



42A01NE0080 2.9639 LEBEL

010

Homestake Explorations Limited
Gull Lake Property
Lebel Township
Larder Lake Mining Division
Ontario

**REPORT ON STRIPPING, MAPPING AND SAMPLING PROGRAM
ON CLAIM L-531754**

RECEIVED

DEC 22 1986

MINING LANDS SECTION

November 17, 1986.

Charles E. Page, M.Sc., FGAC
Consulting Geologist



42A01NE0080 2.9639 LABEL

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SUMMARY

Homestake Explorations Limited has carried out a stripping, geological mapping, and sampling program between October 16 to 22, 1986 on claim L-531754 located in western Lebel Township, Larder Lake Mining Division. This claim combines with 19 others to comprise the Gull Lake property. The property is 1.5 miles east of Kirkland Lake city center and is accessible by two gravel roads that connect to highway 66.

L-531754 known as the Glenora shaft claim adjoins the Toburn Mine property to the east along the projection of the Kirkland Lake Break. Past exploration on this claim consists of surface diamond drilling, trenching, sinking of a 465 foot deep, three compartment shaft with the establishment of three levels at 150, 300 and 450 feet. This work was carried out by London Gull Lake Mines Limited and Glenora Gold Mines Limited between 1924 and 1937. The underground exploration tested surface mineralization which appears to be the eastern extension of the main south vein mined on the Toburn property. The results of this work indicated the presence of a narrow discontinuous quartz vein system with erratic gold values. During this period no production from this property has been reported. In 1983 North Kirkland Mines Limited dewatered the shaft and carried out a program of sampling and shallow diamond drilling. The total results of this work have not been reported.

Claim L-531754 is underlain by east-west trending, southerly dipping Timiskaming tuff and conglomerate. Exploration carried out to date has concentrated on a narrow quartz-carbonate vein system which occurs predominantly in the tuff near the contact of these two lithologies. This vein system appears to represent the eastern extent of the main south vein which was mined on the Toburn property. At Toburn this vein system was most prolific in syenite and when it entered the sediments the grade and widths diminished.

The stripping program was carried out 260 feet east-southeast of the shaft in the vicinity of the Murdoch Creek fault zone. Due to the suggestion that the Glenora mineralization is cut off by this fault the stripping was planned to test the fault zone for the presence of mineralization and syenite. The stripping exposed an area measuring 140 feet long and 55 feet wide orientated north-south and normal to stratigraphy and structure. The bedrock exposed consisted principally of greywacke which was altered to the north displaying shears, fractures and specularite seams parallel to the attitude of the Murdoch Creek Fault Zone. On the southern portion of the bedrock surface exists a sheared and fractured felsic syenite body which was previously unreported.

Nine chip samples were taken from sheared weakly mineralized portions of the exposure with five returning weakly anomalous gold values ranging from 10 to 30 ppb.

Although the Murdoch Creek fault zone was not entirely encountered the presence of sheared syenite in the exposure warrants further investigation. To further evaluate the significance of the syenite body uncovered diamond drilling and/or additional stripping is recommended.

1.0 INTRODUCTION

This report describes a stripping, geological mapping and sampling program performed on the Gull Lake mineral property held by Homestake Explorations Limited. This program was carried out on the property between October 16 to October 22, 1986.

The program consisted of stripping an area located 260 feet southeast of the Glenora shaft in the vicinity of the Murdoch Creek fault zone. The stripping was accomplished employing an hydraulic excavator contracted from Alex MacIntyre and Associates Limited of Kirkland Lake, and high pressure hose and pump from Carl P. Forbes and associates also of Kirkland Lake. The excavator was used to clear the vegetation and overburden down to bedrock with the high pressure washing to further expose and clean the bedrock surface.

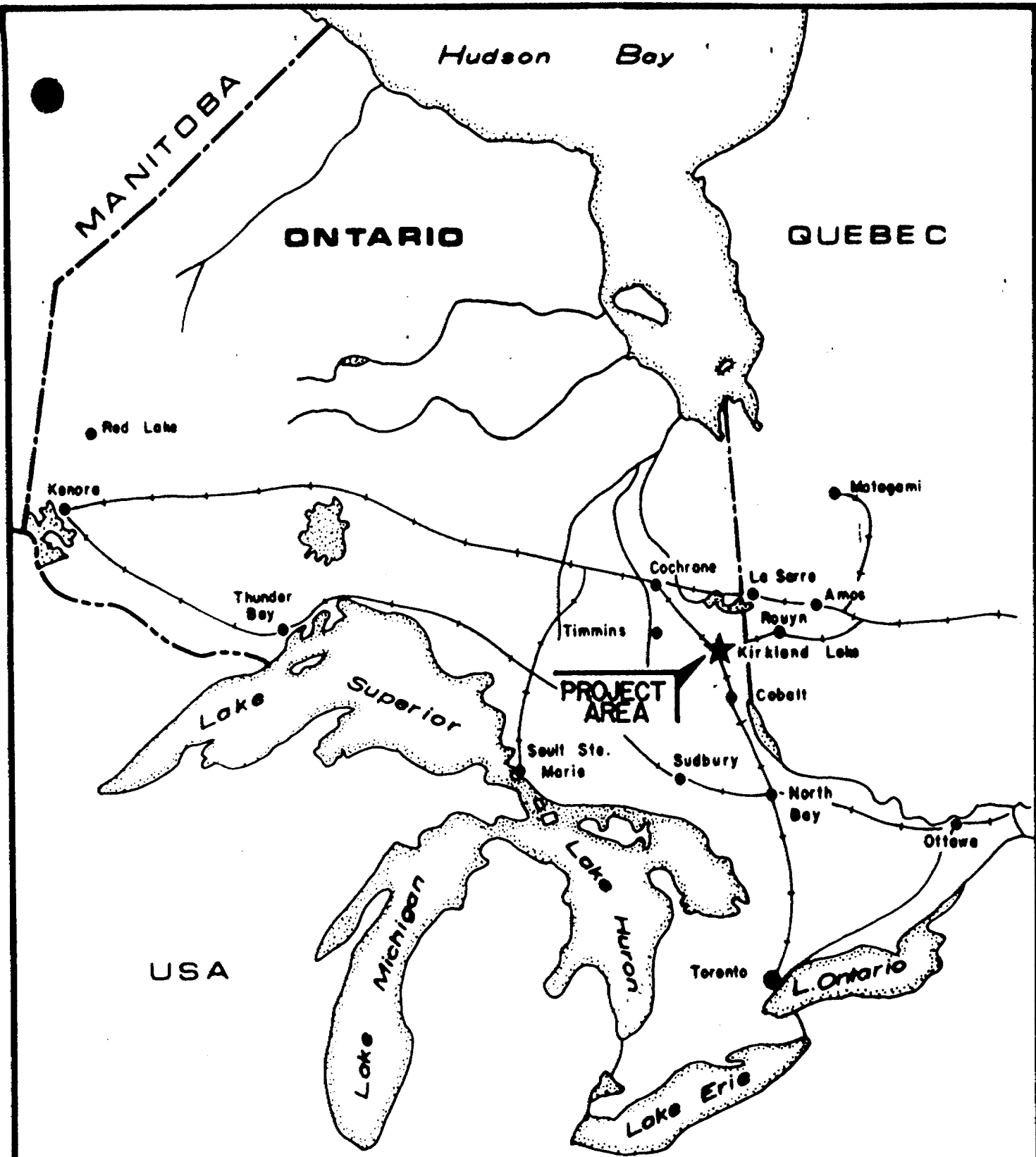
Once the bedrock was adequately exposed detailed geological mapping and rock sampling was performed from a grid.

2.0 PROPERTY AND LOCATION

The Gull Lake property consists of 20 contiguous, unpatented mineral claims, totalling approximately 780 acres located in the western portion of Lebel Township, Larder Lake Mining Division. These claims are registered in the name of Homestake Explorations Limited and are listed below:

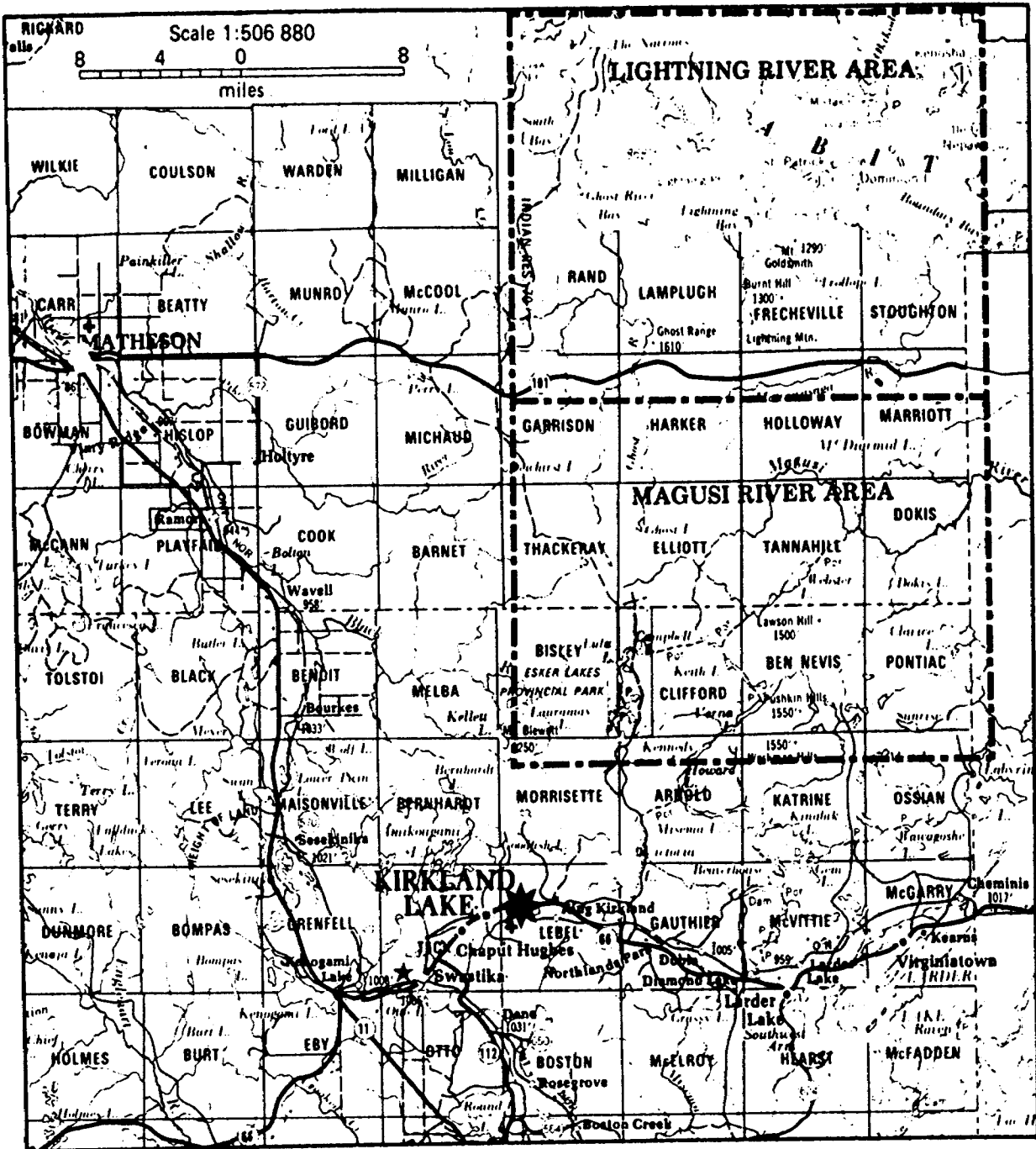
L 531754	L 643183+87
L 643213-14	L 644488-89
L 644478-81	L 800153-56
L 644007-08	L 802410-12

The property is located 1.5 miles east of the town of Kirkland Lake and is accessible by two gravel roads which connect to Highway 66 along the northern portion of the claim group.



HOMESTAKE EXPLORATIONS LIMITED											
<u>LOCATION MAP</u>											
CEP CONSULTING											
<table border="0"> <tr> <td>KM</td> <td>0</td> <td>100</td> <td>200</td> <td>300</td> </tr> <tr> <td>MILES</td> <td></td> <td>100</td> <td>200</td> <td></td> </tr> </table>	KM	0	100	200	300	MILES		100	200		1 : 6,256,000
KM	0	100	200	300							
MILES		100	200								

FIGURE 1.



Location of claim L-531754, Lebel Township



3.0 BRIEF REVIEW OF EXPLORATION AND DEVELOPEMENT

Claim L-531754, on which the stripping program was performed, has experienced varied exploration and developement since 1912 when the claim was first staked by T.H. Tough. In these early days trenching was carried out in various portions of the property to define the eastern extention of the Kirkland Lake Break.

In 1924 London Gull Lake Mines Limited drilled six holes in the surface mineralization encountered previously on the claim.

Between 1933 and 1935 Glenora Gold Mines Limited carried out extensive trenching and 694 feet of diamond drilling. This work was concentrated on the southwestern portion of the claim following the eastern extension of Toburn mineralization. During 1936 and 1937 Glenora Gold Mines sunk a three compartment shaft on the claim to a depth of 465 feet. Levels were established at 150, 300 and 450 feet representing some 2,578 feet of lateral developement. In addition, 7,924 feet of underground drilling was performed at that time.

In 1945 Glenora Gold Mines Limited tested the Murdoch Creek fault zone with four diamond drill holes encountering quartz-carbonate veining and syenite.

In 1963 the claim reverted to the Crown and after various restakings and minor exploration C. P. Frobes staked the property in 1979 and performed sufficient work to keep it in good standing. In 1982 North Kirkland Mines Ltd. optioned the property from Forbes and in 1983 commenced a program of shaft dewatering, rehabilitaton, underground mapping, sampling and surface drilling. The results of this work are only partially available.

In 1986 the property was optioned to Homestake Explorations Limited of Toronto.

4.0 GENERAL GEOLOGY

The Gull Lake property adjoins the Toburn Mine to the east and is underlain by rocks of similar composition to those found on the past producing properties in the Kirkland Lake Camp.

It is well known that the Kirkland Lake Gold camp represents a linear structure along which seven mines produced to date some 23 million ounces of gold since 1913. The gold deposits of the Camp are associated to a fault structure which is referred to as the Kirkland Lake Main Break. This structure trends east-northeast to west-southwest and represents a deep seated rift along which syenitic rocks were intruded. Ore bodies occur along the main break or along subsidiary breaks and are associated with mineralized quartz-carbonate veins. Most of the gold ore is associated with the syenite intrusions but may also occur in the host Timiskaming sediments.

Claim L-531754 is underlain predominantly by east-west trending Timiskaming tuff and conglomerate which dips moderately south. At the tuff - conglomerate contact a quartz-carbonate vein system extends onto the claim from the adjoining Toburn property and appears to be the surface trace of the main south vein mined at the Toburn. This vein was explored on the claim by the Glenora shaft and underground workings and appears to represent a narrow discontinuous vein system with mineralized shoots ranging from 45 to 525 feet in length with an average width of 1.6 feet. The majority of the mineralization is hosted in tuff but a body of syenite was mapped on the third level (300 feet) that was reported as being barren.

5.0 RESULTS OF 1986 STRIPPING, MAPPING AND SAMPLING PROGRAM

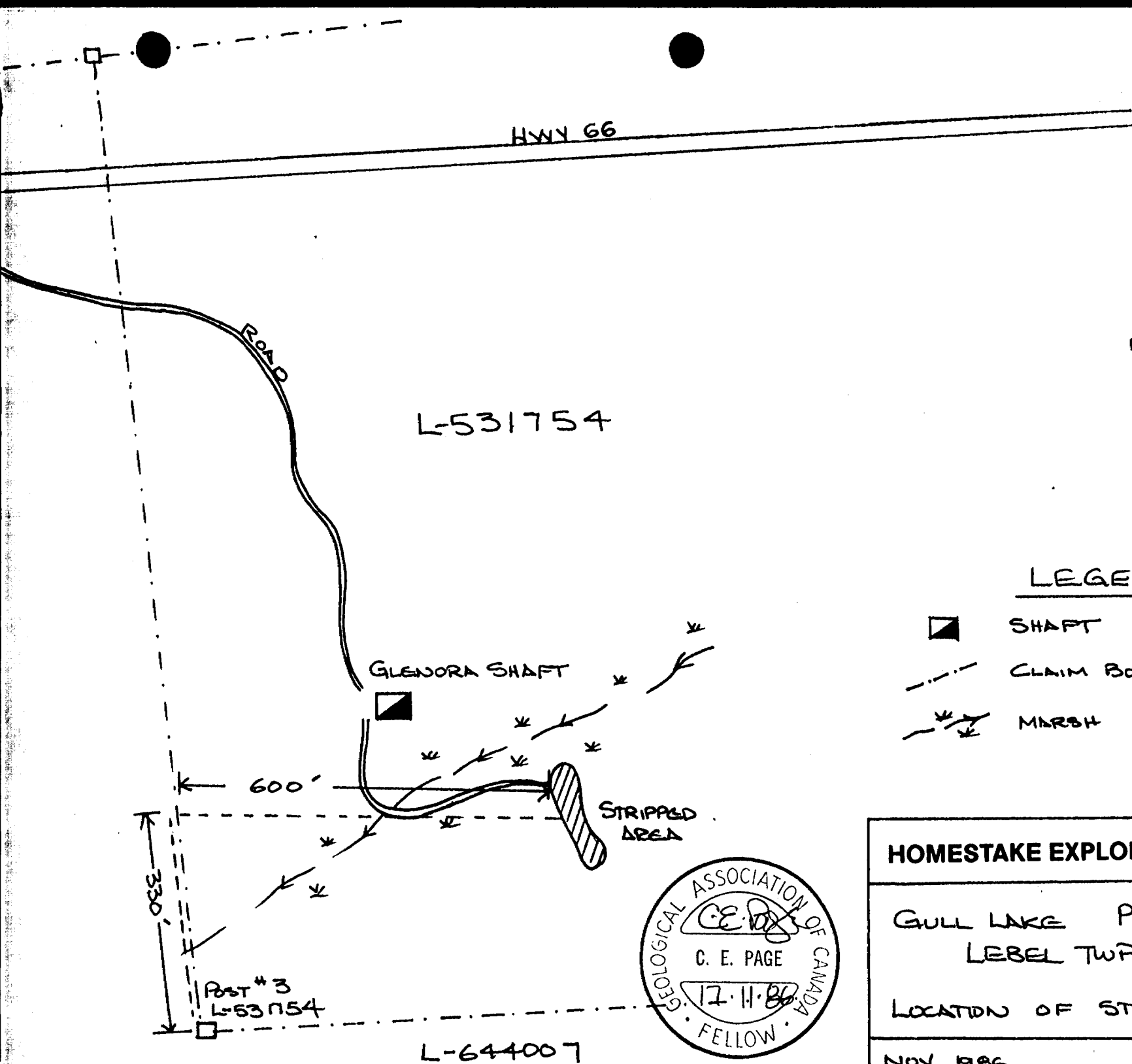
Between October 16 and 22, 1986 a program of surface stripping, geological mapping and sampling was carried out some 260 feet east-southeast of the Glenora shaft. This location was chosen to test the area in the vicinity of the Murdoch Creek fault zone for the presence of intrusive syenite.

An hydraulic excavator was employed to remove the vegetation and overburden to the bedrock surface. Further stripping and washing was accomplished using a high pressure hose and pump. This work exposed an elongated, outcrop area measuring approximately 140 feet long and 55 feet wide orientated in a near north-south direction. The depth of overburden removed in this area ranged from 2 to 8 feet.

Geological mapping of the outcrop area revealed three distinct lithologies. Altered greywacke to the north, massive unaltered greywacke in the center and fractured syenite to the south. The altered greywacke unit appears syenitized with abundant streaks and seams of black specularite. Shearing and fractures parallel the specularite seams in a N 45 degrees E orientation and dip vertical to steeply southeast. This attitude parallels the Murdoch Creek fault zone. Narrow quartz filled fractures are associated to parts of the shearing.

The central portion of the outcrop area is composed of massive, unaltered greywacke which displays a bedding attitude of N 85 degrees E with a steep southerly dip. Beds range from 1 inch to 6 inches thick and display local contortions in the vicinity of micro fracturing. Three sets of fault-fractures occur within this unit, the most abundant is N 45 degrees E dipping 90 degrees southeast, followed by a set bearing N 45 degrees W dipping 85 degrees northeast and a minor set trending N 02 degrees W and dipping 85 degrees east.

The southern portion of the outcrop area is represented by sheared and fractured syenite. It is deep red in colour and appears to represent a variety of the felsic syenite in the Kirkland Lake camp. The contact between the unaltered greywacke and the syenite is sheared and faulted with an orientation of N 70 degrees E dipping 70 degrees south. Prominant shearing in the syenite is N 55 degrees E dipping 90 degrees south. This shearing contains trace amounts of pyrite with seams of specularite.



N
 SCALE
 1" = 200'

LEGEND

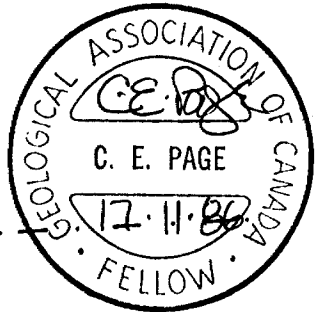
- ▣ SHAFT
- · - · CLAIM BOUNDARY
- ~ - ~ MARSH

HOMESTAKE EXPLORATIONS LIMITED

GULL LAKE PROPERTY
 LEVEL TWP. L-531754

LOCATION OF STRIPPING PROGRAM

NOV. 1986 C.E. PAGE



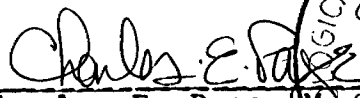
A total of nine chip samples were taken over the outcrop surface with representation from each lithology. The samples represented approximately a 1 foot length and were taken from the sheared and fractured portions of the outcrop. Five of the nine samples returned weakly anomalous gold values ranging from 10 to 30 ppb.

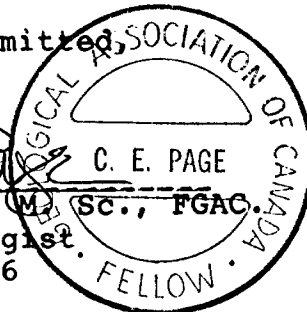
6.0 CONCLUSIONS AND RECOMMENDATIONS

The stripping and sampling program southeast of the Glenora shaft did not intersect the heart of the Murdoch Creek fault zone as planned but appears to have exposed outcrop along the southern fringe as indicated by the intense fracturing and alteration along the north portion of the stripped area. Of geological significance is the presence of sheared syenite at the south end of the outcrop area. Syenite in the past has not been recorded on this portion of the property and further work is warranted due to its geological significance in the camp as a host for gold mineralization.

To further evaluate the significance of the syenite body uncovered diamond drilling and/or additional stripping is recommended.

Respectfully submitted,


Charles E. Page, M. Sc., FGAC.
Consulting Geologist
November 14, 1986



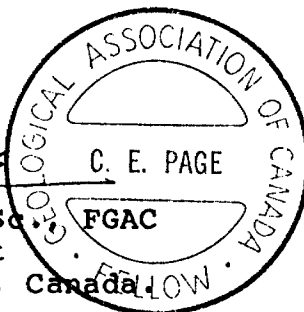
CERTIFICATE OF QUALIFICATION

I, Charles E. Page, of 1454 westbury Avenue, in the City of Burlington, in the Province of Ontario,

DO HEREBY CERTIFY:

1. THAT I am a graduate of Brock University (1975) with the degree of Bachelor of Science (B.Sc.) with Honours in Geological Sciences, and of The University of Waterloo (1983) with the degree of Master of Science (M.Sc.) in Earth Sciences.
2. THAT I am a Fellow of the Geological Association of Canada.
3. THAT I have been practicing my profession as a Geologist and engaged in exploration since 1975.
4. THAT I have examined the property and supervised the work carried out in this report.

Charles E. Page
Charles E. Page, M.Sc.
Consulting Geologist
Burlington, Ontario, Canada
November 14, 1986



Inval. 2.2990

ANALYSES



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

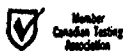
Certificate of Analysis

Certificate No. 64588 Date: October 29th, 1986
Received Oct. 22nd, 1986 33 Samples of Ore
Submitted by Homestake Exploration Ltd., Toronto, Ontario
Mr. C. Page

SAMPLE NO.	GOLD PPB
926	20
927	Nil
928	Nil
929	30
930	10
932	10
933	Nil
934	Nil

**Note: Due to the erratic nature of the results, the reject was completely pulverized, thoroughly mixed with the original and second pulp and assayed with results as shown.

Per G. Lebel
G. Lebel - Manager



ESTABLISHED 1928

CERTIFICATE OF ANALYSIS

CERTIFICATE No. HE-24/5522
 Received: Oct. 28/86
 Samples of: Rock
 Submitted by: Homestake Explorations Ltd.

Date: November 6, 1986

Att'n: Mr. C. E. Page

RESULTS IN ppm

0931

Au	.017
Ag	<.1
As	5
B	<10
Ba	133
Be	<10
Bi	<10
Cd	<10
Ce	61
Co	14
Cr	19
Cu	47
La	29
Mo	<10
Nb	<10
Ni	18
Pb	706
Sb	15
Se	56
Sn	<10
Sr	36
Te	51
Th	<10
V	18
W	82
Y	11
Zn	3639

Al	.25
Fe	3.3
Ca	.3
Mg	.08
Na	.03
K	.1
Ti	<.01
Mn	.1
P	.1

ASSAYERS (ONTARIO) LIMITED

(per) _____



42A01NE0080 2.9639 LABEL

020

HOMESTAKE EXPLORATIONS LIMITED
Vigrass Lake Property
Otto Township
Larder Lake Mining Division
Ontario

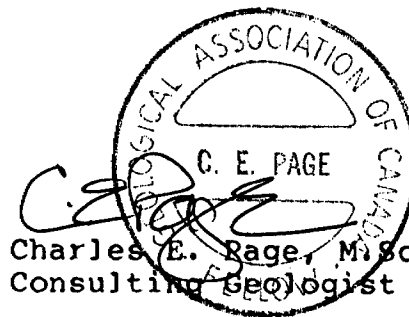
**REPORT ON THE 1986 STRIPPING, MAPPING AND SAMPLING PROGRAM
ON CLAIM L-843400, OTTO TOWNSHIP**

RECEIVED

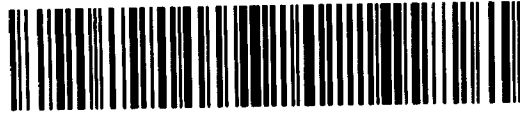
APR 23 1987

MINING LANDS SECTION

November 17, 1986.



Charles E. Page, M.Sc., FGAC
Consulting Geologist



42A01NE0080 2.9639 LABEL

020C

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6.0 CONCLUSIONS AND RECOMMENDATIONS	6
CERTIFICATE OF QUALIFICATIONS.....	7

SUMMARY

Homestake Explorations Limited carried out a stripping, geological mapping and sampling program on claim L-843400 between the dates of October 14 and 22, 1986. The claim is located on the northern boundary of Otto Township on the northeast shore of Vigrass Lake, 3/4 of a mile west of Swastika.

L-843400 represents one claim of a 22 claim property Homestake has assembled in this area straddling both the Larder Lake and Vigrass Lake fault zones. No recent exploration has been carried out on L-843400 but signs of early prospecting are indicated by the presence of two pits in the stripped area and numerous trenches elsewhere on the claim.

L-843400 adjoins the Crescent Mine property to the west and is underlain by kamatiitic metavolcanic rocks of the Larder Lake Group. The Larder Lake Break extends east-westerly across the northern portion of the claim with outcrop displaying a pervasive foliation.

Stripping was carried out 400 feet south of the Larder Lake Fault in the vicinity of two old pits. This stripping exposed an area 130 long and 80 feet wide composed of quartz vein stockwork and altered metavolcanic rocks. Intense shearing and fracturing is noted throughout the exposure associated to disseminated pyrite mineralization and carbonate. Channel and chip sampling of the area recorded anomalous gold values in 24 out of 27 samples analysed. The highest assay recorded a value of 0.363 oz. gold/ton across a width of 5 feet associated with a fractured portion of the quartz vein - stockwork material. Across the 70 foot width of the exposed area anomalous gold values ranging from 40 to 471 ppb were encountered. The most anomalous values are associated to two shear zones, one at the quartz stockwork - metavolcanic contact and the second in a parallel zone within the metavolcanic unit.

Further work on the claim is warranted and a program of data compilation and shallow diamond drilling is recommended to identify the extent and nature of the gold zone discovered.

1.0 INTRODUCTION

This report describes a stripping , geological mapping and sampling program performed on the Vigrass Lake property held by Homestake Explorations Limited. This program was carried out on claim L-843400, Otto Township, between October 14 to October 22, 1986.

The program consisted of stripping an area some 400 feet south of Highway 66 in the vicinity of two old pits. This stripping was accomplished employing an hydraulic excavator contracted from Alex MacIntyre and Associates Limited of Kirkland Lake, and high pressure hose and pump from Carl P. Forbes and Associates also of Kirkland Lake. The excavator was used to clear the vegetation and overburden down to bedrock with the high pressure washing to further expose and clean the bedrock surface.

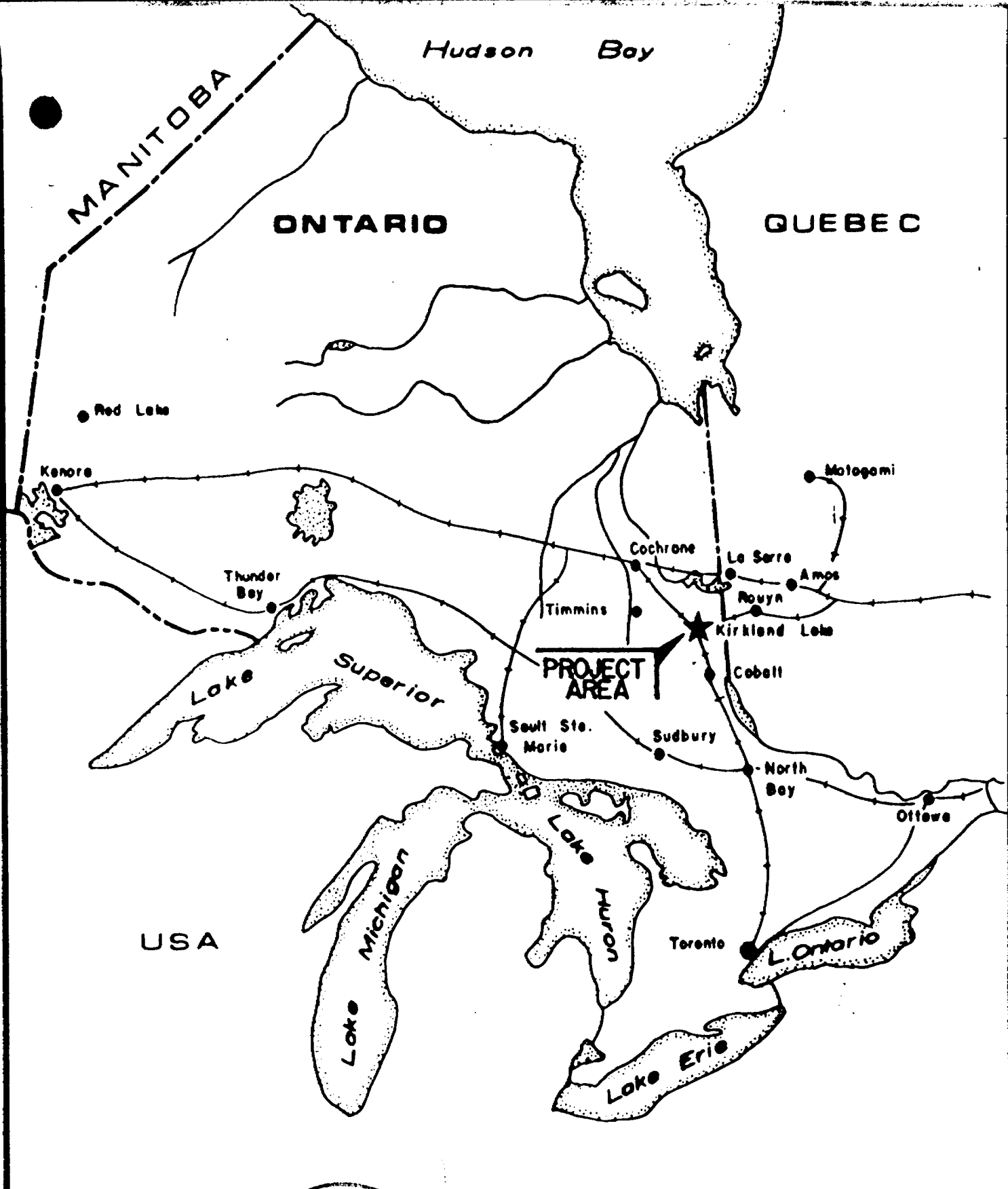
Once the bedrock surface was adequately exposed, detailed geological mapping and rock sampling was performed from a grid.

2.0 PROPERTY AND LOCATION

The Vigrass Lake property consists of 22 unpatented mineral claims totalling approximately 800 acres located in northwestern Otto Township and southwestern Teck Township. These claims are registered in the name of Homestake Explorations Limited and are listed below:

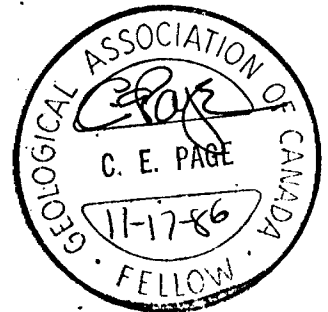
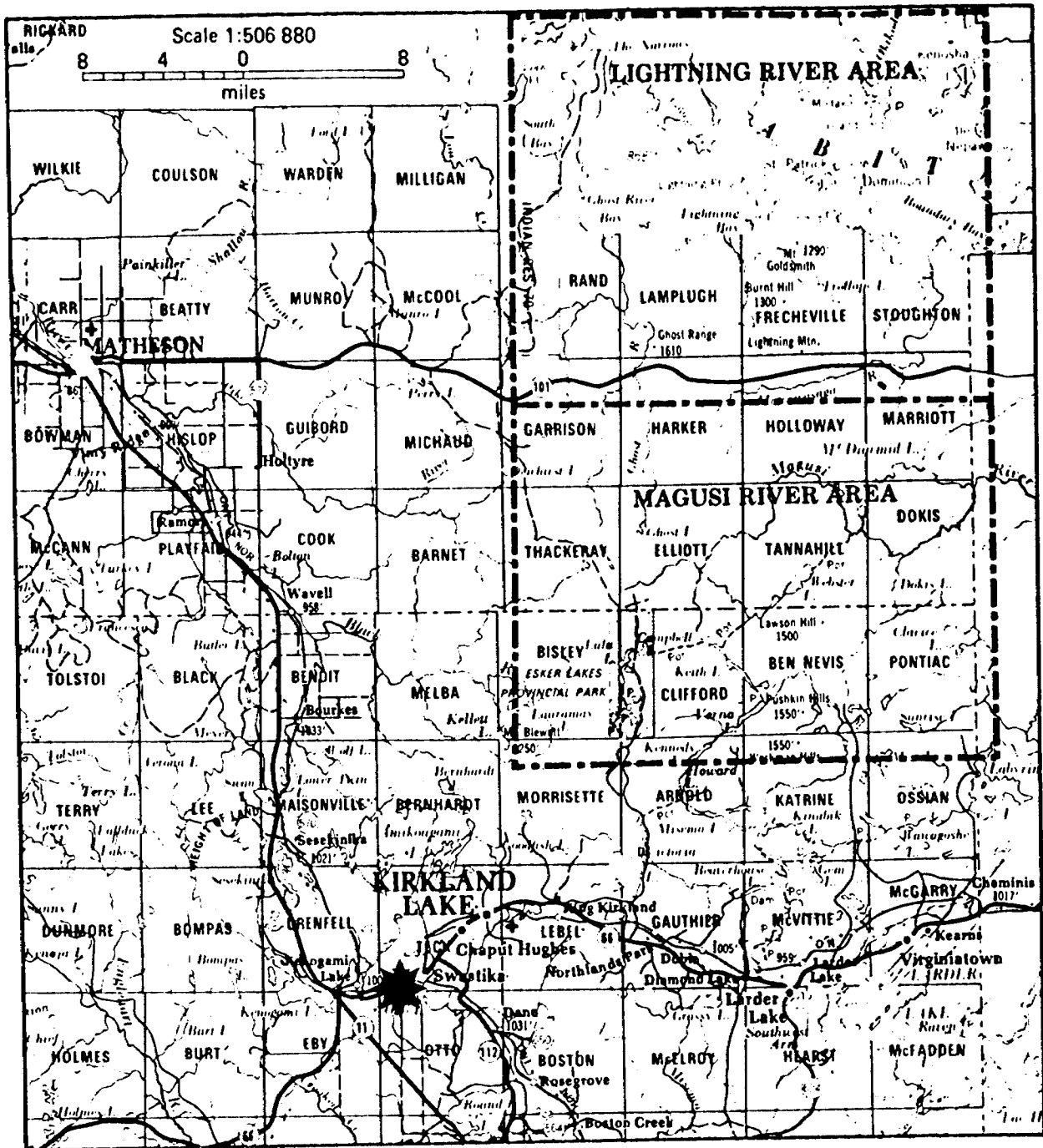
L-476845-47	L-894181	L-843837
L-927927	L-891856	L-843171
L-927914	L-891860	L-544544-46
L-892088	L-843400	L-544549
L-927921	L-842660	
L-892085	L-842782	
L-892089	L-842767	

The property is 3/4 mile west of the community of Swastika and is accessible by Highway 66 which runs through the center of the claim group.



HOMESTAKE EXPLORATIONS LIMITED											
<u>LOCATION MAP</u>											
CEP CONSULTING											
<table border="0"> <tr> <td>KM</td> <td>0</td> <td>100</td> <td>200</td> <td>300</td> </tr> <tr> <td>MILES</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	KM	0	100	200	300	MILES					1 : 8,256,000
KM	0	100	200	300							
MILES											

FIGURE 1.



3.0 BRIEF REVIEW OF EXPLORATION AND DEVELOPMENT

Claim L-843400 on which the stripping was performed has experienced no recent exploration. Two pits of unknown depth occur in the vicinity of the stripping along with numerous trenches and smaller pits over the remainder of the claim. No record of this work has been reported and based on their condition they appear to date back to 1910 during the development of the adjoining Golden Gate and Crescent Mines to the east.

Over the years various parties held this claim generally as part of a larger claim block. Exploration consisting of limited diamond drilling and geophysics was concentrated by various parties to the north testing the Larder Lake fault and to southwest in the vicinity of the Vigrass Lake fault.

Recently this claim was optioned to Homestake Explorations Limited making up part of a larger 22 claim block in the area.

4.0 GENERAL GEOLOGY

The Vigrass Lake property adjoins the Golden Gate and Crescent Mine properties to the west and is underlain by Timiskaming units of greywacke and conglomerate to the north of highway 66 with kamatiitic metavolcanics of the Larder Lake Group to the south. Both units are intruded by acid and basic intrusives.

A fault zone known as the Larder Lake Break occurs between the sedimentary and volcanic units and represents a boundary of a developing volcanic pile to the north composed of alkalic volcanics and sediments of the Timiskaming Group and an older stabilized pile to the south composed of kamatiitic volcanics of the Larder Lake Group. The Larder Lake break extends westward to Matachewan and eastward to the Quebec border where it is referred to as the Cadillac - Bouzan Break. This major structural feature appears important in localizing many producing mines and mineral occurrences.

Claim L-843400 is underlain predominantly by metavolcanic rocks of kamatiitic composition trending N 70 degrees E and dipping steeply south. Old pits and trenches have been dug on quartz veins and stockwork which are generally conformable to the volcanics.

To the south of the quartz stockwork is a unit of less altered volcanic rock displaying a weak foliation parallel to the shear zones that dip steeply south. A 2 inch wide quartz filled fracture cuts these volcanics at N 85 degrees W. Two narrow felsic dikes also occur within this unit trending N 45 degrees W.

Sampling of the stripped outcrop surface employed the use of a rock saw with a impregnated diamond blade. The saw was used to cut 2 inch wide, 3/4 inch deep channel samples across the outcrop surface which were taken at 5 foot intervals. A total of 20 channel samples were taken over the stripped area normal to shearing representing a full cross section of the outcrop. In addition 7 chip samples were collected in the areas that were difficult to channel.

Anomalous gold values ranging from 40 to 471 ppb were recorded in 24 out of 27 samples analysed, across the width of the exposure for 70 feet. One channel sample taken from a portion of the quartz vein stockwork between the two old pits returned 0.363 oz. gold/ton across 5 feet. This sample is associated to a fracture containing pyrite and chlorite. The sheared contact-pyrite zone between the quartz stockwork and the altered metavolcanic rocks to the north records anomalous values greater than 250 ppb. Another anomalous zone is located in the altered metavolcanic unit some 25 feet north of the contact zone in the vicinity of quartz veinlets and disseminated pyrite. Here anomalous gold values range from 160 to 240 ppb.

In addition to the sampling of the stripped area two chip samples were taken elsewhere on the property. One taken from an old trench located approximately 200 feet east of the stripped area containing quartz, pyrite and chalcopyrite returned an assay of 0.032 oz. gold/ton. The other sample taken from a roadcut on Highway 66 in the vicinity of the Larder Lake Break returned 32 ppb from an altered, carbonated volcanic unit. This sample was taken on adjoining claim L-842660.

5.0 RESULTS OF THE 1986 STRIPPING, MAPPING AND SAMPLING PROGRAM

Between October 14 and 22, 1986 a program of surface stripping, geological mapping and sampling was carried out in the center of claim L-843400, some 400 feet south of highway 66. This work occurred in the vicinity of two old pits that were dug into a quartz vein stockwork.

An hydraulic excavator was employed to remove the vegetation and overburden to the bedrock surface. Further stripping and washing was accomplished using a high pressure hose and pump. This work exposed an area measuring 130 feet long and 80 feet wide with an average overburden thickness of 4 feet.

Geological mapping of the outcrop area exposed a central mass of quartz vein stockwork measuring 30 feet thick displaying local fracturing and brecciation. It is within this mass that two old exploration pits are located. This silicious unit trends N 65 degrees E with an apparent southerly dip. Fractures with the same attitude contain chlorite seams and trace amounts of pyrite.

The quartz vein stockwork zone is in contact with an altered metavolcanic unit to the north. The contact is heavily sheared and is represented by a 1 foot to 8 foot wide zone of quartz veining, sheared-carbonated volcanic rock and disseminated pyrite mineralization (3%), trending N 65 degrees E and dipping steeply north. North of the contact zone the volcanic unit is altered containing carbonate and pyrite (1%).

At the north end of the stripped area a small mass of quartz occurs which is cut by a second shear zone with the same orientation as the first. This narrower shear (1 foot wide) extends into the volcanic rocks where locally it contains up to 3% pyrite. The remainder of the volcanic unit displays extensive foliation parallel to the shear zones.

Two sets of faulting cut the altered volcanic unit one bearing N 85 degrees W, dipping south at 60 degrees and the other bearing N 55 degrees E.

941
32 PPG Au

HWY 66

POST #
L-843

842 660

595 FT

400 FT
ROAD

S-2
0.032 oz/ton, Au

STRIPPED
AREA

843400

9760



LAKE

HOMESTAKE EXPLORATIONS LIMITED

LEGEND

⊗ SAMPLE LOCATION
AND ASSAY RESULT

↘*
* CREEK

-.-.- CLAIM BOUNDARY

SCALE
1" = 20'

VIGRASS LAKE PROPERTY, OTTO TWP.
CLAIM L-843400

LOCATION OF STRIPPING PROGRAM

NOV 1986

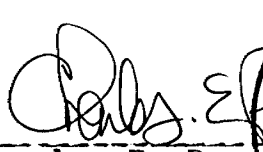
CG PAGE

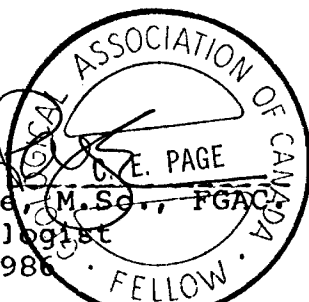
6.0 CONCLUSIONS AND RECOMMENDATIONS

The stripping and sampling program on claim L-843400 uncovered an anomalous gold zone associated to a quartz vein stockwork and altered metavolcanic rocks. The zone is located approximately 400 feet south of the Larder Lake fault displaying a similar attitude and west of the Crescent Mine. Gold values returned from the sampling of this zone appear to be associated to shears and fractures both within the quartz stockwork and along the contact with the metavolcanics. Unlike the Crescent Mine to the east where flat quartz veins were mined at or near the contact of intrusive syenite, to date no syenite has been noted in the vicinity of the surface stripping.

Based on the widespread distribution of anomalous gold values recorded on the stripped area and its proximity to a major gold structure further work is warranted. To identify the nature and extent of the gold zone uncovered a comprehensive review of all data available on the area combined, with a shallow diamond drill program is recommended.

Respectfully submitted,


Charles E. Page, M.Sc., FGAC
Consulting Geologist
November 14, 1986

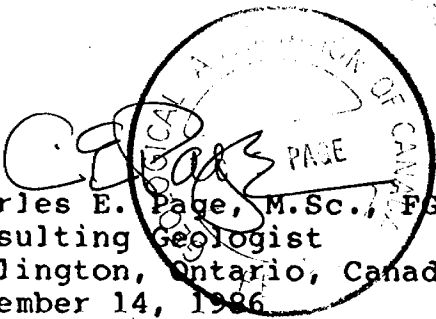


CERTIFICATE OF QUALIFICATION

I, Charles E. Page, of 1454 westbury Avenue, in the City of Burlington, in the Province of Ontario,

DO HEREBY CERTIFY:

1. THAT I am a graduate of Brock University (1975) with the degree of Bachelor of Science (B.Sc.) with Honours in Geological Sciences, and of The University of Waterloo (1983) with the degree of Master of Science (M.Sc.) in Earth Sciences.
2. THAT I am a Fellow of the Geological Association of Canada.
3. THAT I have been practicing my profession as a Geologist and engaged in exploration since 1975.
4. THAT I have examined the property and supervised the work carried out in this report.


Charles E. Page, M.Sc., FGAC
Consulting Geologist
Burlington, Ontario, Canada.
November 14, 1986

ANALYSES



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 64588

Date: October 29th, 1986

Received Oct, 22nd, 1986 33 Samples of Ore

Submitted by Homestake Exploration Ltd., Toronto, Ontario

Mr. C. Page

SAMPLE NO.	GOLD PPB		SAMPLE NO.	GOLD PPB
901	40		917	130
902	150		918	400/340
903	60 Oz/ton		919	160
**904	0.320/0.470/0.300		920	280
905	70		921	120
906	260		922	310/210
907	10	OTTO	923	80
908	90		924	60
909	Nil		925	Nil
910	70		926	20
911	160		927	Nil
912	240		928	Nil
913	210		929	30
914	170		930	10
915	130	LEBEL	932	10
916	80		933	Nil
			934	Nil

**Note: Due to the erratic nature of the results, the reject was completely pulverized, thoroughly mixed with the original and second pulp and assayed with results as shown.

Per G. Lebel
G. Lebel - Manager





SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 64536

Date: October 22nd, 1986

Received Oct. 16th, 1986 2 Samples of Rock

Submitted by Homestake Exploration Ltd., Toronto, Ontario

Attention: Mr. C. Page

SAMPLE NO.	GOLD Oz/ton
S-1	0.002
S-2	0.030/0.035

Per

G. Lebel - Manager

CERTIFICATE OF ANALYSIS

CERTIFICATE No. HE-24/5522

Date: November 6, 1986

Received: Oct. 28/86

Samples of: Rock

Submitted by: Homestake Explorations Ltd.

Att'n: Mr. C. E. Page

RESULTS IN ppm

	0941	0942
Au	.032	.471
Ag	.7	1.0
As	134	468
B	16	<10
Ba	10	20
Be	<10	<10
Bi	<10	43
Cd	<10	11
Ce	<10	<10
Co	54	40
Cr	203	36
Cu	35	314
La	<10	<10
Mo	<10	233
Nb	<10	<10
Ni	596	48
Pb	34	95
Sb	34	50
Se	72	110
Sn	<10	18
Sr	397	59
Te	33	41
Th	<10	<10
V	51	39
W	22	34
Y	<10	<10
Zn	55	106
Al	.41	5.3
Fe	3.2	7.4
Ca	10.4	6
Mg	7.5	2.6
Na	.02	.01
K	.1	.2
Ti	<.01	<.01
Mn	.08	.2
P	<.01	.08

ASSAYERS (ONTARIO) LIMITED

Recorded Holder _____

HOMESTAKE EXPLORATION

Township or Area _____

LEBEL TOWNSHIP



42A01NE0080 2.9639 LEBEL

900

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days	<p>\$101.25 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIM:</p> <p style="text-align: center;">L 531754</p>
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	<p>6.75 ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.</p>
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.



Date
May 13, 1987

Mining Recorder's Report of Work No.
515/86

Recorded Holder
HOMESTAKE EXPLORATIONS LIMITED

Township or Area
OTTO TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	<p>\$344.25 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIM: L 843400</p> <p>22.95 ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.</p>

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.



Recorded Holder
HOMESTAKE EXPLORATIONS LIMITED

Township or Area
LEBEL AND OTTO TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological <u>14</u> days Geochemical _____ days Man days <input checked="" type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	L 843400

Special credits under section 77 (16) for the following mining claims

[Empty box for special credits]

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

L 842782
800156

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

June 2, 1987

Your File: Nos. 513,515/86
Our File: 2.9639

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated May 13, 1987
Data for Assaying and Geological Survey
on Mining Claims L 531754, et al, in
Lebel Township

The assessment work credits, as listed with the above-mentioned
Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and
so indicate on your records.

Yours sincerely,

Gary L. Weatherson, Manager
Mining Lands Section
Mineral Development and Lands Branch
Mines and Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

DK/mc

cc: Homestake Explorations Limited
Suite 800
111 Richmond Street West
Toronto, Ontario
M5H 2G4

Charles E. Page
1454 Westbury Avenue
Burlington, Ontario
L7P 1M2

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Kirkland Lake, Ontario

Encl.

MORRISETTE TP.

TOPOGRAPHY
SHEETS AND ATLAS ETC. FROM FOREST RESOURCES
INVENTORY SHEETS 481794, 481801, 482784, 482801

SURVEYS
FIELD NOTE BOOKS: 2430, 2665, 3341, 3525
PLANS: W-15, W-15-12, M-15-30, W-15-12, N-12-4, P-16-14,
S-10-10, S-11-25, V-11-2, V-13-4, V-15-45

HIGHWAYS
HIGHWAYS THROUGH CROWN LANDS FROM MINISTRY OF
TRANSPORTATION AND COMMUNICATIONS SURVEY PLANS
AS NOTED.

AREAS WITHDRAWN FROM DISPOSITION

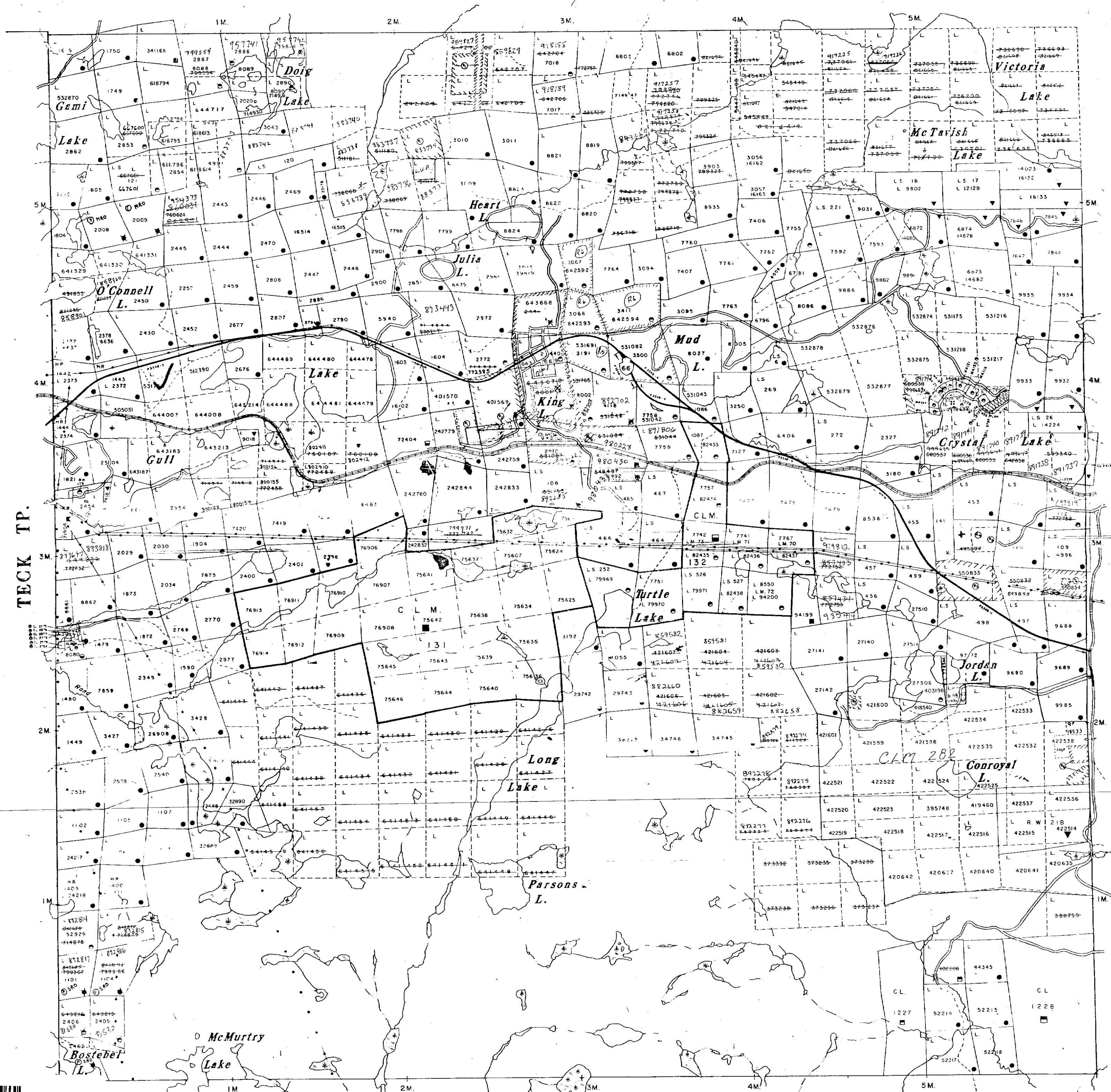
SR - SURFACE RIGHTS MR - MINING RIGHTS

Description	Order No.	Date	Disposition	File
			201/65 SR	165484
			W106/82	6/1/82 MRO
			CROWN RES.	164586

SAND AND GRAVEL

- ⑤ GRAVEL FILE 38581
- ⑤ GRAVEL FILE 8816
- ⑤ M.T.C. GRAVEL PIT No.513
- ⑤ GRAVEL FILE 29795
- ⑤ GRAVEL FILE 42354
- ⑤ GRAVEL FILE 105110

Wings 2/15/83 S.K.O.
+ Reserve surface rights in any to-shedding
at the claim holder's
⑤ W 9/18/80 24/10/80 S.K.O.
⑤ W 10/22/86 01/03/86 S.M.
D. White - memo re: proposed application for surface rights



GAUTHER TP.

TECK TP.

BOSTON TP.

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

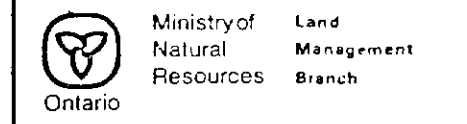
DISPOSITION OF CROWN LANDS

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	◘

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8 1912, ISSUED IN ORIGINAL PATENTS BY THE PUBLIC LANDS ACT, R.S.O. 1910, CHAP. 200, SEC. 63 SUBSEC. 1.

SCALE: 1 inch 20 chains

TOWNSHIP
LEBEL
M.N.R. ADMINISTRATIVE DISTRICT
KIRKLAND LAKE
MINING DIVISION
LARDER LAKE
LAND TITLES / REGISTRY DIVISION
TIMISKAMING



Date: MARCH 1982

G-639



42401NE0800 2.9639 LEBEL

THE TOWNSHIP OF
OF
OTTO

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	⊙ or ⊕
CROWN LAND SALE	C.S.
LEASES	⊙
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	⋈
CANCELLED	⊙
PATENTED S.R.O.	⊙

NOTES

400' surface rights reservation along the shores of all lakes and rivers.
 Withdrawn
 (R) See 36/10, w. 9/10 24/10/10 mrs
 * Applies under the Public Lands Act - Sec 31(b) of the Mining Act.

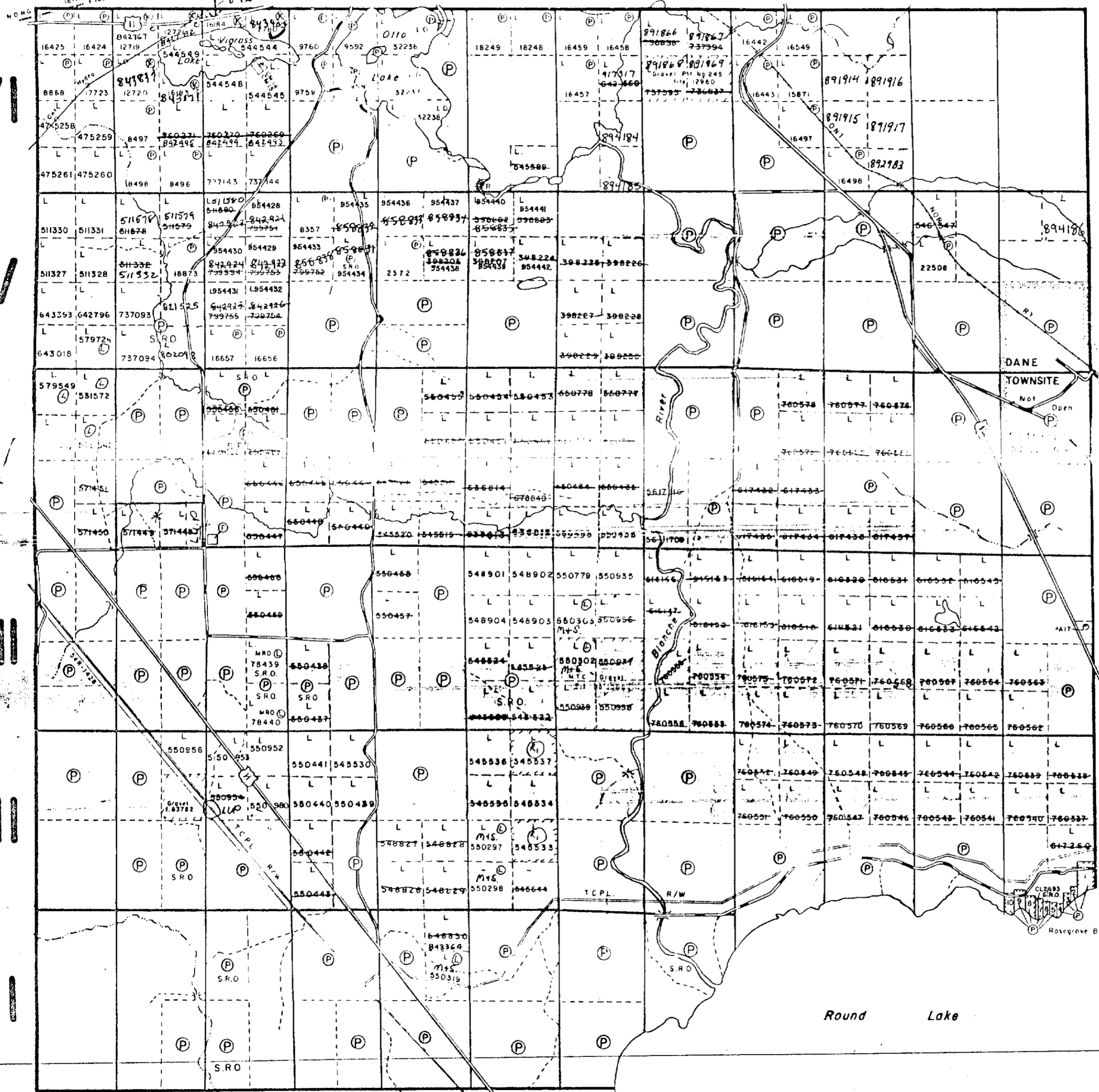
DATE OF ISSUE
 APR 29 1981
 LARDER LAKE
 MINING DIVISION'S OFFICE

PLAN NO. **M-379**

ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEYS AND MAPPING BRANCH

TECK TP. - M.392

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



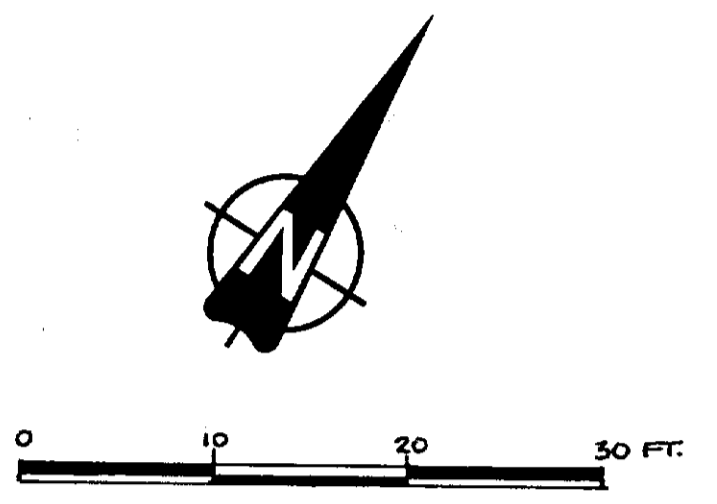
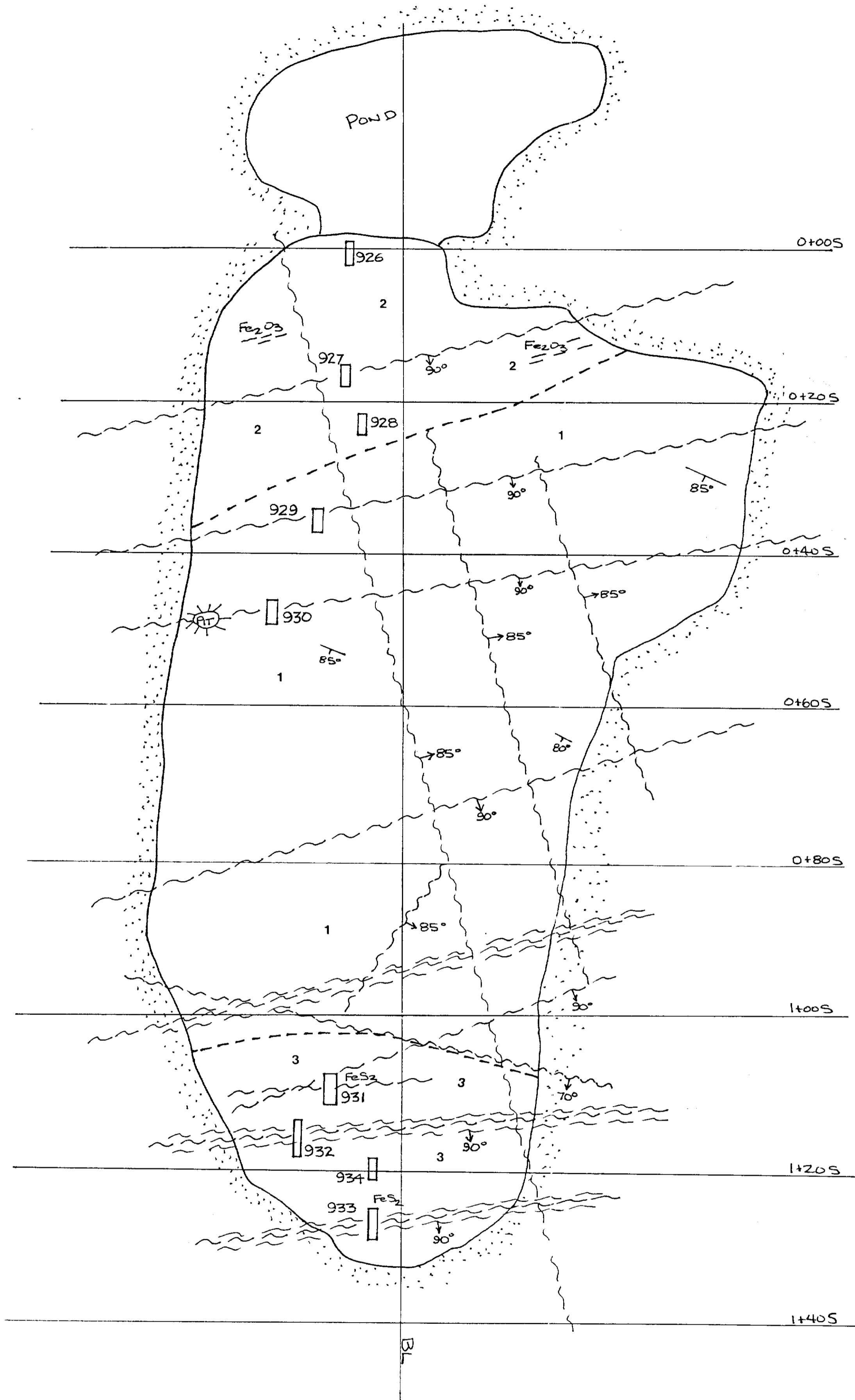
VI

V

EBY TP. - M.345

BOSTON TP. - M.332





SAMPLE RESULTS		
No.	LENGTH (FT)	Au ASSAY (PPB)
926	1	20
927	1	NIL
928	1	NIL
929	1	30
930	1	10
931	1	17
932	1	10
933	1	NIL
934	1	NIL

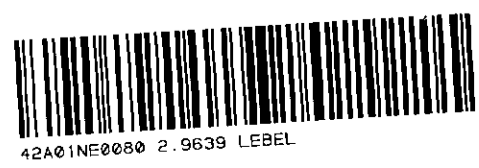
LEGEND

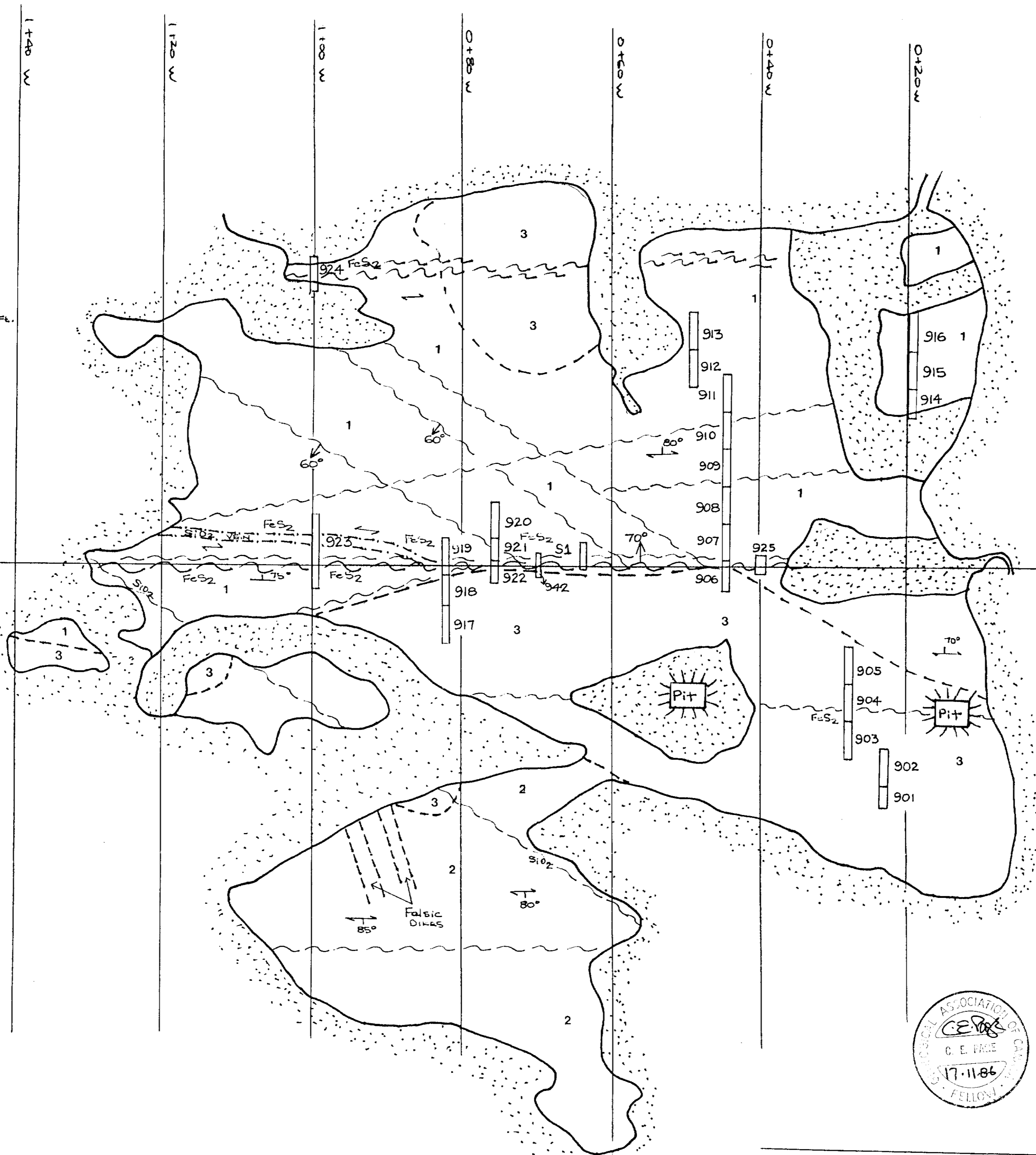
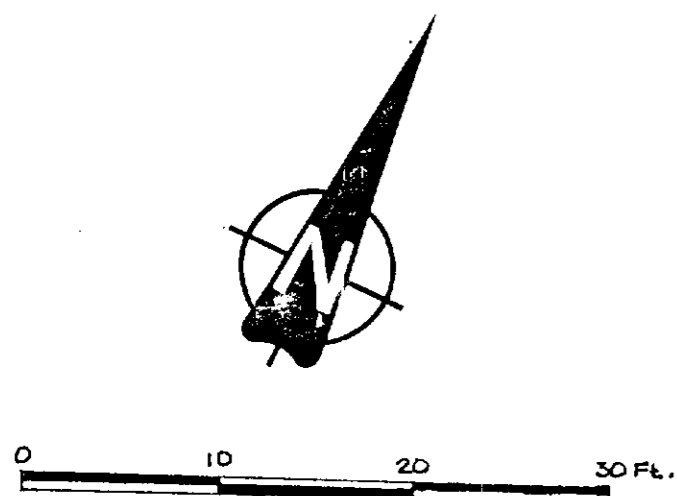
- 1 MASSIVE GREYWACKE
- 2 ALTERED GREYWACKE
- 3 SYENITE
- FAULT
- SHEAR
- FeS₂ PYRITE
- Fe₂O₃ SPECULARITE
- SAMPLE LOCATION
- DRIFT COVER



HOMESTAKE EXPLORATIONS LTD.
 GULL LAKE PROPERTY
 LEBEL TWP.
 STRIPPING, SAMPLING, MAPPING
 PROGRAM
 Nov. 1986 C.E. PAGE

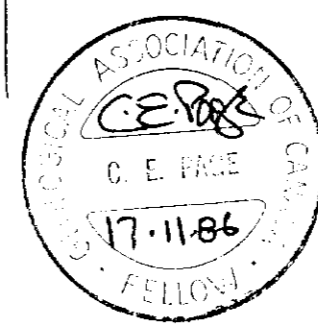
27639





SAMPLE RESULTS		
No.	LENGTH (feet)	Au ASSAY (PPB)
901	3	40
902	5	150
903	5	60
904	5	.363 oz/ton
905	5	70
906	4	260
907	5	10
908	5	90
909	5	NIL
910	5	70
911	5	160
912	5	240
913	5	210
914	5	170
915	5	130
916	4	80
917	5	130
918	4	400/340
919	5	160
920	5	280
921	3	120
922	3	310/210
923	10	80
924	4	60
925	1	NIL
S1	2	.002 oz/ton
942	2	471

LEGEND	
[1]	ALTERED FOLIATED METAVOLCANICS
[2]	ALTERED METAVOLCANICS
[3]	QUARTZ STOCKWORK-BRECCIA
~~~~~	FAULT
~~~~~	SHEAR
FeS ₂	PIRIT
⊙	DRIFT COVERED
901	SAMPLE LOCATION AND NUMBER



HOMESTAKE EXPLORATIONS LTD
 VIGRASS LAKE PROPERTY
 OTTO TOWNSHIP
 STRIPPING, SAMPLING, MAPPING PROGRAM
 Nov. 1986 C.E. PAGE

Q 9639

