Power Stripping and Sampling

Ivanhoe Township Property

Porcupine Mining Division

December, 1996

D. R. Pyke

Power Stripping and Sampling
Ivanhoe Township Property
Porcupine Mining Division

Introduction

The property, located approximately 100 km ESE of Timmins and 10 km south of Foleyet (Figure 1) consists of two mining claims (P1201687 and P1201688) comprising a total of 32 claim units (Figure 2). Access is good; a logging road extends from Ivanhoe Provincial Park across the south part of the claim group.

Ivanhoe Township was first mapped by Harding (1937) as part of the Horwood Lake area, and later formed part of a regional scale map of the Chapleau area by Thurston et al (1977). Subsequently, Percival (1981) included the area in a study of the Kapukasing structural zone. In 1990, an airborne magnetic and electromagnetic survey by the Ontario Geological Survey of the north Swayze area included Ivanhoe Township. Recently, Ayer (1991) and Ayer and Puumala (1993) mapped Ivanhoe Township.

There is no recorded exploration work on the property.

A small exposure of previously unreported sheared sedimentary rocks on claim P1201686, approximately 400 m north of the Muskego River Fault (Ayer and Puumala, 1993) prompted the present exploration program of power srtipping. The Muskego River Fault, together with a currently unnamed westerly trending fault near the north end of the claim group (Figure 2), are interpreted by the property owners to form part of the western extension of the Porcupine Destor Fault system into the Ivanhoe Township area, as alluded to by Ayer (1995).

Present Survey

The present survey consisted of power stripping/trenching on claim P1201686 during the period November 19 to November 29, 1996. The machine employed was a Bombadier mounted 9300 John Deere backhoe. Four northeast trenches were established, varying in length from approximately 60 m to 12 m and averaging 2 - 3 m in width. Depth of overburden varied from negligible to 2 m, averaging 1.5 m. Sampling of the trenched area was done by Roland Collins, Dale Pyke and Julien Corriveau. A total of 24 samples were submitted to Swastika Laboratories for geochemical analyses. D. Pyke spent one day examining the geology of the trenches.

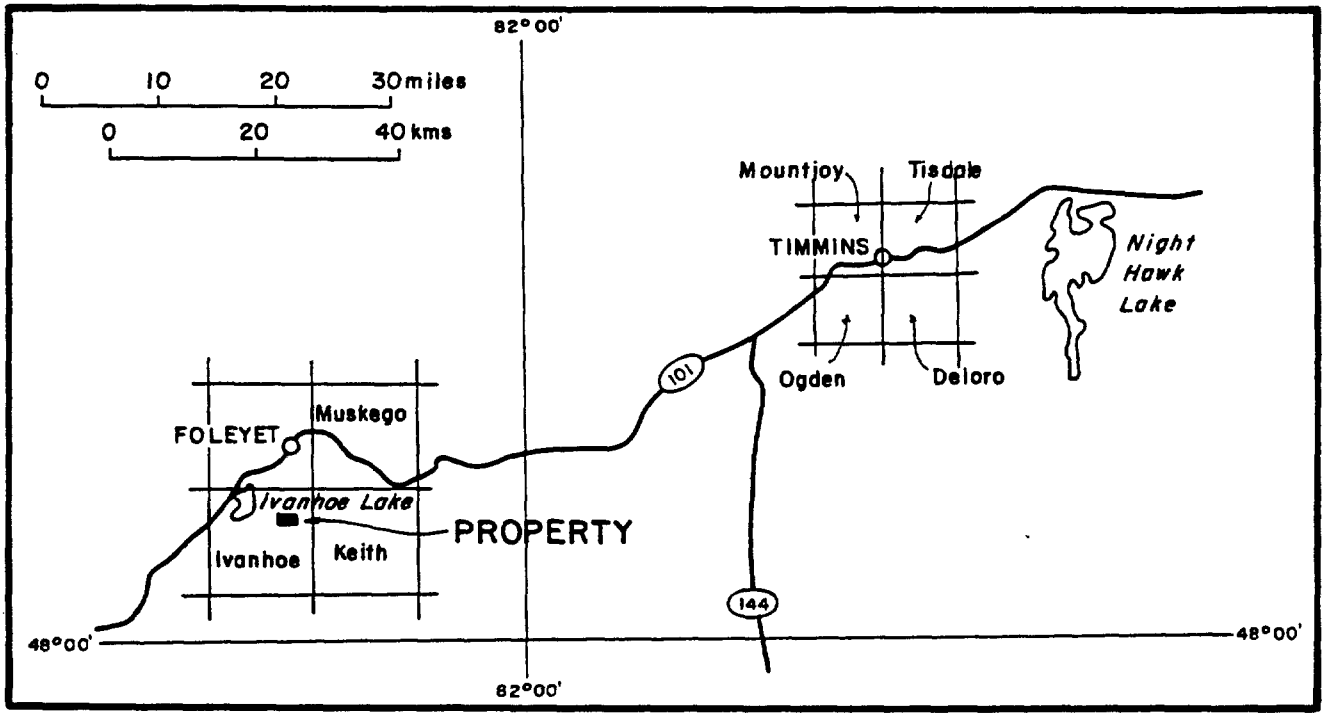

Figure 1 Location of Ivanhoe Township property

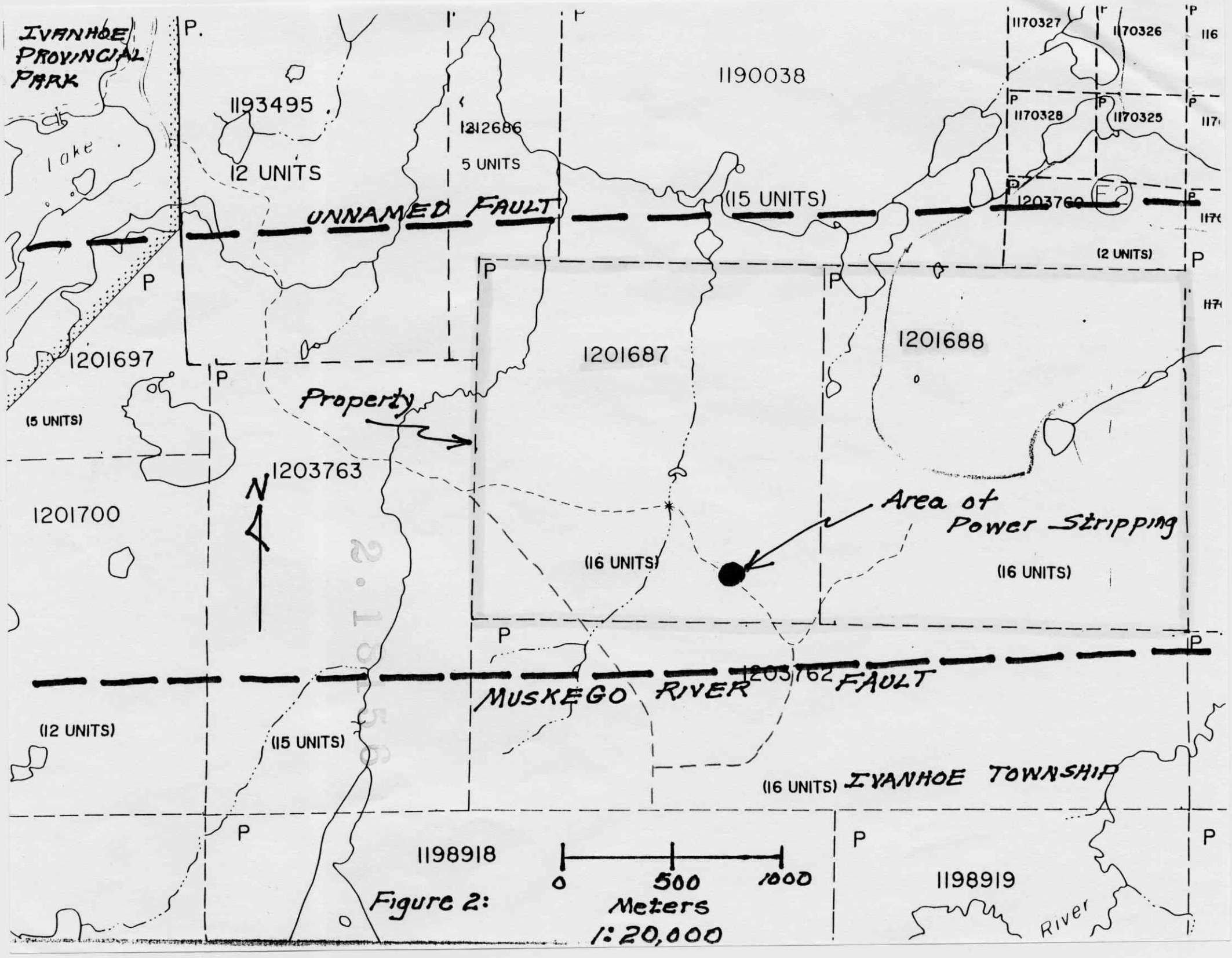
IVANHOE PROVINCIAL PARK
Lake
1193495
12 UNITS
1212686
5 UNITS
1190038
(15 UNITS)
UNNAMED FAULT
1170327
1170326
1170328
1170325
1203760
F2
(2 UNITS)
1201697
1201687
1201688
Property
(5 UNITS)
1203763
N
1201700
Area of Power Stripping
(16 UNITS)
(16 UNITS)
MUSKEGO RIVER
1203762 FAULT
(12 UNITS)
(15 UNITS)
(16 UNITS)
IVANHOE TOWNSHIP
1198918
1198919
River
0
500
1000
Meters
1:20,000

Figure 2:

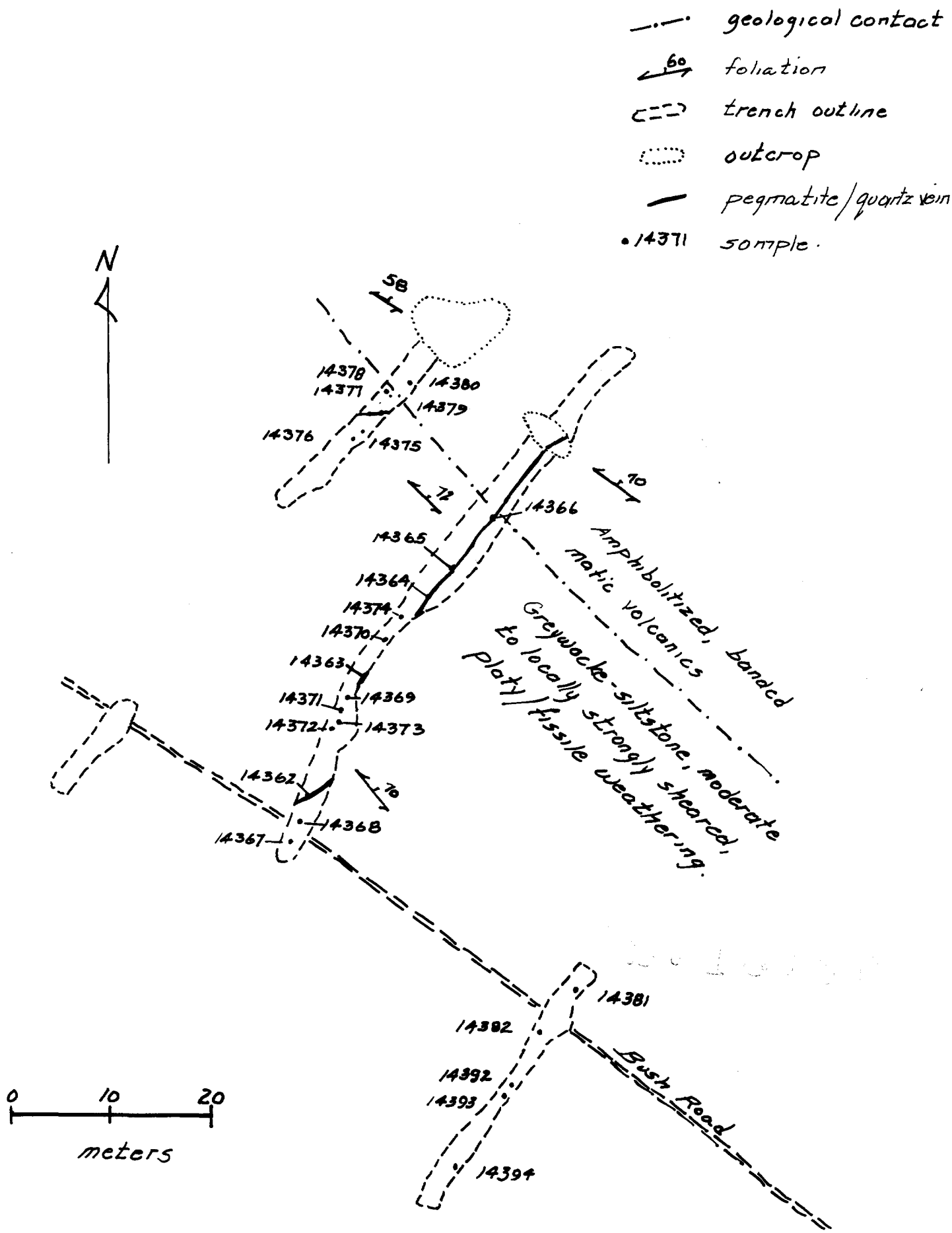

Figure 3: Trenched area, Ivanhoe Township Property

Geology

The trenched area exposed a NW trending sedimentary - volcanic contact (Figure 3). The sediments consist of interlayered wacke and siltstone. The wacke is typically fine to medium grained, finely layered (1 - 15 mm) light to medium grey in color, and is estimated to contain approximately10 - 15 percent biotite, 60 percent feldspar and 25 percent quartz. The siltstone is much finer grained, finely layered (1 - 3 mm), medium to dark grey and locally quite black, possibly reflecting a graphitic component. Moderate to strong shearing is prevalent and the rocks typically weather/break in a very platy to fissile manner.

The volcanics are amphibolitized, black, fine to medium grained, strongly foliated and locally display pronounced metamorphic banding.

Foliation and shearing is parallel/subparallel to layering, all of which trend SE and dip steep to the north.

Mineralization

Mineralization is mainly of two types - (1) disseminated pyrite forming local concentrations of 1 - 3% in the wacke and less commonly as narrow (to 3 mm) massive bands within the siltstone, and (2) minor pyrite, sphalerite and trace molybdenite within narrow (10 cm - 1 m) coarse grained, quartz-rich pegmatitic dikes. Here, medium to coarse grained pyrite forms small sporadic disseminations near the dike margins and within later quartz seams whereas the sphalerite forms sparse, semi-rounded 1 - 2 cm sized clots/ pockets throughout the dikes.

The results of the analyses and a brief sample description are appended. None of the gold analyses are considered anomalous. The high zinc values reflect the minor 'pockets' of sphalerite in the pegmatitic veins.

D. R. Tyke

References

Ayer, J.
1991: Geology of Foleyet and Ivanhoe Townships; Open File Map (OFM) 164, Ministry of Northern Development and Mines. Scale 1:20,000

Ayer, J.
1995: Precambrian geology Northern Swayze Greenstone Belt; Ontario Geol. Survey, Report 297, 56 p. Map 2627, scale 1:50,000.

Ayer, J. and Puumala, M. A.
1993: Precambrian geology, Ivanhoe Township, Ontario Geol. Survey, Preliminary Map P.3199, scale 1:15,840.

Harding, W. D.
1937: Geology of the Horwood Lake area; Ontario Dept. Mines, Vol 46, 42p. Scale 1" = 1 mile.

Ontario Geological Survey (OGS)
1990: Airborne electromagnetic and total intensity magnetic survey, north Swayze - Montcalm area; Ontario Geol. Survey, Maps 81374 and 81375, scale 1:20,000.

Percival, J. A.
1981: Geology of the Kapuskasing structural zone in the Chapleau - Foleyet area, Ontario; Geological Survey of Canada, Open File Map 763, scale 1:100,000.

Thurston, P. C., Siragusa, G. M. and Sage, R. P.
1977: Geology of the Chapleau area; Ontario Division Mines, Geological Report 157, 293p. Scale 1" = 4 mile.

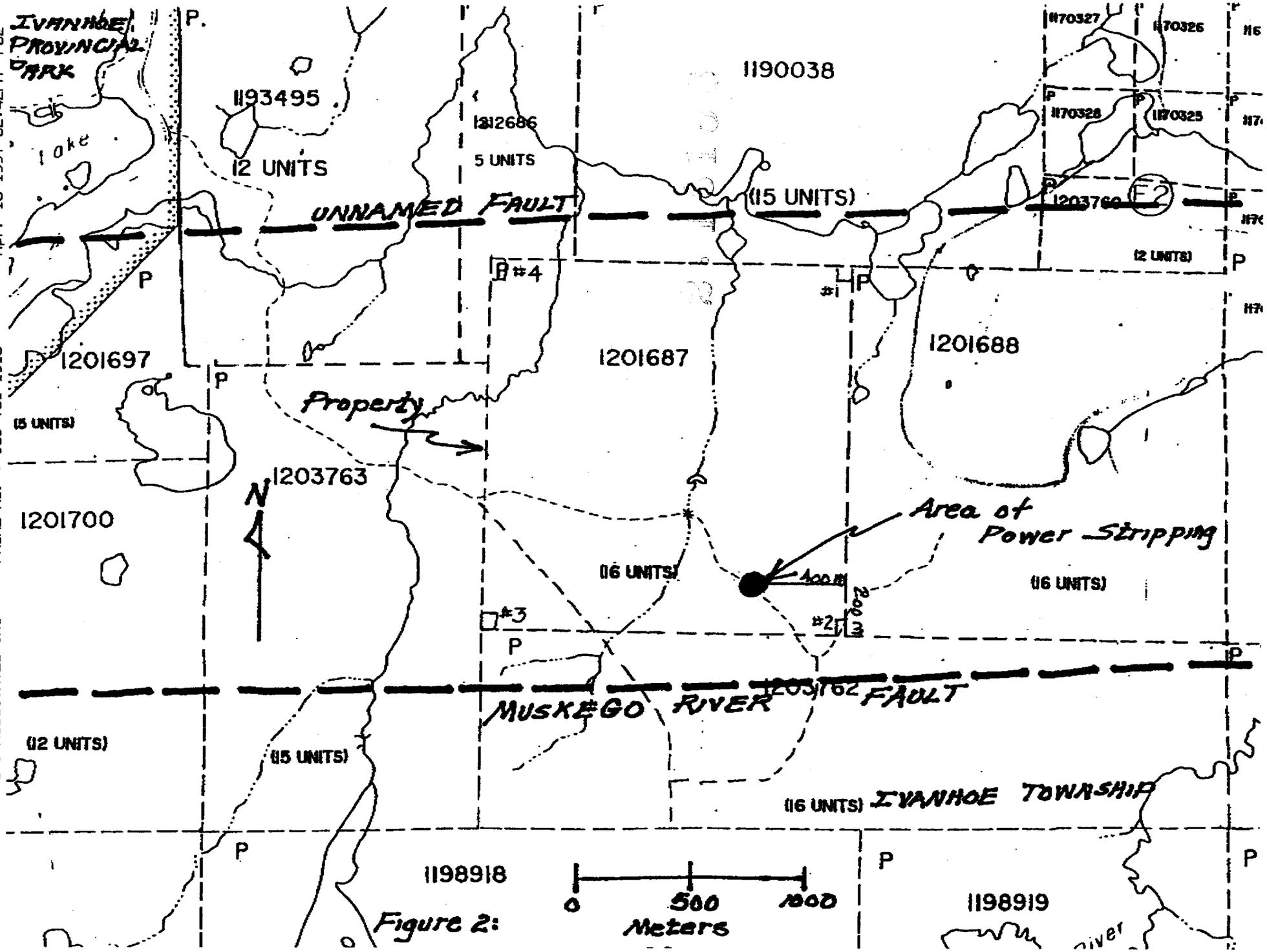

Figure 2:

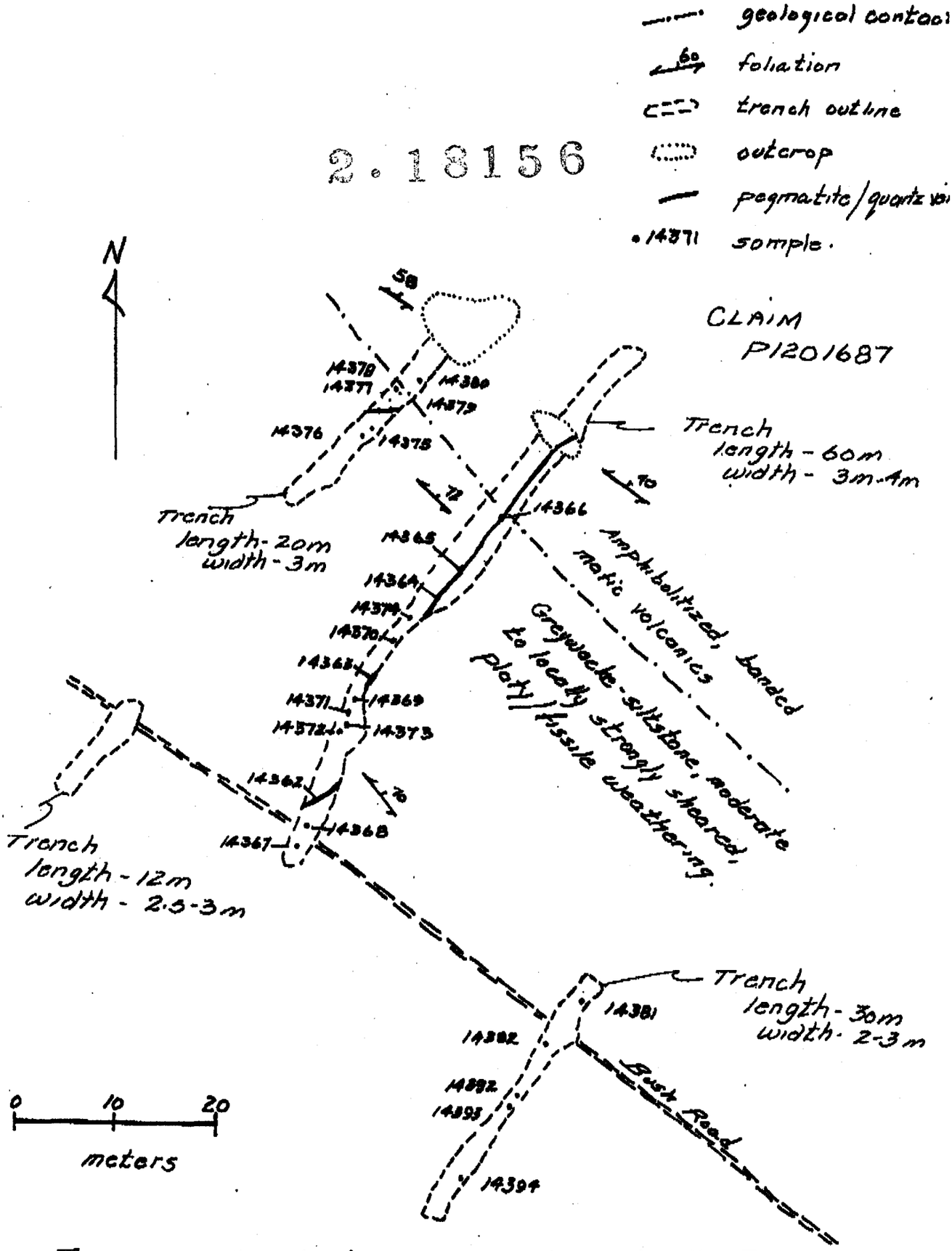

Figure 3 : Trenched area, Ivanhoe Township Property

Swastika Laboratories

A Division of TSL/Assayers Inc.

Established 1928

Assaying - Consulting - Representation

Geochemical Analysis Certificate

6W-5094-RG1

Company: **R. Collins** Date: DEC-06-96

Project:

Attn: R. Collins / D. Pyke

We hereby certify the following Geochemical Analysis of 24 Rock samples submitted NOV-28-96 by .

Sample Number	Au PPB	Au Check PPB	Mo PPM	Zn PPM
14362	5	-	1	4500
14363	7	-	1	3240
14364	10	-	1	1670
14365	2	-	1	5440
14366	15	14	-	-
14367	7	-	-	-
14368	5	-	-	-
14369	2	-	-	-
14370	Nil	-	-	-
14371	5	2	-	-
14372	Nil	-	-	-
14373	Nil	-	-	-
14374	Nil	-	-	-
14375	Nil	-	-	-
14376	3	-	-	-
14377	2	-	1	3160
14378	2	-	-	-
14379	2	-	-	-
14380	Nil	-	-	-
14381	2	-	-	-
14382	Nil	-	-	-
14392	Nil	-	-	-
14393	3	-	1	-
14394	10	14	-	-

One assay ton portion used.

Certified by G. Thom

P.O. Box 10, Swastika, Ontario P0K 1T0

Telephone (705) 642-3244 FAX (705) 642-3300

Sample Description

14362 - Pegmatite, coarse grained, light tan colored feldspar crystals to 2-3 cm form 90% of the rock; remainder is largely grey interstial quartz. Minor, later white quartz seams associated with minor coarse pyrite. Two 'pockets' of coarse sphalerite to 1.5-2 cm. Typically weathers rusty orange due to minor carbonate alteration.

14363
14364 - Samples of pegmatite, much the same as 14362.
14365

14366 - Quartz vein, white, barren

14367 - Greywacke, medium grained, medium grey, minor white quartz seams to 4 mm parallel to foliation, no sulphide. Quartz 20 - 30%, feldspar 50%, biotite 15-20%

14368 - Greywacke-siltstone, fine grained, dark grey, layering 2 - 6 mm, 2 % pyrite as fine disseminations and narrow seams.

14369 - Greywacke, massive, medium - light grey, 5-10% biotite, trace to 1% pyrite.

14370 - Siltstone, well layered (1 - 10 mm), medium grey, strongly foliated. One 2 mm layer of pyrite as well as 1 - 2% fine streaky pyrite parallel to foliation

14371 - Greywacke/siltstone, fine grained, light to medium grey, finely layered, 1% disseminated pyrite. 10% of sample is a boudind quartz vein bearing 2% clotty pyrite

14372 - Same as 14371 but 30% of sample is a boudind portion of a quartz vein carrying 2-3% pyrite

14373 - Greywacke, medium grained, light grey, strongly foliated, layered (1-6 mm), trace pyrite

14374 - Siltstone, fine grained, dark grey, layered (1-3mm), minor parallel quartz seams carry 1-2% pyrite

14375 - Greywacke, medium grained, medium grained, biotite 5-10%, quartz 25%, feldspar 70%. Disseminated pyrite 4-5%.

14376 - Greywacke, fine to medium grained, light to medium grey with minor light green sericitic bands 3-4 mm; 4% fine disseminated pyrite.

14377 - Quartz vein, white, coarsely crystalline, contains 3-4% sphalerite as irregular clumps to 5 by 10 mm.

14378 - Quartz vein with minor pegmatitic material. Contains 1-2% pyrite with trace chalcopyrite and possible molybdenite. Sample was only assayed for gold

14379 - Greywacke, fine grained, dark grey, quartz-rich, well banded, bears 3% fine disseminated pyrite

14380 - Greywacke - volcanic(?), well banded with coarse horneblende-rich layers (5-7mm) alternating with more feldspathic layers

14381 - Greywacke, fine - medium grained, medium-dark grey, strongly foliated, 15-20% biotite, 2% pyrite

14382 - Greywacke/silstone, fine grained, medium grained, strongly foliated/sheared, 1% fine pyrite

14392 - Siltstone, fine grained, strongly foliated, dark grey, trace pyrite

14393 - Greywacke, medium grained, medium grey, well layered, 2% pyrite, trace Mo?

14394 - Greywacke, fine grain, dark grey, half of sample is narrow boudined quartz vein with 1% pyrite

Date : 19 nov. 96 To 28 nov 96
10 hrs a day @ 90.00 PER hr.
OPERATOR INC.

19 nov To 28 nov 96
OPERATOR and MYSELF
FOR 10 DAYS

● Rolly Collins 150.00 per day
FOR 10 DAYS.

Roland Collins
Feb 24, 1997

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use) W9860.00845
Assessment Files Research Imaging

900

Personal information collect... of the Mining Act. Under section 8 of the Mining Act, the information i... id correspond with the mining land holder. Questions about this colle... ern Development and Mines, 6th Floor, 933 Ramsey Lake Road, St...

Instructions: - For work performed on Crown Lands before **recording** a claim, use form 0240.
- Please type or print in ink.

2.18156

1. Recorded holder(s) (Attach a list if necessary)

Name	Client Number
JEAN LOUIS DEBLOIS	124542
Address P.O. Box 574	Telephone Number 705-337-6990
KAPUSKASING ONT	Fax Number
Name	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

☒ Geotechnical: prospecting, surveys, assays and work under section 18 (regs) ☒ Physical: drilling, stripping, trenching and associated assays ☐ Rehabilitation

		Office Use
Work Type	STRIPPING WITH BACKHOE CHAIN SAW WORK CLEARING SAMPLING ASSAYS	Commodity
		Total $ Value of Work Claimed 13,834
Dates Work Performed	From 19 (Day) 11 (Month) 96 (Year) To 28 (Day) 11 (Month) 96 (Year)	NTS Reference
Global Positioning System Data (if available)	Township/Area IVANHOE	Mining Division Porcupine
	M or G-Plan Number G-1102	Resident Geologist District Timmins

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name	Telephone Number
Roland Collins	705-268-8630
Address 23-525 WESTMOUNT BLVD, TIMMINS ONT	Fax Number
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

4. Certification by Recorded Holder or Agent

I, Roland Collins (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent		Date
Roland Collins		DEC 27, 1996
Agent's Address	Telephone Number	Fax Number
23-525 WESTMOUNT BLVD TIMMINS ONT P4N 6K8	705-268-8630	

Deemed Approval March 27/98

0241 (02/96)

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg	TB 7827	16 ha	$26, 825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8, 892	$ 4,000	0	$4,892
1	1201687	16 HA	13,834.00	6400.00	6,400.00	1,034.00
2	1201688	16 HA	Ø	6400.00		
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
		Column Totals	13, 834.00	12,800.00	6, 400.00	1,034.00

I, Roland Collins (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing		Date
Roland Collins	PARTNER	DEC, 27, 1996

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☐ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp: RECEIVED DEC 27 1996 @12:55 (C) MINING DIVISION

Deemed Approved Date	Date Notification Sent
Mar. 27/97	
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9660.00845

2.18158

Personal information collected on this form is obtained under the authority of the **Mining Act**. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la **Loi sur les mines** et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	1,500.00	
	Field Supervision Supervision sur le terrain		1,500.00
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type BOMBARDIER CARRIER MOUNTED BACKHOE		
	10 HRS @ 90.00 PER X 10 DAYS	9,000.00	
	DALE PYKE 3 days CONSULTANT @ 250.00	750.00	9,750.00
Supplies Used Fournitures utilisées	Type		
ASSAYS	27 SAMPLES	319.40	
			319.40
Equipment Rental Location de matériel	Type CHAIN SAW	250.00	
			250.00
	Total Direct Costs Total des coûts directs		11,819.40

2. Indirect Costs/Coûts indirects

** **Note:** When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type TRUCK ½ TON		
	10 DAYS X 280 KL @ .30 PER KL	840.00	
	R.S.		840.00
Food and Lodging Nourriture et hébergement	10 DAYS X 2 MEN @ 25.00 PER MAN	500.00	500.00
Mobilization and Demobilization Mobilisation et démobilisation	TRANSPORT	675.00	675.00
	Sub Total of Indirect Costs Total partiel des coûts indirects		2,015.00
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)	**Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles**		13,834.40

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Roland Collins (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
Roland Collins	DEC, 27, 1996

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (705) 670-5881

March 9, 1998

BLOIS JEAN-LOUIS DE
92 GOVERNMENT ROAD
BOX 574
KAPUSKASING, ONTARIO
P5N-2X8

Dear Sir or Madam:

Submission Number: 2.18156

		Status
Subject: Transaction Number(s):	W9660.00845	Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 11999

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.18156

Date Correspondence Sent: March 09, 1998 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9660.00845	1201687	IVANHOE	Deemed Approval	March 27, 1997

Section:
10 Physical PSTRIP

Correspondence to:
Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
Roland Collins
TIMMINS, ON, CAN

BLOIS JEAN-LOUIS DE
KAPUSKASING, ONTARIO

Correspondence ID: 11999