Geological Report

McCart Township Property

N1/2, Lot 6, Concession 5

McCart Township

Porcupine Mining Division, Ontario

April, 1993

Dale R. Pyke

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Geological Report

McCart Township Property

Introduction

The property , located approximately 35 miles northeast of the City of Timmins (Figure 1) and 8 miles west of Iroquois Falls, consists of the following four claims in the north half of Lot 6, Concession 5, McCart Township:

P1131544	SW1/4	N1/2	Lot 6, Concession 5
P1131545	SE1/4	N1/2	Lot 6, Concession 5
P1131546	NE1/4	N1/2	Lot 6, Concession 5
P1131547	NW1/4	N1/2	Lot 6, Concession 5

Mr. Bruce Raine is the recorded holder of the claims.

The claims are readily accessible. An all weather road extends west from Highway 11 along the north boundary of Concession 4, from which a bush road/trail in Lot 5 extends north to the claim group.

Previous Work

The geology of McCart Township has been compiled by Satterly (1953) at a scale of 1 inch to 1/4 mile.

In 1950, Arrow Timber Co. conducted a magnetic and geological survey over the claim group. The exploration was oriented towards finding commercial asbestos within the ultramafic intrusive rocks. Seven diamond drill holes were sunk within the ultramafic rocks in the southwest part of the current property to test for asbestos fibre. The holes largely intersected serpentinzed dunite; only minor asbestos was encountered.

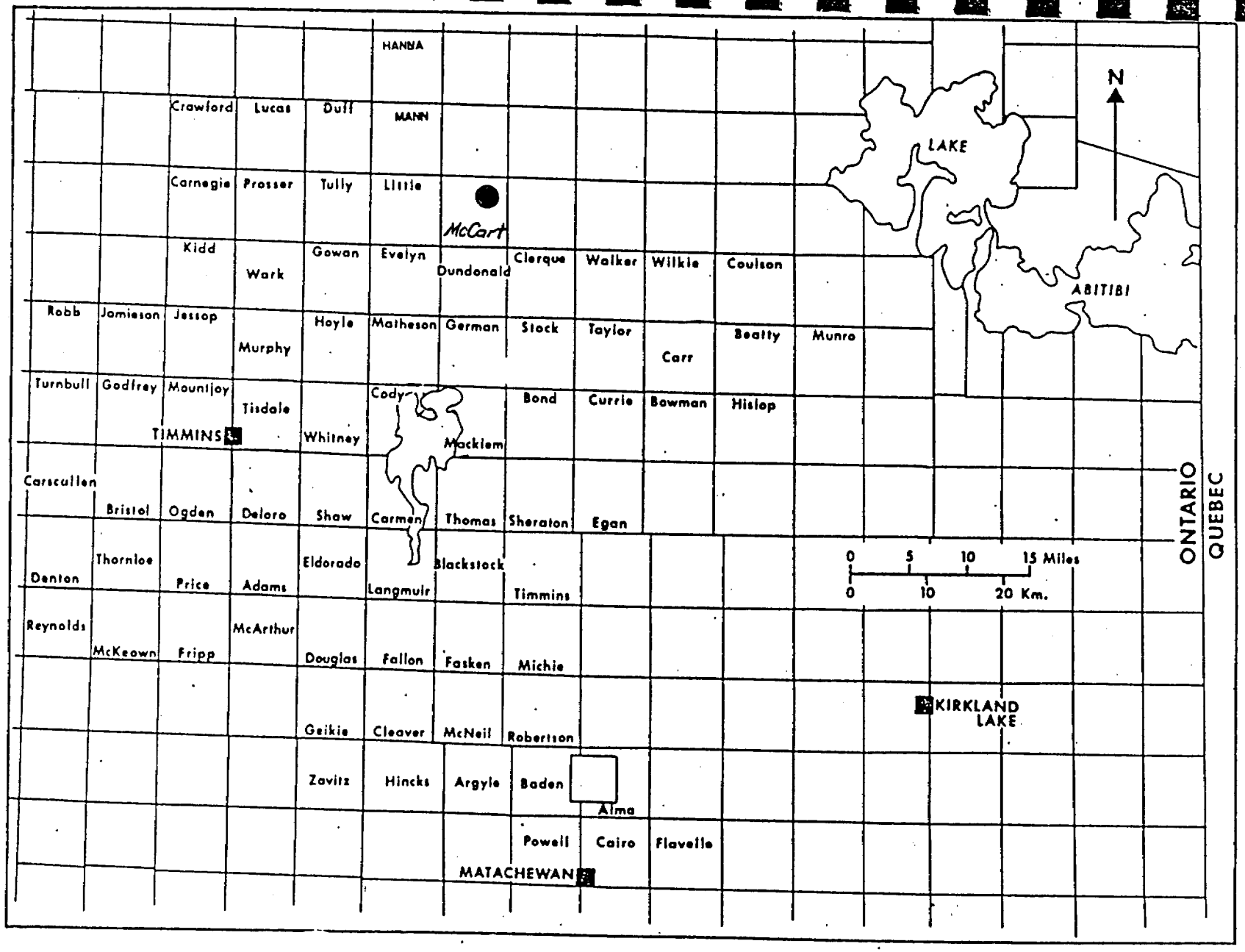
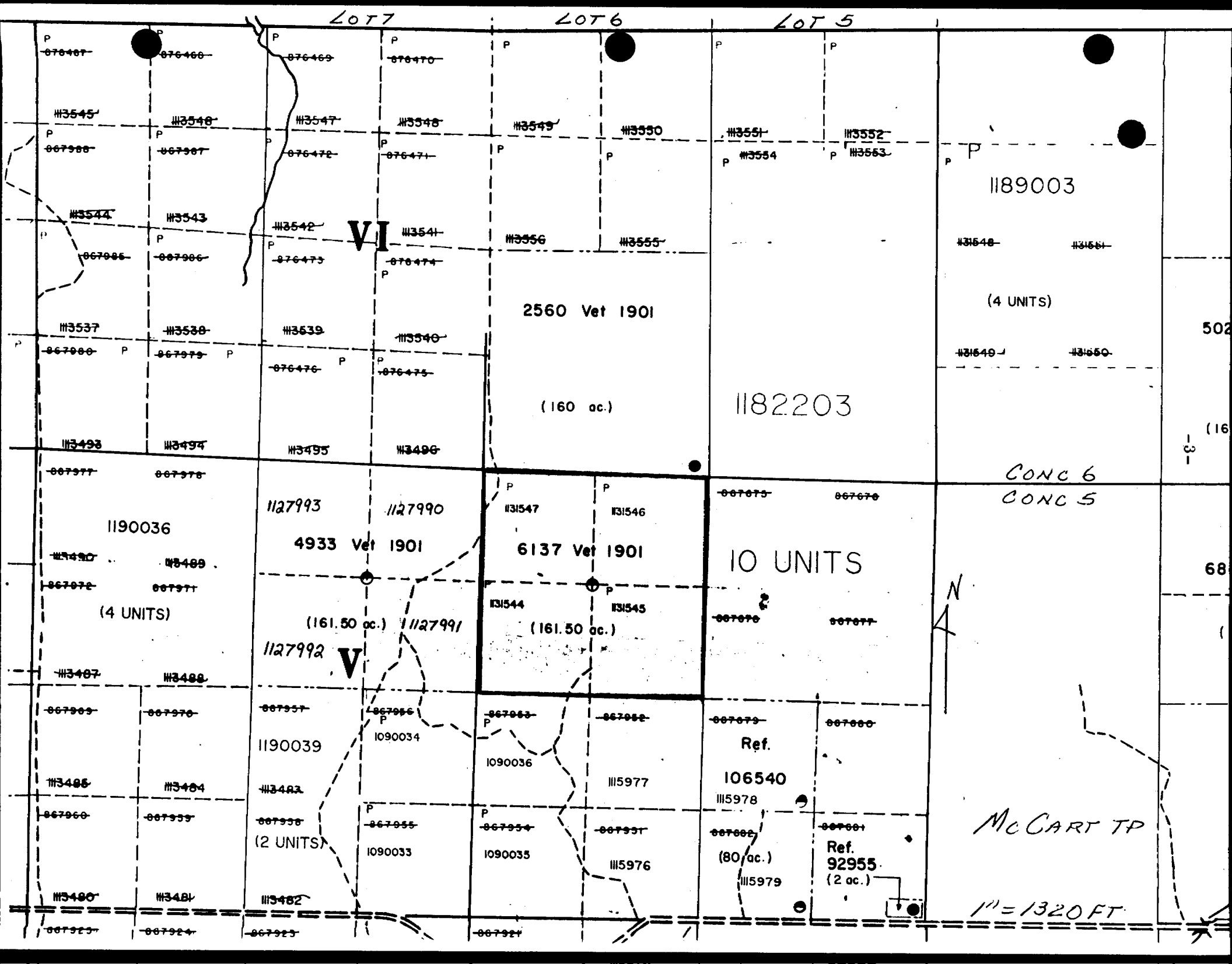


Figure 1 - Location map McCart Township Property


LOT 7
LOT 6
LOT 5
VI
V
2560 Vet 1901
(160 ac.)
1182203
1189003
(4 UNITS)
CONC 6
CONC 5
1127993
1127990
4933 Vet 1901
6137 Vet 1901
10 UNITS
1190036
(4 UNITS)
(161.50 ac.)
1127991
1127992
(161.50 ac.)
1190039
(2 UNITS)
1090034
1090036
1090033
1090035
Ref.
106540
(80 ac.)
Ref.
92955
(2 ac.)
McCART TP
1" = 1320 FT
N

In 1988, a combined airborne electromagnetic and magnetic survey was flown by Geoterrex Limited for the Ontario Geological Survey (OGS, 1988), which covered much of the area immediately north and east of Timmins, inclusive of McCart Township.

Present Survey

The present survey was conducted by D. R. Pyke over a period of five days in October 1991. North-south picket lines at 100 meter intervals and an airphoto blow-up at an approximate scale of 1:5000 provided mapping control. Because of the extensive outcrop on the property a great deal more time could be spent documenting many of the primary volcanic features.

Regional Geology

The property is located near the southeast end of a large gabbroic-ultramafic complex that extends approximately 15 miles to the northwest (Pyke el, 1973). The complex appears to be largely sill-like in nature, having been emplaced within relatively flat lying komatiitic and tholeiitic lavas. To date, exploration work within the region has largely been confined to the northwest portion of the complex where some interesting, yet sub-economic nickel-copper values and anomalous platinum and palladium values are reported from diamond drilling (Shklanka, 1969). Here, at the Zevely Prospect in Mann Township, nickel-copper assays are reported from a 72 foot wide zone occurring at an intrusive peridotite-volcanic contact. Locally, up to five foot sections contained 15% sulphides (pyrrhotite and chalcopyrite) that assayed as high as 6.6% copper and 5.5% nickel with locally anomalous platinum values (0.05 ounces/ ton). The general area of the current property in McCart Township is considered to have good potential for Ni-Cu-Pt-Pd

mineralizaton, even though the few samples assayed in the course of the present survey have not been encouraging.

Property Geology

The map as presented is at best preliminary, as both the quality and extent of bedrock exposure is unique for the north Timmins area and certainly warrants a more detailed examination, particulary as regards the primary volcanic features.

Two main rock types dominate the property:- 1) ultramafic intrusive rocks consisting largely of serpentinized dunite-peridotite and, 2) tholeiitic volcanics, some of which appear to have a basaltic komatiite affinty.

The ultramafic rocks occur as an envelope surrounding the volcanics, with which they are interpreted to be partially fault bounded. They appear to be largely of dunitic/peridotitic parentage, now altered to serpentine, and are commonly massive, orange brown to orange grey weathering and dark blue-black or locally medium green on fresh surfaces. Irregular fracturing and local development of asbestos fibre is common. One of the highest outcrop areas in the general region is centered on the ultramafics in the southwest corner of the claim group where local relief would be in the order of 50-60 meters or more.

The tholeiitic volcanics form a large expanse of outcrop (Photo 1) across the central portion of the claim group. The flows dip shallow to the north, 20 to 30 degrees, and generally consist of a massive base with an overlying pillowed portion, commonly capped by a pillow breccia and/or a hyaloclastitic flow top. Individual flows, or portions of flows, commonly form a steep south facing scarp and a shallow north dipping dip slope (Photo 2), imparting a step-like quality to much of the outcrop area. Flows vary in thickness from approximately 10 to 20 meters. The tholeiites are typically massive, fine to- medium grained, medium grey

Photo 1 - Typical outcrop area on the claim group

Photo 2 - Dip slope outcrop ridge in pillowed Mg-tholeiite

green weathering and dark green grey fresh. Some of the outcrops in the most southern exposures display the characteristic polygonal jointing or polysuturing structure on the weathered surface which is typically diagnostic of komatiitic flows. However, chemically (see below) the flows have a normal tholeiitic composition. In thin section the tholeiites are largely composed of approximately equal proportions of pale green actinolitic hornblende and weakly to strongly saussuritized sodic plagioclase. Minor accessories include opaque minerals, leucoxene, chlorite, epidote and traces of quartz, biotite and rarely apatite. Grain size averages 0.6-1.0 mm; one massive flow was observed to contain 10-15 percent actinolitic laths 5 to10 mm in length.

A peculiar variolitic-type structure is common to many of the flows, occurring in both the pillowed and massive portions but generally best developed in the former. They consist of ball-like structures (Photos 3 and 4) varying from 0.5 to 30 cm and commomly averaging 2-3cm. The structures protrude from the outcrop and can be very densely packed or form isolated 'balls' or strings of 'balls'. Mineralogically, the 'balls' are more leucocratic than the surrounding matrix, with a typical color index of 35 as compared to 55 for the matrix. The 'balls' may occur randomly throughout a pillow or be preferentially concentrated at the rim or the central portion. In the massive part of a flow the 'balls' tend to occur near the top, at or near the transition to the overlying pillowed portion of the flow. In thin section the 'balls' are in sharp contact with the matrix and are seen to consist typically of actinolitic hornblende commonly forming elongate laths up to 3-4 mm, set a a matrix of plagioclase which is commonly twinned and shows only minor alteration to epidote/saussurite, etc. Traces of leucoxene, quartz and opaque minerals are also present. In contrast, the matrix consists of actinolitized pyroxene, much of which shows a skeletal habit (a sheaf-of-wheat type texture) and is set within a matrix of dull brown saussuritized plagioclase, some of which in the

Photo 3 - Ball-like structure in pillowed Mg-tholeiite

Photo 4 - Ball-like structure in pillowed Mg-tholeiite

pillowed portions is extremely fine, non-pleochroic, and appears in part to represent devitrified glass. As a preliminary interpretation, it would appear that the 'balls' formed first, representing initial crystallization centres within the magma, perhaps in part before extrusion. On extrusion, rapid crystallization of the magma (matrix) led to the formation of skeletal pyroxenes locally set in a somewhat glassy matrix.

Minor orange brown weathering, polysutured ultramafic komatiite, now altered largely to tremolite, outcrops in the northeast part of the claim group near L12E-500N.

The volcanic rocks trend E-W, dip gently north at approximately 20 degrees and are right side up. Structurally the property is interpreted to be on the north limb of an east plunging overturned anticline, the axial trace of which trends through the claims immediately to the south. (Assessment Files). Foliation is generally weak and tends to be parallel to flow contacts. Two fracture cleavages, striking NW and NE respectively, are locally prominent, being especially strongly developed in flow top and pillow breccias. Shearing occurs at least locally along the ultramafic-volcanic contact but it is not currently known if these are major zones of dislocation. It is suspected that the ultramafics form part of a single sill-like body that is repeated by faulting, however, more detailed mapping will be necessary to confirm this or not.

Geochemistry

Six samples from the volcanic rocks were submitted to X-Ray Assay Laboratories for whole rock chemical analyses. The results, listed in Table 1, confirm the petrographic observations that there is little variation in the composition. On a Cation Plot ($Fe_2O_3+TiO_2+MnO$ - Al_2O_3-MgO; Jensen, 1976), all the samples lie within the field of magnesium tholeiite (Figure 2). Of interest is a polysutured pillow basalt (P3-91), mapped as basaltic komatiite which lies well within the field of

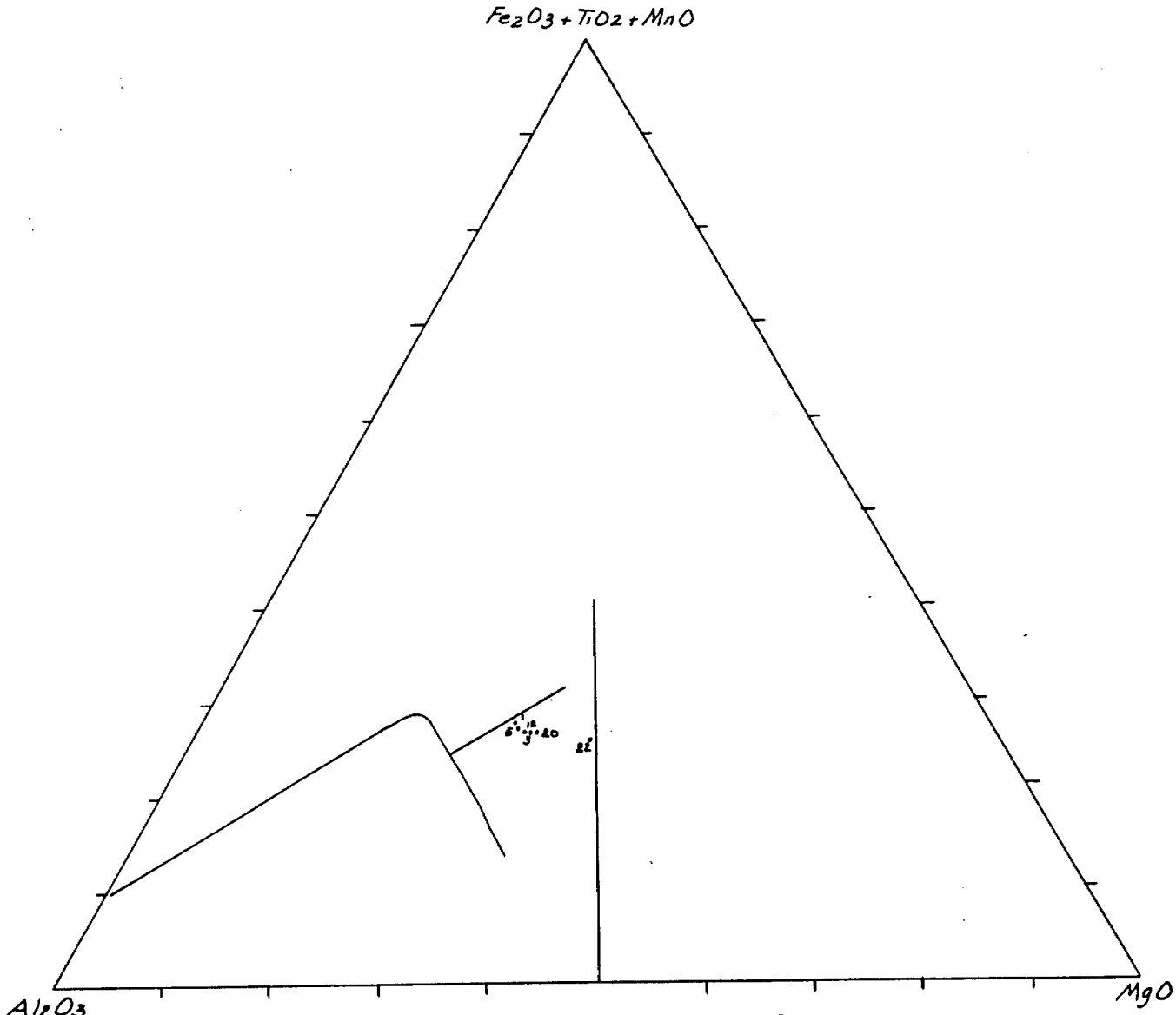
Table 1: Whole rock chemical analyses, McCart Township property

SAMPLE \ %	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
P-1-91	54.0	12.5	12.5	6.64	1.04	.20	11.4	.19	.679	.07	.03	1.08	100.4
P-3-91	52.9	12.9	11.0	7.47	1.32	.35	11.8	.20	.707	.07	.05	1.85	100.7
P-5-91	52.6	13.3	10.5	7.20	2.57	.20	12.2	.17	.712	.07	.05	1.00	100.6
P-12-91	51.7	13.4	9.06	7.63	2.97	.23	12.3	.20	.752	.08	.03	1.70	100.1
P-20-91	52.6	12.6	10.3	7.55	1.51	.86	11.8	.21	.703	.07	.05	1.70	100.0
P-22-91	51.4	12.0	11.1	9.44	1.31	.22	12.3	.20	.619	.07	.11	1.54	100.3

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA
P-1-91	15	128	27	55	12	76
P-3-91	<10	103	12	55	23	144
P-5-91	<10	103	25	66	15	77
P-12-91	<10	89	12	65	15	142
P-20-91	19	68	27	53	<10	281
P-22-91	16	118	<10	42	18	80

Table 2: Assays, McCart Township property

SAMPLE	AU PPB	AS PPM	PD PPB	PT PPB
P-2-91	4	--	12	<10
P-4-91	<1	--	6	10
P-7-91	2	--	6	<10
P-9-91	<1	--	5	<10
P-25-91	1	--	--	--
P-27-91	2	--	--	--



Cation Plot of Samples from McCart Property

(Samples P1, P3, P5, P12, P20, P22)

Mg-tholeiite. As polysuturing is such a diagnostic structure of komatiitic rocks, this suggests that some of the more southerly flows on the property are of komatiitic affinity.

Mineralization

Only traces of mineralization were observed on the property, yet time constraints were such that only a cursory examination was possible. Minor disseminated pyrrhotite-pyrite occurs along a sheared and rusty weathered contact between the ultramafics and volcanics near L5E-L6E in the southwest corner of the property. Samples, assayed for Au-Pt-Pd, returned no anomalous values (Table 2). In the volcanics a number of bull white quartz veins, varying in width from a few cm to a meter, trend E-W and are notably barren of mineralization; assays for gold were negligible.

Results and Recommendations

The property is underlain by relatively flat lying Mg-tholeiitic basalts and ultramafic sill(s), interpreted to be on the north limb of an overturned anticline. Only minor pyrrhotite- pyrite mineralization was observed on the claims, but detailed prospecting, particularly along and near the contact zone of the ultramafics with the volcanics for potential Ni-Cu and/or Pt-Pd mineralization is recommended. The prospecting would necessarily be extended into contiguous claims to the south, which are also held by the co-owners, and are known to host minor nickel mineralization along the sheared ultramafic-volcanic contact extending southwest near L7E.

D R. Lyke

REFERENCES

Jensen, L. S.

1976: A New Cation Plot for Classifying Subalkalic Volcanic Rocks; Ontario Division Mines, Miscell. Paper 66, 22p.

Ontario Geological Survey

1988: Airborne Electromagnetic and Magnetic Survey, Timmins Area, McCart Township, Map 81058, scale 1:20,000.

Pyke, D. R., Ayres, L. D. and Innes, D. G.

1973: Timmins-Kirkland Lake Sheet; Ontario Division of Mines, Geological Compilation Series, Map2205, scale 1"= 4 miles

Shklanka, R.

1969: Copper, Nickel, Lead and Zinc Deposits of Ontario; Ontario Dept. Mines, MRC 12, 394p.

Satterly, J.

1953: McCart Township; Ontario Department Mines, Preliminary Map P16, scale 1" = 1/4 miles.

Invoice No.: 18559

XRAL X-Ray Assay Laboratories

A Division of SGS Supervision Services Inc.

1885 Leslie St.
Don Mills
Ontario **M3B 3J4**
Canada
Tel: (416) 445-5755
Fax: (416) 445-4152
Telex: 09-986947

Invoice To:

D.R. PYKE & ASSOCIATES
ATTN: D.R. PYKE
31 DELAIR CRESCENT
THORNHILL, ONTARIO
L3T 2M3

Invoice Date: 26-Nov-91
Work Order No.: 11274
Date Submitted: 5-Nov-91
Report No.: 17528
Customer No.: 754/DR0155
Your P.O. No.:
Your Project No.:

Submitted To:

D.R. PYKE & ASSOCIATES
ATTN: D.R. PYKE
31 DELAIR CRESCENT
THORNHILL, ONTARIO
L3T 2M3

NO. OF PKGS	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM	TYPE OF SAMPLES
1 PKG	SELF		THORNHILL	ROCK

QUANTITY	DESCRIPTION METHOD	CODE NUMBER	UNIT COST	AMOUNT
1. 32	WHOLE ROCK ANALYSES	6 0 0 0 0	35.00	1120.00
2. 32	CRUSHING & MILLING	1 0 0 0 0	4.50	144.00
1	JENSEN PLOT	15 0 0 0 0	12.00	12.00
	GST REG NO. R105082572 APPLIED TO $1276.00			89.32

MISC. CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX/FAX	MINIMUM CHARGES	
	OTHER: TERMS NET 30 DAYS, 1.5% PER MONTH INTEREST ON ACCOUNTS OVER 30 DAYS			SURCHARGE - RUSH SERVICE	

ORIGINAL INVOICE

TOTAL IN → CDN FUNDS $ 1365.32

Invoice No.: 18515

XRAL X-Ray Assay Laboratories

A Division of SGS Supervision Services Inc.

1885 Leslie St.
Don Mills
Ontario **M3B 3J4**
Canada
Tel: (416) 445-5755
Fax: (416) 445-4152
Telex: 09-986947

Invoice To:

D.R. PYKE & ASSOCIATES
ATTN: D.R. PYKE
31 DELAIR CRESCENT
THORNHILL, ONTARIO
L3T 2M3

Invoice Date: 25-Nov-91
Work Order No.: 11273
Date Submitted: 5-Nov-91
Report No.: 17502
Customer No.: 754/DR0155
Your P.O. No.:
Your Project No.:

Submitted To:

D.R. PYKE & ASSOCIATES
ATTN: D.R. PYKE
31 DELAIR CRESCENT
THORNHILL, ONTARIO
L3T 2M3

NO. OF PKGS	SHIPPED VIA	WAY BILL NO.	SHIPPED FROM	TYPE OF SAMPLES
1 PKG	SELF		THORNHILL	ROCK

QUANTITY	DESCRIPTION METHOD	CODE NUMBER	UNIT COST	AMOUNT
1. 59	AU,PPB	210 7 0 0 0	8.00	472.00
2. 6	AU,PD,PT,PPB	210 7 0 0 0	11.50	69.00
3. 5	AS,MIXED ACID DIG.	3 7 0 0 0 0	6.00	30.00
4. 65	ROCK, CRUSHING & MILLING (CHROME STEEL MILL)	99 1 0 0 0 0	4.50	292.50
	GST REG NO. R105082572 APPLIED TO $863.50			60.44

MISC. CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX/FAX	MINIMUM CHARGES
	OTHER TERMS NET 30 DAYS, 1.5% PER MONTH INTEREST ON ACCOUNTS OVER 30 DAYS			SURCHARGE - RUSH SERVICE

ORIGINAL INVOICE

TOTAL IN → CDN FUNDS $ 923.95

Vancouver Petrographics Ltd.
8080 Glover Road, P.O. Box 39
FORT LANGLEY, B.C. V0X 1J0
GST NUMBER: R105484687
(604) 888-1323 Fax (604) 888-3642

INVOICE

№ 1325

SALESPERSON	DATE OF INVOICE
	Dec 19,91

SHIP TO
Attn;Dale R Pyke Ph.D.

TO:
D R Pyke & Associates Inc
31 Delair Crescent
Thornhill,Ontario
L3T 2M3

ACCOUNT NO.	DATE SHIPPED	SHIPPED VIA	COL	P.P.	F.O.B. POINT	TERMS	YOUR ORDER NUMBER
	Dec 19	Loomis *	X		Ft. Langley	Net 30 days	D R Pyke

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
38	thin sections	8.00	304.00
36	off-cuts	0.75	27.00
	G.S.T. (7%)		23.17
		TOTAL	354.17

Paid Dec 30/91 Chq #1306.

Thank You

Expenditure Breakdown - McCart Township

6 whole rock analyses and 6 assays	$319.93
5 days geological mapping	$1750.00
4.5 days report writing, petrography map production	$1575.00
12 thin sections	$112.35
Mileage - 1100 km @ $0.30/km	$330.00
Food & Lodging - 5 days @ $40/day	$200.00
	$4287.28

Value of assessment/claim = $\frac{4287.28}{4}$ = **$1072.00**

MNO LANDS

Ministry of Northern Development and M[illegible]
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
W9360.00097

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.15030

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requi Recorder.
- A separate copy of this form must be completed
- Technical reports and maps must accompany this
- A sketch, showing the claims the work is assigne

42A15SW8849 2.15030 MCCART

900

Recorded Holder(s)		Client No.
Bruce N. Raine		185565
Address		**Telephone No.**
1668 Dalton Rd, Timmins PAN 7C2		705-267-7492
Mining Division	**Township/Area**	**M or G Plan No.**
Porcupine	McCart	
Dates Work Performed From: ~~Oct/91~~ Sept 11/91 DKP	To: ~~Jan/92~~ Jan 28/92 NKP	

Work Performed (Check One Work Group Only)

	Work Group	Type
✓	Geotechnical Survey	Geological
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

RECORDED
MAY - 5 1993
Receipt

Total Assessment Work Claimed on the Attached Statement of Costs $ 4287 {AS PER STATEMENT}

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Dale R. Pyke	31 Delair Cres, Thornhill, Ont L3T2M3

RECEIVED
MAY 20 1993
MINING LANDS BRANCH

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)
	May 3/93	D R Pyke

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying
Dale R. Pyke, 31 Delair Cres. Thornhill, Ont. L3T 2M3

Telepone No.	Date	Certified By (Signature)
416-731-1913	May 3/93	D R Pyke

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
$4287.00	MAY 5th/93	S White	RECEIVED May 1993
	Deemed Approval Date: AUG. 3RD/93	Date Approved	
	Date Notice for Amendments Sent		

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	P 1131544	1	$1072	$1072	0	0
	P 1131545	1	$1072	$1072	0	0
	P 1131546	1	$1072	$1072	0	0
	P 1131547	1	$1072	$1072	0	0
	Total Number of Claims: 4	4	Total Value Work Done: $4288	Total Value Work Applied: $4288	Total Assigned From: 0	Total Reserve: 0

2.15030

RECEIVED
MAY 20 1993
MINING LANDS BRANCH

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☑ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date

0241 (03/91)

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: W9360.00091

2.15000

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	$ 3325	
	Field Supervision Supervision sur le terrain		3325
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type		
Supplies Used Fournitures utilisées	Type Thin Sections	$ 112	
	Analyses	$ 320	
			$ 432
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		$ 3757

RECEIVED
MAY 20 1993
MINING LANDS SECTION

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 Vehicle	$ 330	
Food and Lodging Nourriture et hébergement	5 Days @ $40/Day	$ 200	
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Indirect Costs Total partiel des coûts indirects		$ 530
	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)**		$ 4287

RECORDED
MAY 5 1993
Receipt

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.

RECEIVED
Sudbury
MAY 5 1993
240 Pool St

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 Agent I am authorized
(Recorded Holder, Agent, Position in Company)

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 _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	Date
D R Fyke	May 3/93

0212 (04/91)

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

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Geoscience Approvals Section
Willet Green Miller Centre
933 Ramsey Lake Rd., 6th Flr
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

Our File: 2.15030
Transaction #: W9360.00097

July 23, 1993

Mining Recorder
Ministry of Northern
Development and Mines
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Approval of Assessment Work on mining claims P 1131544 et al. in McCart Township.

The assessment credits for Geology, section 12 of the Mining Act Regulations, as listed on the original Report of Work, have been approved as of **July 22, 1993.**

Please indicate this approval on the claim record sheets.

If you have any questions please contact Dale Messenger at 670-5858.

Yours sincerely,

Ron C. Gashinski

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

DEM/dm

cc: Assessment Files Office
Toronto, Ontario

Resident Geologist
Timmins

TOWNSHIP OF NEWMARKET

REFERENCES

NOTE

LOT AND CONCESSION LINES SHOWN HEREON ARE PROJECTED FROM THE BEST INFORMATION AVAILABLE, BUT THEIR TRUE POSITION IS NOT GUARANTEED.

FOR LEGAL AND SURVEY PURPOSES CONSULT THE ORIGINAL SURVEY PLANS AND FIELD NOTES OF RECORD IN THE DEPARTMENT OF LANDS AND FORESTS, TORONTO.

ACREAGES SHOWN IN RESPECT OF PATENTED LOTS ARE IN ACCORDANCE WITH AREA GRANTED.

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(M2)		14/12/70	S.R.&M.R.	36866
(M2) REOPENED	M.R.O. 71/84			

(R1) Surface Rights Withdrawn under Sec. 36, The Mining Act R.S.O. 1980, ORDER NO. W-01/81/CNT (Trans Canada Pipeline Right of Way and Buffer Zone particularly 40.25 meters or 132 ft. on either side of centre line of right of way)

LITTLE

CALVERT

Devonshire Lake

Hermon Lake

Wilson Lake

Slim Creek

Frederick House River

DITCH

TOWNSHIP OF

TOWNSHIP OF

TOWNSHIP OF

TOWNSHIP OF DUNDONALD

I II III IV V VI

1 2 3 4 5 6 7 8 9 10 11 12

17678 Mg. (72.25 ac.) | Ref. 108916 (106.90 ac.) | 17679 Mg (144.50 ac.) | 17680 Mg (150.08 ac.) | 2751 Vet 1901 (160 ac.)

4834 Vet 1901 (163 ac.) | 4698 Vet 1901 (163.50 ac.) | 1190036 (4 UNITS) | 1127993 | 1127990 | 4933 Vet 1901 (161.50 ac.) | 1127991 | 1127992

P 1182158 (4 UNITS) | Ref. 109882 (81.75 ac.) | 1190039 (2 UNITS)

1182136 | Ref. 84414 (147 ac.) | Ref. 94396 (77 ac.) (12 UNITS)

5411 Vet 1901 (161 ac.) | 2800 Vet 1901 (162 ac.) | Ref. 78830 (162.50 ac.)

Ref. 97141 (78.75 ac.) | Ref. 111419 (158.50 ac.) | Ref. 100523 (158 ac.)

6513 Vet 1901 (157.50 ac.) | 4526 Vet 1901 (158 ac.)

5804 Vet 1901 (166.50 ac.) | 6487 Vet 1901 (84.25 ac.) | 6488 Vet 1901 (84.25 ac.) | 6870 Vet 1901 (161.50 ac.)

2560 Vet 1901 (160 ac.) | 1182203 | 1189003 (4 UNITS)

6137 Vet 1901 (161.50 ac.) | 2.15030 10 UNITS 600.

Ref. 106540 (80 ac.) | Ref. 92955 (2 ac.)

Ref. 115607 (78.50 ac.)

2555 Vet 1901 (157 ac.)

3449 Vet 1901 (163 ac.) | Ref. 108444 (163 ac.)

Ref. 89882 (158.50 ac.) | Ref. 91226 (164.50 ac.) | Ref. 77967 (163 ac.) | Ref. 72393 (158 ac.) | Ref. 106738 (159.50 ac.) | Ref. 69920 (158.50 ac.) | Ref. 77201 (158.50 ac.)

5023 Vet 1901 (160.50 ac.) | 1738 Vet 1901 (160.50 ac.) | Ref. 99451 (160 ac.) | Ref. 93366 (160 ac.)

684 Vet 1901 (160 ac.) | 5185 Vet 1901 (160 ac.) | Ref. 73104 (160 ac.)

Ref. 123915 (80 ac.) | Ref. 91260 (160 ac.)

Ref. 74006 (160 ac.) | Ref. 90120 (79.75 ac.) | Ref. 68297 (160 ac.)

2825 Vet 1901 (160 ac.) | 203 Vet 1901 (159.50 ac.) | Ref. 97267 (80 ac.) | Ref. 92242 (80 ac.)

2193 Vet 1901 (159.50 ac.) | 4956 Vet 1901 (158 ac.) | Ref. 94193 (157.50 ac.)

Ref. 69005 (159.50 ac.) | 2 | Ref. 90086 | 1 (157.50 ac.)

Ref. 74830 (159 ac.) | Ref. 74916 (136 ac.)

Ref. 76966 (158 ac.) | 5672 Vet 1901 (158 ac.) | 1816 Vet 1901 (159 ac.)

Ref. 74138 (158 ac.) | Ref. 75410 (156.50 ac.) | 256 Vet 1901 (156.50 ac.) | Ref. 115048 (80 ac.) | Ref. 119109 | Ref. 119110 (40 ac.) | Ref. 108312 (156.50 ac.)

Plan M-242

REFERENCES

TOPOGRAPHY

LAKES, RIVERS, ETC., FROM FOREST RESOURCES INVENTORY SHEETS № 486804 AND 487804

SURVEYS

TOWNSHIP OF McCART SUBDIVIDED BY A.D. GRIFFIN, O.L.S., 1904. FIELD NOTE BOOK 1533.

WEST LIMIT OF McCART TOWNSHIP (SEE LITTLE TWP.) SURVEY BY J.W. FITZGERALD, O.L.S., 1904. FIELD NOTE BOOK 1402.

EAST LIMIT OF McCART TOWNSHIP (SEE CALVERT TWP.) SURVEY BY ALEXANDER BAIRD, O.L.S., 1904. FIELD NOTE BOOK 1009.

THIRD MERIDIAN (EAST LIMIT OF McCART TWP) BY WILLIAM GALBRAITH, O.L.S., 1904. FIELD NOTE BOOK 2363.

BASE LINE (SOUTH LIMIT OF McCART TWP.) BY T.J. PATTEN, O.L.S., 1903. FIELD NOTE BOOK 2460.

LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

AGGREGATE PERMIT

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	
L.U.P.	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63 SUBSEC. 1

*** Ski trails within boundary

SCALE: 1 INCH = 20 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP 2.15030
McCART

M.N.R. ADMINISTRATIVE DISTRICT
COCHRANE

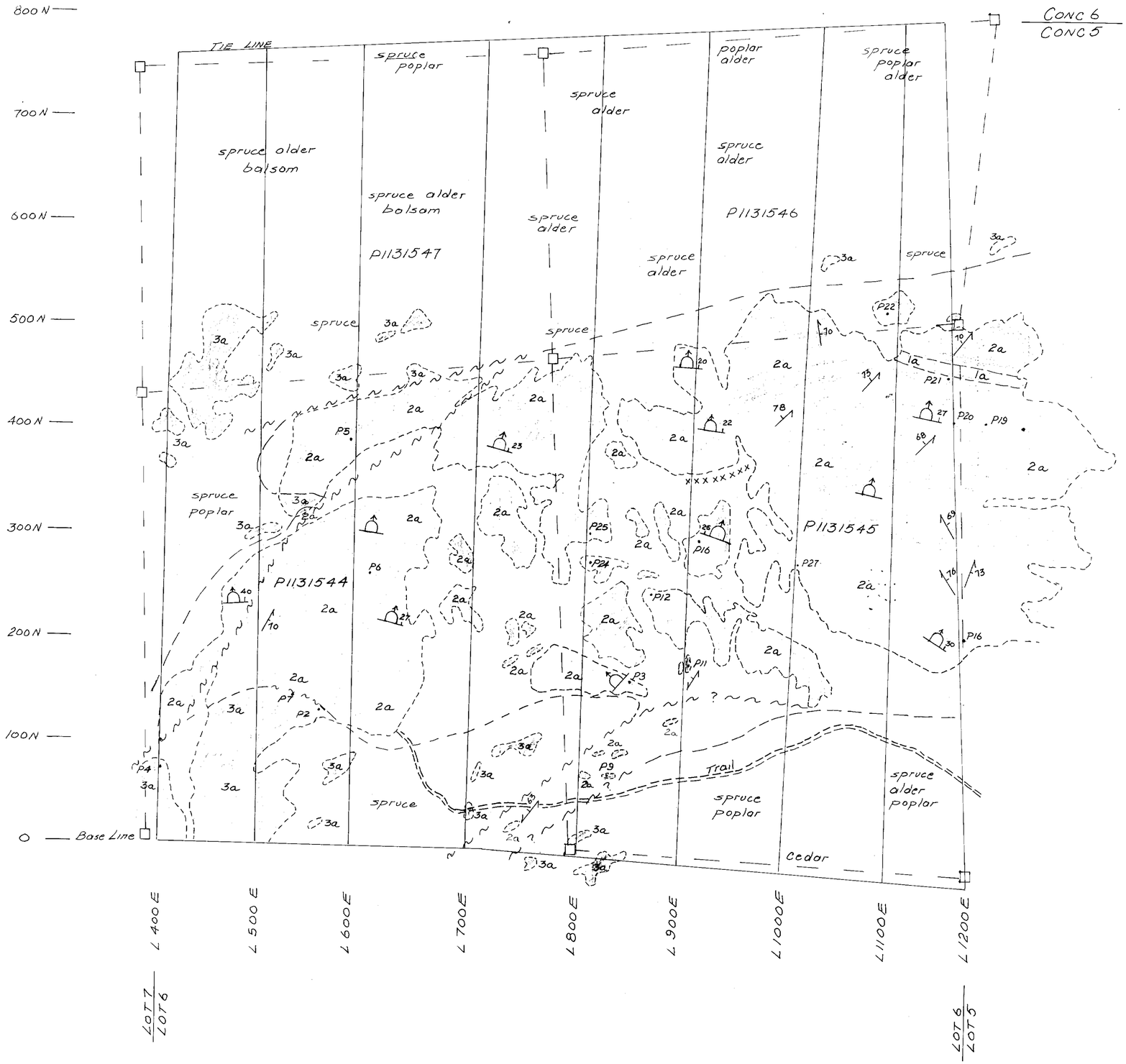
MINING DIVISION
PORCUPINE

LAND TITLES / REGISTRY DIVISION
COCHRANE

Prod. Aug 21/96

Ontario Ministry of Natural Resources | Ministry of Northern Development and Mines

Date JULY 1988 | Number G-3541



N

50 0 100 m

SYMBOLS

- Outcrop area
- Geological boundary
- 20 Pillow lava with top direction and dip
- 70 Fracture cleavage
- 60 Foliation
- ~~~ Shear/fault (interpreted in areas of no outcrop
- ×××× Raised boulder beach
- • P4 Sample location (assay-wholerock-thin section)
- -□- Claim post

2.150 30

LEGEND

- 3a Dunite-Peridotite (ultramatic intrusion)
- 2a Mg-tholeiitic basalt
- 1a Peridotitic komatiite (tremolitic)

GEOLOGICAL SURVEY
McCART TOWNSHIP PROPERTY
SOUTH CLAIM GROUP
January, 1992 Scale: 1:2500

D. R. Pyke