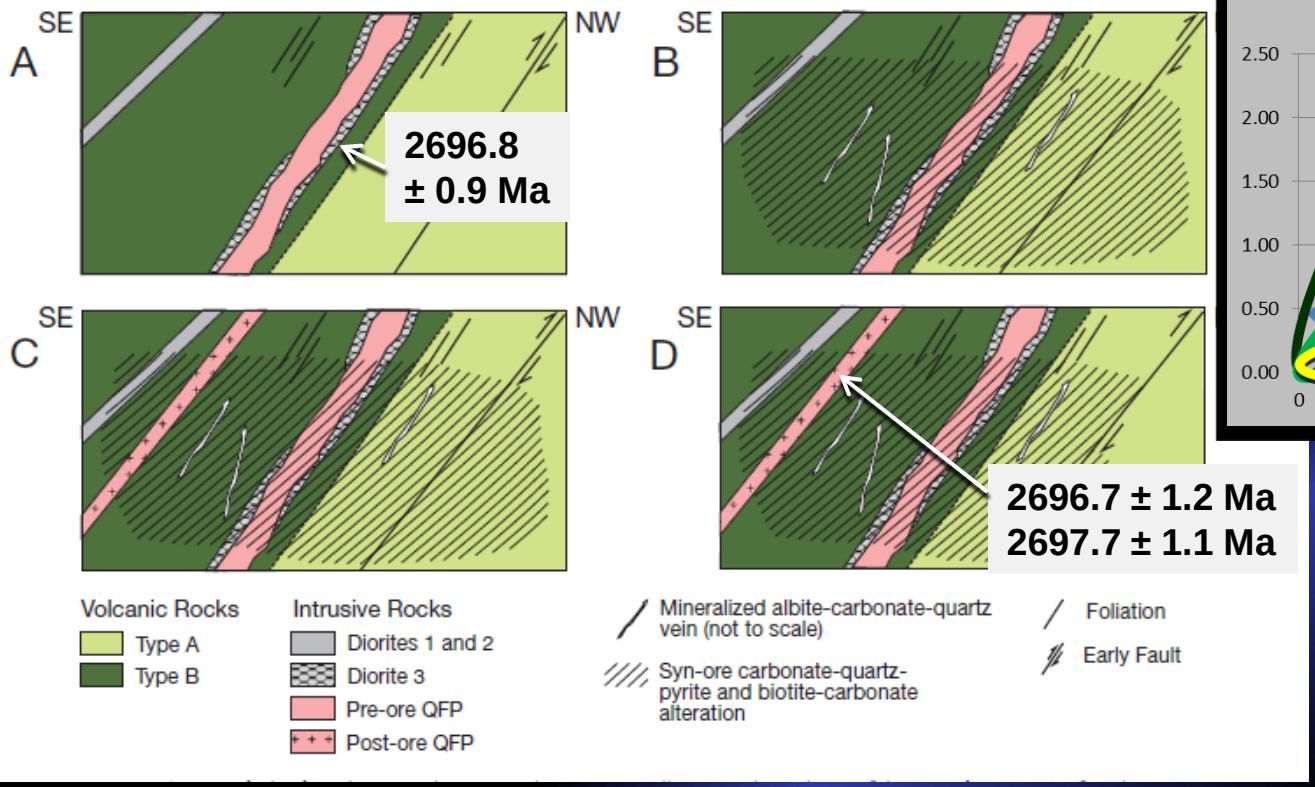


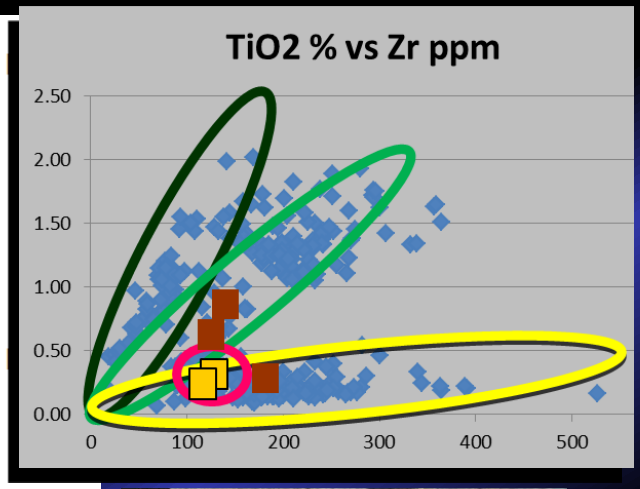


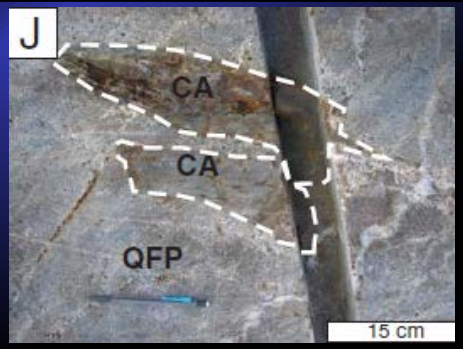

Y vs SiO2
Rhyolite
Basalte – andesite
andesite
QMZ et porphyres
Y (ppm)
SiO2 (%)
140
120
100
80
60
40
20
0
35
40
45
50
55
60
65
70
75
80
85


Pre-ore diorite 3
A
Pre-ore diorite 3
2690
2694
2698
2702
2696.8 +/- 0.9 Ma
4 data, 19% prob. of fit
Post-ore QFP
B
Post-ore QFP
2686
2690
2694
2698
2702
Youngest intercept
2696.7 +/- 1.2 Ma
2 data, 81% prob. of fit
Post-ore QFP
C
Post-ore QFP
2690
2694
2698
2702
2697.7 +/- 1.1 Ma
4 data, 87% prob. of fit
D
Barry gold deposit
Urban-Barry greenstone belt
Québec
2690
2694
2698
2702
Mineralized diorite 3
QFP cutting mineralization
Pooled Data
2697.1 +/- 0.6 Ma
10 data, 57% prob. of fit
Age de la minéralisation
De Kitney et al., 2011

Datation des dykes au gisement d'or de Barry







Kitney et al. 2011. Economic Geology

OR DANS LA CEINTURE D'URBAN - BARRY

2 épisodes aurifères

- **Premier épisode parallèle à S1 et moins important (?)**
- **Deuxième épisode parallèle à S2 = Majeur**

Veines et stockwork aurifères

- **DANS LES DYKES**
- **RECOUPÉS PAR LES DYKES**

Volcanisme autour de 2718 Ma

Or relié à un événement intrusif ~ 2697 Ma

21 Ma différence

Intrusions importantes pour l'Or dans Urban-Barry

Merci !

Darrell Turcotte
Fanny Tortiget
Golpira Elmi Assadzadeh
Severine Blouin

Benoit Boudreault et son équipe

Robert Duchesne (Tech2Mine)