IEP International Explorers and Prospectors Inc.

building shareholder value from knowledge and experience

Technical Presentation Regional Gold Metallogeny In the Kidd Munro Assemblage, Tisdale Assemblage and Porcupine Sediments

18 APRIL, 2017

Management Team

- Lionel Bonhomme, Abitibi Prospector, President: Lionel who originated the property portfolio, remains a driving force in the company while leaving the day-to-day management to the technical team.

- Charles Beaudry, M.Sc., P.Geo., géo., V.P. Exploration: A seasoned geologist and executive with extensive experience in VMS and gold exploration environments in the Abitibi Belt. Charles brings to Gold Crossing considerable knowledge of VMS metallogeny developed during his long career with Noranda in Quebec and Junior Management skills.

- Peter Colbert, CFO: Peter draws on extensive experience in prospecting and contracting to provide the company with highly efficient financial accounting and administrative management.

- Matthew Johnston, B.Sc., Chief geophysicist: Matthew is an experienced geophysicist with long and varied experience working in the Abitibi on both airborne and ground geophysical survey interpretation.

- LeAnn van Hees, Consultant: An American Geologist with a B.S. Degree in Geology from Wayne State University in Detroit, Mi, U.S.A. LeAnn brings her 4 years experience in a mining environment and her analytical skills she developed doing research at WSU on various Porcupine Camp properties.

IEP Gold Exploration in Timmins

- Company has been involved in active gold exploration for >40 years and was important in helping advance the West Timmins project, the DeSantis, Hoyle Pond Extension/Matheson JV, 1976 Matheson Township Drilling and the Montclerg properties.
- Company was an early adopter of high precision lithogeochemistryin gold exploration to characterize chemo-stratigraphy and monitor alteration in gold systems.
- Our current efforts are focused on Montclerg/Wilkie/Walker and Matheson project areas.
- Our gold targeting at the regional scale is informed by four elements

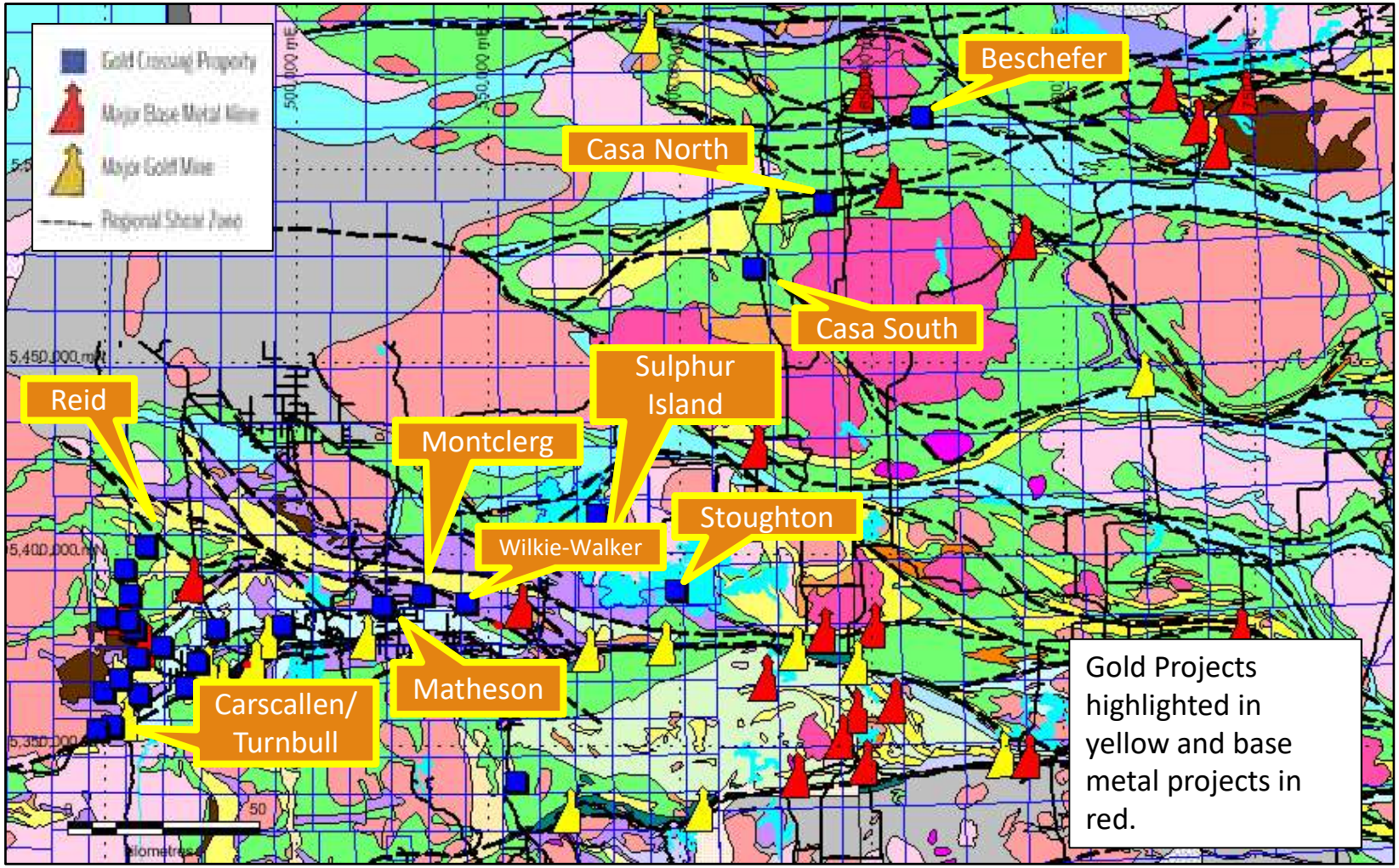
Cautionary Statement

*This presentation contains forward-looking statements. All statements, other than of historical fact, that address activities, events or developments that International Explorers and Prospectors Inc.(**IEP)** believes, expects or anticipates will or may occur in the future (including, without limitation, statements regarding the estimation of mineral resources, exploration results, potential mineralization, potential mineral resources and mineral reserves) are forward-looking statements. Forward-looking statements are generally identifiable by use of the words "may", "will", "should", "continue", "expect", "anticipate", "estimate", "believe", "intend", "plan" or "project" or the negative of these words or other variations on these words or comparable terminology. Forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond **IEP**'s ability to control or predict, that may cause the actual results of the project to differ materially from those discussed in the forward-looking statements. Factors that could cause actual results or events to differ materially from current expectations include, among other things, without limitation, failure to establish estimated mineral resources*, the possibility that future exploration results will not be consistent with **IEP's**expectations, changes in world gold markets and other risks disclosed to the Canadian provincial securities regulatory authorities. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, **IEP** disclaims any intent or obligation to update any forward-looking statement.*

* Total Resources includes all categories of resources unless indicated otherwise.

All currency numbers are in $Can unless otherwise stated.

Location of Projects



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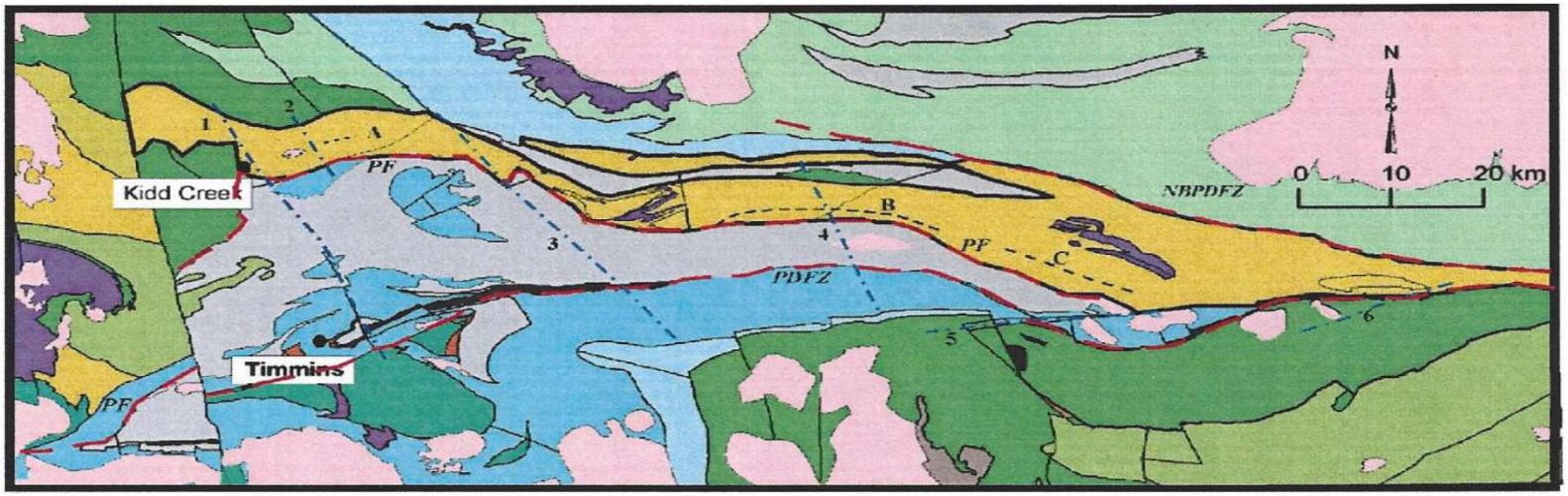
Porcupine Destor Fault Zone



Legend for faults

PDFZ	Porcupine Destor fault zone
PF	Pipestone Fault
NBPDFZ	North Branch of the Porcupine Destor fault zone
1	Burrows-Benedict fault
2	Prosser fault
3	Buskegau River fault
4	Black River fault
5	Arrow fault
6	Ghostmount fault
A, B	Un-named internal faults
C	Munro fault

Bounding faults
Cross faults
Internal faults

Major Faults

PROTEROZOIC
Sediments

ARCHEAN
felsic to intermediate intrusions
Mafic to ultramafic intrusions

ABITIBI EPISODE (ASSEMBLAGE)

2676-2670 Ma (Timiskaming)
Sedimentary
Volcanic

2690-2682 Ma (Porcupine)
Sedimentary
Volcanic

2704 - 2695 Ma (Blake River)
Upper Unit
Lower Unit

2710 - 2704 Ma (Tisdale)
Upper Unit
Lower Unit

2720 - 2710 Ma (Kidd-Munro)

2723 - 2720 Ma (Stoughton-Roquemaure)

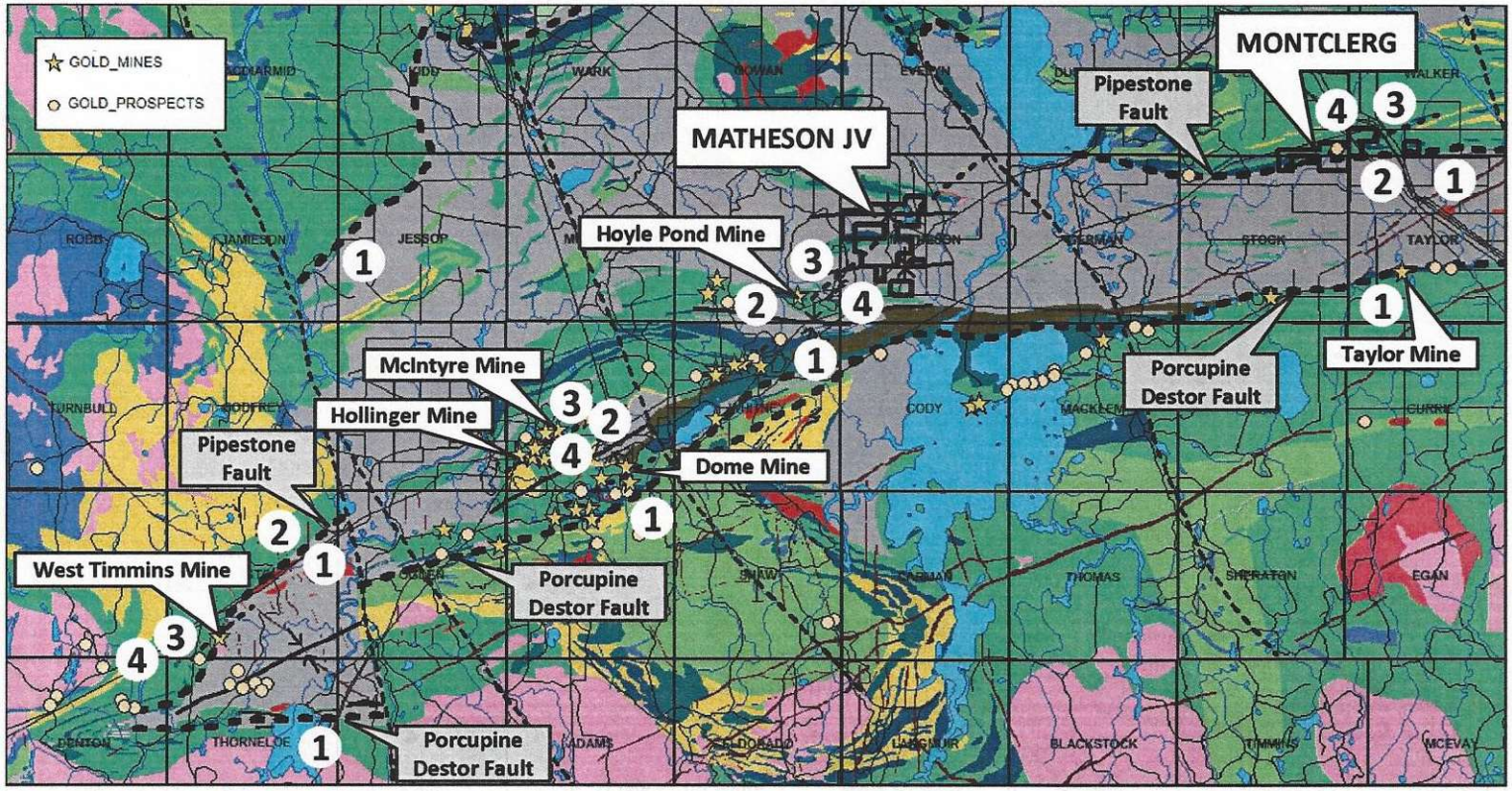
2734- 2724 Ma (Deloro)

2750 - 2735 Ma (Pacaud)

>2750 Ma

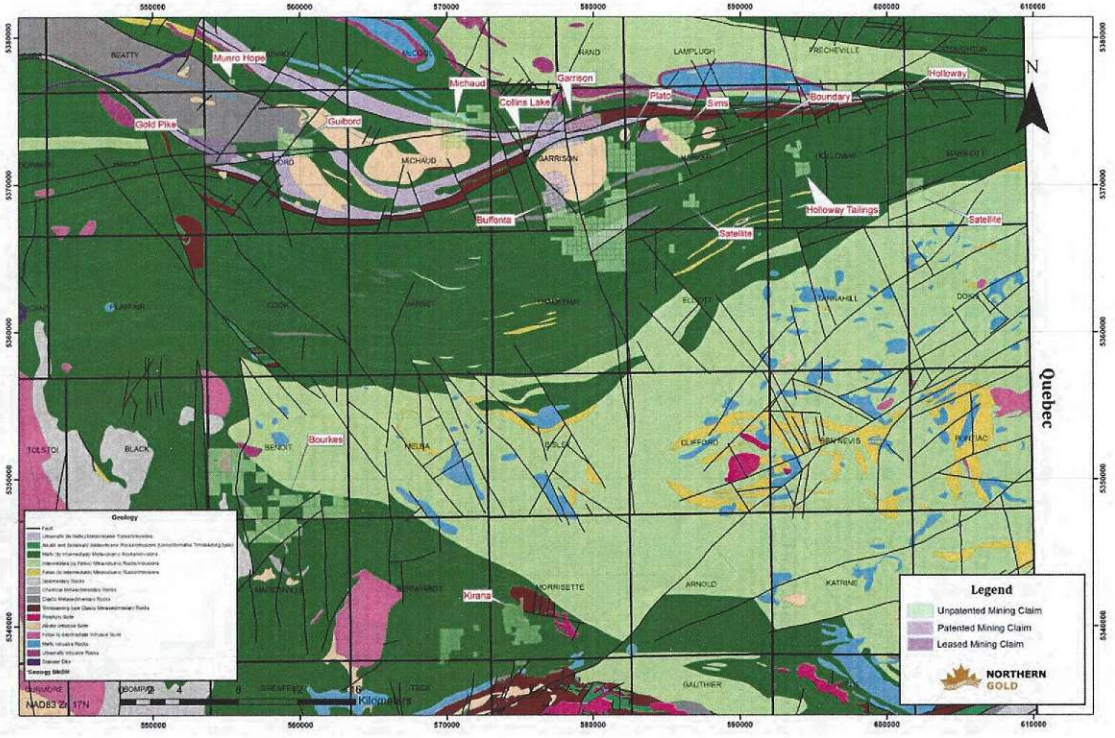
Bleeker, W. and van Breemen, O. 2011. New geochronological, stratigraphic, and structural observations on the Kidd–Munro assemblage and the terrane architecture of the south--central Abitibi greenstone belt, Superior craton, Canada; *in* Results from the Targeted Geoscience Initiative III Kidd–Munro Project, Ontario Geological Survey, Open File Report 6258, 142p.

Tahoe West Mine to Taylor Twp.



From MNDM

Munro Twp to Quebec Border

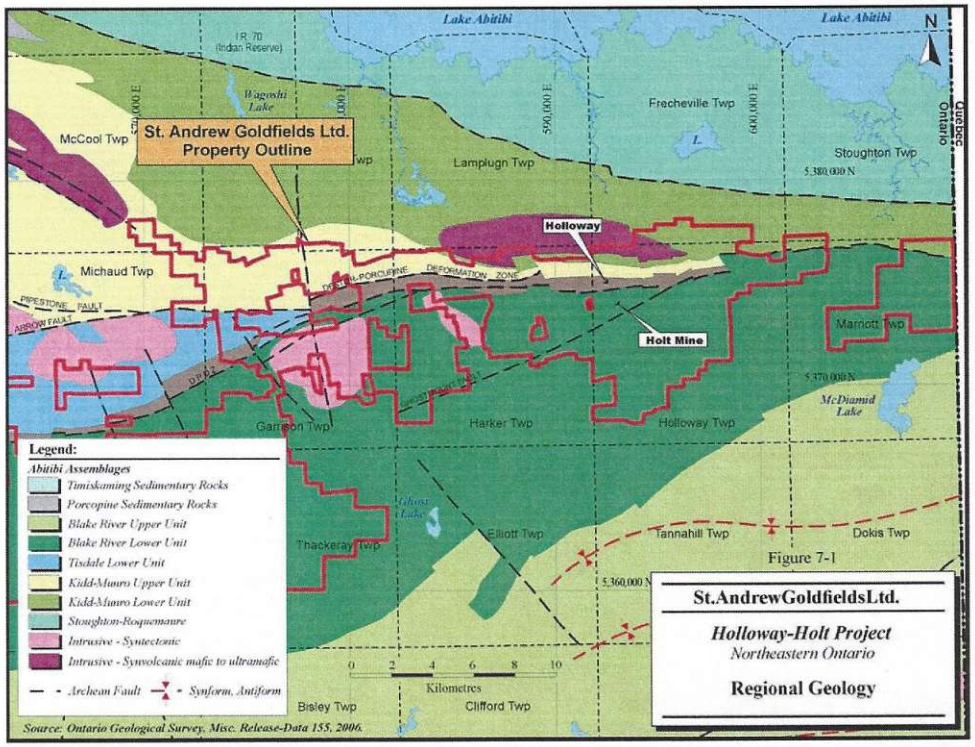


Source: Northern Gold, 2014

Regional Geology of Golden Bear Project

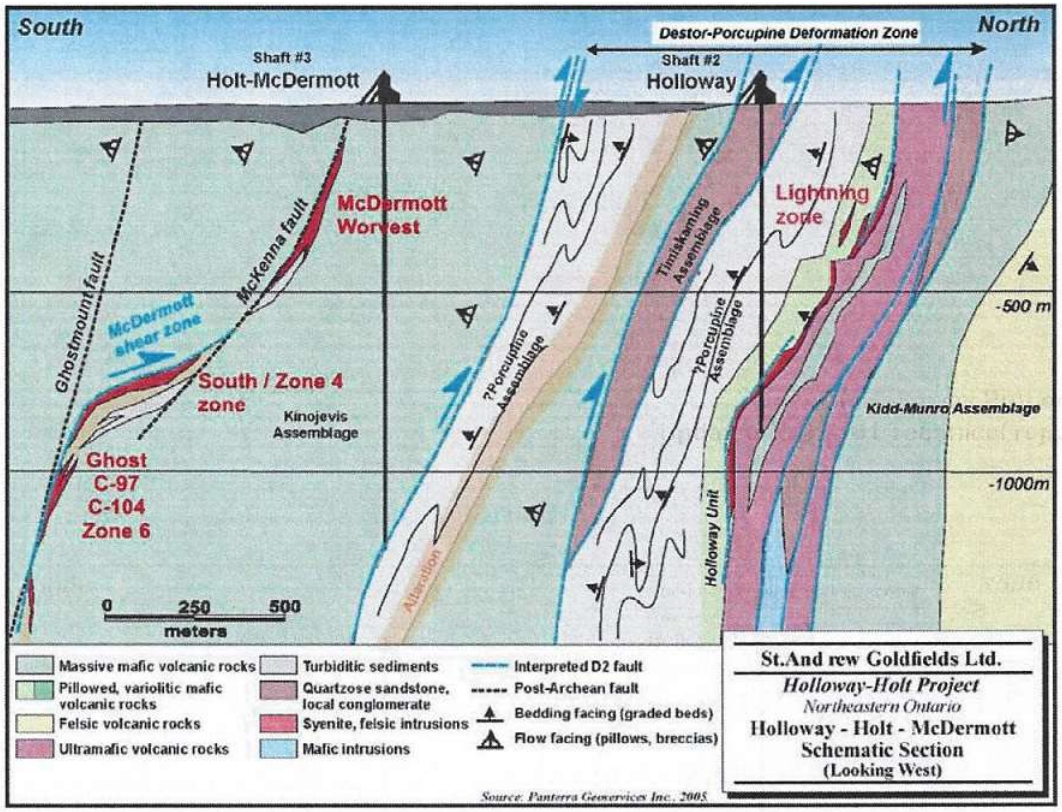
A.C.A. HOWE INTERNATIONAL LIMITED Report No. 975
March, 03, 2014

Michaud to Quebec



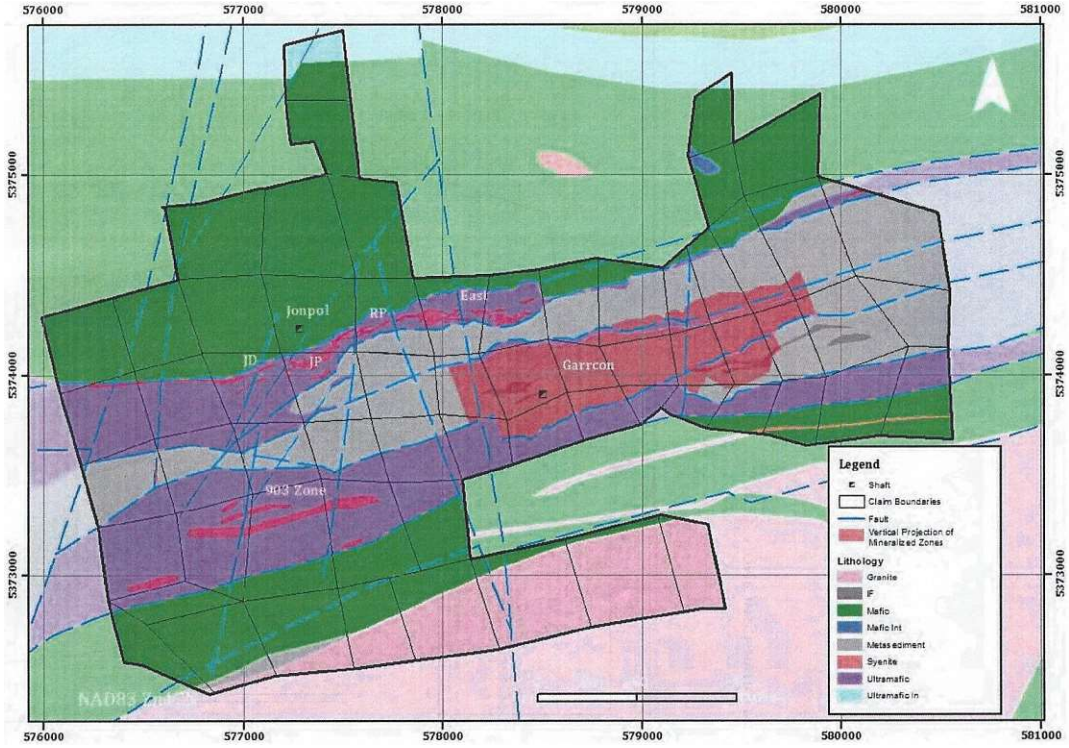
Holt and Holloway mines regional geology.

Cross Section of Holt Property



Holt and Holloway properties geology (cross sectional view).

Garrison Property Geology

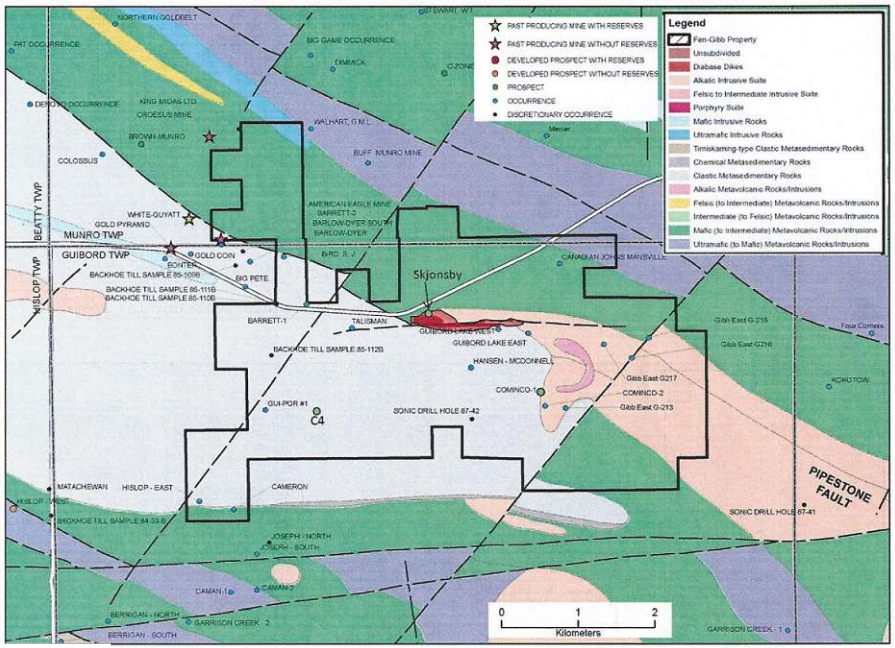


Source: Northern Gold 2014

Garrison Property Geology

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 975
March, 03, 2014

Fenn-Gib Property Mineral Occurrences

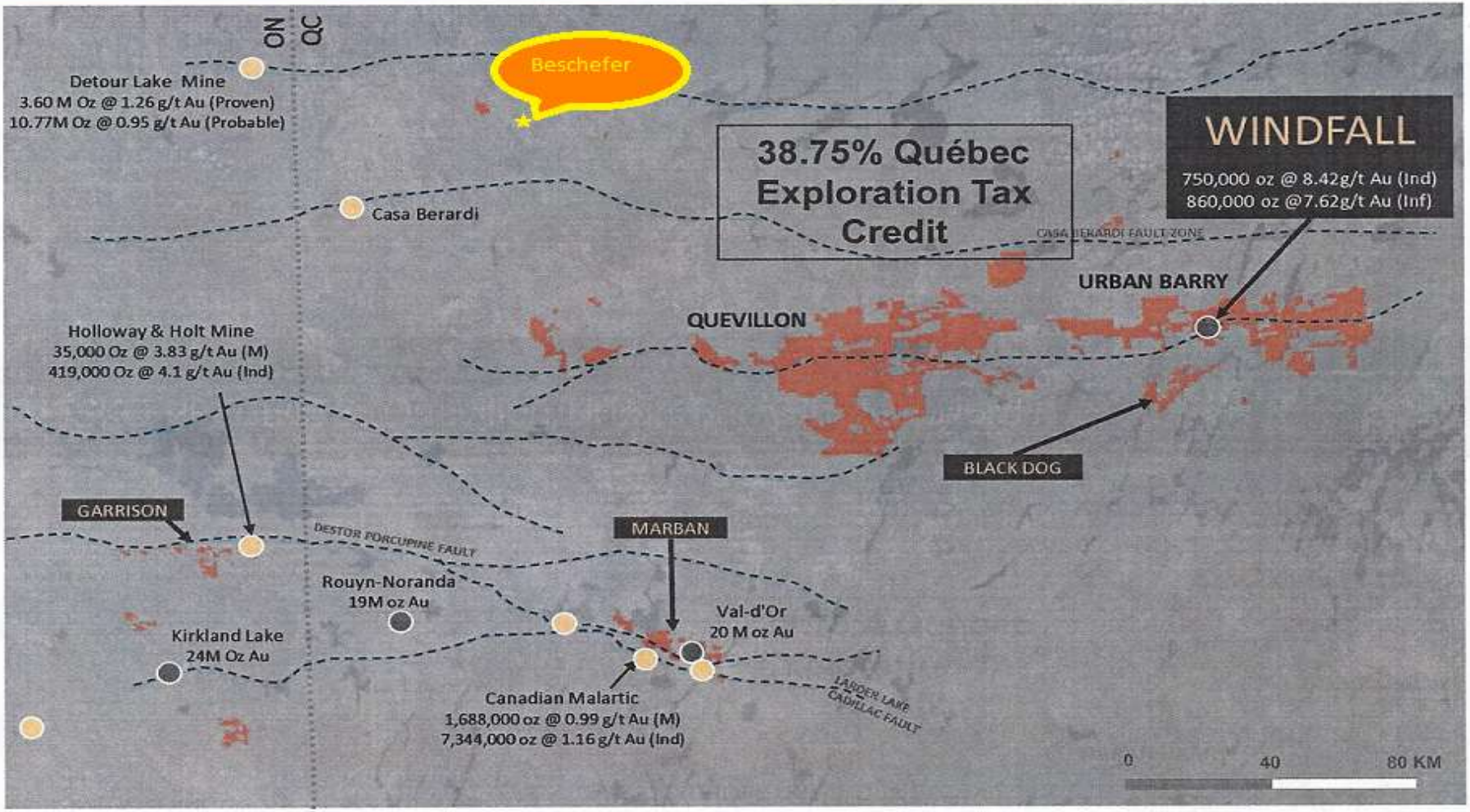


Geological map showing the position of the various mineral showings on and around the Fenn-Gib Property. Mineral occurrences mainly compiled by the Ontario Ministry of Northern Development and Mines.

Fenn-Gib Resource Estimate Technical Report, Timmins Canada

OSISKO PROJECTS: Quevillon/Urban Barry in Plan Nord

OSISKO MINING



See also *"Cautionary Statements Regarding Technical Information – Mineral Resources"*.
Note: Resources shown consider all categories.

7

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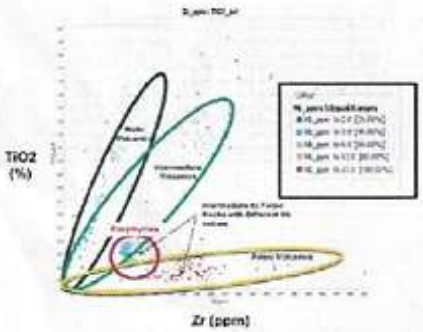
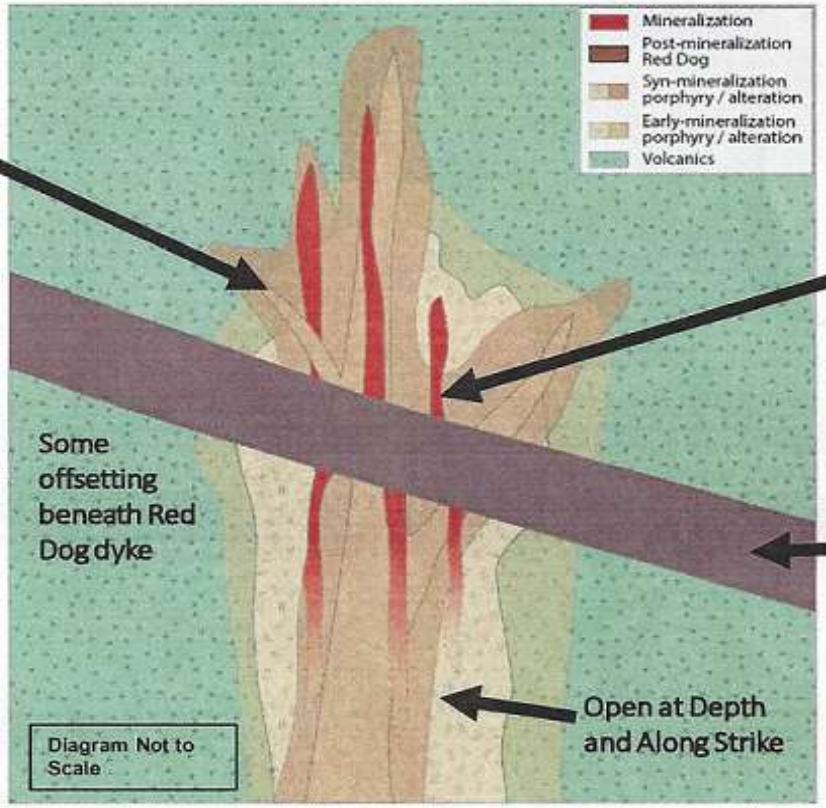
WINDFALL DEPOSIT: INTRUSIVE-RELATED MINERALIZATION

OSISKO MINING

Multiphase Porphyry Intrusive Complex - Gold mineralization genetically related to porphyry dykes.



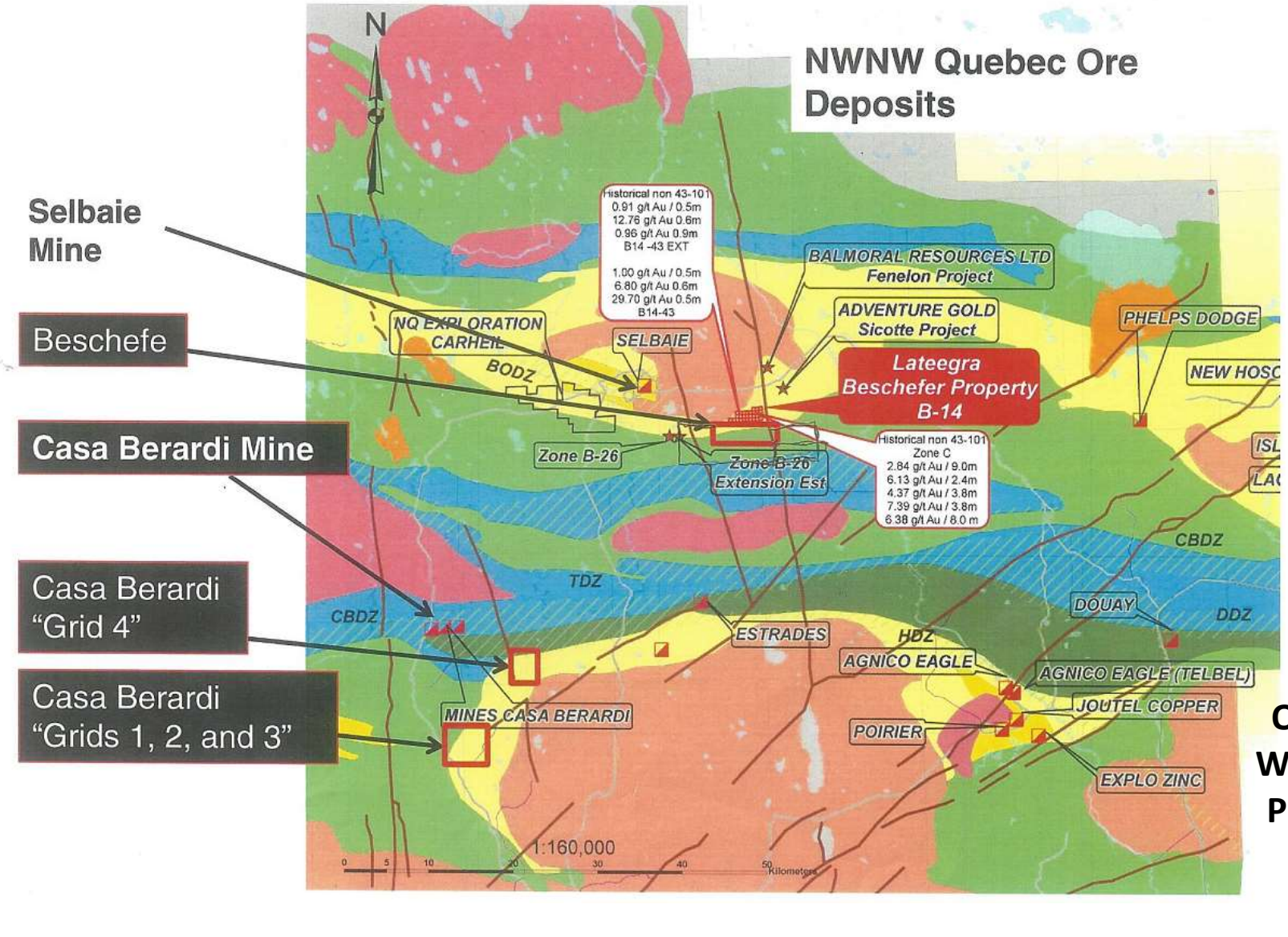
Immobile element geochemistry used to identify intrusive phases and "see through" alteration processes.



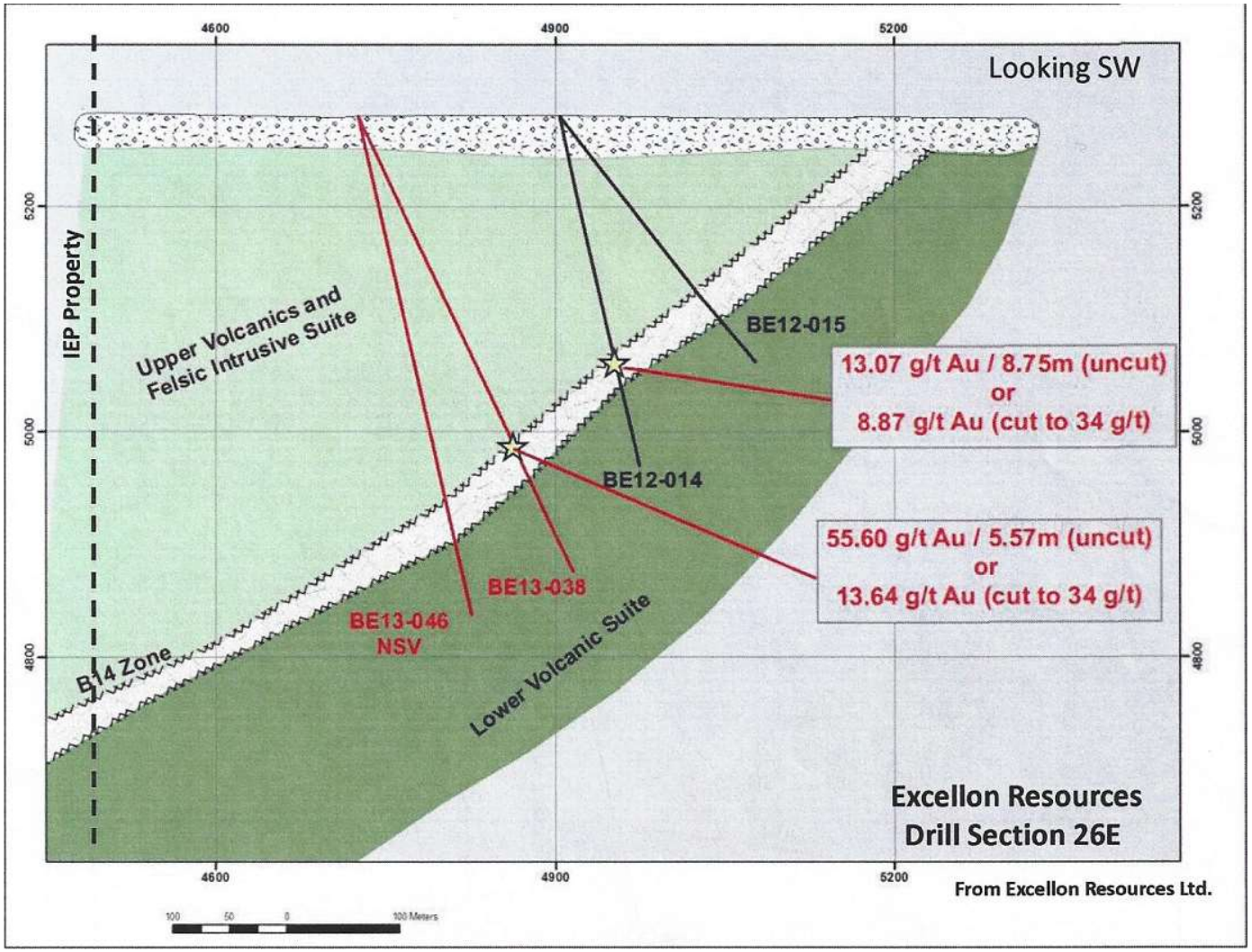
Host 2718Ma volcanic rocks are intruded by Windfall porphyry dykes at about 2697Ma

Mineralization hosted in texture destructive quartz-sericite alteration. Gold mineralization associated with pyrite forming stringers and disseminations in stockwork network.

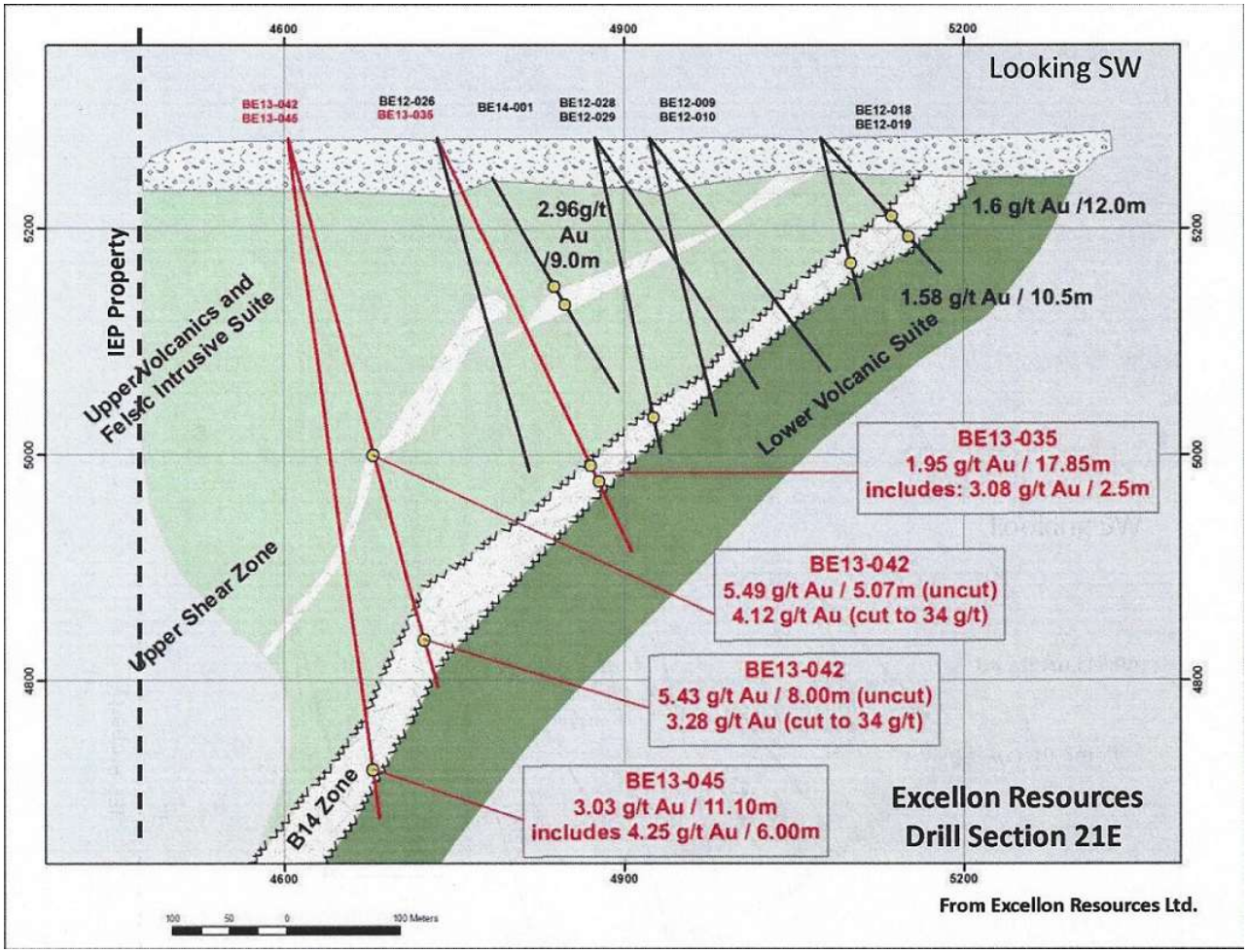
Red Dog – Barren post-mineral dyke


NWNW Quebec Ore Deposits
N
Selbaie Mine
Beschefe
Casa Berardi Mine
Casa Berardi "Grid 4"
Casa Berardi "Grids 1, 2, and 3"
Historical non 43-101
0.91 g/t Au / 0.5m
12.76 g/t Au 0.6m
0.96 g/t Au 0.9m
B14 -43 EXT
1.00 g/t Au / 0.5m
6.80 g/t Au 0.6m
29.70 g/t Au 0.5m
B14-43
BALMORAL RESOURCES LTD
Fenelon Project
ADVENTURE GOLD
Sicotte Project
PHELPS DODGE
NQ EXPLORATION
CARHEIL
SELBAIE
BODZ
Lateegra
Beschefer Property
B-14
NEW HOSC
Zone B-26
Zone B-26
Extension Est
Historical non 43-101
Zone C
2.84 g/t Au / 9.0m
6.13 g/t Au / 2.4m
4.37 g/t Au / 3.8m
7.39 g/t Au / 3.8m
6.38 g/t Au / 8.0 m
CBDZ
TDZ
CBDZ
DOUAY
DDZ
ESTRADES
HDZ
AGNICO EAGLE
AGNICO EAGLE (TELBEL)
JOUTEL COPPER
MINES CASA BERARDI
POIRIER
EXPLO ZINC
1:160,000
0 5 10 20 30 40 50 Kilometers
Osisko Windfall Project

Beschefer Drill Section 26E



Beschefer Drill Section 21E



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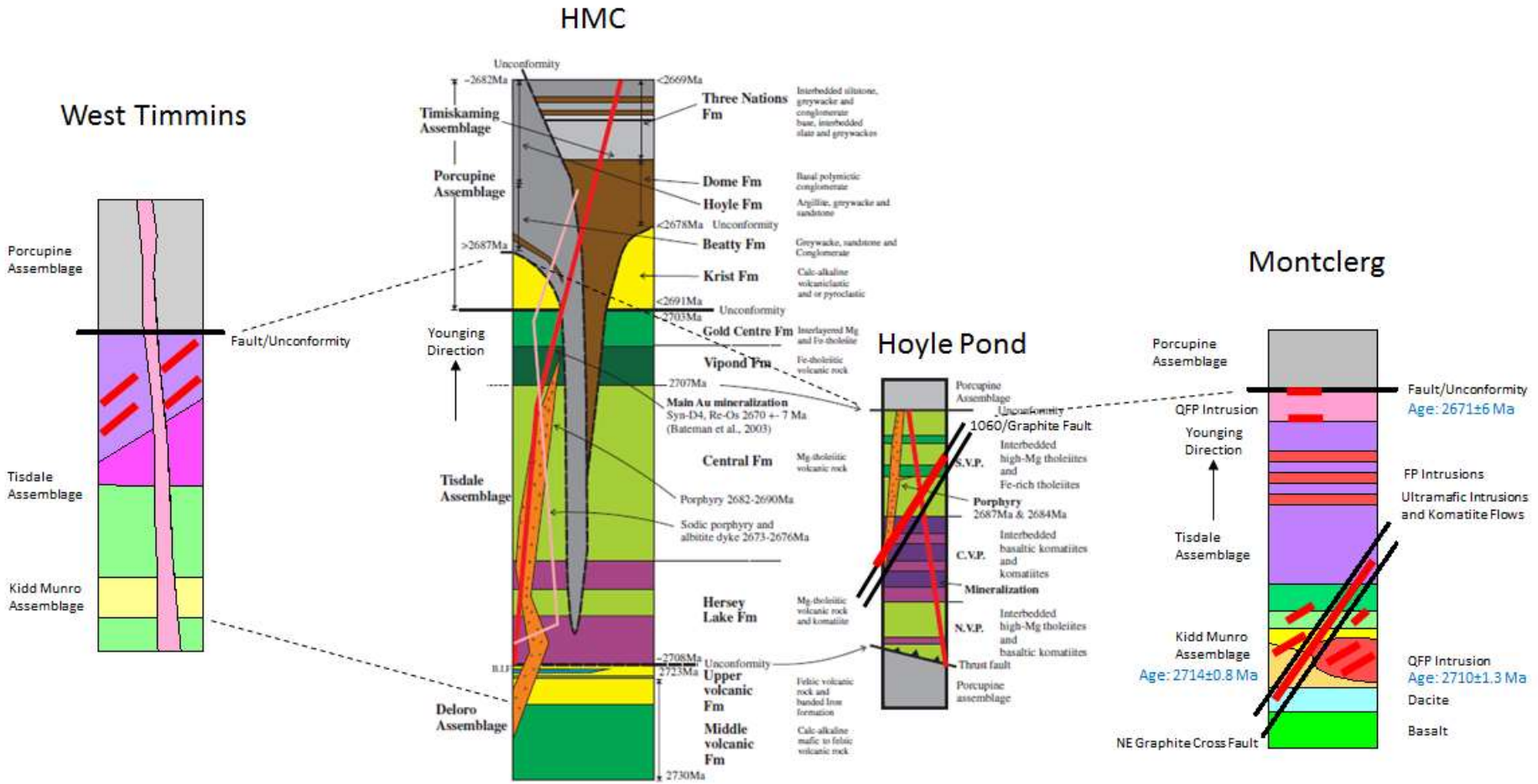
Summary IEP Gold Exploration In Timmins

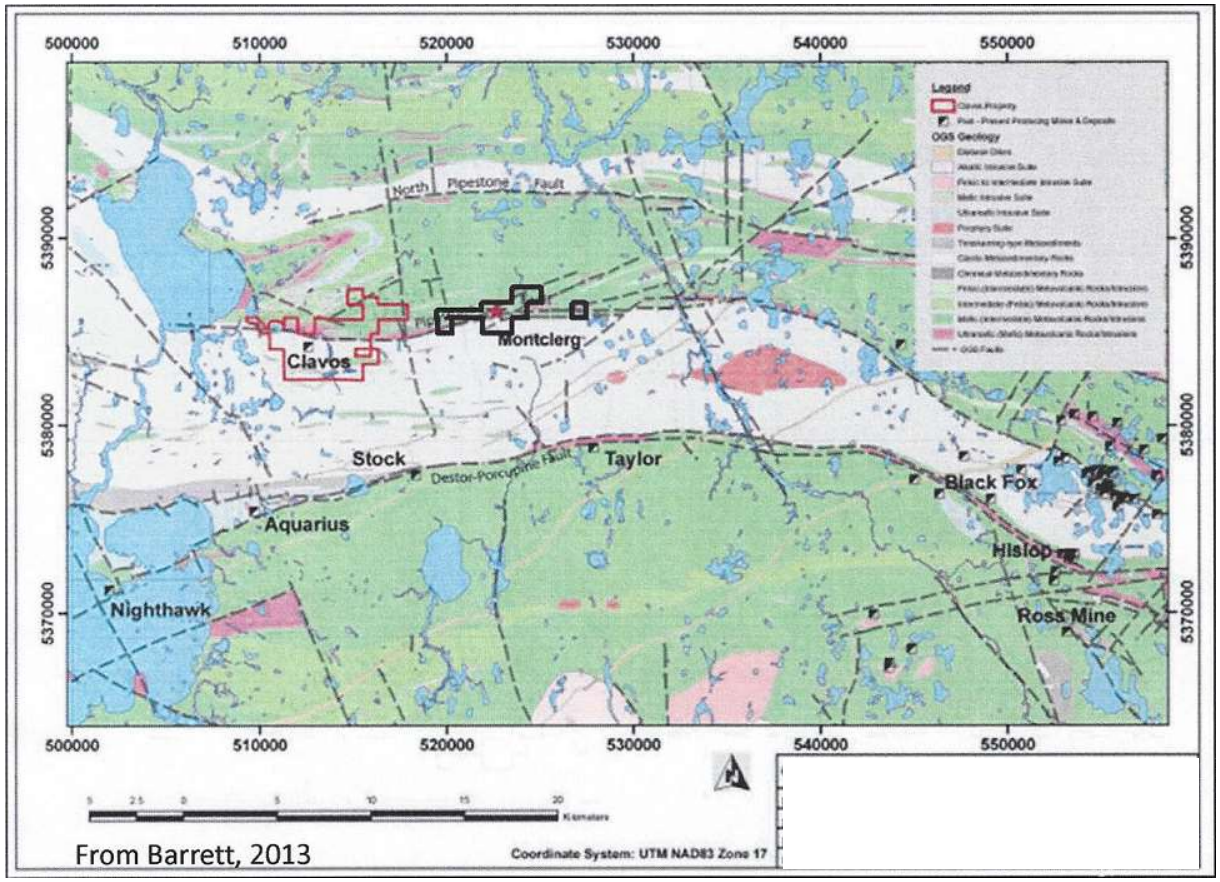
- Regional mapping and geochron work clearly place the West Timmins deposit on the Pipestone fault system at the north contact of the Porcupine Assemblage. This interpretation evidently upgrades the gold exploration potential of the whole Pipestone fault system, including the Montclerg Property.
- Our efforts are focused primarily along the Pipestone fault and its splays, particularly where they intersect iron-rich basalts of the Tisdale Assemblage in the presence of porphyry intrusions.
- At the property-scale we look for demagnetization of the rocks and obvious structures (NE in particular) that cut across the main trend of the Pipestone or PD faults.
- The Matheson JV is located on the northeast extension of the 1060 Fault first observed on the Anglo-Colbert claim and validated by Goldcorp on the east extension of the Hoyle Pond mine.
- The 1060 Fault system is interpreted as a major transfer fault linking the Porcupine Destor fault in the south to the Pipestone fault in the north.
- This major structure traverses the Matheson JV.

Comparison of Schematic Stratigraphic Columns from West Timmins to Montclerg Project Area



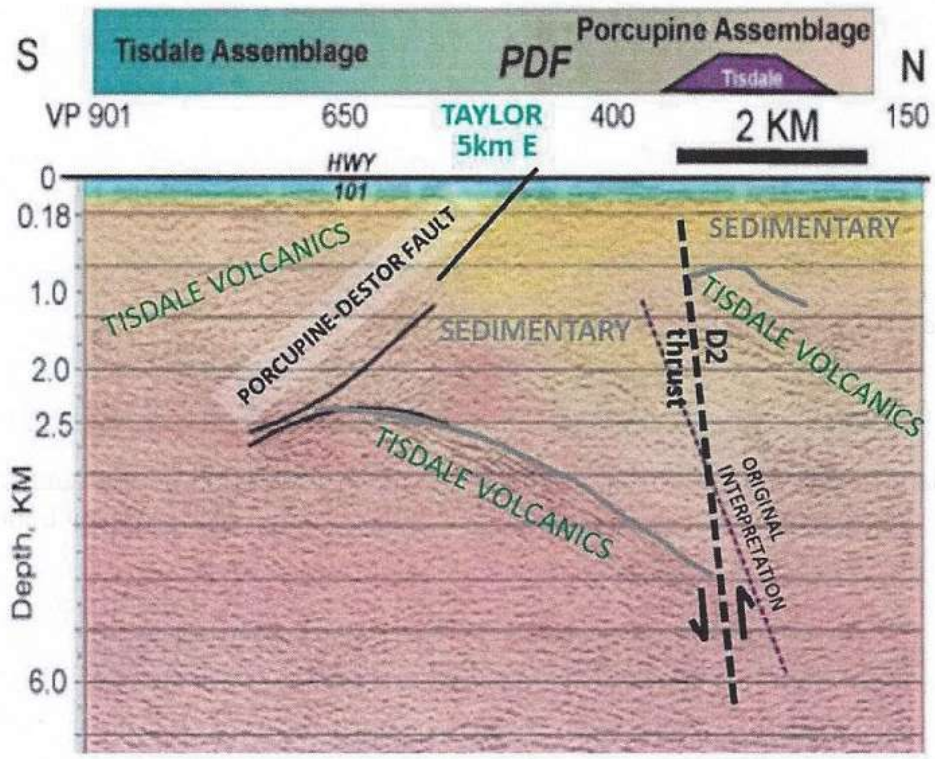
Modified after Dinel et al., 2008

Clavos to Montclerg



MRD 300 figure 1.3

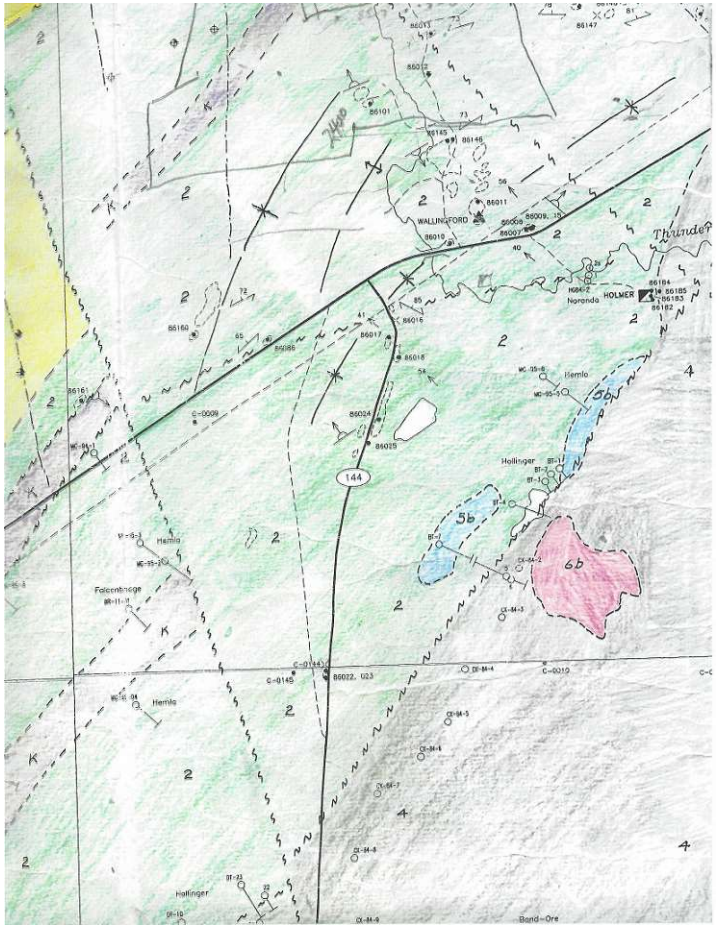
Shillington Seismic Line



Reed, L.E., Snyder, D.B. and Salisbury, M.H. 2005. Two-dimensional (2D) reflection seismic surveying in the Timmins–Kirkland Lake area, Northern Ontario; acquisition, processing, interpretation: Discover Abitibi Initiative; Ontario Geological Survey, Open File Report 6169, 96p.

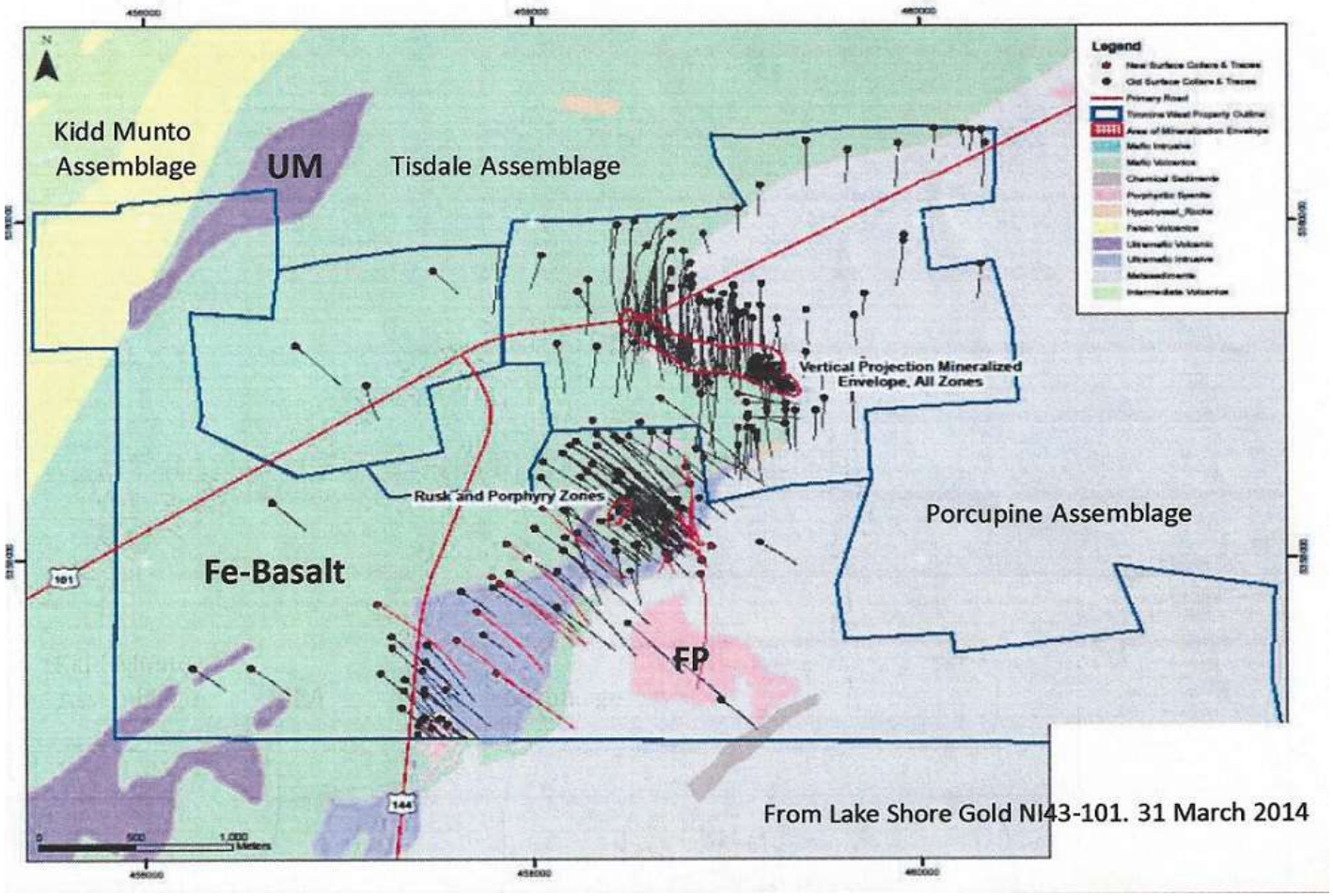
Seismic Reflection survey cross section looking west.

Holmer Outcrop & Structural Interpretation



From Compilation 1992-97; Bonhomme Syndicates

Geology West Timmins Deposit



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Revised Geochronology Timmins West

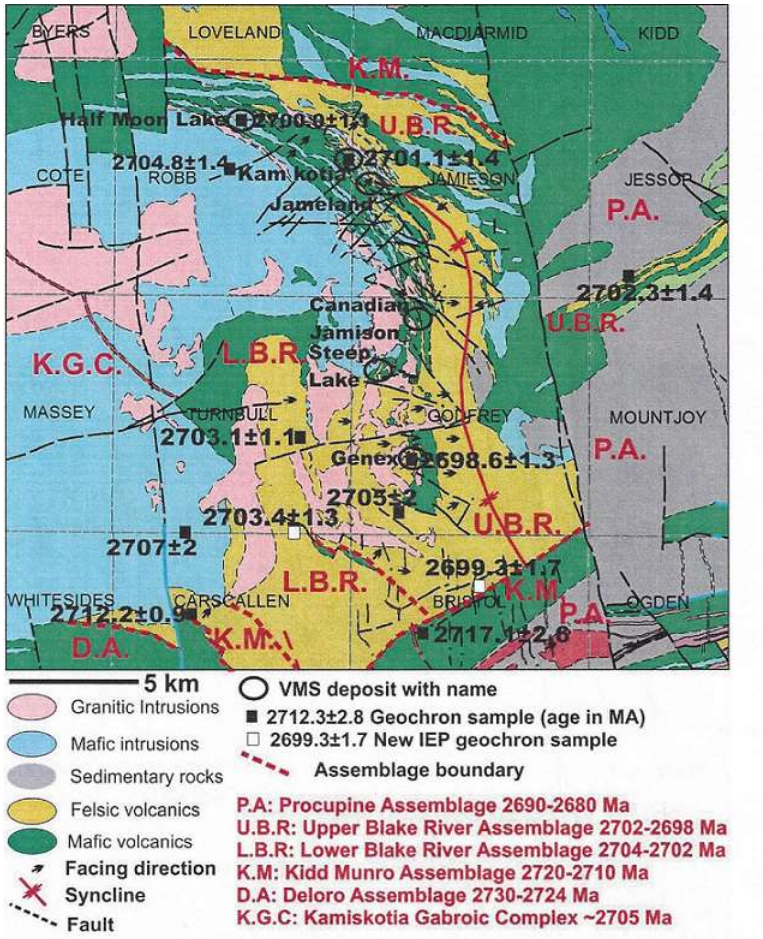


Figure 1. Kamiskotia area general geology with U-Pb zircon ages in MA VMS deposit locations and assemblage boundaries.

Ayer, John & Hamilton, Mike, *Reid Township and Kamiskotia areas Geochronology, Stratigraphy and VMS Potential*

Gold/VMS Deposits from Blake River Assemblage

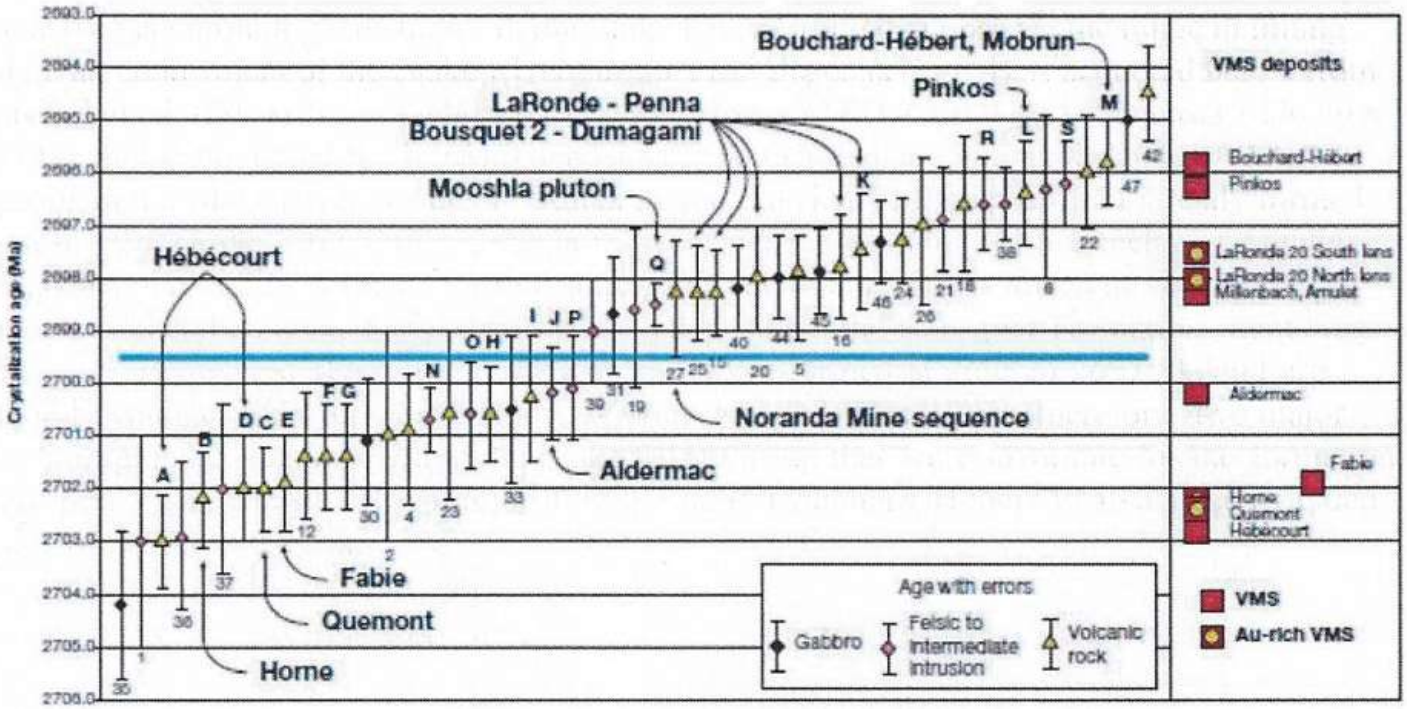


Figure 4. Distibution of U-Pb ages from the Blake River group in Quebec correlated with the timing of VMS deposits (McNicoll et al., 2014)

Ayer, John & Hamilton, Mike, *Reid Township and Kamiskotia areas Geochronology, Stratigraphy and VMS Potential*

1060 Geology

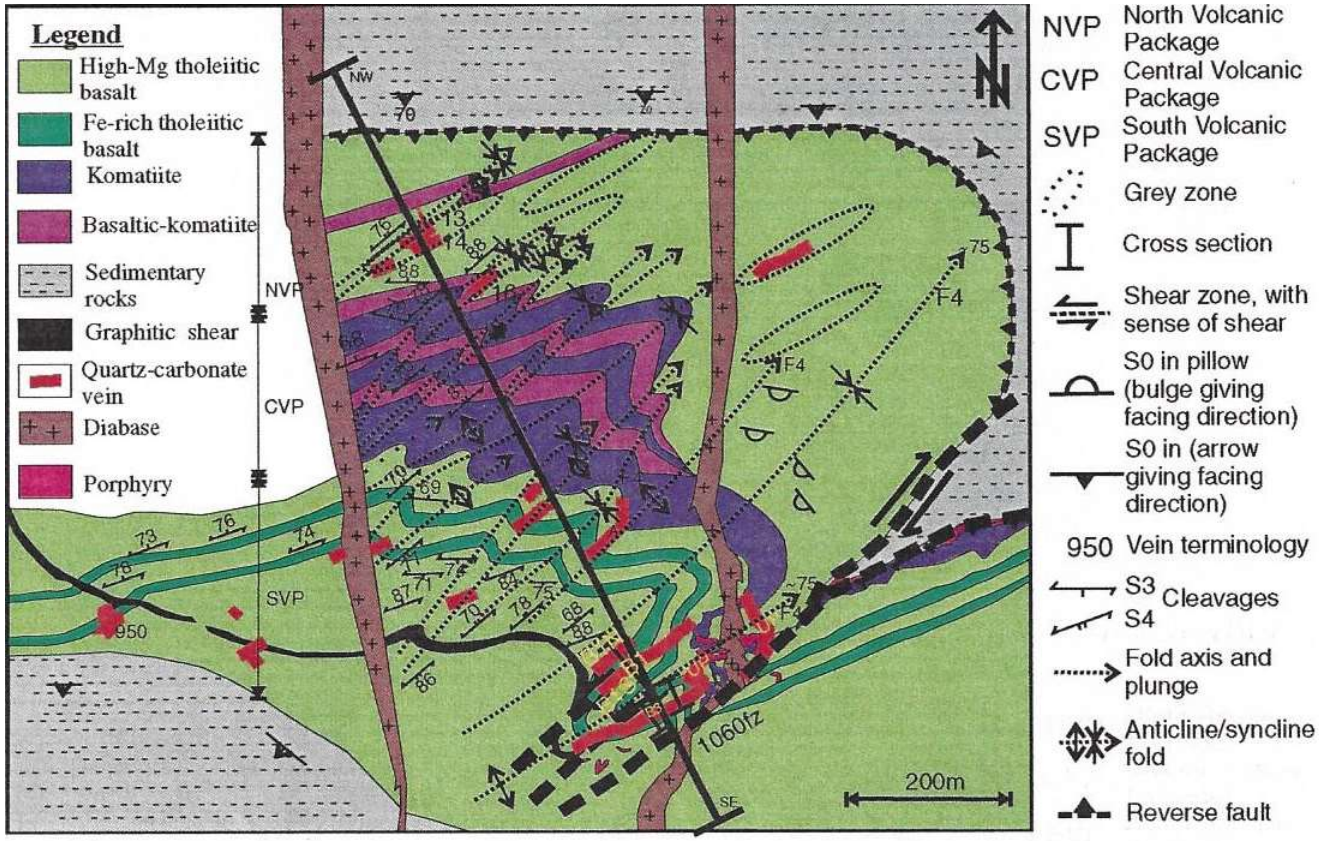
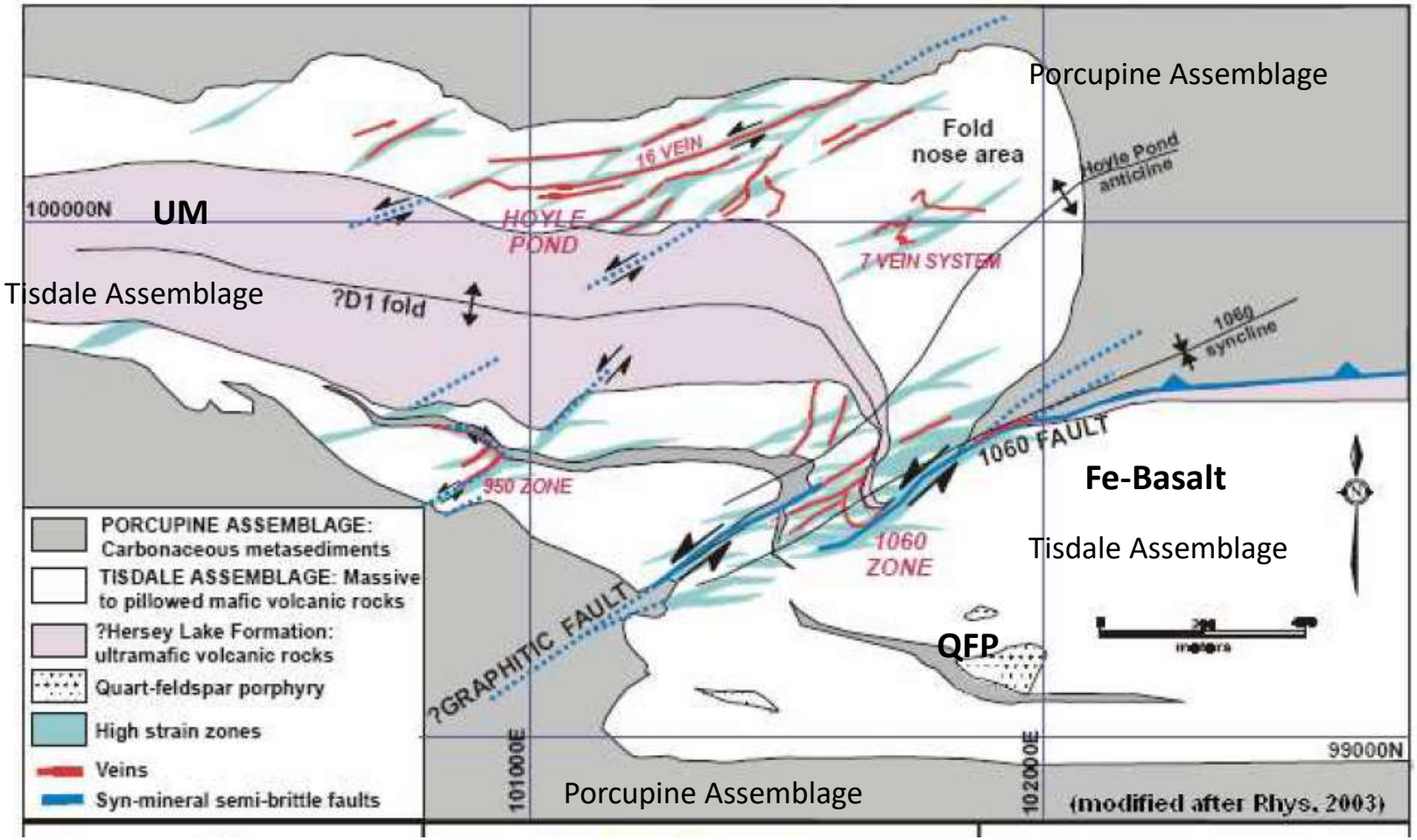


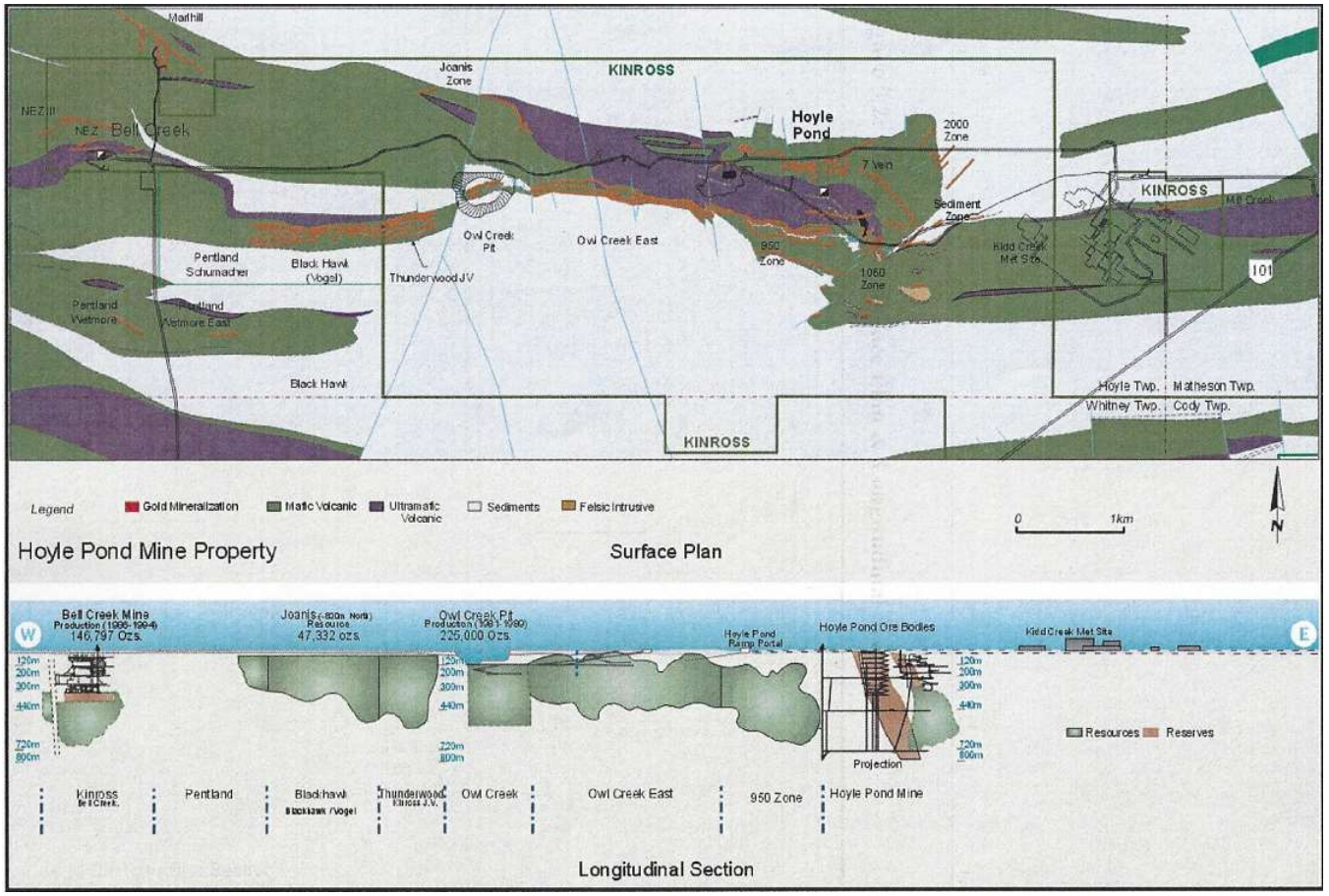
FIG. 2. Simplified geologic map of the Hoyle Pond mine, compiled from the 440- and 720-m level maps. Certain veins are labeled using the mine convention (e.g., "A" vein). Traverses across veins are indicated. Note that in the western portion of the south volcanic package, the graphitic unit cuts the stratigraphy.

LITHOGEOCHEMICAL & STRATIGRAPHIC CONTROLS ON Au MINERALIZATION, HOYLE POND MINE, TIMMINS, ON

Geology Hoyle Pond – 1060 Fault Discovery



Original Hoyle Pond



Hoyle Pond Surface Plan & Longitudinal Section

SRK Consulting
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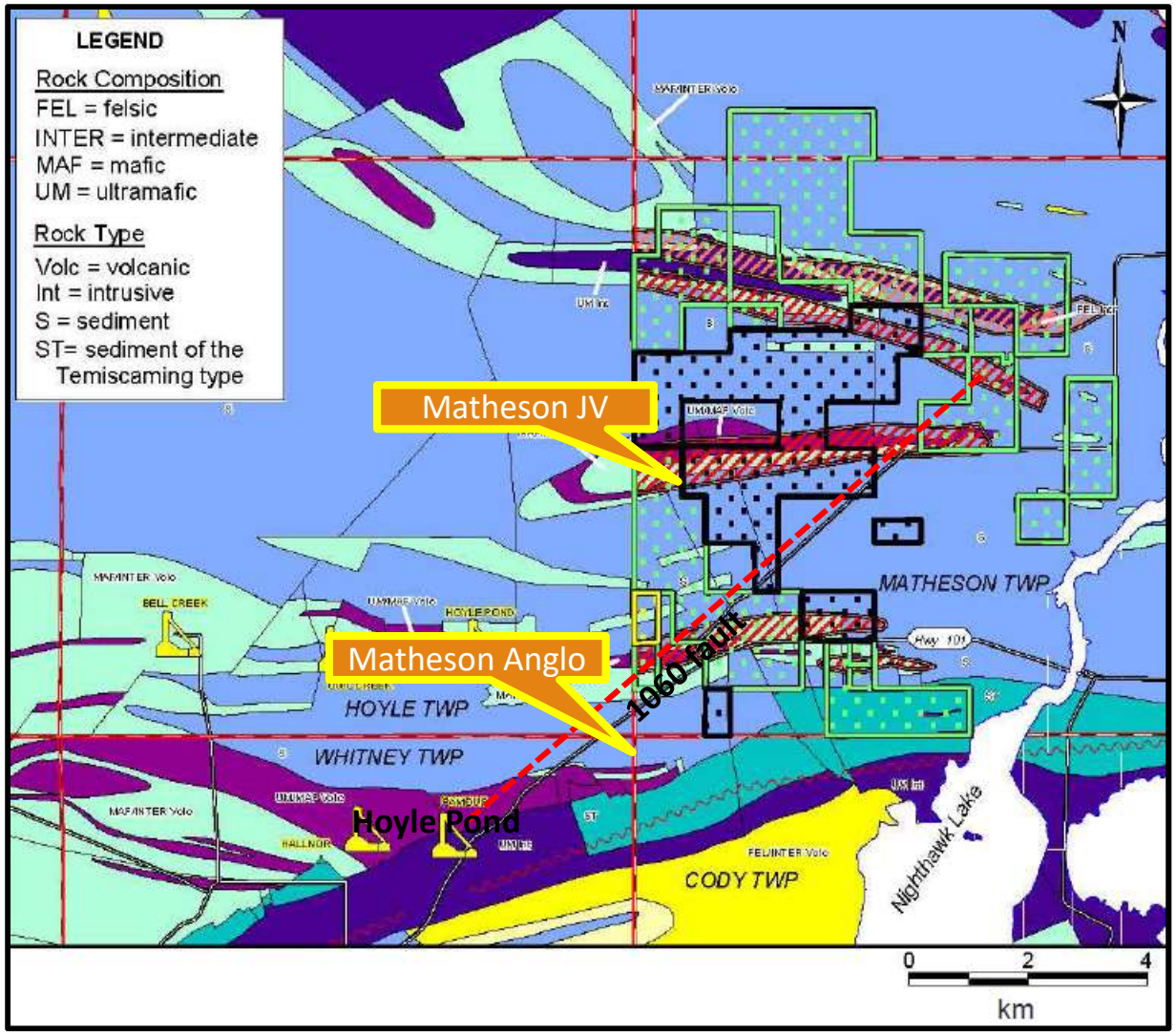
Regional Geology, Matheson Project



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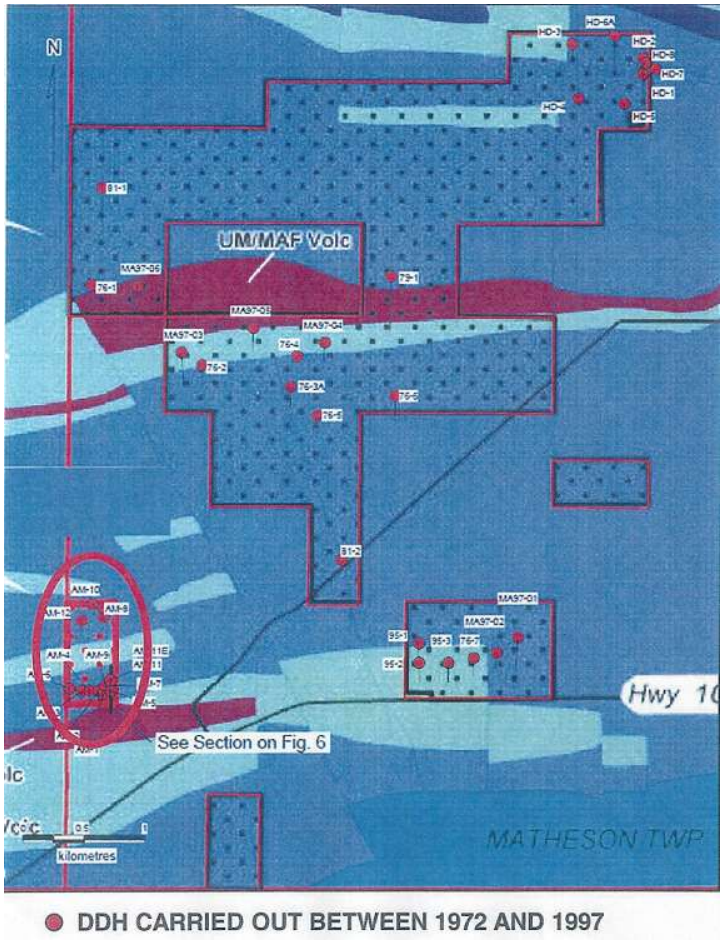
Matheson TWP 1060 Extension



IEP/Explorers Alliance Private Report

Stratigraphic Column of Kidd Creek to Montclerg Area

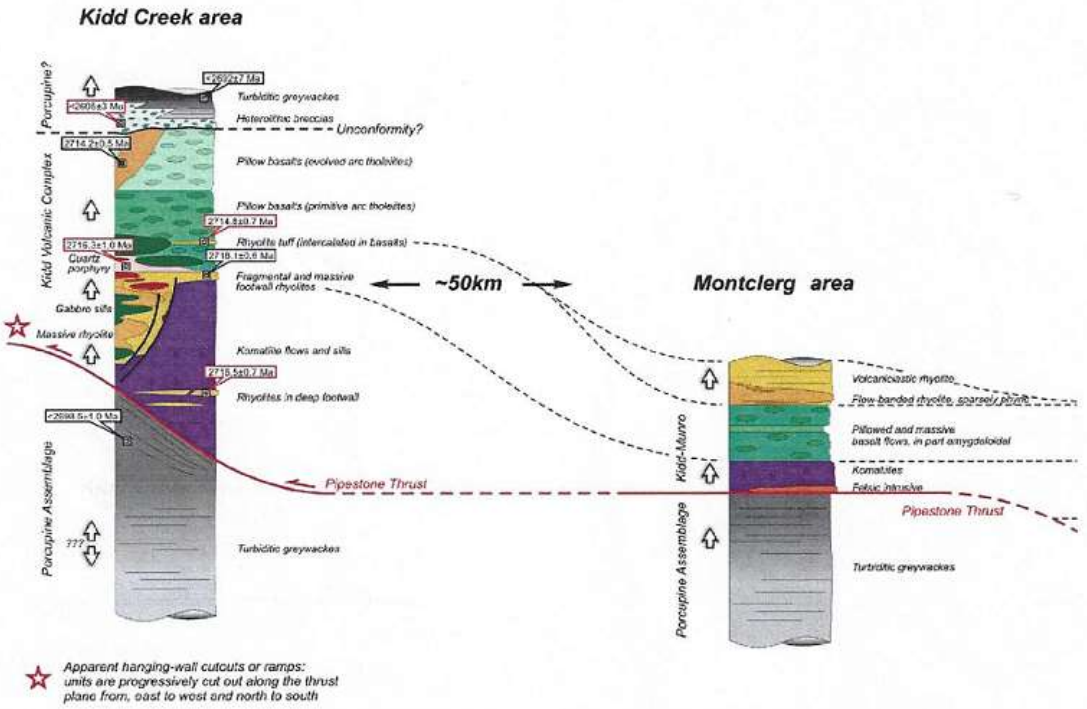
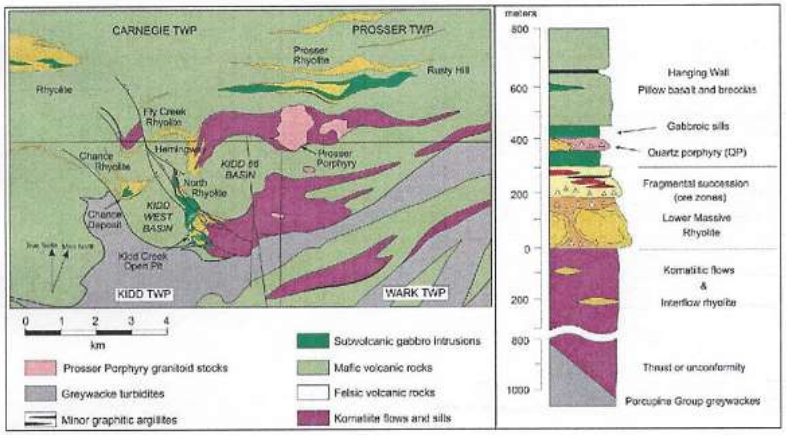


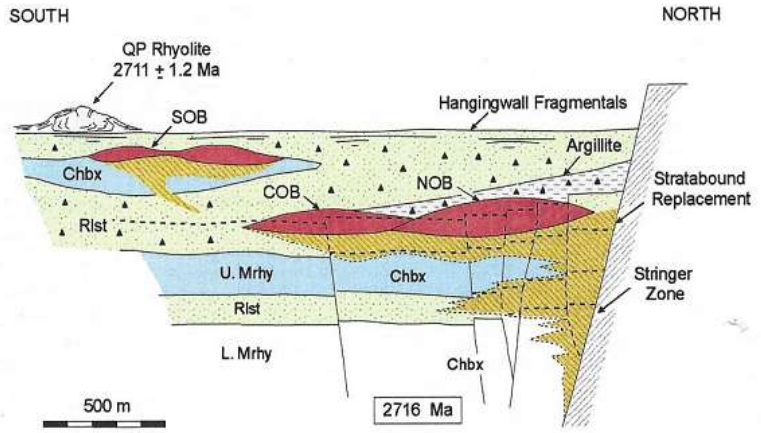
Figure 6-2. Comparison of main lithological units in the vicinity of the Kidd Creek massive sulfide deposit and the Montclerg gold deposit 50 km to the east (*from* Bleeker and van Breemen 2011). The Clavos gold mine is located approximately 9 km west-southwest of Montclerg, along the Pipestone [thrust] fault. The main lithological units at Clavos are the same as those at Montclerg (*see* Figure 1-18), although ferrobasalt is absent and rhyolite was intersected only in the eastern drill-hole CL11-13.

Kidd-Munro Assemblage

Local Kidd-Munro Assemblage

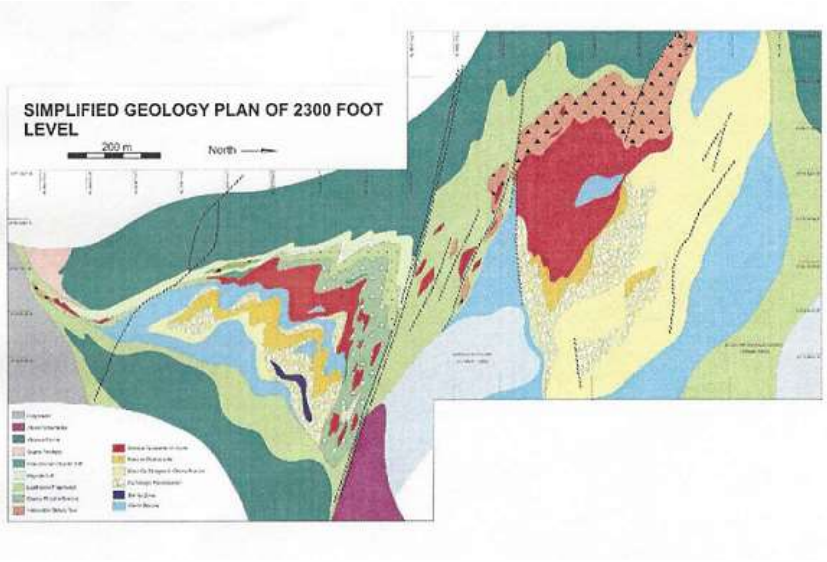


Hannington 2010

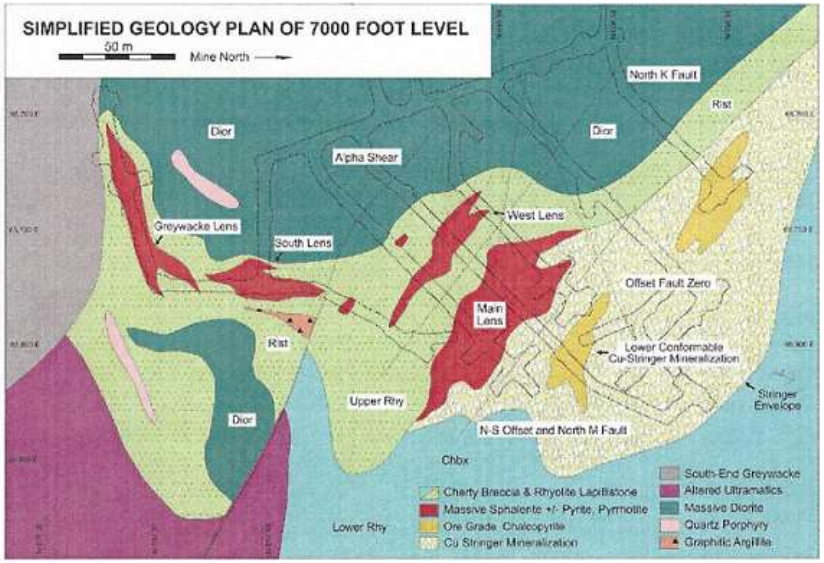


Hannington, Bleeker and Kjarsgaard 1999

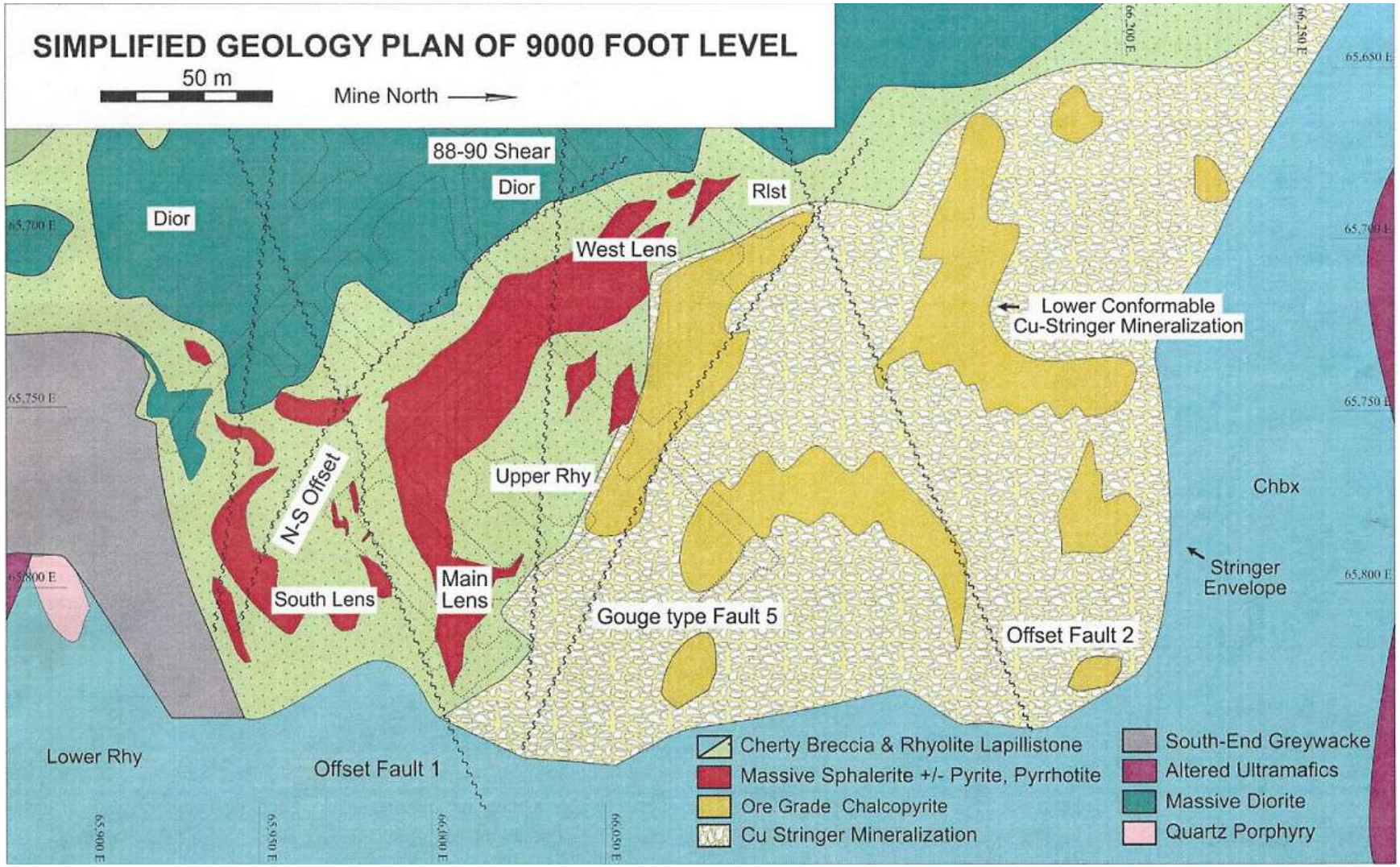
Geology Level 2300 & 7000 Kidd Creek Mine



Hannington, Bleeker and Kjarsgaard 1999

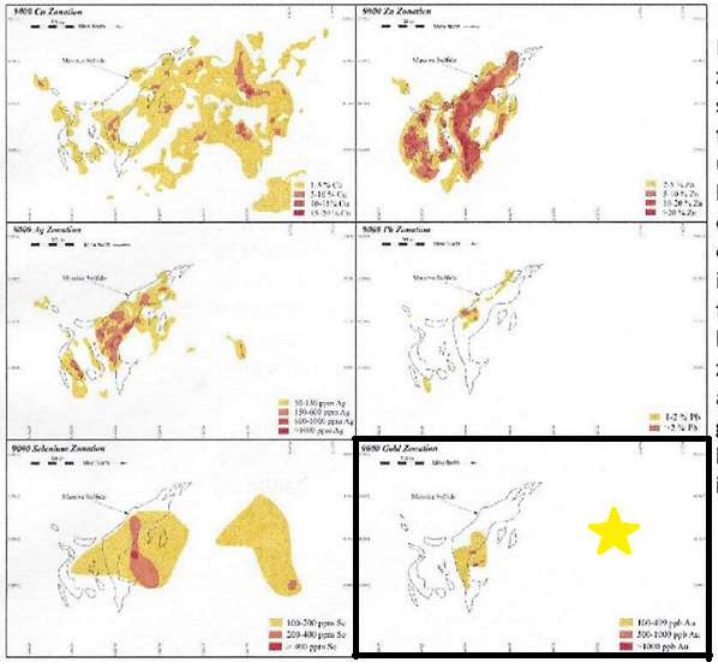


Modified from Gemmell 2013

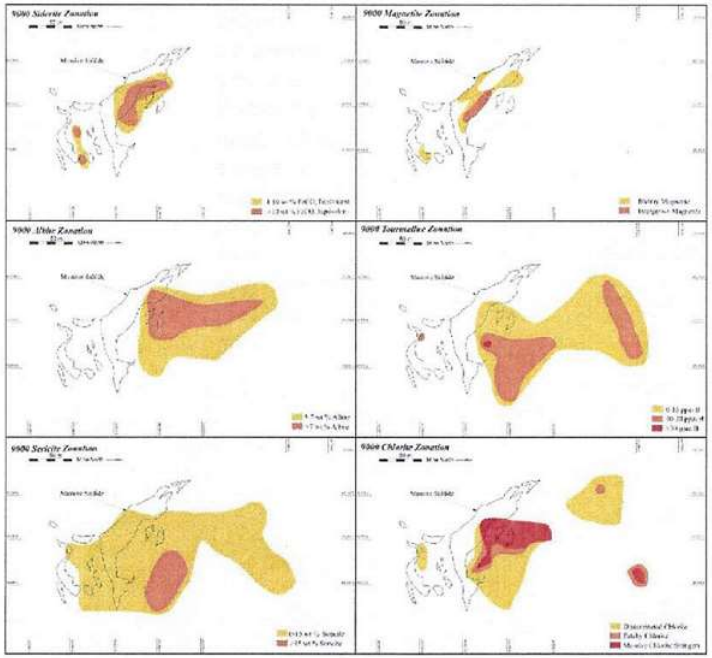


Modified from Gemmell 2013

Gold Enrichment at Depth Near Sediments



Metal zonation is similar to that in the upper mine, however no enrichment of selenium is seen in the south lens and a zone with anomalous gold has been identified



Mineral zonation is similar to that in the upper mine, except for magnetite, which is more abundant in the deep mine

Modified from Gemmell 2013

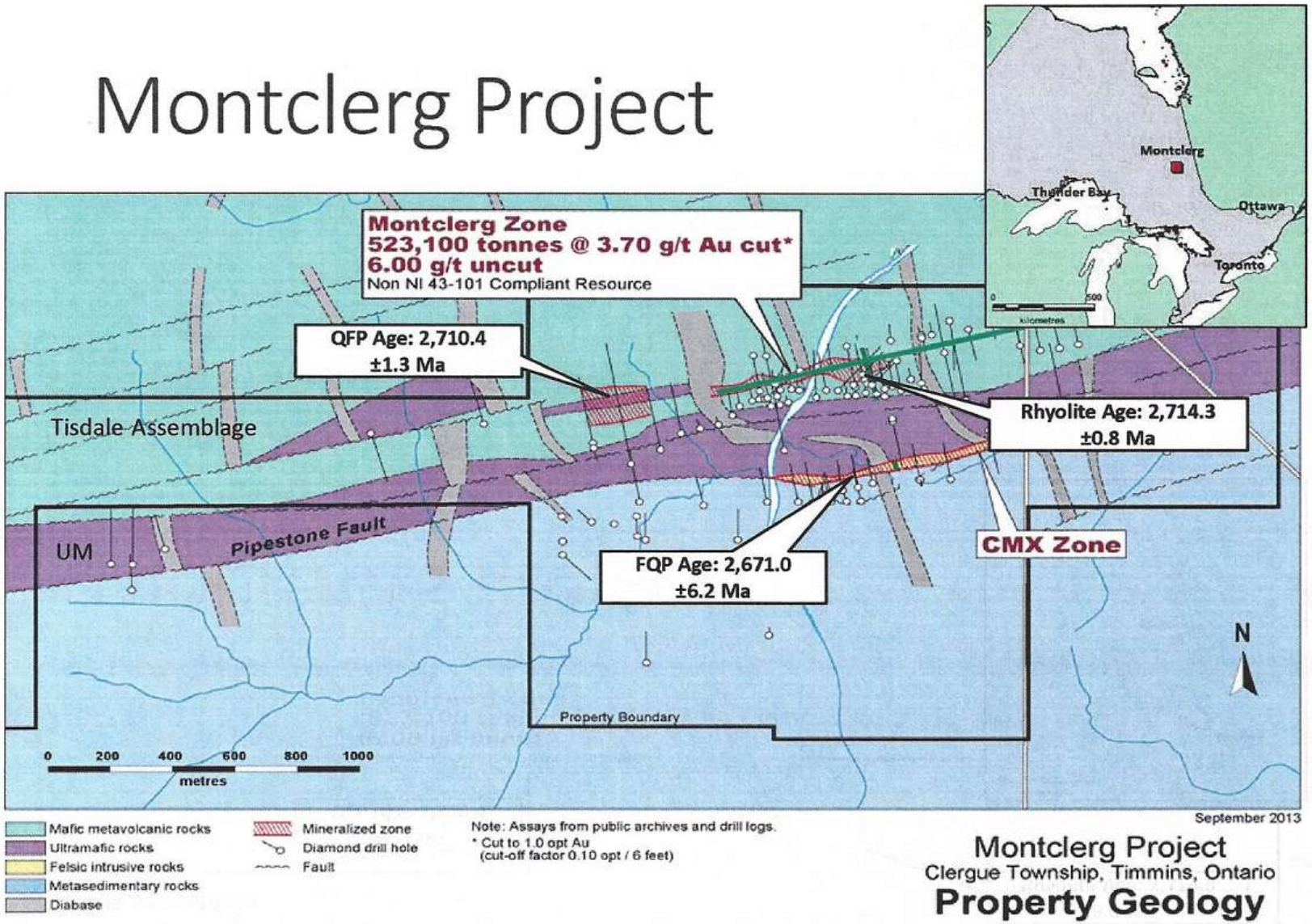
IEP International Explorers and Prospectors Inc.

Montclerg Project (Au) – Highlights

- 100% IEP; 1% NSR.
- $300,000 spent on property in past year.
- Potential to delineate open-pitable resource and high grade deposit at depth.
- Historic Resource of 523,100 tonnes @ 3.70 g/t Au (cut to 31 g/t Au) for about 62,144 ounces (Baynes).
- In addition to the Montclerg deposit, gold mineralization is outlined on the Canamax Zone along Pipestone Fault and at depth on the Montclerg zone in the Fe-Ti Basalts.
- Mineralized zones open at depth and along strike.
- Independent NI43-101 Technical Report dated November 2013.
- Montclerg located circa 5km east of the Clavos deposit along the same regional structure (Pipestone fault) (1,258K indicated tonnes @ 4.81 g/t Au (194K oz Au).
- 5-hole, 1,907 m diamond drilling in December 2016 confirmed low grade open pit potential over strike length of >500m and high grade zones at depth.
- Delineation drilling required to outline open pit resource.
- More drilling required to expand high grade mineralization at depth.

***See Note on last page concerning Historical and Non-Compliant Resources**

Montclerg Project



Geology from Barrett, 2008; modified from Pentland-Firth 1999

See Note on last page concerning Historical and Non-Compliant Resources

Longitudinal Section Prior to 2016 Program

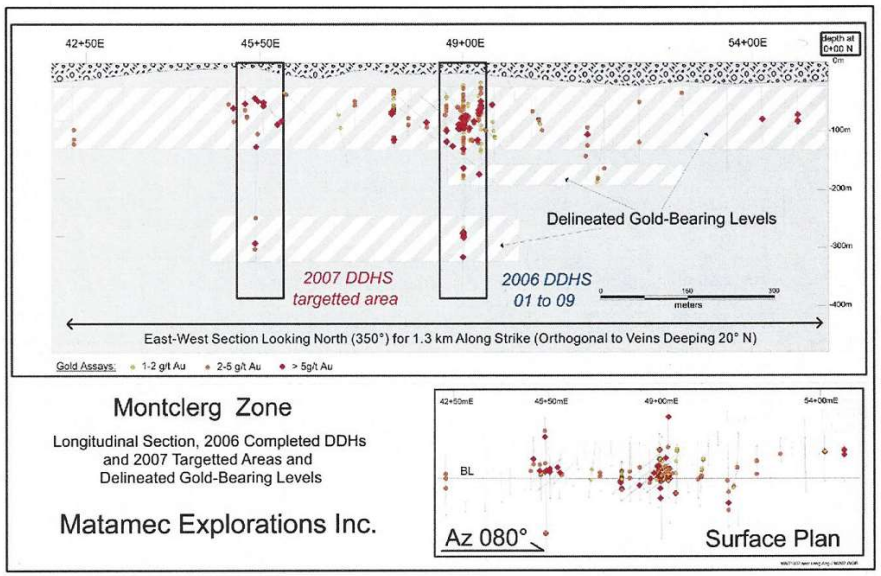


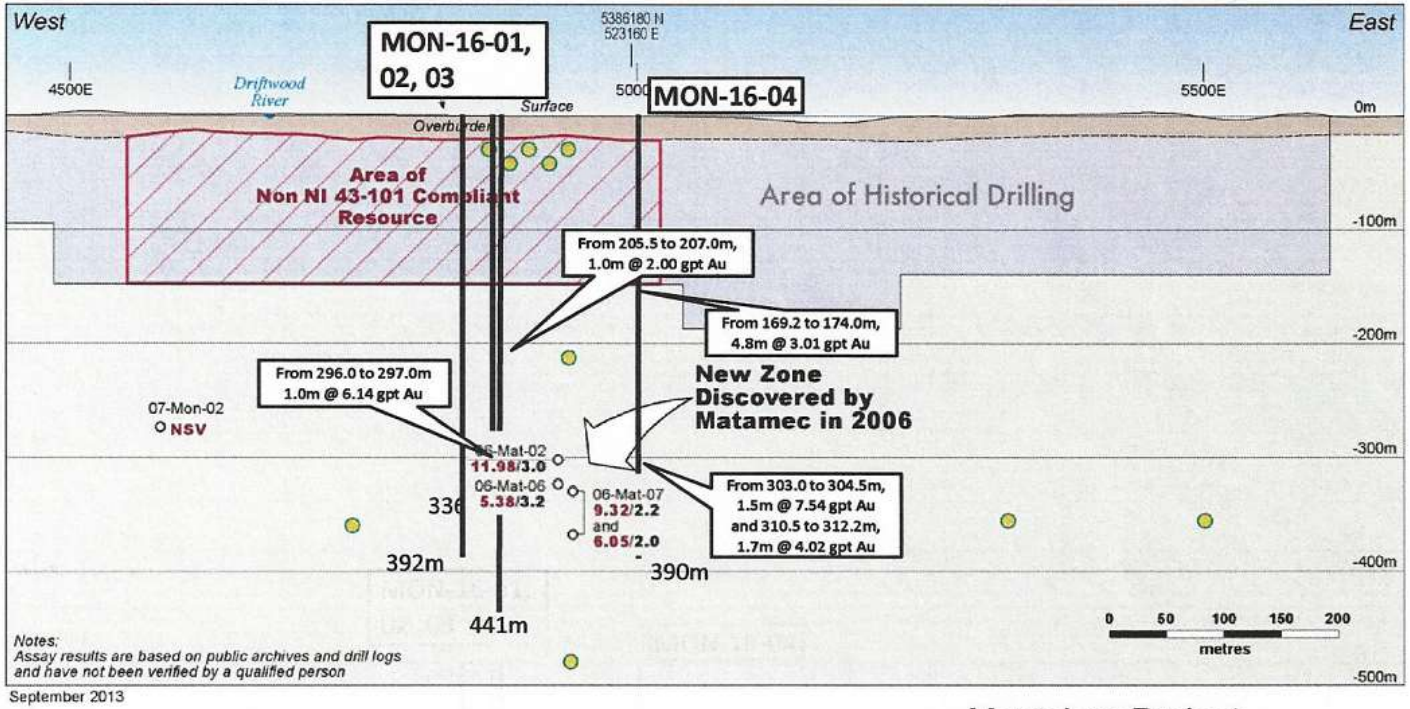
Figure 1-16. Longitudinal section through the Montclerg Zone at azimuth = 80°, looking north (Matamec Explorations Inc. 2007). The vertical rectangles centred at 4900E and 4550E outline the 2 areas drilled in 2006 and 2007, respectively. Chemostratigraphic relations on sections 4900E ("east of the river") and 4550E ("west of the river") are presented in Chapter 2.

*Forward Looking Statement

30-60m spacing; 500m strike; 100m vertical; 75m width

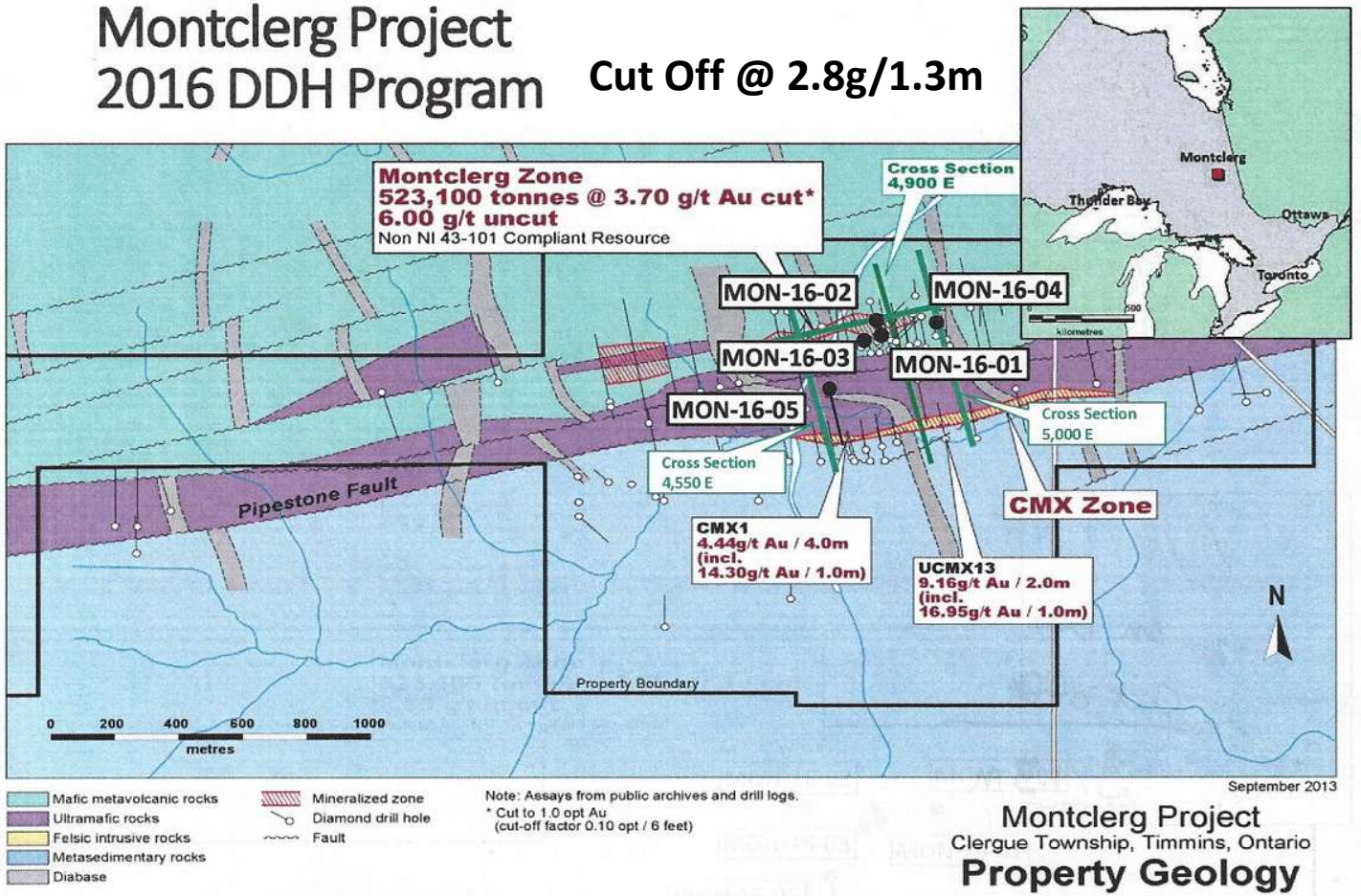
Approx. 15.0 mil T @ 1.5g/t in Pit; 740,000 oz

IEP 2013 43-101 Updated with 2016 Program



Montclerg Project
2016 DDH Program

Cut Off @ 2.8g/1.3m



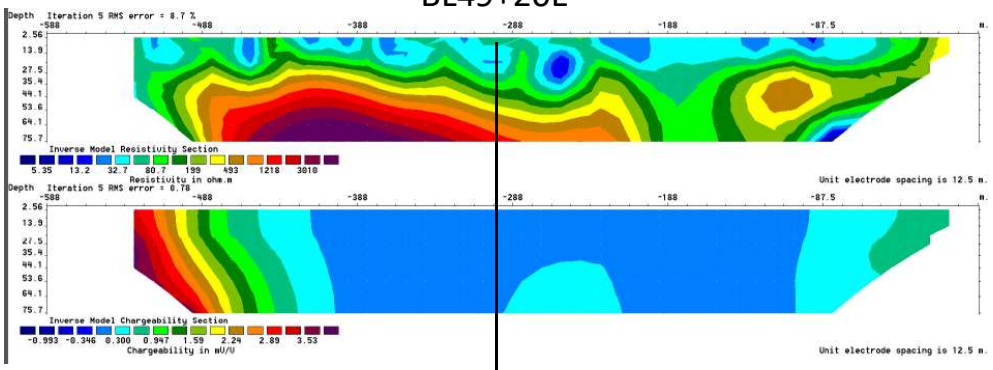
See Note on last page concerning Historical and Non-Compliant Resources

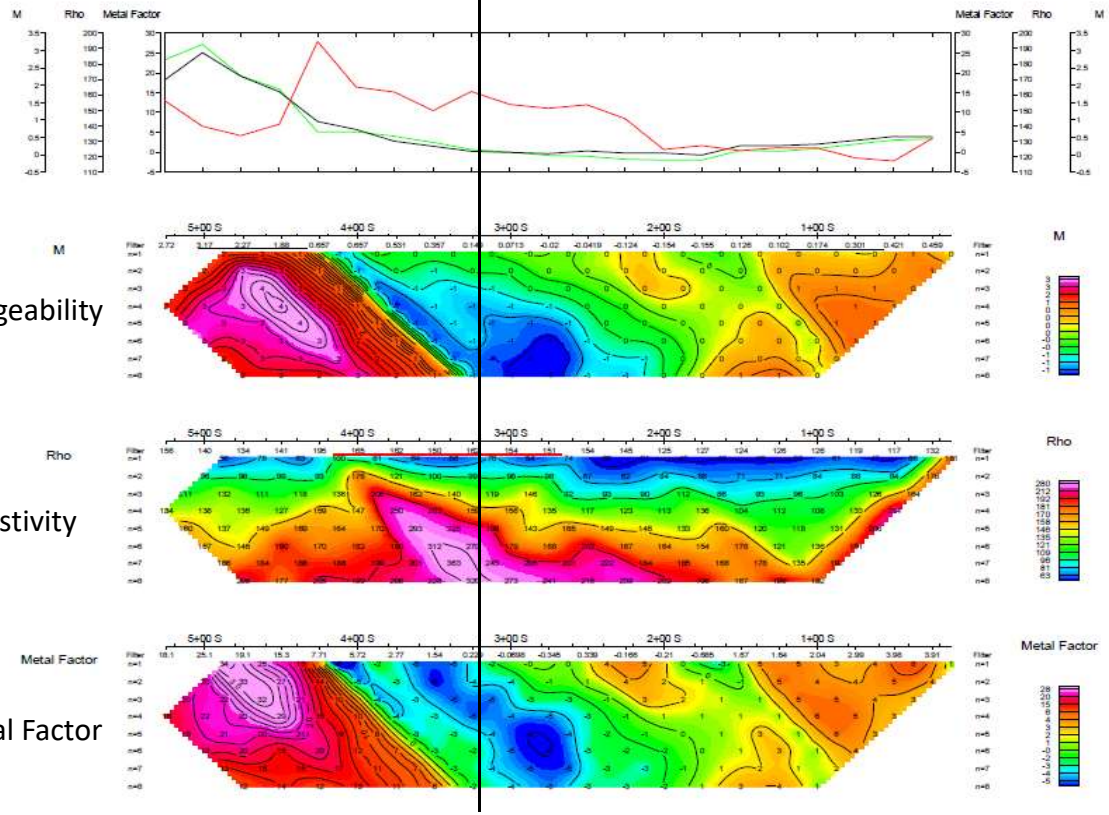
Baynes Calculation 1985; IEP 43-101 Report

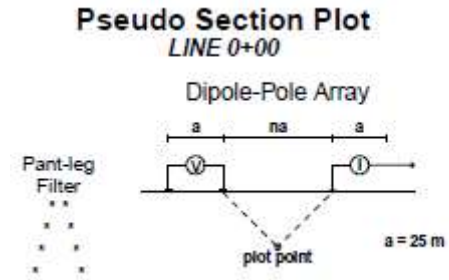
North-South IP Profile L0 (crosses BL at 49+20E)

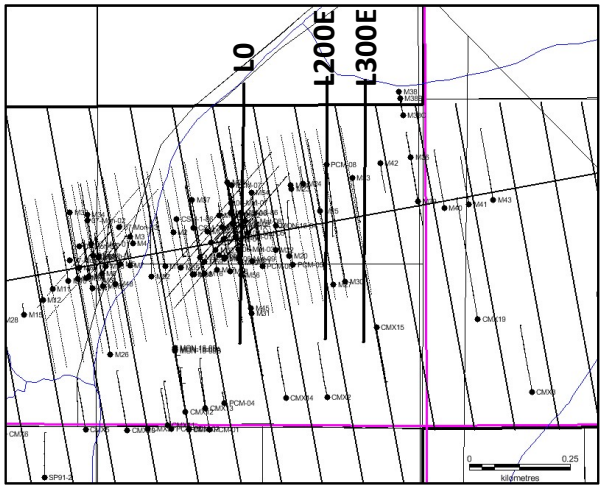
BL49+20E

INVERSION





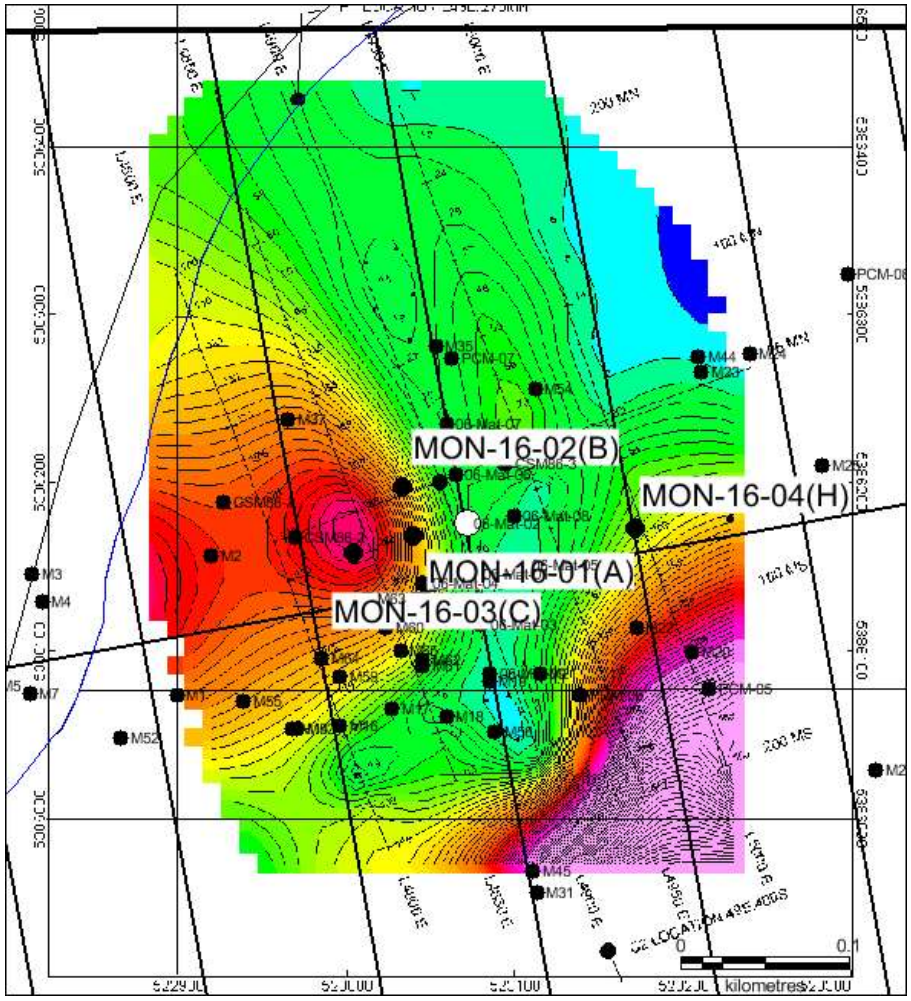


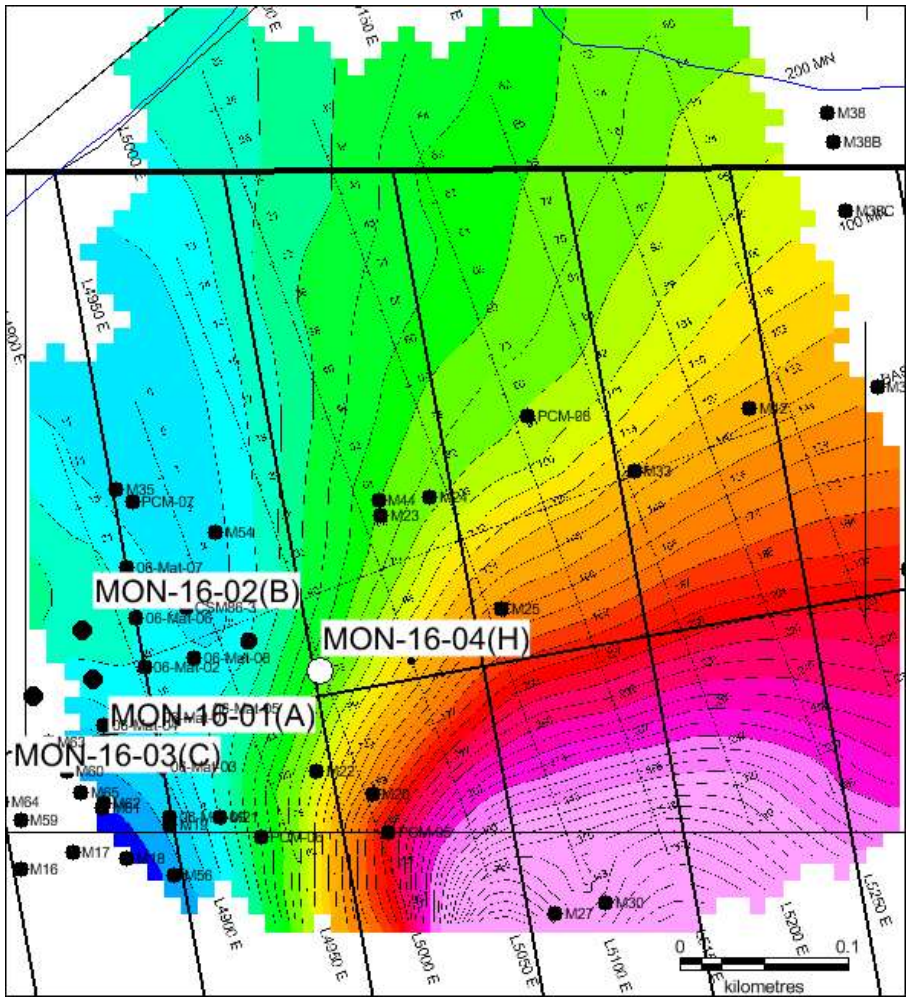


IP Survey 2015 (Exsics)

IEP International Explorers and Prospectors Inc.

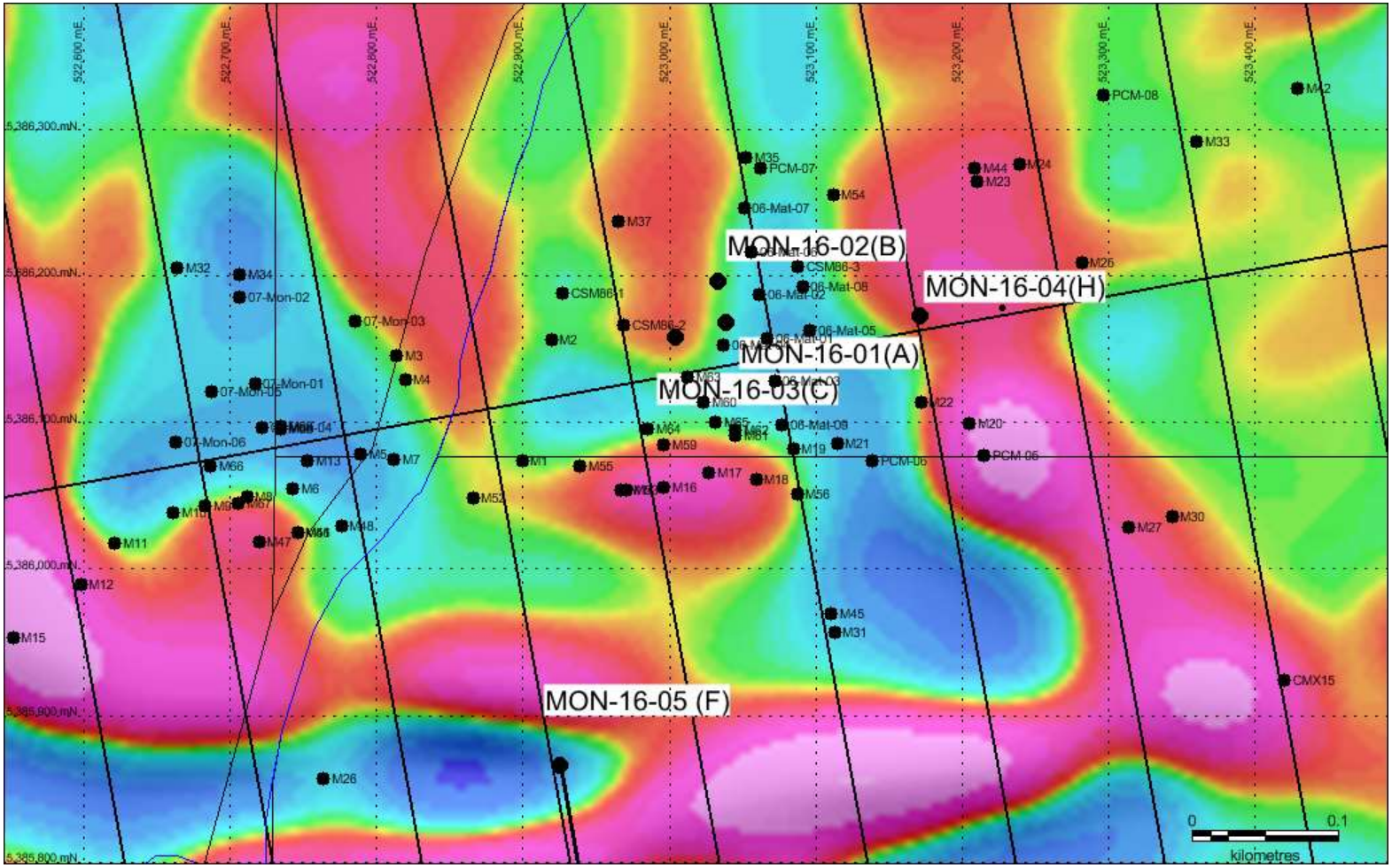
Mise a la Masse Survey (Exsics) 2016





IP Survey 2015 (Exsics)

Montclerg Project – 2nd Vertical Derivative Airborne Magnetics

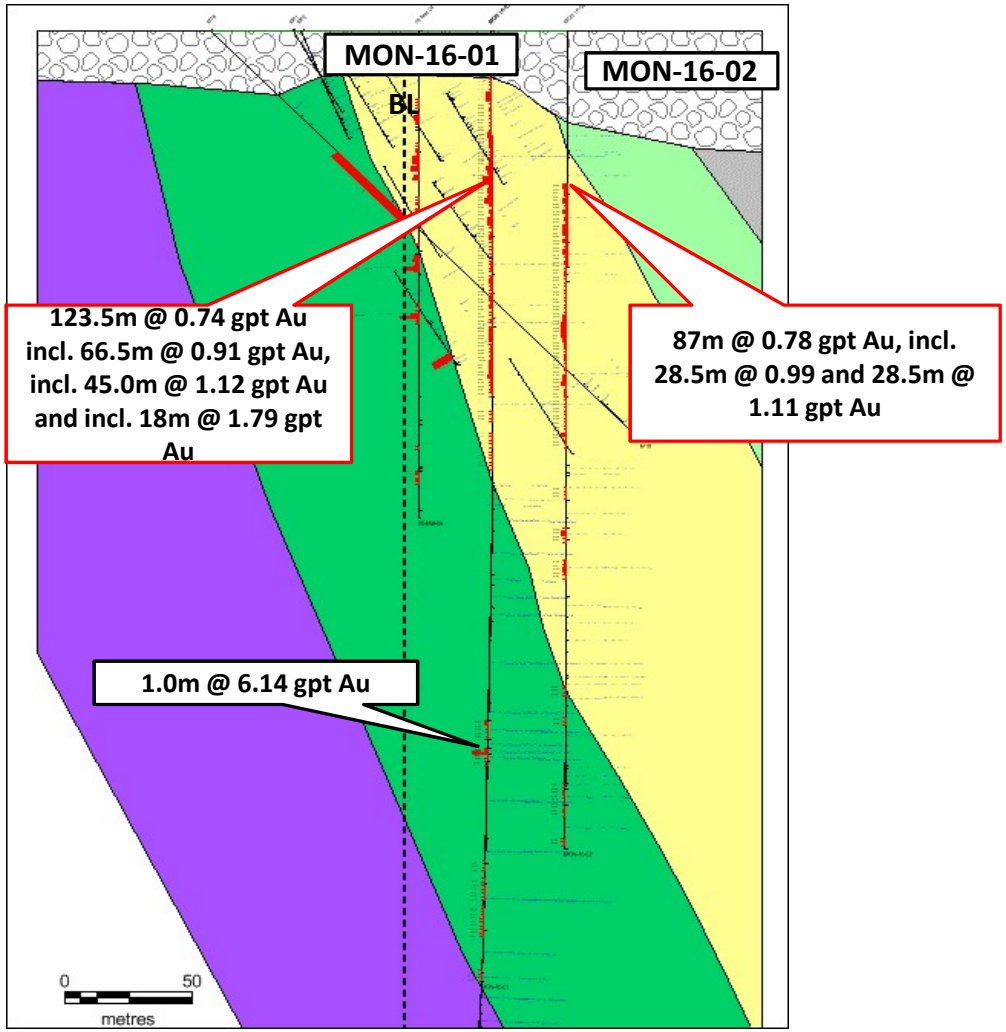


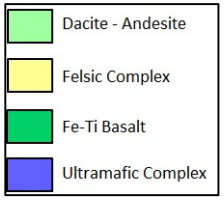
IP Survey 2015 (Exsics)

Typical In-Pit Material

Montclerg Main Zone

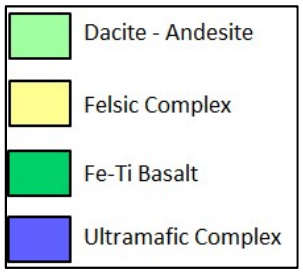
Section 48+70E

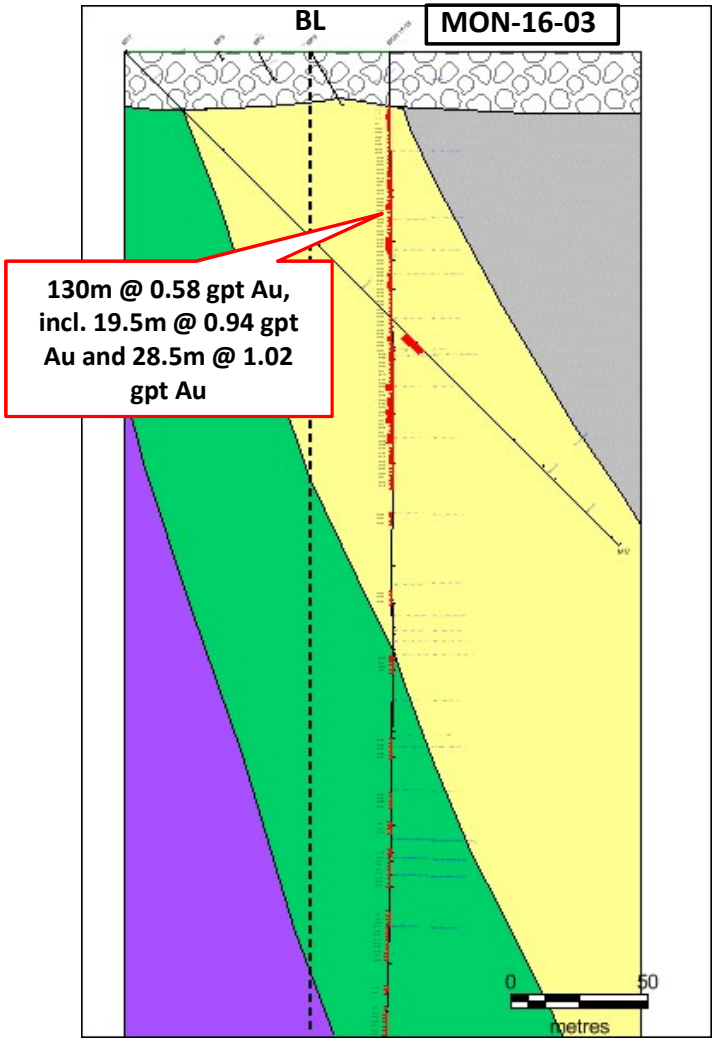




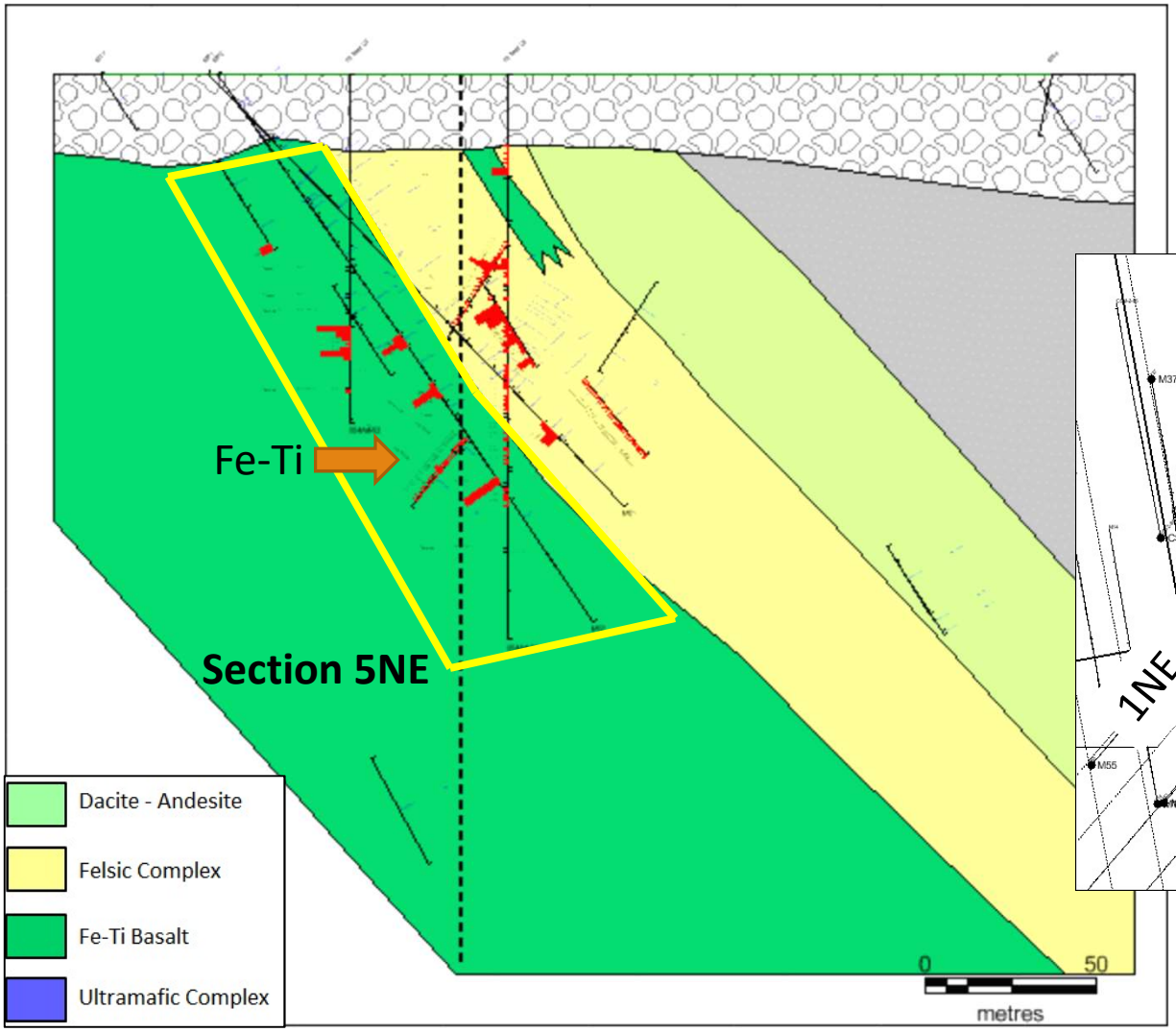
Section 48+40E

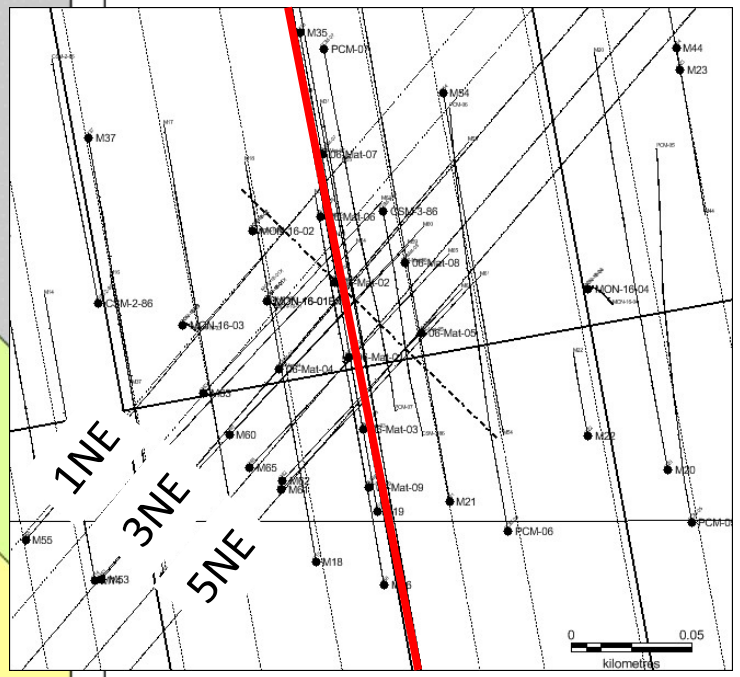
Montclerg Main Zone





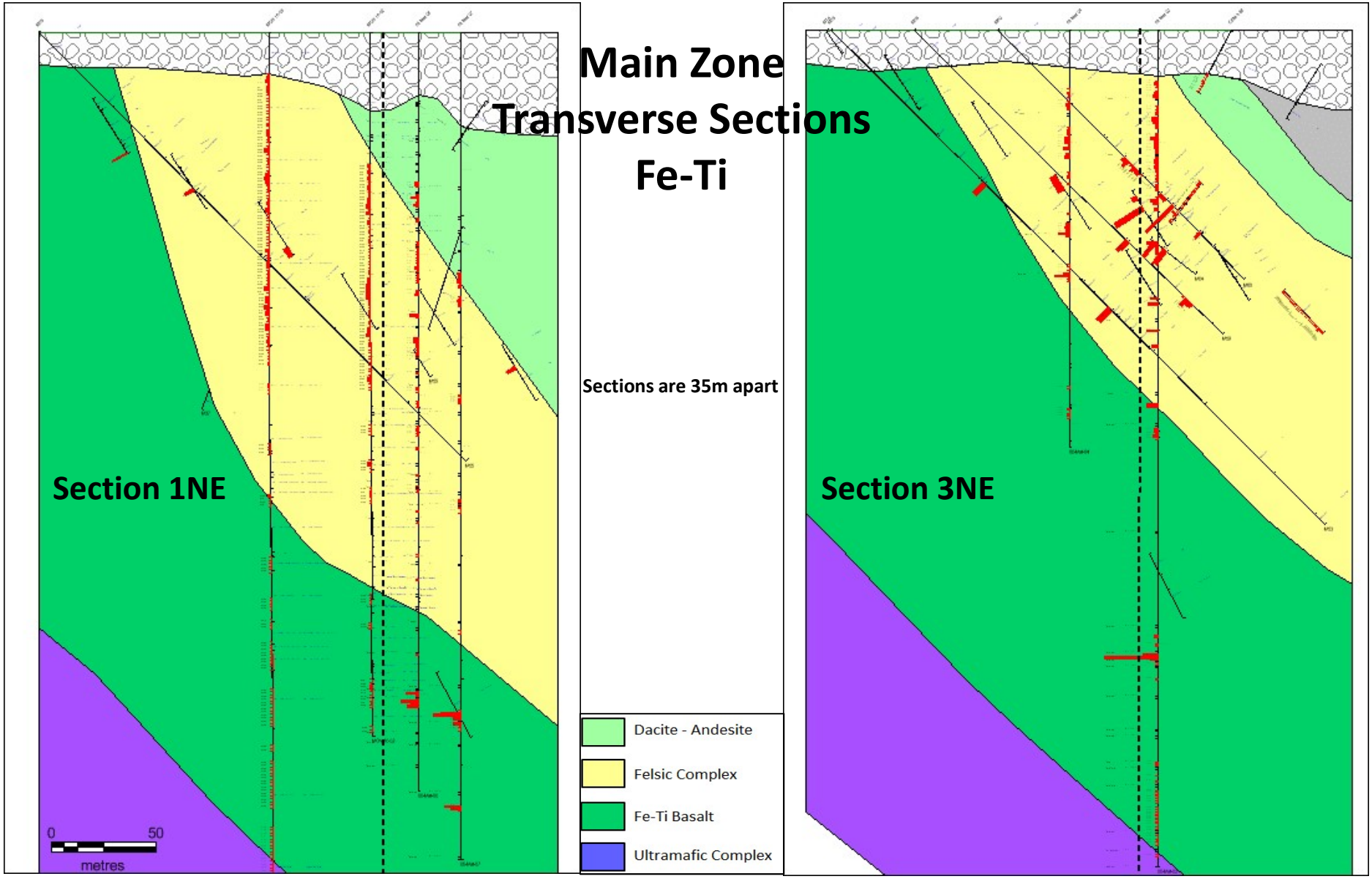
Main Zone Transverse Sections



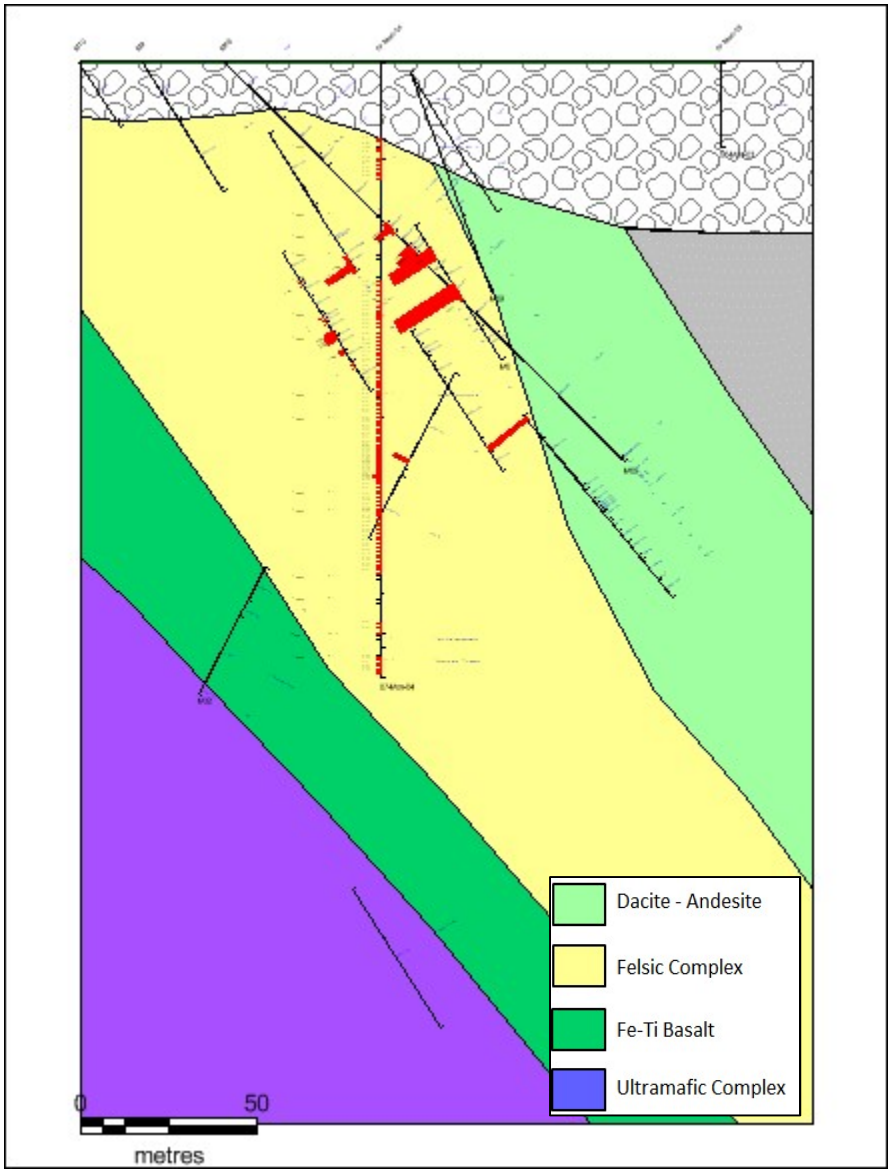


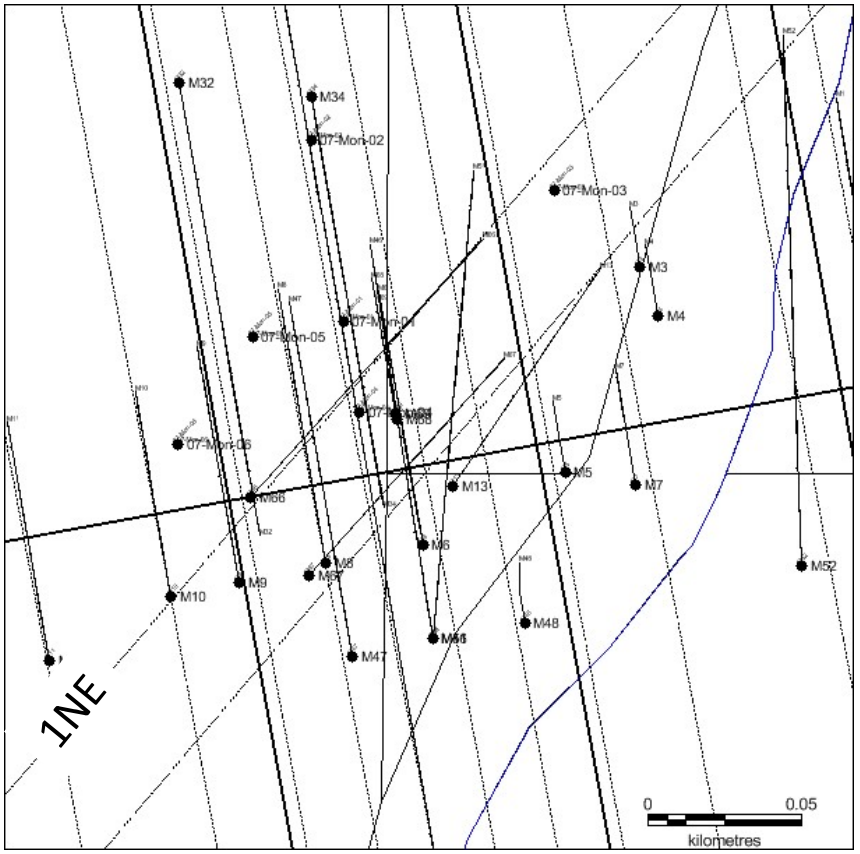
IEP International Explorers and Prospectors Inc.

Main Zone
Transverse Sections
Fe-Ti



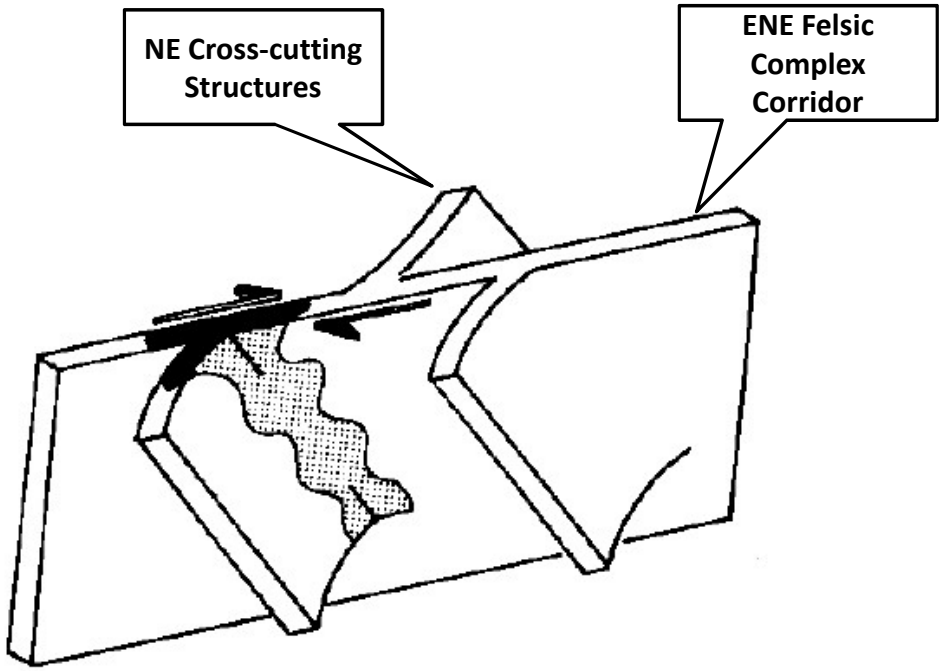
West Zone Transverse Section





General Model at Montclerg

- Our current working model for the mineralization at Montclerg has brittle deformation occurring within the felsic complex parallel to and adjacent to the ultramafic complex.
- Gold in the felsic complex is a function of degree of fracturing and sericite Fe-carbonate sericite alteration.
- Grey Zone alteration (graphite and muscovite) often accompanied by gold is restricted to the Fe-Ti basalts to south of felsic complex. There may be a relationship of these veins with splay structures off the Pipestone fault.

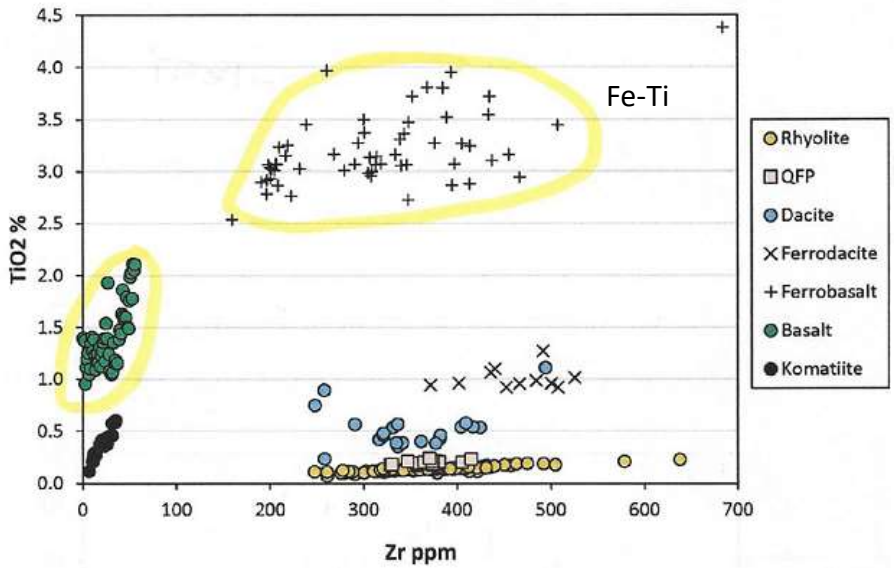


Colvine et al., 1988

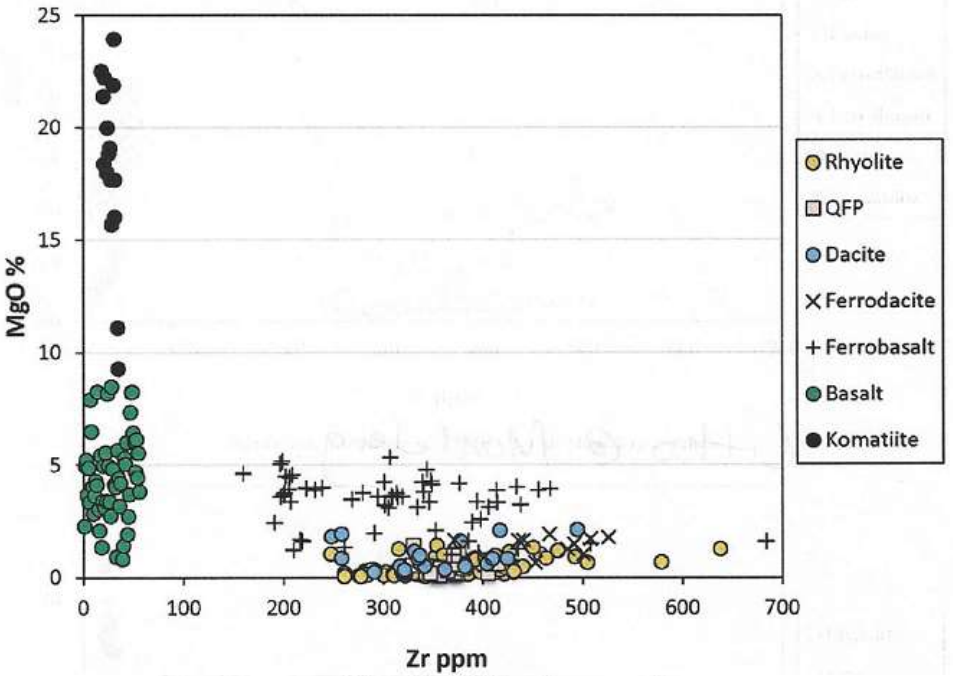
Summary Montclerg

- Project has been drill tested by numerous companies in the past and a historic resource was delineated in the mid-80's. The property is host to low-grade openpitable gold in felsic volcanic rocks in the near surface environment that extends for several hundred metres along strike and is over 100m in width. Continuous sampling from bedrock to 150m shows good continuity and average grades in the 0.6 to 0.8 gpt Au over intervals greater than 100 metres with intervals up to 40 metres greater than 1.0 g/t Au. Mineralization continues at depth along the 70 degree north dip of the felsic volcanic unit.
- Property also is host to high grade gold intersections in the adjacent mafic volcanic rocks to the south sandwiched between the felsic volcanics and the ultramafic structural unit. Here the better gold intersections appear to coincide with a northeast trending cross-cutting structural corridor.
- More drilling is required to delineate an open-pitable resource and selected drill testing of the high grade veins in the mafic volcanic unit along the NE structural corridor.

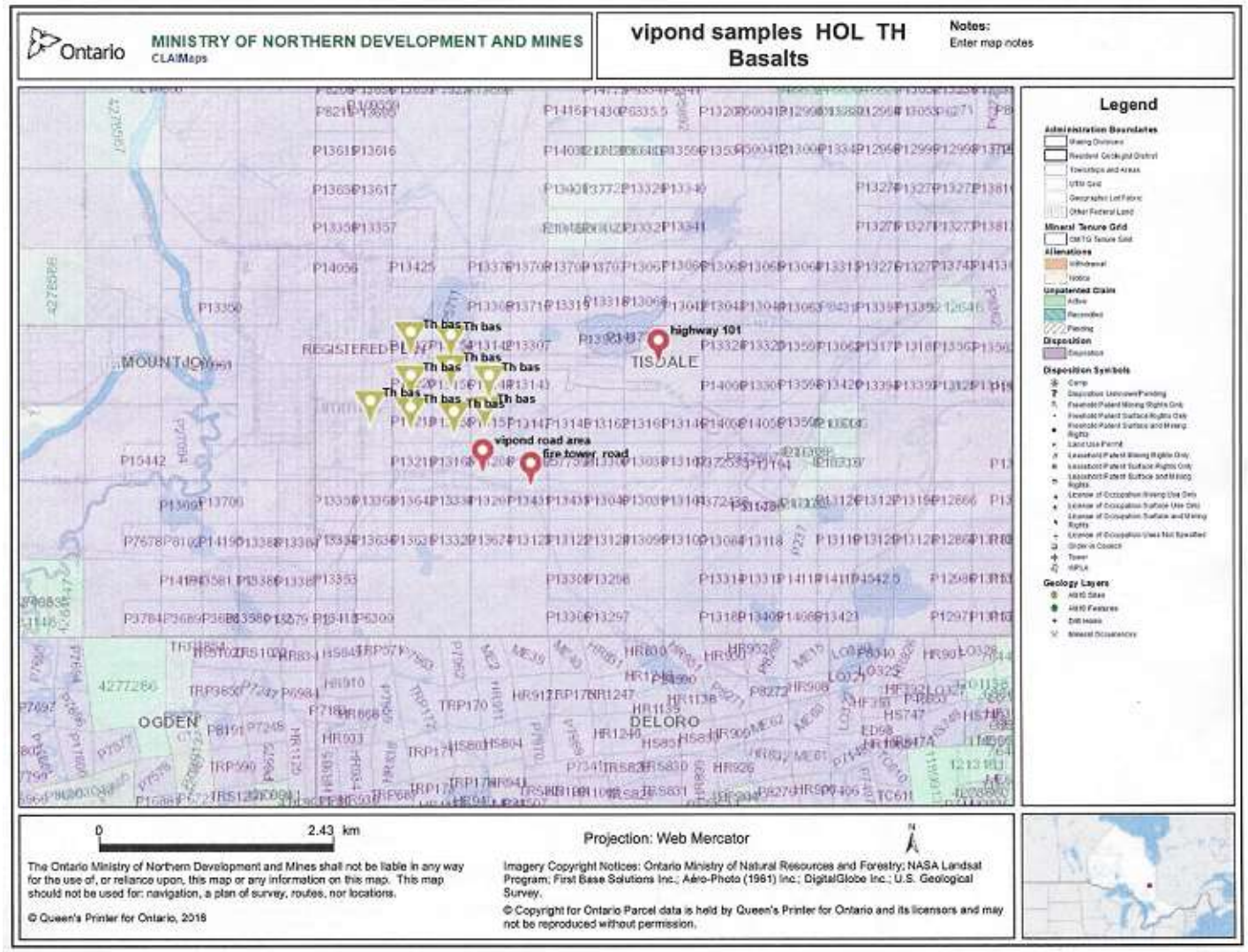
Lithology at Montclerg



Zirconium versus TiO_2 for all Montclerg samples.



Zirconium versus MgO for all Montclerg samples.



Dinel, E., Saumur, B.M. and Fowler, A.D., Economic Geology v. 103, 2008, pp. 1365-1378

Chemical Analysis and Mineralogical Descriptions

Table 2 *Chemical analyses and recalculated analyses of metabasalts (less water and carbon dioxide).*

	UNIFORM LAVA			PILLOW LAVA			VARIOLITIC LAVA	NORMAL THOLEIITIC LAVA
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
	percent	percent	percent	percent	percent	percent	percent	percent
SiO_2	46.66	49.88	45.83	49.98	45.67	38.98	59.41	50.83
Al_2O_3	15.47	15.29	12.88	17.29	19.94	11.24	14.85	14.07
FeO	8.48	0.43	9.73	0.78	10.04	15.81	6.08	9.04
Fe_2O_3	3.16	11.30	0.90	6.31	1.44	0.20	1.88	2.88
CaO	9.69	4.54	6.03	8.36	8.30	6.84	4.78	10.42
MgO	3.99	9.83	6.52	4.85	0.41	3.11	2.29	6.34
K_2O	0.35	2.17	1.25	0.14	0.24	0.76	0.86	0.82
Na_2O	2.06	0.62	2.38	4.21	2.68	3.88	3.23	2.23
CO_2	6.11	3.20	10.58	5.10	6.77	16.80	2.42	nil
H_2O	4.27	5.17	2.70	3.22	4.66	0.58	3.12	0.91
TiO_2	.....	.....	1.10	.....	.....	1.19	.....	2.03
P_2O_5	.....	.....	0.11	.....	.....	1.32	.....	0.23
MnO	.....	.....	nil	.....	.....	0.02	.....	0.19
FeS_2	.....	.....	0.17	.....	.....	0.23	.....	nil
Total	100.24	102.43	100.18	100.24	100.14	99.95	98.92	100.00
SiO_2	51.88	54.32	52.72	54.45	51.52	47.10	62.86	
Al_2O_3	17.14	16.63	14.79	18.84	22.49	13.61	15.71	
FeO	9.42	0.47	11.19	0.85	11.32	19.14	6.43	
Fe_2O_3	3.52	12.30	1.03	6.87	1.63	0.24	1.99	
CaO	10.77	4.94	6.93	9.13	9.38	8.28	5.06	
MgO	4.40	10.68	7.48	5.30	0.46	3.77	2.42	
K_2O	0.39	2.37	1.43	0.15	0.27	0.92	0.91	
Na_2O	2.29	0.67	2.74	4.59	3.02	4.70	3.42	
TiO_2	.....	.....	1.27	.....	.....	1.44	.....	
P_2O_5	.....	.....	0.13	.....	.....	0.39	.....	
MnO	.....	.....	nil	.....	.....	0.02	.....	
FeS_2	.....	.....	0.20	.....	.....	0.28	.....	
Total	99.81	102.38	99.91	100.18	100.09	99.89	98.80	

SAMPLES
Nos. 1, 2, 4, 5 and 7 from Burrows (1924, p.20).
Nos. 3 and 6 from Hurst (1935, p.110).
No. 8 from Nockolds (1954, p.1021).

Sample No.8 Normal tholeiitic basalt (and dolerite), average of 137 analyses.

1968 Ferguson, Geological Report 58, pp. 18-19

Original Hoyle Pond Mine Deposit

TABLE FHOYLE2: Representative chemical analyses of rocks from the Falconbridge Hoyle Pond Mine area (from Rye 1987).

	COMPARATIVE GEOCHEMICAL ANALYSES								
	ULTRAMAFIC KOMATIITES			BASALTIC KOMATIITES			THOLEIITIC BASALTS		
	Hoyle Pond	(2) Condie	(6) Wilson	Hoyle Pond	(4) Condie	Hoyle Pond	"Ore Zones"	(5) Condie	(6) Wilson
SiO_2	28.0	42.9	41.0	43.2	48.8	47.0	41.9	50.2	49.4
Al_2O_3	3.95	7.46	4.40	8.67	13.0	16.0	14.0	15.5	14.1
CaO	13.5	7.21	4.27	10.6	8.24	7.10	10.4	11.6	8.94
MgO	17.5	24.0	28.43	13.3	11.8	7.11	5.77	7.53	6.17
Na_2O	0.10	0.41	0.36	0.83	1.48	2.15	1.98	2.15	2.33
K_2O	0.10	0.16	0.05	0.02	0.15	0.33	0.61	0.22	0.33
Fe_2O_3	8.21	10.1	10.3	12.2	12.7	10.2	8.19	11.9	13.1
MnO	0.28	0.19	0.15	0.23	0.21	0.22	0.25	0.22	0.22
TiO_2	0.26	0.36	0.28	0.55	0.73	0.51	0.45	0.94	1.16
P_2O_5	0.04	0.02	0.01	0.43	0.09	0.06	0.04	0.10	0.17
CaO/Al_2O_3	3.42	0.97	0.97	1.22	0.63	0.44	0.74	0.75	0.63
Al_2O_3/TiO_2	15.2	20.7	15.7	15.7	17.8	31.4	31.1	16.5	12.2
Na_2O/Na_2O+K_2O	0.91			0.98		0.85	0.77	0.91	0.88
Cr ppm	1600	2200	2191	2201	900	233.8	348.0	490	256
Ni	650	2000	1463	525	390	110.2	140.2	140	162
Co	59	60	90	66.5	270	52.1	47.7	52	38
As	81			9.5		29.1	100.0		
W	82			1.0		60.9	69.1		
Rb	20			11.7		20.0	26.4		
Sr	90		39	21.7		50.0	61.8	100	149
Y	10	10		10.0	22	15.9	14.5	20	
Zr	20	34	56	10.0	69	21.8	14.5	53	108
Nb	20			16.7		15.9	10.0		
Ba	18.2		14	31.7	37	133.5	137.5	80	99
Sc	110	90	181			50.6	47.1		
Au ppb	10			10.5		14.2	3657	260	385
Ti/Zr	77.9			329.7		140.3	186.1	106.3	64.4

1. Total iron as Fe_2O_3
2. Condie (1981): Average spinifex-textured peridotitic komatiite, Abitibi Belt
3. Wilson and Morrice (1977): Average peridotitic volcanic Timmins, Kirkland Lake
4. Condie (1981): Average basaltic komatiite BK2
5. Condie (1981): Archean tholeiite TH1
6. Wilson (1977): Average Superior Province tholeiite

OFR 2161

Hoyle Pond Mine & 1060 Deposit

- However, our geochemical data and facing directions demonstrate that the NVP and SVP are not equivalent, indicating the three volcanic packages represent a south facing homoclinal sequence that was thrust on top of younger sediments of the Porcupine assemblage .
- This comparison shows that the Hoyle Pond volcanic rocks are geochemicaly correlative to the base of the Tisdale Assemblage stratigraphic column in Timmins. They have similar immobile element chemistry, specifically TiO2/Al2O3, Zr/Al2O3 ratios indicating the SVP has very similar geochemistry to the Central Formation, whereas the NVP and CVP correlate with the Hershey Lake formation.

Etienne Dinel (a), Anthony D. Fowler (a), John Ayer (b), Alastair Stillc, Ken Tylee (c) and Erik Barr (c), *Litho-geochemical and stratigraphic controls on gold mineralization within the meta-volcanic rocks of the Hoyle Pond Mine, Timmins, Ontario*
a) University of Ottawa, Department of Earth Sciences, Ottawa-Carleton Geoscience Centre
b) Ontario Geological Survey, Precambrian Science Division
c) Porcupine Joint Venture, Hoyle Pond Mine, Timmins, Ontario
Author correspondence: edine031@uottawa.ca

Kidd Mine Fe-Ti Basalt

- Intermediate metavolcanic rocks described as “icelandites” overlie the footwall rhyolites in the Kidd Creek stratigraphy and are defined as flows with SiO2 between 55 and 60%, P2O5 greater than 0.3% high TiO2 (1.7 to 2.5%), Zr/Y between 4.6 and 6.6 and enriched LREE (Wyman, Bleeker and Kerrich 1999.

Bleeker, W. and van Breemen, O. 2011. New geochronological, stratigraphic, and structural observations on the Kidd–Munro assemblage and the terrane architecture of the south--central Abitibi greenstone belt, Superior craton, Canada; *in* Results from the Targeted Geoscience Initiative III Kidd–Munro Project, Ontario Geological Survey, Open File Report 6258, 142p.

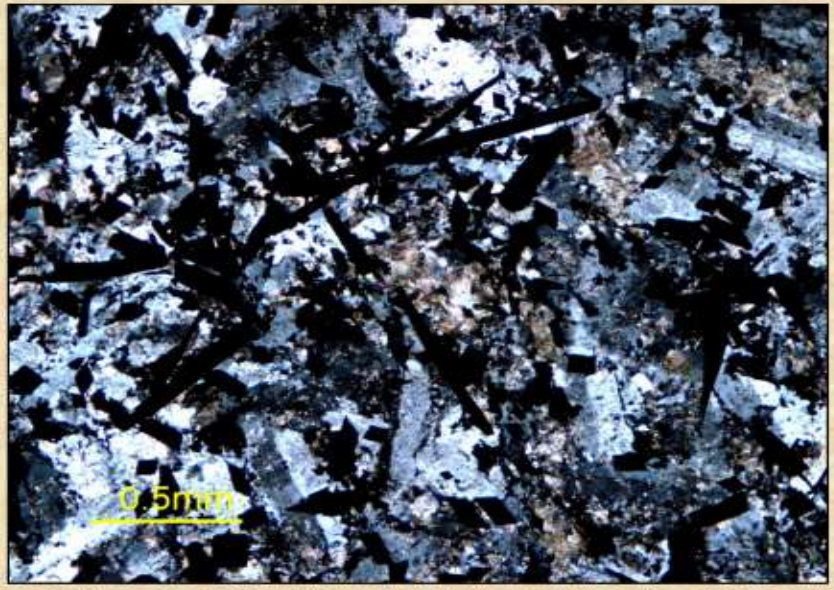
Petrography of Grey Zone Alteration

06-MON-02, 301.6m

FeTi basalt A at 301.5m

30.6 ppm Au in litho sample

Asp-rich portion of drill core at about 301.6m. **Assay at 299.00-302.00m: 3.00m at 11.98 g/t Au**.



Detail, crossed polars. Note generally good preservation of Plag, with only small patches of alteration Carb. Opaques are Asp (needles) and Ti oxides (irregular small patches). Scale bar = 0.5 mm.

Thanks to **JEAP** and **Metalla** for funding these Programs

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