63 3554



BADEN COLOSSY BADEN

010

MANITOU LAKE GOLD MINES INC.

BADEN TOWNSHIP PROPERTY

ONTARIO

SUMMARY REPORT ON

ELECTROMAGNETIC AND

MAGNETIC CHECK SURVEY

ON A PORTION

OF THE PROPERTY

MARCH 28, 1978

BY: S.S. SZETU, Ph.D., P.Eng. and MICHAEL Ogden, B.A.Sc., P.Eng.

H. S. & O. ENGINEERING LIMITED

MANITOU LAKE GOLD MINES INC. BADEN TOWNSHIP PROPERTY ONTARIO

Summary Report on electromagnetic and magnetic check survey on a portion of the property.

INTRODUCTION

The field work was done during the week of March 13 to 18, 1978, by Dr. S. S. Szetu, P.Eng., using a Ronka EM-16 instrument with transmitter station NSS, and Michael Ogden, P.Eng., with a Coni-Mag G-1 Magnetometer. The purpose of the investigation was to locate anomalous zones in the vicinity of the old Arbade shaft and along strike of the previous drilling on either side of the creek.

The old Quilty showing southwest of lower pond was also investigated with negative results.

METHOD

Using the lines that are cut in a northeasterly direction over most of the area surveyed, the readings were taken at 50-foot intervals along these lines, which are usually 400 feet apart.

The magnetometer survey of February 1977 covering the vicinity of the upper pond, has been added to the new map that accompanies this work, in order to present a more complete picture.

RESULTS

(1) An electromagnetic conductor similar to those found over shear zones or fault systems was located some 500 feet southwest of the Arbade shaft on L16N 4375'W. Other indications on L20N and L12N suggest that the fault or shear zone trends in a northerly direction at about 30° to the apparent strike of the

ein system at the shaft. A drill hole is recommended on line 16N from 4550 feet west, drilled to the east, to cover 250 feet horizontally. This would probe both the anomalous EM and magnetic zones.

(2) There is a weak indication of a possible fracture zone trending parallel to the base line at about 3050 feet west on lines 8N, 12N, and 16N. This appears to be the northeastern edge of the large symplete dykes where the shaft was sunk and is thus worthy of a drill hole.

(3) To the immediate north of two small outcrops of syenite observed last November near line 8N, there is a vague zone which strikes northerly parallel to shearing on one of the outcrops. This vague zone is inferred as possible fractures or a minor shear along the north contact of the syenite. Further investigation of the nearby outcrops may help to resolve the possibilities of this zone.

(4) The broad anomaly over the vicinity of the creek is typical of the conductive results obtained over constructive overburden. Concealed conductors, if any, may or may not be detectable by other electromagnetic methods.

It is interesting to note that the above-mentioned EM-16 anomaly straddles a sizeable magnetic area with readings in the same order (over 400) as detected over the large symple dyke where the shaft was sunk. Geological examination to be assisted by trenching at the high ground area located on L12N 27W should be carried out to check the possible occurrence of symple for further evaluation of the geophysical indications and for the possibility of having gold mineralization.

In addition to the above, the magnetic survey on the west part of the property has obtained some indications to support the interpretation of the EM-16 anomalies described in (1), (2) and (3).

(5) On the eastern part of the property, the magnetic results are very useful in locating the edges of the diabase dyke where it happens to be magnetic.

H. B. & O. ENGINEERING LIMITED

- 2 -

If ficinity of the syenite and diabase contact area should be investigated in outcrop and near outcrop. Failing that a hole or two should be drilled to investigate for the possible repetition of the French vein, i.e., a gold vein alongside the dyke. The area of interest is west of upper pond, from 10S to 20S, some 400 to 600 feet west of the south base line.

(6) Neither the magnetometer nor the EM-16 check work gave any indication of anomalous results along a north-south line over the long trench of Tom Quilty's in area (6).

Respectfully submitted,

S. S. Szetu, Ph.D., P.Eng.

Michael Ugden, B.A.Sc., P.Eng.

Toronto, Ontario March 28, 1978

REPORT ON 1978 EXPLORATION PROGRAM MANITOU LAKE GOLD MINES INC. BADEN TOWNSHIP PROPERTY

The company holds a group of 32 mining claims in Baden Township, Larder Lake Mining Division, Untario, numbered as follows:-

L.401113 to 401115 inclusive L.401358 to 401364 inclusive L.422167 to 422171 inclusive L.422263 to 422267 inclusive L.496685 to 496690 inclusive L.506536 to 506541 inclusive

During 1976 and 1977 twenty-one diamond drill holes with a total length of 4,759 were put down on claims 401358, 401115 and 401361 to explore (1) a northwesterly-trending zone of gold-bearing fractures which had been partially explored in 1937 by Fondewa Gold Mines Ltd., and (2) the Ronda diabase dyke, a northeasterly-trending structure with which gold-bearing veins are associated on neighbouring claim MR 81186.

This work did not disclose gold deposits of probable economic importance and the 1978 program was devoted to preliminary exploration of other areas on this large property.

The first area to be considered was the northwesterly-trending driftfilled valley on claims 401361, 401362 and 401363. This valley contains the possible extension of the Fondewa gold-bearing zone, and is parallel to the belt of syenite dykes which had been partially explored in the 1930's on claim 401364 (Arbade zone). An E.M. and magnetic survey was done in this area in March 1978 by S.S. Szetu and Michael Ogden. This work gave the following indications:

 An E.M. conductor similar to those found over shear zones or fault systems some 500 feet southwest of the Arbade shaft.

H. M. & O. ENGINEERING LIMITED

- (2) A weak indication of a possible fracture zone on the northeastern edge of the syenite dyke swarm which contains the Arbade zone.
- (3) A vague zone lying to the north of the creek on the largely driftcovered valley on claim 401362.

After further study of the ground it was decided to explore areas (2) and (3) by drill holes, for possible shear zones or fractured syenite dykes. The first three holes of the 1978 program numbered 22, 23 and 26, with a total length of 953 feet were drilled in this area; holes 24 and 25 were lost in overburden. The holes intersected a monotonous succession of andesitic lavas and pyroclastics with no shear zones or syenite dykes. The holes did not reach the north edge of the symplete dyke swarm.

Hole 27 and 28 (total length 187 feet) were designed to explore the Ronda dyke in an area where it was quite highly magnetic, and which is some 500 feet south of previous drilling. No gold-bearing quartz was intersected.

The final hole of the program (No. 29) was drilled under a showing of gold-bearing veinlets (stock work) on claim 496685. Nothing of interest was encountered.

total footage drilled in 1978 was 1341.

Kattale R. A. Halet

November 30, 1978

- 2 •

i -

.

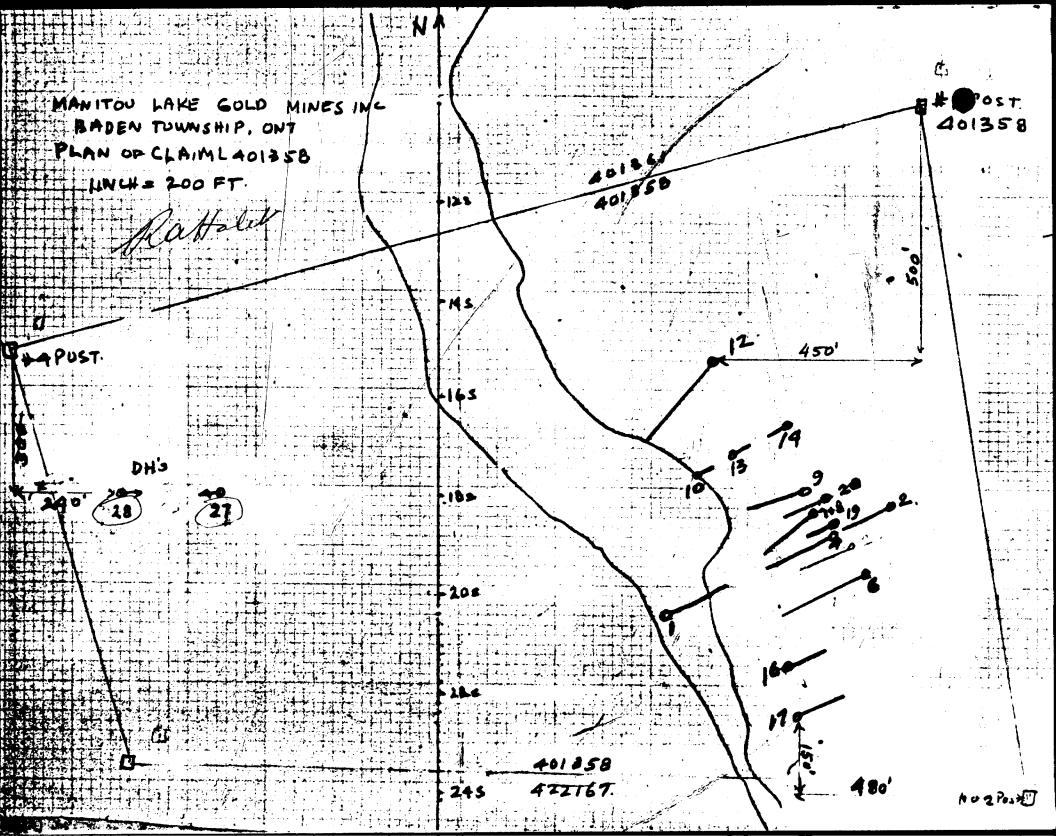
1 :

۶.

::i

PROPERTY!	MANITOU	J LAKE GOLD MINI	ES INC.		HOLE NUMBER: 2	8
LOCATION		Township, Larden No. 401358	r Lake Mining Divisi	on, Ontario	DIP TESTS	
XXXXXXX		Dipi	45 ⁰	Footage	Reading	Corrected
	300' south		120 feet	Drilled:	R.M. Ferguson	-
XIII KAKANI KIX	240' east o Post	of #4 Commenced	h August 7, 1978	britted.	Matachewan, O	nt.
Azimuth	90 ⁰ astrono	mic Finished:	August 14, 1978	Logged by:	R. A. Halet	
BAMPLE NUMBER		Dì	SCRIPTION	•		
	0.0 - 2.2	Casing				
	2.2 - 12.0	Feldspar porph	iyry, greenish and p	inkish		
	12.0 - 28.0	Greenstone, va	igue banding.			
- - - - -	28.0 - 30.0	Porphyritic, p	and green.			
	30.0 - 45.2	Greenstone as	above.			
	45.2 - 58.3	Massive, pink stringers of q	and grey, very fine wartz with chalcopy	grained, rite.		
	58.3 - 69.0	Greenstone, ma	issive, core much br	oken.		1 Tara
	69.0 - 107.0	grained, brigh	issive, not porphyri it pink and green se pidote. No core 79	ctions alter	mate,	
	107.0 - 120.0	Diabase, sharp medium grained	contact, fine grai I dark rock otherwis	ned near cor e.	itact,	
	SAMPLE RECORD					
	From To	Length Mate	erial	<u>Gold - 0</u> 2	z/Ton	
4079 4080 4081 4082 4083 4084 4085	32.3 32.4 42.8 43.7 48.1 48.2 52.8 53.7 57.8 58.5 50.9 51.8 104.0 105.1			0.035 0.005 Tr. 0.005 0.005 0.005 Tr.		
			·	Rate	eler	

HALET, BROADHUNST & OGDEN



Ì.

÷.,

ER'	TY: MANIT	DU LAKE GOLD MINE	S INC.	۲. ۲	OLE NUMBER: 2	22
LOCATIO		ou Lake – Baden Ti #401362	wþ.		DIP TESTS	
ben (aucle)	,	south of Dip:	45 ⁰	Footage	Reading	Corrected
Веринка	#1 Pos		294 ft.		-	
	#1 0~~		d: May 30, 1978			
Azimuth	72 ⁰	Pinished:	June 14, 1978	Logged by	R. A. Halet	٠
SAMPLE NUMBER		D È .	SCRIPTION		Samola	Gold Assay
4102	1.6 - 92.6 92.6 - 101.4 101.4 - 232.0 Sample	Porphyritic in crysts up to 0. Diabase - green finer grained to Grey andesite as 213 - 215.6 Qua con 213.3 - 213.9 Breccia of dark matrix which app very fine dissen	-grey, massive, m owards edges. s above artz stringer near re with abundant p ssive aggregates i angular fragments bears to be quarts minate pyrite - in	up to one inch and dark pheno edium-grained, rly parallel to pyrite in near up to 3 inches i and carbonate, pks like a	10ng 0.6'	0.005
4103	267.6 - 294 294 <u>NOTES:</u> Open fi Bad ca	tectonic breccia some rhyolite fr 250 - 250.5 and Grey andesite as End of hole. racture at 47 - ci ve at 87 - ci ater at 294 - ci	agments preserved 255 - 256 above.	inh marcfatad and	1.5'	Tr.
			H	Raffales		

Bar Constant

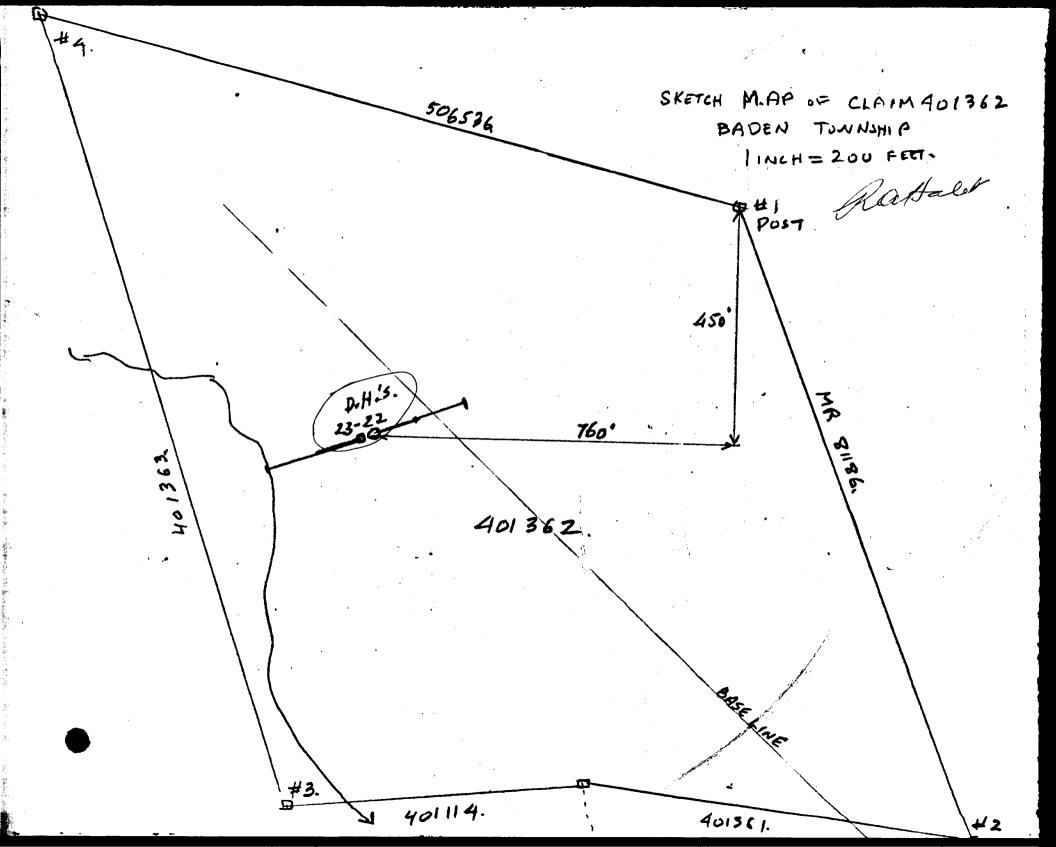
4

ł

. .

÷.

LOCATION: XUOXINUMEX XDIGIOGRAMINA XDIGIOGRAMINA XDIGIOGRAMINA Azimuths Azimuths	Claim 4013 Same locat as Hole 22 152 ⁰	tion Dip: Depth: Commences Finished:	45 ⁰ 347 ft. 1 June 14, 1978 June 19, 1978	Pootage Logged by R	DIP TESTS Reading	Corrected
XDieguntures XDieguntioner Azimuths	as Hole 22 152 ⁰	Depth: Commences Finished:	347 ft. 1 June 14, 1978 June 19, 1978			Corrected
XII ANNO IN A	152 ⁰	Depth: Commences Finished:	June 14, 1978 June 19, 1978	Logged by: R	. A. Halot	•
Azimuth		tinishedi	June 19, 1978	Logged by: R	. A. Halot	•
				Logged by R	. A. Halpt	•
NUMBER	0.0 - 1.0	DÈ				
	0.0 - 1.0				Sample	Gold Assay
		Casing				
	1.0 - 99.3	andesitic matr	ia, rhyolitic frag ix, somewhat schis , gradually gets l	tose, chioriti;	zed and	· /
4101		84 - 84.5 Qua	rtz vein		0.6'	tr.
9	99.3 - 108.4	Diabase				
10	08.1 - 160.0	Volcanic brecc calcite string	ia as above, numer ers.	ous small quart	2	-
16	60.0 - 347.0			ents get larger eter at 280)		
34	47	End of hole.			2 2	
4						
			•			
		•				
	19 N					
			R	aHal	er	



The star

ķ

: ∳.

and the second second

•

PERRTY	MANITOU LAKE G	DLD MINES 1	INC.			HOLE N	JMBER: 24	
LOCATION	Manitou Lake -	Baden Twp.				DIP	tests	Corrected
XIMINA	Claim 401363 580' west and	Dip	45 ⁰		Footage	Red	ding	
Юеринини	150' north of #2 Post	Depthi	37 ft.					
XIN & MATIS K:		Commenced:	June 25, 1	978				
Azimuthi		Finished:	June 28, 1	978	Logged by	R. A	. Halet	
SAMPLE NUMBER		DES	CRIPTION		· · ·			
	0 - 37 Glacial dri	ift - large	boulders -	abandoned	· ·			
4. 	s A							
	and the second s		•					•
			* •					
	×.						:	
	•							
				•				
			· · ·	Ro	Ha	let		

F.

.

۱. ۱۳

.

ERTY:	LOCATION: Manitou Lake - Baden Twp.					IUMBER, 25 TESTS	5			
XUHUMHHHX	No. 24	•	Dipi	49 ⁰			Footage	Rec	ding	Corrected
			Depth	16 ft		1070				
				iced: Jun				н а	* 41 a \$ m.k	
Azimuth:			Finished:			1978	Logged by	K. A	, Malet	·
BAMPLE NUMBER			ł	DESCRIP	TION					
0	- 16 - 61	acial dri	ft and	bou1der	s - a	bandoned.				
			2 - 1							
		۰ ۱۰ ۱۰	• •	a de la companya de l La companya de la comp						
in the second										-
									<u>.</u>	n Kurana Kurana Kurana
	۹.	·								, , , , , , , , , , , , , , , , , , ,
	No. Sec. Sec.				•					
				:						
				·		2			×.	× • /
						. ·				
		·			i.					
						Re	eHa	let	-	
					•					

1.1.1

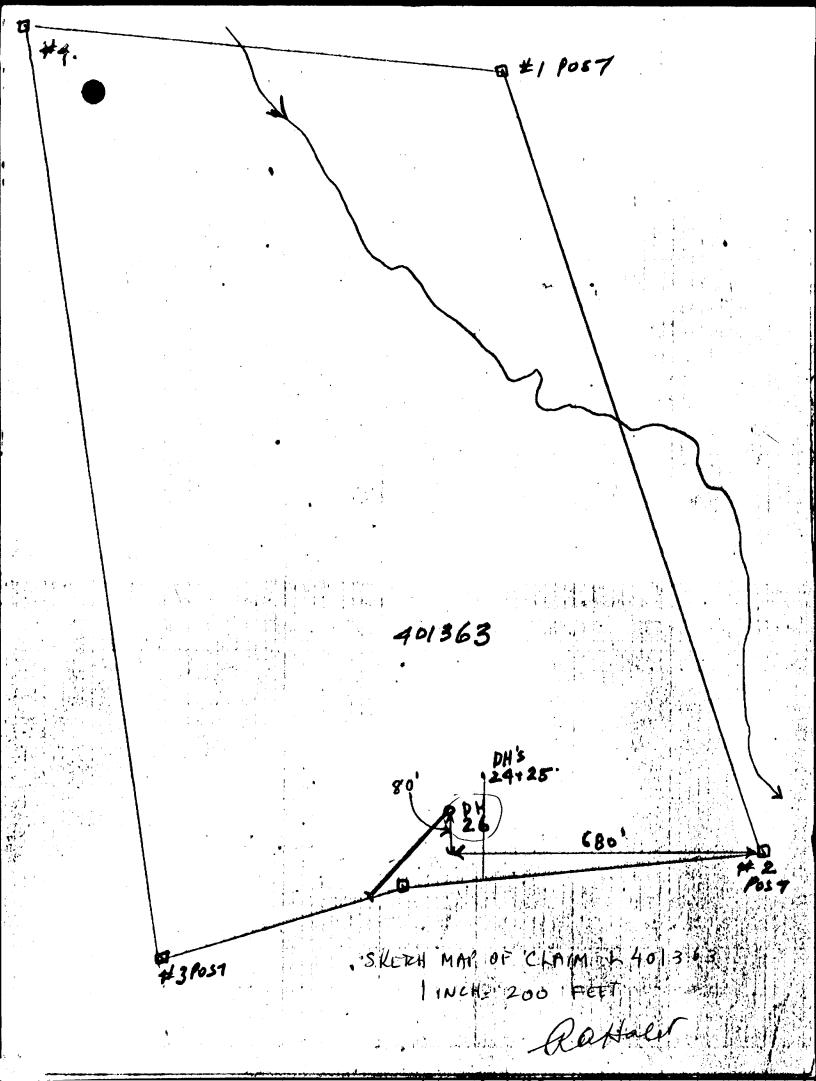
۱ ,

•

 (Holes #24-& #25 -abandoned in overburden

PRERTY	MAN 1	ITOU LAKE GO	DLD MINES I	NC.		i	HOLE NI	UMBER: 26	5
		itou Lake - Im 401363	Baden Twp.				Dif	tests	
XOFKOMARX	80'	north and	Dip			Footage	Rea	ding	Corrected
XRAINKNXA		west of ost	Depth:	312 ft.					
XINAWAXISKX			Commencedi	June 29,	1978				
Azimuthi			Finished	Ju1y 12,	1978	Logged by:	R. A.	Halet	
BAMPLE NUMBER			PESC	RIPTION				iin Tiin an ta' san ar	
		Casing (mu Volcanin h			-	andanitio			
	57 - 512	Volcanic b matrix - s	lightly scl	histose å	carbonated	andesitic			
	312	End of hol	e.						
			3 - cement 5 - sand s						
•		· .		н. 1					
					· •				
			•						
					-				
		•							
				A	Roy	Hale	-		

HALET. BROADHURST & OBDEN



4

PF RTY:	MANITO)U LAKE GO	LD MINES IN(HOLE NUMBER:	27	
LOCATION				Mining Division,	Ontario	DIP TESTS		
KONNIXONX		No. 401351 South and	B Dip:	45 ⁰	Footage	Reading	Corrected	
Dardanaha:		east of #4	Depth:	67 feet				
edex ad have a	(000		Commenced:	August 2, 1978	Driller:	R.M. Fergusor	1	
Azimuthi	270 ⁰ as	tronomic	Finishedi	August 4, 1978	Logged by:	Matachewān, 6 R. A. Halet	Int.	
SAMPLE NUMBER			DESC	RIPTION				
	0.0 - 8	.0 Castr	ıg					
	8.0 - 24	(syer	, massive, f lite?) some ration.	ine grained, sligh epidote in fractur	tly porphyr es, some pi	itic nk		
	24.0 - 26	.8 No co	ore.					
	26.8 - 49	26.8 - 49.5 Syenite as above, massive, mostly red in various shades, some minor fractures with chlorite.						
	49.5 - 51.6 Strongly altered, yellowish green.							
	51.6 - 58	.0 Syent	te as above	•				
	58.0 - 67	.0 Diaba	se, fine gr	ain near contact.				
	SAMPLE RE	CORD						
	From	to	Length	Material	<u>Gold - Oz</u>	<u>/ton</u>		
4076	43.2	44.2	1.0 ⁻	Syenite with	0.005		;	
4077	54.0	55.0	1.0	stringers Syenite, some	0.005			
4078	49.5	50.0	0.5	pyrite Epidote, some qtz.	0.015			
			·					
				Ra	Hall	~		

HALET. BROADHURST & OGDEN

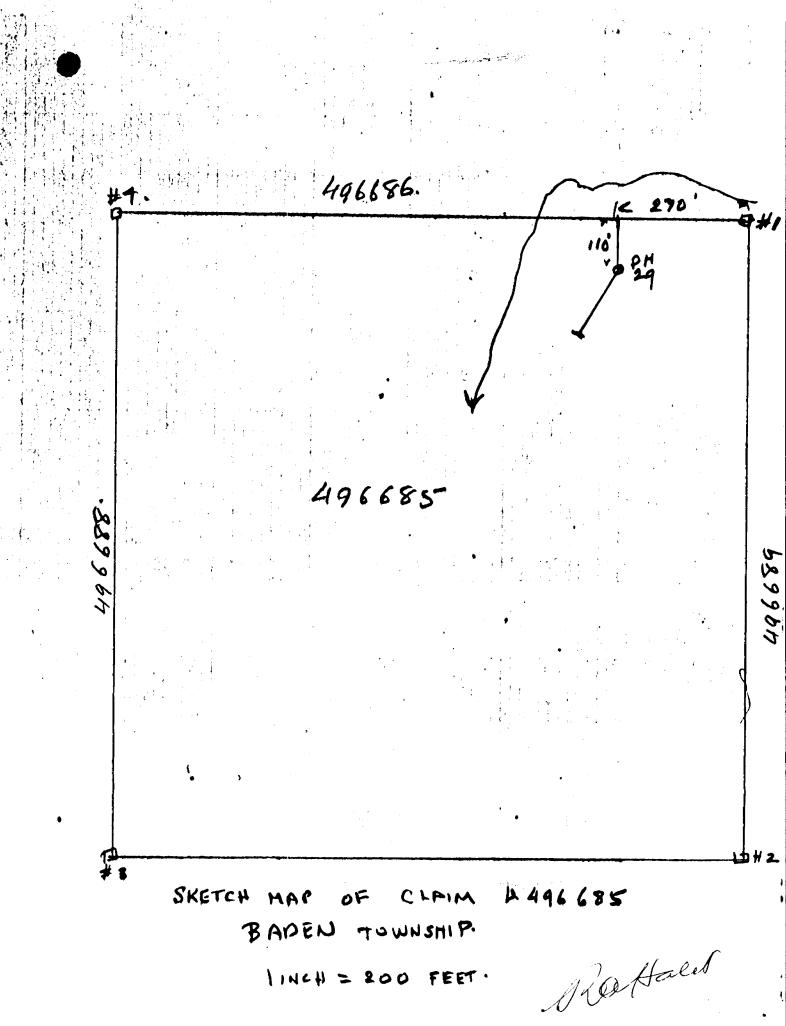
PERTY	Y: MANITOU LAKE GOLD MINES INC. HOLE NUMBER: 29					
LOCATION	4: Baden Towns Claim No. 4	DIP TESTS				
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	110' south	in the second	50 ⁰	Footage	Reading	Corrected
XOLENANCE 270' west of #1 Post		f #1 Depth:	Depth: 201 feet Driller	Driller:	: R. M. Ferguson Matachewan, Ont.	
ХМКЖИФИХ		Commenced:	October 25, 1978	1		
Azimuthi 135 ⁰ astro		omi c Finished:	c Finished: November 7, 1978 Logged by:		A. Byberg and R. A. Halet	
BAMPLE NUMBER		DES	CRIPTION			
	0.0 - 30.0	Casing				
	30.0 - 120.4	Andesite - gr 50 - 54.1 Qu	ey, porphyritic i artz stock-work.	n p laces.		
	120.4 - 123.4	Diabase? Som	e calcite stringe	rs.		
	123.4 - 161.0	Andesite as a	bove.			

	30.0 - 120.2		ite – grey, porphyritic 54.1 Quartz stock-work	in places.	
	120.4 - 123.4	Diabas	e? Some calcite string	gers.	
	123.4 - 161.0	Andes 1	te as above.		
	161.0 - 163.0	Schist	ose, with quartz calci	te stringers.	
	163.0 - 169.3	Diabas	e? Numerous calcite si	tringers.	
	169.3 - 176.2	Andesi	te gray, porphyritic.		
	176.2 - 201.0		tone, coarser grained, ated, calcite stringers	some sections in places.	
	SAMPLE RECORD		· · · · · · · · · · · · · · · · · · ·		
	<u>From</u> <u>To</u>	Length	<u>Material</u>	Gold Oz/Ton	
4086 4087 4088	50 54.1 54.1 57.5 161 163	4.1 3.4 2.0	Quartz stock-work Wall rock Quartz & schist	0.01 Tr. Tr.	

HALET. BROADHURST & OGDEN

.

ReHaler



Bell-White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-5107

Certificate of Analysis

NO. 7129

F

DATE: June 19, 1978.

SAMPLE(S) OF: Core(1)

RECEIVED: June 19/78.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

SAMPLE(S) FROM: Mr. A. Byberg, Manilou Lake Gold Mines.

Sample No.

Oz, Gold

D4101

Trace

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND BILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-BATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ABSAY PROCESS.

BELL - WHITE	ANALYTICAL	LABORA	TORIES LTD.
P.O. BOX 187,	HAILEYBURY, ON	ITARIO 1	TEL: 672-3107

Certificate of Analysis

NO. 7237

DATE: June 20, 1978.

SAMPLE(S) OF: Core(2)

RECEIVED: June 20/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4102	0,005
D4103	Trace

BELL-WHITE ANALYTICAL LABORATORIES LTD.



IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-BATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS. BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-3107

Oertificate of Analysis

NO. 8082

DATE: July 10, 1978.

SAMPLE(S) OF: Core(3) Rock(1)

RECEIVED: July 10/78.

SAMPLE(S) FROM: A. Byberg, Esq., Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4069	Trace
D4070	Trace
D4071	0.38 - bould
04072	0.005

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-BATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

Bell - White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-5107

Certificate of Analysis

NO. 8316

DATE: July 13, 1978.

SAMPLE(S) OF: Rock(3)

RECEIVED: July 13/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold	
D4073	0.115	
4	0.13	PRILTY
5	0,005	

IN ACCORDANCE WITH LONG ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND BILVER VALUES REPORTED ON THESE SHETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND DAINS INHERENT IN THE FIRE ASSAY PROCESS.

Bell - White	ANALYTICAL	LABORA	TORIES	LTD
P.O. BOX 187.	HAILEYBURY, ON	TARIO	TEL: 672-	\$107

Certificate of Analysis

NO. 8854

DATE: July 27, 1978.

SAMPLE(S) OF: Rock(9)

RECEIVED: July 27/78.

SAMPLE(S) FROM: Dr. R. A. Halet, Manitou Lake Gold Mines.

Bample No.	Oz, Gold
No tag	0.02
914-915*	0.215
916	0.15
917	0.02
918	0,105
919	0.22
920	0.775
921	0.97
922	0.08

^t Two tags in this sample,

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED STHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.



Bell . White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 9330

DATE: August 8, 1978.

SAMPLE(S) OF: Core(3)

RECEIVED: August 8/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
4076	0.005
4077	0.005
4078	0,015

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.





TEL: 872-3107

Certificate of Analysis

2972 NO.

No. 14

August 14, 1978. DATE:

PLE(S) OF: Core(6)

August 14/78. RECEIVED:

BAMPLEts) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4079	0.035
D4080	0,005
D4081	Trace
D4082	0.005
D4083	0,005
D4084	0.005

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND BILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-BATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ABSAY PROCESS.



Bell-White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 13410

DATE: October 30, 1978.

SAMPLE(S) OF: Core(2)

RECEIVED: October 30/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4086	0.01
D4087	Trace

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-BATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.







1

Bell - White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY. ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 13821

DATE: November 6, 1976.

SAMPLE(S) OF: Core(1)

RECEIVED: November 6/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

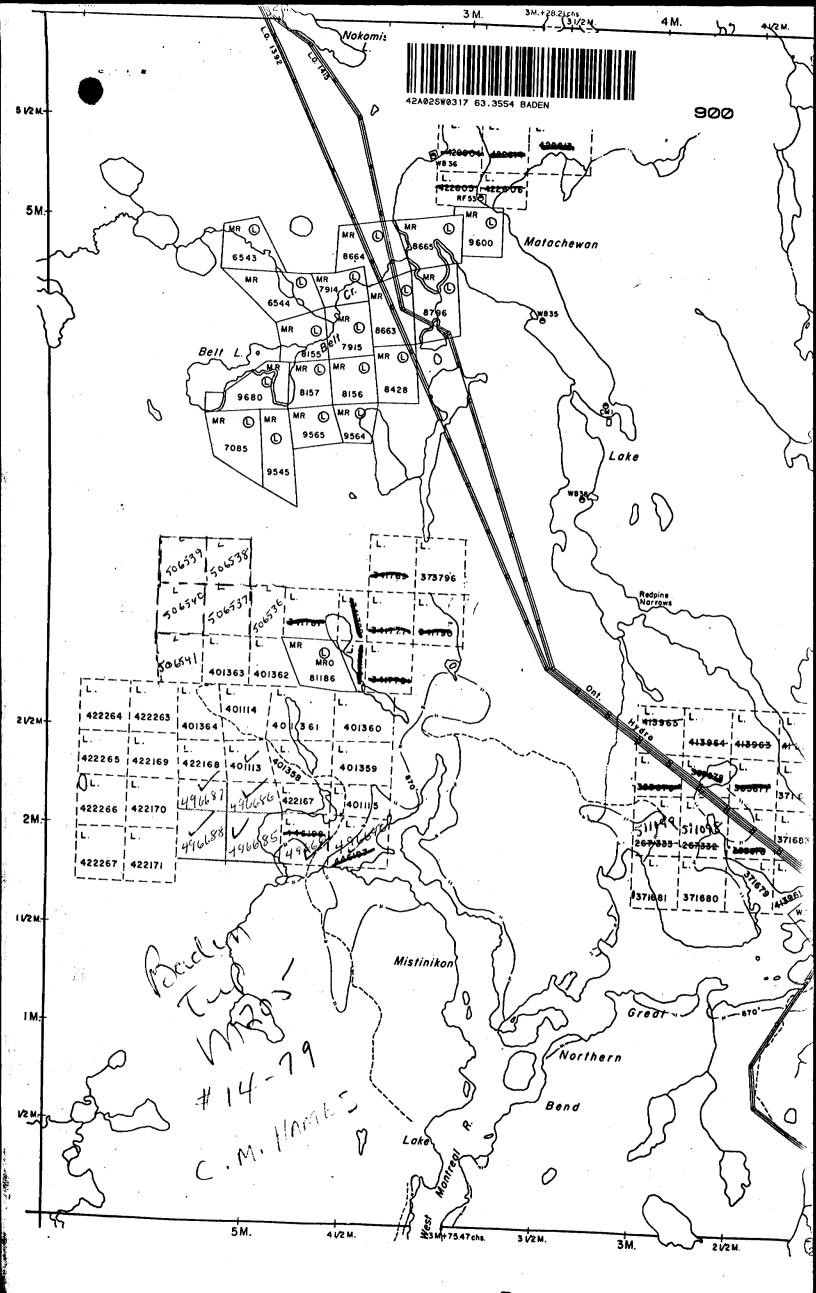
Sample No.

Oz. Gold

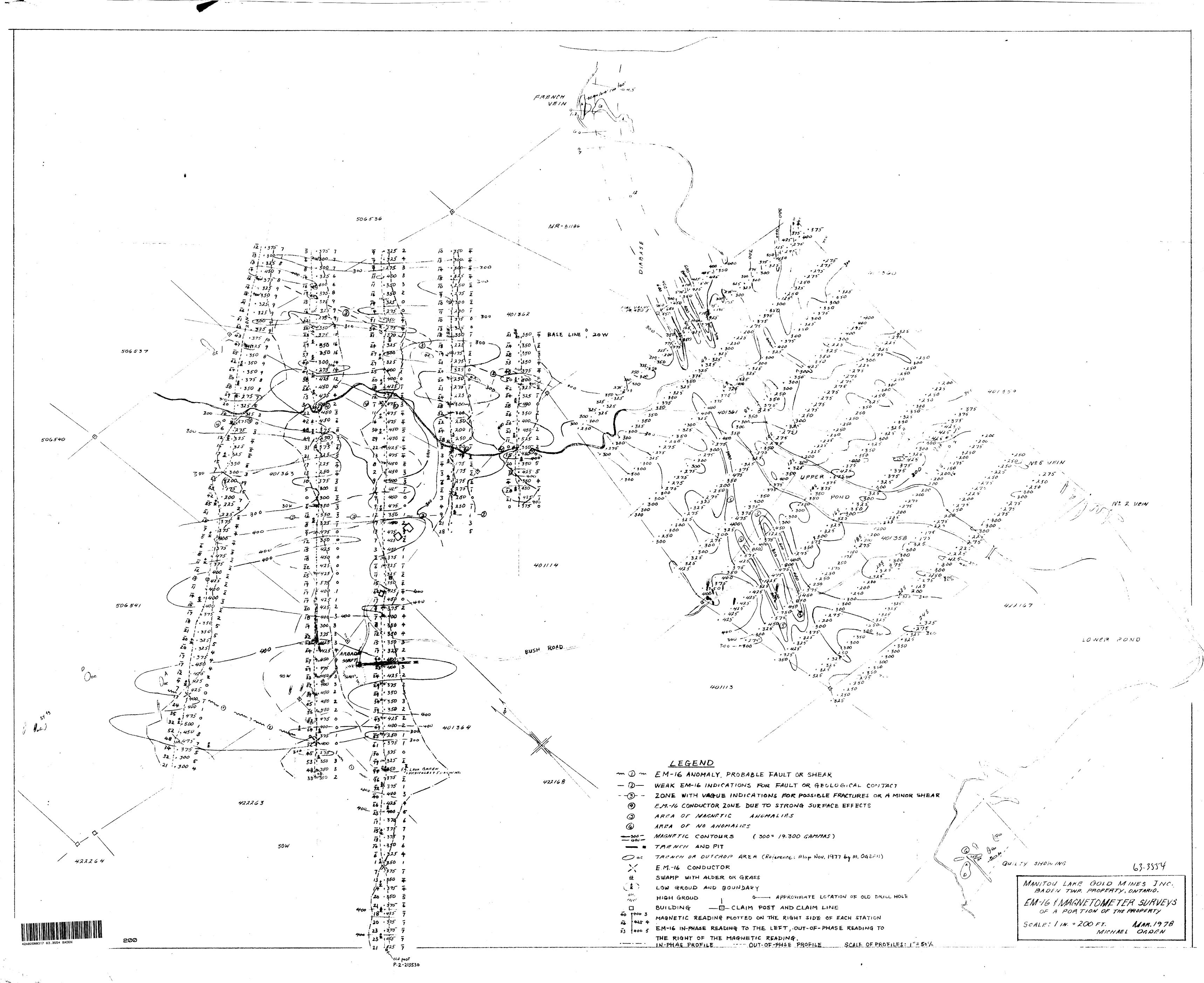
D4088

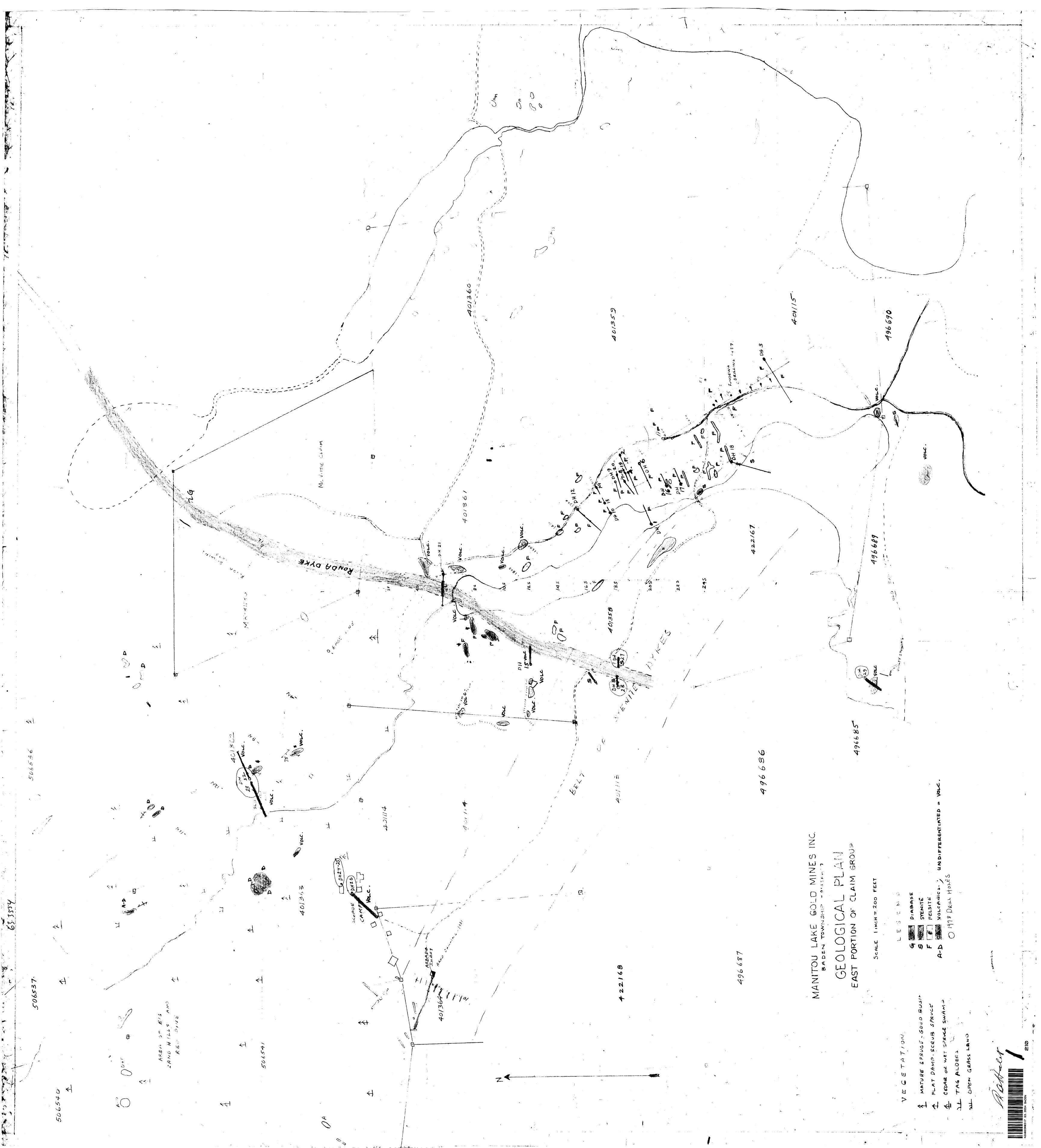
Trace

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSSED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.



Powell Twp. M.241





REPORT ON 1978 EXPLORATION PROGRAM MANITOU LAKE GOLD MINES INC. BADEN TOWNSHIP PROPERTY

The company holds a group of 32 mining claims in Baden Township, Larden Lake Mining Division, Ontario, numbered as follows:-

L.401113 to 401115 inclusive L.401358 to 401364 inclusive L.422167 to 422171 inclusive L.422263 to 422267 inclusive L.496685 to 496690 inclusive L.506536 to 506541 inclusive

ì

During 1976 and 1977 twenty-one diamond drill holes with a total length of 4,759 were put down on claims 401358, 401115 and 401361 to explore (1) a northwesterly-trending zone of gold-bearing fractures which had been partially explored in 1937 by Fondewa Gold Mines Ltd., and (2) the Ronda diabase dyke, a northeasterly-trending structure with which gold-bearing veins are associated on neighbouring claim MR 81186.

This work did not disclose gold deposits of probable economic importance and the 1978 program was devoted to preliminary exploration of other areas on this large property.

The first area to be considered was the northwesterly-trending driftfilled valley on claims 401361, 401362 and 401363. This valley contains the possible extension of the Fondewa gold-bearing zone, and is parallel to the belt of symmite dykes which had been partially explored in the 1930's on claim 401364 (Arbade zone). An E.M. and magnetic survey was done in this area in March 1978 by S.S. Szetu and Michael Ogden. This work gave the following indications:

 An E.M. conductor similar to those found over shear zones or fault systems some 500 feet southwest of the Arbade shaft.

H. H. & O. ENGINEERING LIMITED

3554

63

020

- (2) A weak indication of a possible fracture zone on the northeastern edge of the symmitte dyke swarm which contains the Arbade zone.
- (3) A vague zone lying to the north of the creek on the largely driftcovered valley on claim 401362.

After further study of the ground it was decided to explore areas (2) and (3) by drill holes, for possible shear zones or fractured symplete dykes. The first three holes of the 1978 program numbered 22, 23 and 26, with a total length of 953 feet were drilled in this area; holes 24 and 25 were lost in overburden. The holes intersected a monotonous succession of andesitic lavas and pyroclastics with no shear zones or symplete dykes. The holes did not reach the north edge of the symplete dyke swarm.

Hole 27 and 28 (total length 187 feet) were designed to explore the Ronda dyke in an area where it was quite highly magnetic, and which is some 600 feet south of previous drilling. No gold-bearing quartz was intersected.

The final hole of the program (No. 29) was drilled under a showing of gold-bearing veinlets (stock work) on claim 496685. Nothing of interest was encountered.

Total footage drilled in 1978 was 1341.

Ratales

R. A. Halet

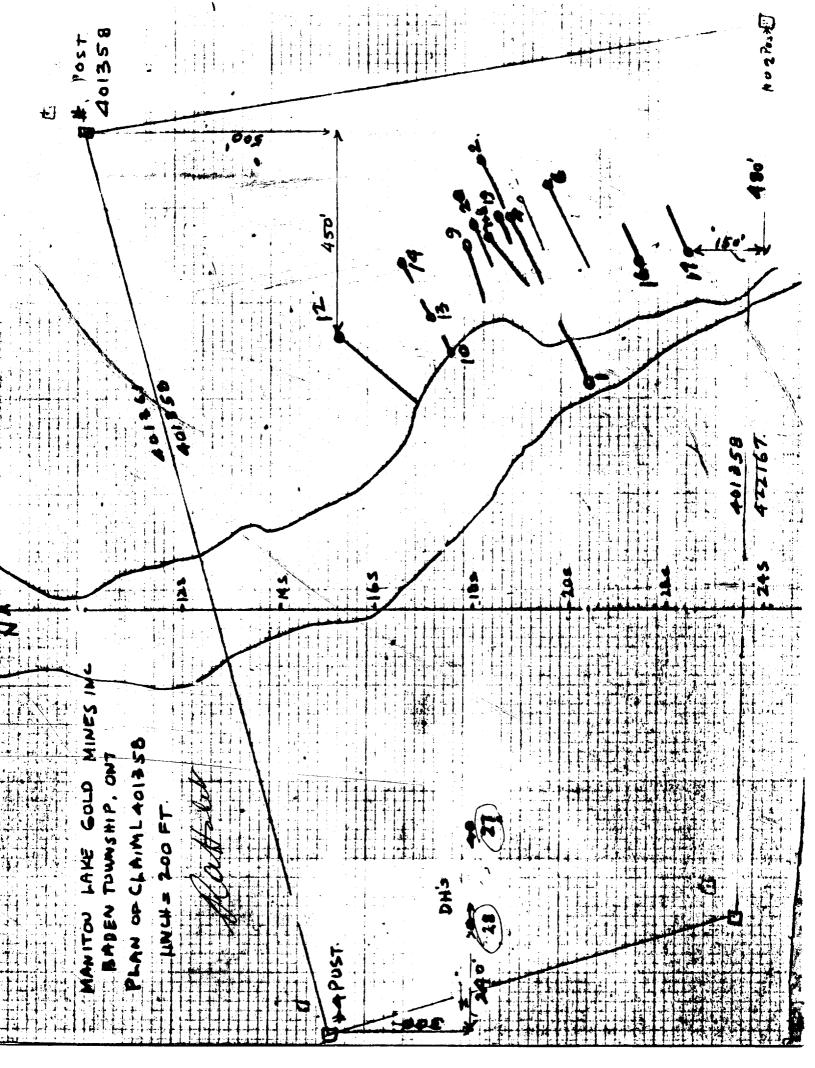
November 30, 1978

.

PI ZRTY-	MANITOU	LAKE GOLD MINI	ES INC.	1	HOLE NUMBER: 2	B
LOCATION	Baden To Claim No	ownship, Larden o. 401358	r Lake Mining Divisi	lon, Ontario	DIP TESTS	
ANNINAR:		Dip	45 ⁰	Footage	Reading	Corrected
XX CONTRACTOR	300' south a	-	120 feet	Drilled:	R.M. Ferguson	· -
XINAGOUNKX	240' east of Post	f #4 Commenced	d: August 7, 1978		Matachewan, O	nt.
Azimuth	90 ⁰ astronom	ni c Pinished i	August 14, 1978	Logged by	R. A. Halet	
SAMPLE NUMSER		DE	SCRIPTION			
	0.0 - 2.2	Casing				
	2.2 - 12.0	Feldspar porpl	hyry, greenish and p	pinkish		
-	12.0 - 28.0	Greenstone, v	ague banding.			
	28.0 - 30.0	Porphyritic,	pink and green.			
	30.0 - 45.2	Greenstone as	above.			
	45.2 - 58.3	Massive, pink stringers of	and g rey, very fin quartz with chalcop	e grained, yrite.		
	58.3 - 69.0	Greenstone, m	assive, core much b	roken.		4 L
	69.0 - 10 7.0	prained, brid	assive, not porphyr ht pink and green s epidote. No core 7	ections alte	rnate,	
	107.0 - 1 20.0	Diabase, shar medium graine	p contact, fine gra d dark rock otherwi	ined near co se.	ntact,	
	SAMPLE RECORD					
	From To	Length Mat	ertal	<u>Gold - 0</u>	z/Ton	
4079 4080 4081 4082 4083 4083 4085	32.3 32.4 42.8 43.7 48.1 48.2 52.8 53.7 57.8 58.5 50.9 51.8 104.0 105.1	0.9 Sye 0.1 Qua		0.035 0.005 Tr. 0.005 0.005 0.005 Tr.		
				Rat	eler	

HALET, BROADHUNST & OGDEN

ساجير بمتعسق



<u> </u>				~		
· · ERT	MANITOL	U LAKE GOLD MINES	5 INC.	HC	DLE NUMBER: 2	2
LOCATIC	DN: Manitou Claim #	u Lake - Baden Tw	/p.		DIP TESTS	
	,	outh of Dip:	45 ⁰	Pootage	Reading	Corrected
Reputitus	#1 Post 760'we		294 ft.			
Marchion	#1 Doe+		k May 30, 1978			
Azimuth:	72 ⁰	Finished:	June 14, 1978	Logged by: A	. A. Haimt	•
SAMPLE		D E S	CRIPTION		Sampla	Gold Assay
				,	Lengen	Assay
	0.0 - 1.6	Casing				
	1.6 - 92.6	OCCASIONAL TRAD	lava, massive, soft ments of rhyolite u places with light a l inch.	n to one inch	1	
	92.6 - 101.4	Diabase - gr een - finer grained to	-grey, massive, med owards edges.	1um-grained,		
4102		cor Mas	above ertz stringer nearly e with abundant py sive aggregates up	rite in near	ong	
4102		213.3 - 213.9			0.6'	0.005
4103		very fine dissem tectonic breccia	angular fragments u ears to be quartz a linate pyrite - look , some sections unb agments preserved.	ind carbonate, s like a	in	
4100	Sample	250 - 250.5 and 2	255 - 256		1.5'	Tr.
į	267. 6 - 294	Grey andesite as	above.		_	-
	294	End of hole.				
	NOTES: Open fra Bad cave Lost wat Hole sto	e at 87 - ce ter at 294 - ce	emented. emented. emented.			
		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -				4
				\sim		
			(Ar	attalet	+	1
			NU			

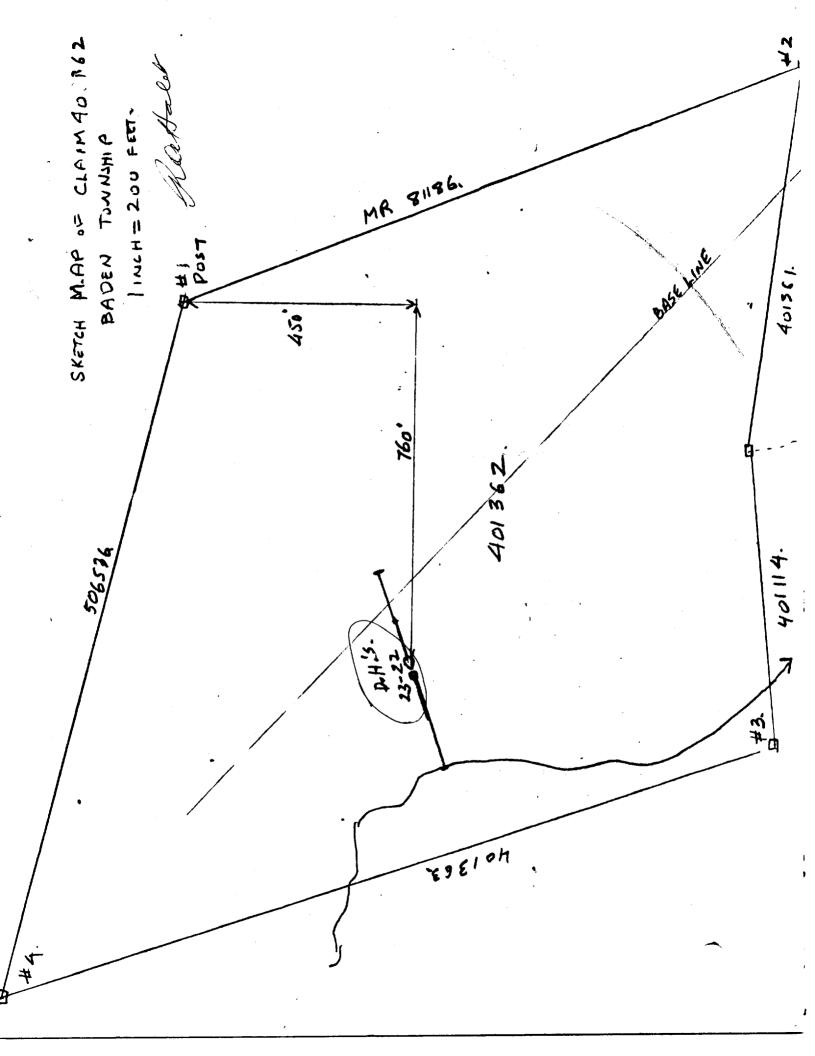
1 3

.

ł

HALET. BROADHURST & OGDEN

The RT	Y. MANITOU LAKE GOLD MINES INC. H		OLE NUMBER: 23					
LOCATIO	N: Manitou L Claim 401	.ake - Baden Tw 362	p.	DIP		' TESTS		
xi xxinucle x X Depurkune	ex Same location Dip: 450 Footoge No as Hole 22.				Reading	Corrected		
XEIGNANIOAS	ĸ	Comment	edi June 14, 1978					
Azimuth	n 152 ⁰ Finished: June 19, 1978 Logged by: R. A				R. A. Halet	. Halet		
NUMBER		þ	BECRIPTION		Sample Length	Gold		
	0.0 - 1.0	Casing						
4101	1.0 - 99.3	andesitic mai	ccia, rhyolitic frag trix, somewhat schi ed, gradually gets i uartz vein	stose. chloriti	and 0.6'	tr.		
	99.3 - 108.4	Diab ase						
	108.1 - 160.0	Volcanic brec calcite strin	ccia as <mark>above, nume</mark> r Igers.	rous small quar	tz			
	160 .0 - 347 .0	Volcanic brec below 250 (on Last foot ban Cemented hole		ments get large meter at 280)	r			
	347	End of hole.						
			A	attal	2er			



PF. RTY:	MANITOU LAKE GO	OLD MINES I	INC.			HOLE NU	MBER: 24	
LOCATION:	Manitou Lake -	Baden Twp.				DIP	TESTS	
Xentikudek	Claim 401363 580' west and	Dip	45 ⁰		Footage	Redd	ling	Corrected
-	150' north of #2 Post	Depth:	37 ft.					
		Commenced:	June 25,	1978			•	
Azimuth:		Finished:	June 28,	1978	Logged by:	R. A	. Halet	
SAMPLE NUMBER		DES	CRIPTION		,			
	0 - 37 Glacial dr	ift - large	e boulders	- abandone	d.			
			• •					
								~
			•				×.	· · ·
			•.					
	·.							
		•						
	•						-	i
				• •				
				\bigcap	olo	P. A	-	
				M	affa	Leg .		

MALET, BROADHURST & OSDEN

ERTY:	MANITOU LAKE GOLD MINES INC.		HOLE NUMBER: 25	
LOCATION:	Manitou Lake - Baden Twp.		DIP TESTS	
XUGXUANSA	Same as Hole Dip: 49 ⁰ No. 24.	Footage	Reading	Corrected
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Depth: 16 ft.			
XINAJAMANX	Commenced: June 28, 1978			
Azimuth:	Finished: June 29, 1978	Logged by:	R. A. Halet	
SAMPLE NUMBER	DESCRIPTION			
	0 - 16 Glacial drift and boulders - abandoned.			
		Wal	200	

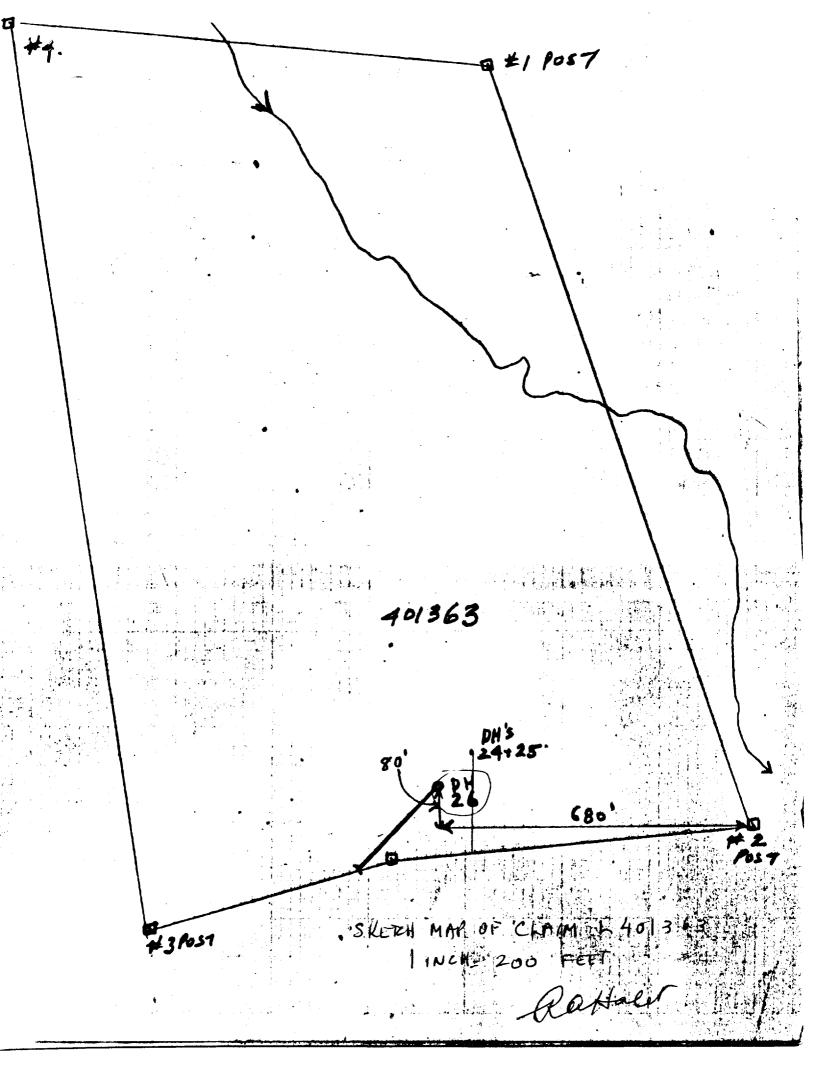
. . . .

HALET. BROADHURST & OGDEN

(Holes #24 & #25 -abandoned in overburden

PR ATY:	MANI	tou lake GC	DLD MINES I	NC.		н		ABER: 26	
LOCATION	Man1	tou Lake - m 401363	Baden Twp.				DIP TI	ests	
XOLICOLUOX	80'	north and	Dip:			Footage	Readi	ng (Corrected
XRANNAR	680' #2 Po	west of st	Depth:	312 ft.					
XINA JUNIS NIX			Commenced	June 29,	1978				
Azimuthi			Finished	July 12,	1978	Logged by:	R. A.	Halet	
SAMPLE NUMBER			D 2 3 C	RIPTION					
	0 - 37 37 - 312 312	Volcanic b matrix - s End of hol		hyolite f histose å	ragments in	andesitic I.			
		Cave at 27		2 a m -		Halo			

HALET, BROADHURST & OGDEN



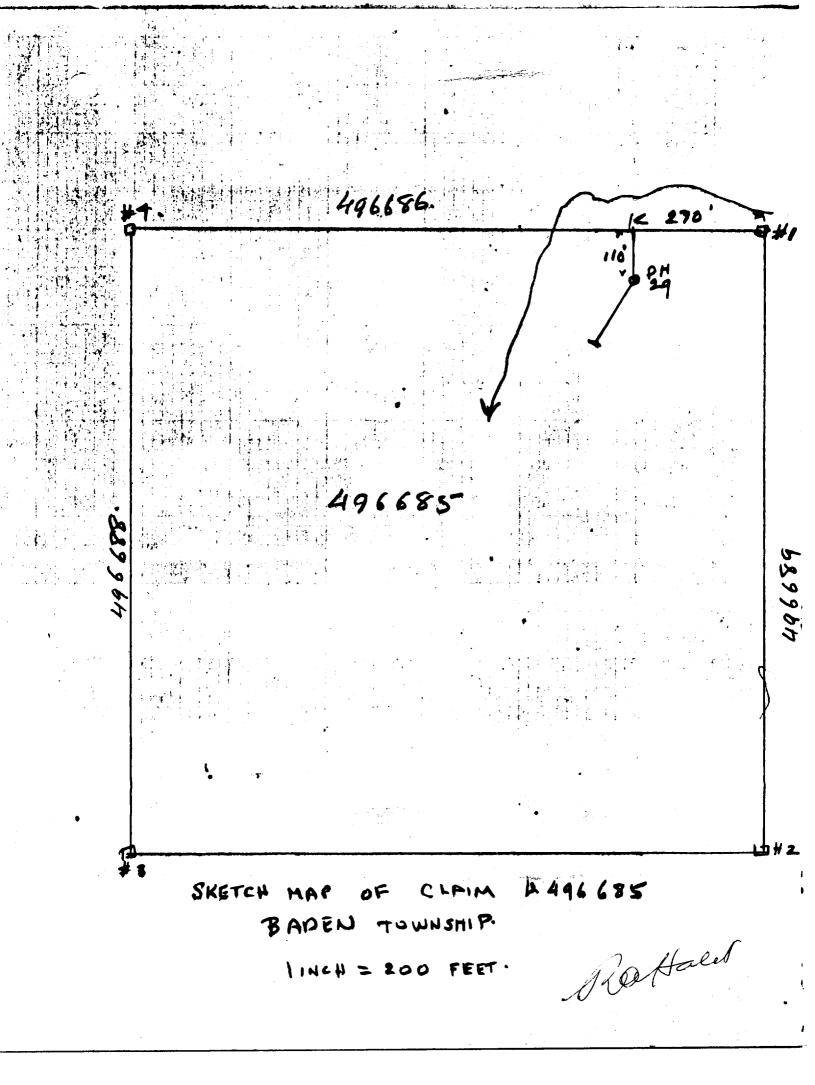
PF RTY:	MANI	TOU LA	ke goli	D MINES INC	•				HOLE N	IUMBER: 2	7
LOCATION				Larder Lake	Mining	Div	ision,	Ontario	DIF	TEST\$	
KOTHVORX		im No. 4 south		Dip	45 ⁰			Footage	Rec	ding	Corrected
Danonya H.		east (Depthi	67 fee	t					
EdexadxxxXX				Commenced:	August	2,	1978	Driller	R.M.	Ferguson chewan, 0	nt
Azimuthi	270 ⁰	astron	omic	Pinished:	August	4,	1978	Logged by		A. Halet	
SAMPLE NUMBER				PLIC	RIPTION	4					
	0.0 -	8.0	Casing	9							
	8.0 -	24.0	Grey, (syent altera	massive, f ite?) some a ation.	ine grai epidote	ined in	, sligh Fractur	itly porphy res, some p	vritic bink		
	24.0 -	26.8	No con	~ e .							
	26.8 -	49.5	Syenit shades	te as above; s, some mino	, massiv or fract	ve, I ture	nostly with	red in van chlorite.	rtous		
	49.5 -	51.6	Strong	jly altered	, yellow	wish	green.				
	51 .6 -	58.0	Syen1 t	te as above.	•		1. T.				
	58.0 -	67.0	Diabas	e, fine gra	ain near	r coi	itact.				
	SAMPLE	RECORD									
	From	to	Ľ	ength M	Material	1_		<u>Gold - C</u>	z/Ton		
4076	43.2	44.2		1.0 [°] 5	Syenite	with	1	0.005	j		
4077	54.0	55.0		1.0 5	string Syenite,	, 501	ne	0.005	i		
4078	49.5	50.0		0.5 É	pyrite Epidote,		ne qtz.	0.015	j		
				·							
										-	
						A	Pa	Hal.	Γ		
									,		

HALET, BROADHURST & OGDEN

P ERTY:	MANITOU LAKE GOLD MINES	INC.		HOLE NUMBER: 29
LOCATION	Baden Township, Larder L Claim No. 496685	ake Mining Division,	Ontario	DIP TESTS
XDEXCHARGE	110' south and Dip:	50 ⁰	Footage	Reading Corrected
XCHANNER	270' west of #1 Post Depthi	201 feet	Driller:	R. M. Ferguson Matachewan, Ont.
ХИКНЯНК	Commence	d: October 25, 1978		
Azimuth:	135 ⁰ as tronomic Finished i	November 7, 1978	Logged by:	A. Byberg and R. A. Halet
SAMPLE NUMBER	ĐÌ	SCRIPTION		
	0.0 - 30.0 Casing			
		grey, porphyritic in Quartz stock-work.	places.	
	120.4 - 123.4 Diabase? Se	ome calcite stringer	5.	
	123.4 - 161.0 Andesite as	above.		
	161.0 - 163.0 Schistose, w	with quartz calcite :	stringers.	
	163.0 - 169.3 Diabase? Nu	umerous calcite stri	ngers.	
	169.3 - 176.2 Andesite gra	ay, porphyritic.		
		coarser grained, son calcite stringers in		
	SAMPLE RECORD			
	From To Length Mate	irtal.	Gold Oz/	Ton
4086 4087 4088 1	54.1 57.5 3.4 Wa11	tz stock-work rock tz ā schist	0.01 Tr. Tr.	
	· · · ·			
	•			
		K	ato	let

HALET. BROADHURST & OGDEN

.



Bell - White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 7129

DATE: June 19, 1978.

SAMPLE(S) OF: Core(1)

NECEIVED: June 19/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No,

Oz. Gold

D4101

Trace

BELL-WHITE ANALYTICAL LABORATORIES LTD.

N ACCORDANCE WITH LONG-ESTABLISHED NORTH MERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED THERWISE GOLD AND SILVER VALUES REPORTED ON HESE SHEETS HAVE NOT SEEN ADJUSTED TO COMPEN-ATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL - WHITE	ANALYTICAL LABOR	RATORIES LTD.
P.O. BOX 187,	HAILEYBURY, ONTARIO	TEL: 672-3107

Certificate of Analysis

NO. 7237

DATE: June 20, 1978.

SAMPLE(S) OF: Core(2)

RECEIVED: June 20/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4102	0.005
D4103	Trace



IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INNERENT IN THE FIRE ASSAY PROCESS. Bell - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Tertificate of Analysis

NO. 8082

DATE: July 10, 1978.

SAMPLE(S) OF: Core(3) Hock(1)

RECEIVED: July 10/76.

SAMPLE(S) FROM: A. Byberg, Esq., Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4069	Trace
D4070	Trace
D4071	0.38 - bould
D4072	0.005

Pin

WHITE ANALYTICAL LABORATORIES LTD.

N ACCORDANCE WITH LONG-ESTABLISHED NORTH Imerican Custom, unless it is specifically stated otherwise gold and silver values reported on these sheets have not been adjusted to compenbate for losses and gains inherent in the fire assay process. Bell-White analytical laboratories LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-5107

Certificate of Analysis

NO. 8316

DATE: July 13, 1978.

SAMPLE(S) OF: Rock(3)

July 13/78. RECEIVED:

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold	
D4073	0.115	
4	0.13	PRILTY
5	0.005	

BELL-WHITE

YTICAL LABORATORIES LTD.

CCORDANCE MERICAN CUSTOM. UNLESS IT IS SPECIFICALLY STATED THERWISE GOLD AND BLUER VALUES REPORTED ON MERE SHETS HAVE NOT BEEN ADJUSTED TO COMPEN-ATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS. BELL-WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 8854

DATE: July 27, 1978.

SAMPLE(S) OF: Rock(9)

RECEIVED: July 27/78.

SAMPLE(S) FROM: Dr. R. A. Halet, Manitou Lake Gold Mines.

Sample No.	Oz. Gold
No tag	0.02
914-915*	0.215
916	0.15
917	0.02
918	0.105
919	0.22
920	0.775
921	0.97
922	0.08

* Two tags in this sample.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED Otherwise gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire Assat process.



Certificate of Analysis

NO. 9330

DATE: August 8, 1978.

SAMPLE(S) OF: Core(3)

RECEIVED: August 8/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
4076	0.005
4077	0.005
4078	0,015

BELL-WHITE ANALYTICAL LABORATORIES LTD.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH American Custom, Unless It is specifically stated Otherwise gold and silver values reported on These sheets have not been adjusted to compensate for lobbes and gains inherent in the fire Assay process.



Certificate of Analysis

NO. 2972

DATE: August 14, 1978.

SAMPLE(S) OF: Core(6)

: -

RECEIVED: August 14/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4079	0.035
D4080	0,005
D4081	Trace
D4082	0,005
D4083	0,005
D4084	0.005



IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-BATE FOR LOBSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS. Bell-White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 13410

DATE: October 30, 1978.

SAMPLE(S) OF: Core(2)

2

RECEIVED: October 30/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No.	Oz, Gold
D4086	0.01
D4087	Trace

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH American Custom, Unless it is specifically stated otherwise gold and silver values reported on these sheets have not been Adjusted to compensate for Losses and gains inherent in the fire Assay process. BELL-WHITE ANALYTICAL LABORATORIES LTD.



Bell - White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 13821

DATE: November 6, 1978.

SAMPLE(S) OF: Core(1)

RECEIVED: November 6/78.

SAMPLE(S) FROM: Mr. A. Byberg, Manitou Lake Gold Mines.

Sample No,

Oz. Gold

D4088

Trace

IN ACCORDANCE WITH LONG.ESTABLISHED NORTH-American Custom, Unless it is specifically stated otherwise GGLD and Silver Values reported on These sheets have not been adjusted to compenbate for Losses and gains inherent in the fire Assav process. BELL-WHITE ANALYTICAL LABORATORIES LTD.

Pin Coo