WEM William E. MacRae Geological Services

010

PROGRESS REPORT

ON

LONG LAKE CLAIM GROUP - WEST BLOCK

IN

MACKLEM TOWNSHIP

OVERBURDEN DRILLING RESULTS

PORCUPINE MINING DIVISION

DISTRICT OF COCHRANE

FOR

HILTON RESOURCE CORPORATION

W. MacRae
April 16, 1986

Qual. 2.3027

SUMMARY OF WORK

TOTAL FOOTAGE DRILLED	796
NUMBER OF HOLES	9
OPERATING DAYS	4
COST OF DRILLING	$5634.92
CREDITS EARNED AT $15.00/DAY	375
CREDITS REQUESTED IN THIS REPORT	360

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INTRODUCTION

This report details an overburden drilling program carried out on the Long Lake claim group (west block) in Macklem Township. The property consists of six (6) unpatented mining claims located 22 miles due east of Timmins (Figure 1 and 2).

The overburden sampling program employed a reverse circulation drill system mounted on skids and moved by a tree skidder. The program covered four days from January 16 to January 19, 1986 inclusive and was carried out by Dominik Drilling (1981) Inc. of Timmins, Ontario.

LOCATION AND ACCESS

The Long Lake claim group is located on the eastern shore of Night Hawk Lake, in the southern part of Macklem Township, northeastern Ontario. The property is 22 miles east of the city center of Timmins.

Access to the property is via paved Highway 101 east from Timmins to just east of the Highway 65 junction, then south on a gravel timber access road (Gibson Lake road) to the northeast corner of the property. Logging roads and trails west of the Gibson Lake road provide access to most of the property.

TOPOGRAPHY AND DRAINAGE

The terrain in Macklem Township is relatively flat and typical of heavily glaciated shield areas. Relief is

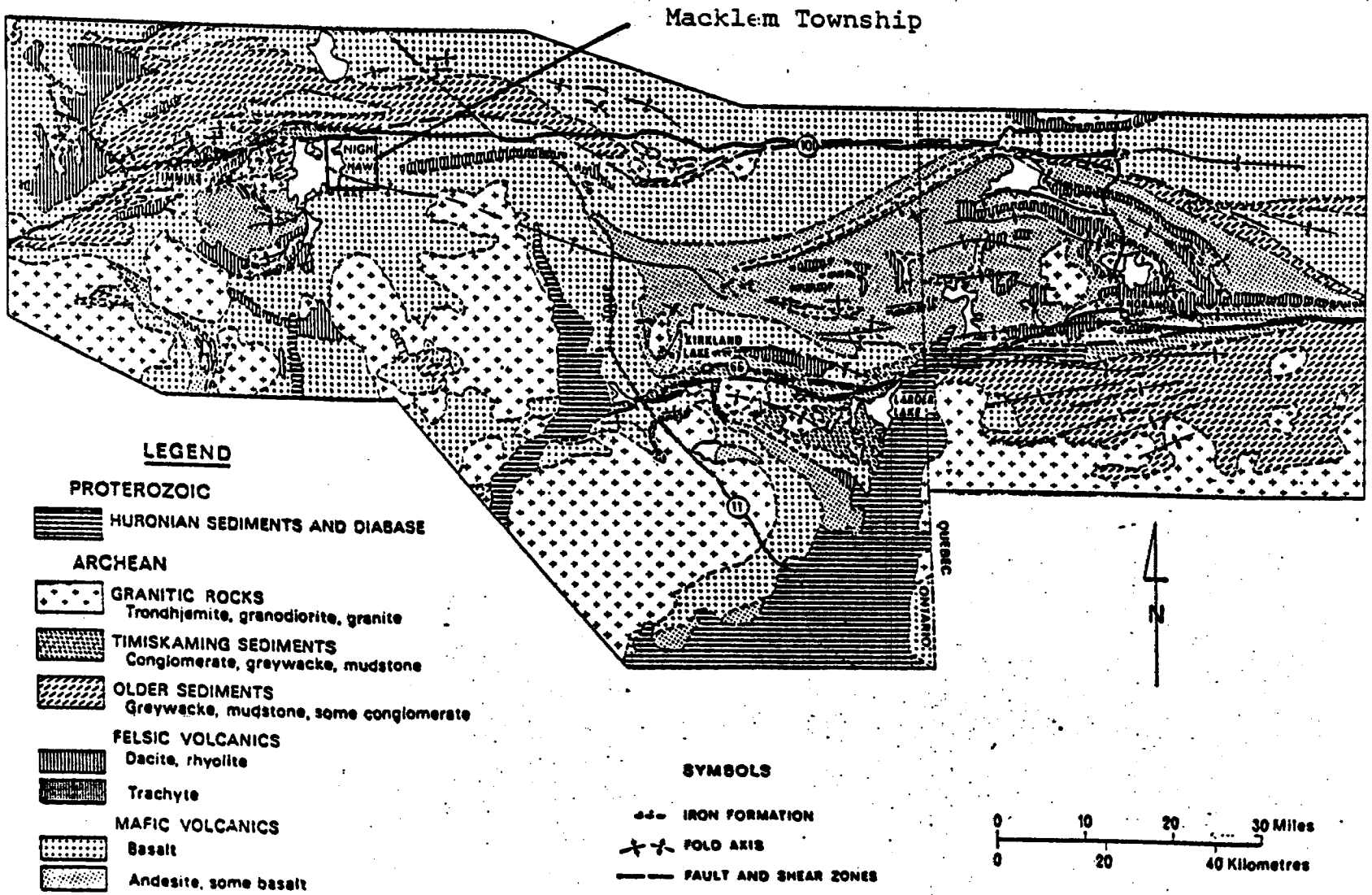


Figure 1. Location Map, Macklem Township

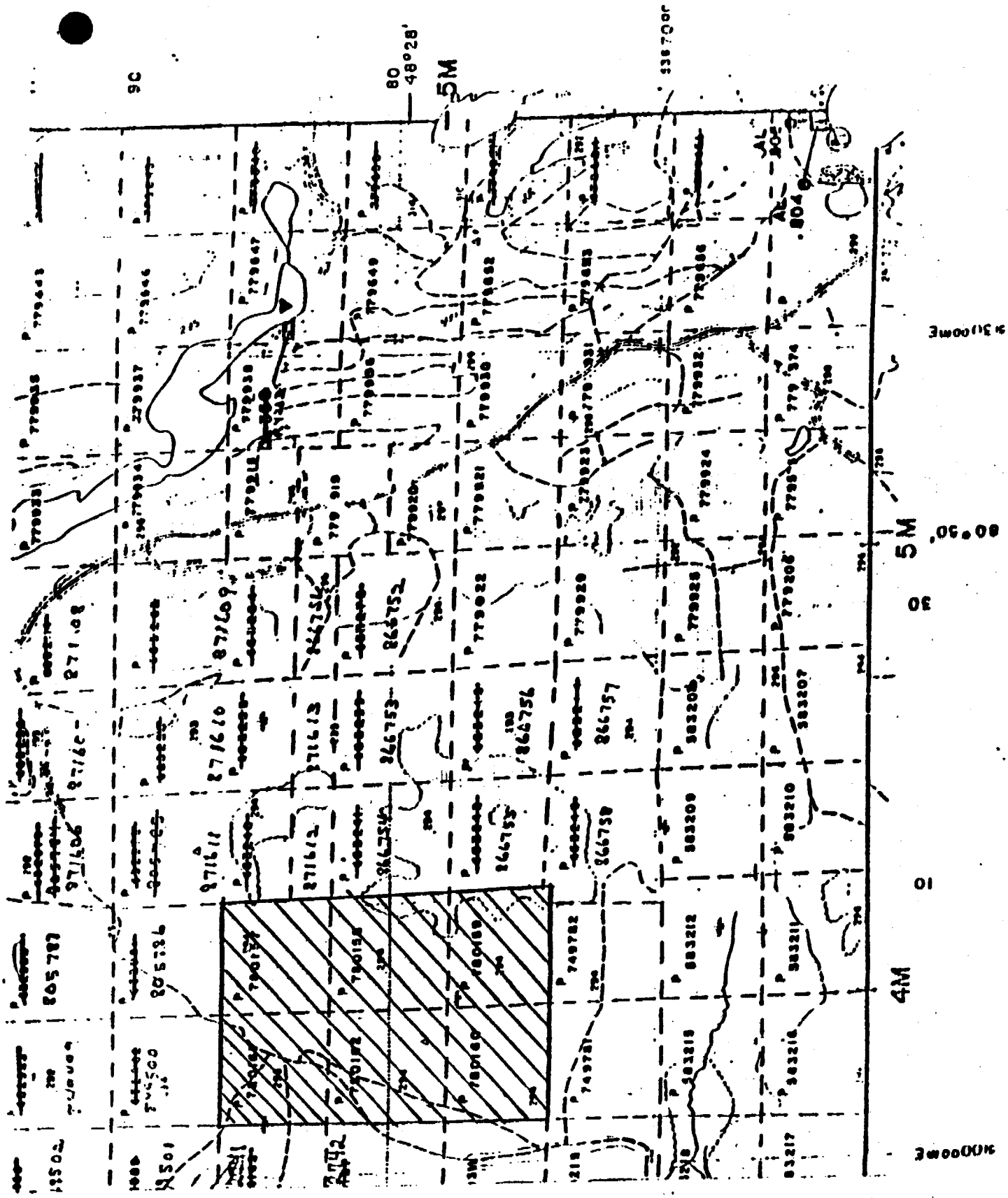


Figure 2. Claim location map, Long Lake - West Block, Macklem Twp. (1:20,000).

low with rounded hills reaching up to 50 feet above the local drainage. The Long Lake claim group is almost completely flat at an elevation approximatley 30 feet above that of Night Hawk Lake (895 feet).

The region is part of the James Bay - Hudson Bay watershed and drainage is roughly north. Near the western part of the property several small lakes and streams drain westward into Night Hawk Lake, which drains northerly.

PROPERTY STATUS

The Long Lake claim group west block consists of six (6) contiguous unpatented mining claims in Macklem Township, District of Cochrane, Porcupine Mining Division, Ontario. The following is a listing of the claim numbers, recording date and date on which the next assessment work is due:

Claim No.	Recording Date	Assessment Work Due	(Days)
P780157	November 17, 1983	November 17, 1986	(40)
P780158	November 17, 1983	November 17, 1986	(40)
P780159	November 17, 1983	November 17, 1986	(40)
P780160	November 17, 1983	November 17, 1986	(40)
P780161	November 17, 1983	November 17, 1986	(40)
P780162	November 17, 1983	November 17, 1986	(40)

HISTORY

In 1907, gold was discovered in Macklem Township on Gold Island, located at the northeast end of Night Hawk Lake. This was the first discovery of gold in the Porcupine Mining Camp. On the peninsula and 1-1/2 miles along strike to the west and up to 3 miles along strike to the east, subsequent gold discoveries were made. In this area five discoveries

were evaluated by shafts and underground workings. The only property to have significant production was the Porcupine Peninsula Gold Mine (now owned by Hydra Explorations Ltd.) producing, to 1948, 27,416 oz. gold from 100,000 tons of ore milled. Reserves at the Porcupine Peninsula Mine (1-1/2 miles west of Gold Island) are estimated at 1.48 million tons grading 0.123 oz. gold per ton to the 675 foot level.

The Goldhawk Porcupine Mine (including Gold Island) saw sporadic evaluation with the bulk of the underground testing undertaken from 1945 to 1950 with a new shaft sunk to 641 feet and 4 levels established. Reserves above the 225 foot level are estimated at 275,000 tons grading 0.11 oz. gold per ton.

The two properties to the east, Ronnoco and Aquarius - New Electra (along strike two and three miles respectively) have reported substantial tonnages of low grade gold mineralization with erratic higher grade zones. There has been no gold production to date from these two deposits.

During 1979-80, Pamour Porcupine Mines shipped approximately 50,000 tons of open pit ore from the Goldhawk and Porcupine Peninsula properties to their mills in Timmins. The grade of the ore shipped is not public information.

In 1980, Asarco Exploration Co. of Canada Ltd. confirmed that drilling on their Macklem Township property had intersected substantial gold mineralization in the vicinity and along strike from the former Aquarius property. In April, 1982, a new shaft was completed to a depth of 575

feet and an initial cross-cut on the 500 foot level reached the footwall of the ore zone. Initial work suggests that ore shoots with some continuity were present and mill testing was necessary. The approximate reserves are presently 500,000 tons grading 0.24 oz. gold per ton.

Eight miles to the east, along strike, is the St. Andrews Goldfields deposit which is undergoing further evaluation from underground. The estimated reserves at the St. Andrews deposit are 900,000 tons grading 0.12 oz. gold per ton.

There is no record of any work having been completed within the Long Lake claim group west block prior to their acquisition by Hilton Resource Corporation and Livingstone Energy Corporation.

In April, 1985, VLF-EM and magnetometer surveys were carried out over a control grid cut with a baseline running east-west and cross lines running north-south at 300 foot intervals. Five crossover anomalies were pinpointed in the VLF-EM survey of which most can be attributed to shearing in volcanics. The magnetometer survey outlines a relatively large area on the north and west portions of the block with values above 59,020 gammas. The southeastern portion of the block is relatively void of magnetic variations.

REGIONAL GEOLOGY

The Night Hawk Lake area was first reported on in detail in 1924 by Hopkins and in 1931 by Laird. Except for regional compilation maps, the area was not remapped until 1969 by Leahy with a final report (G.R. 96) in 1971.

The Macklem Township area is underlain by Archean Age rocks consisting of metavolcanic and metasedimentary rocks that have been intruded by felsic plutons and ultramafic plugs and sills. All the above mentioned rock types have been cut by Matachewan-type (quartz) and Keweenawan-type (olivine and quartz) diabases.

The volcanic rocks have been divided into two groups, an older Deloro group and a younger overlying Tisdale group. The Deloro group is largely a calc-alkaline sequence; tholeiites are prominant only towards the bottom of the group. The group is approximately 16,000 feet thick and composed of flows of andesite and basalt in the lower portion and dacite flows and dacitic and rhyolitic pyroclastics near the top. Iron formation is common at or near the top of the Deloro group and forms a persistent stratigraphic marker through much of the area south of the Destor-Porcupine Fault zone. The Tisdale group is a major change in vulcanism with the base composed mainly of basaltic and peridotitic komatiites and magnesium-rich tholeiitic basalts. The middle formations are dominantly an iron-rich tholeiitic sequence. The upper formations are almost entirely calc-alkaline volcanic rocks. The Tisdale group varies in thickness, but is approximately 10,000 feet in the Macklem Township area.

Metasedimentary rocks, belonging to the Porcupine group, consisting predominantly of interlayered greywacke, siltstone and minor conglomerate, forms a turbidite sequence that is time equivalent to the top of the Deloro group and all the Tisdale group. The maximum thickness is approximately 10,000 feet.

Large peridotite and dunite bodies were emplaced generally as sills in the Deloro group of volcanics. A variety of felsic intrusive rocks occur in the region: the oldest being soda-rich quartz feldspar porphyries and trondhjemites and the youngest a more potassic granodiorite and monzanites. The porphyries all occur within the lower formations of the Tisdale group. Pyke (1982) suggests that some or all of the porphyries may represent rhyolite domes formed at or near the surface.

Diabasic intrusions form dykes that trend north-south and are part of the Matachewan Dyke swarm. The Matachewan diabase is Proterozoic in age and can show glomeroporphyritic textures in a quartz diabase composition. A younger diabase trends northeast-southwest and is probably Keweenawan-type. This latter diabase cross-cuts the older diabase and can be olivine or quartz rich.

A major regional fault, the Destor-Porcupine Fault, trends in a general east-west direction in the northern part of Macklem Township. An older set of faults, trending N70E, off-set stratigraphy and are themselves off-set by a younger N55W set of faults.

The Macklem Township area was over-ridden by a continental ice sheet during the Pleistocene period. As the glacier melted back it formed a large glacial lake called Lake Barlow-Ojibway. The lake deposited sediments in the form of varved clays which covered tills and in some places flanked sand and gravel deposits left by former meltwater rivers. The overburden depth is variable and reaches up to 345 feet in northeastern Macklem Township.

OVERBURDEN TARGET SELECTION

The location of the overburden holes were targeted using magnetometer and VLF-EM geophysical surveys. The magnetic relief was not high with lows from 127 gammas to highs of 285 gammas (158 gamma difference). The VLF-EM dip angle data was "Fraser Filtered" and 10 set as the background in this environment. Map 1 shows the drill hole locations as well as anomalous mag and VLF-EM areas.

OVERBURDEN DRILLING METHODOLOGY

Depths were determined with the aid of the known length of the drill rods used. The samples were collected in five gallon pails with the sampling interval determined by the supervisor logging the stratigraphy.

The samples were collected from a cone into which the return water, containing the sample, was discharged. The samples were passed through a number 12 wire mesh screen. The return is constantly monitored to determine the nature of the horizon being drilled. Horizons normally encountered are organic matter, clay, varved clay, sandy clay, sand, gravel, till, boulders, or bedrock.

The sample pail is changed as new horizons are encountered or a sample length has been chosen. If the horizon is not sampled then the sample is discarded. If it is to be sampled, the material is transferred to a heavy plastic bag and saved. The till samples are sent out for heavy mineral concentration. The resulting concentrates are analysed for gold. Bedrock is penetrated approximately three feet and the resulting chips assayed.

SAMPLE HANDLING

Overburden samples were sent to Overburden Exploration Services Limited of Timmins, Ontario for heavy mineral concentration. The bedrock chips were sent directly to the assay lab for analysis.

At Overburden Exploration Services Limited the sample is homogenized and a 250 gram geochem sample is taken and stored. The sample is then wet sieved at 10 mesh with the +10 mesh stored. The -10 mesh is passed over a shaking table where the light fraction is stored and the gold grains are counted in the heavy portion. The remaining heavy portion is then separated using heavy liquids (sp.gr. 3.3) and the light fraction stored. This heavy fraction is then put through a magnetic separator. The magnetic fractions were returned to the author. The non-magnetic heavy mineral concentration was sent to Swastika Labs of Swastika, Ontario for analysis of gold.

At Swastika Labs the complete non-magnetic heavy mineral concentrate is assayed by fire assay and an atomic absorption finish. The bedrock chips are assayed by fire assay and an atomic absorption finish.

RESULTS

Nine overburden holes were compelted with a total of 796 feet drilled (Appendix I). The overburden varied in thickness from 20.5 feet to 167 feet. The overburden consisted predominantly of sand with minor pebbles and a thin basal till. Only the till samples were processed as the source of any anomalies can be pinpointed while in sand the source could be very obscure. All assays quoted in this report are of heavy mineral concentrates.

Holes 1 to 5 in the southeastern portion of the west block were shallow varying from 20.5 feet to 34 feet. Hole 3 did not give a till sample due to poor water return. Hole 3 returned a slightly anomalous till at 320 ppb Au, while holes 2 and 5 returned highly anomalous values of 1265 1430 ppb Au.

Hole 6 returned two slightly anomalous values in the bottom of the hole with the bedrock returning as a rusty red-brown clay.

Hole 7, in sample 7-A which assayed 37990 ppb (1.1 oz./ton) Au, also contained one gold grain. Also in the same hole sample 7-C assayed 12500 ppb (0.36 oz/ton) Au. Samples 7-B and 7-D were slightly anomalous at 470 and 320 ppb Au respectively. Hole 9 returned anomalous assays in samples 9-B, 9-D and 9-E with 9-E the highest at 1105 ppb Au.

The following is a summary of the assay results for this program:

Sample	H.M.C. Weight (grams)	Au ppb	Gold Grains
1-A	11.87	75	0
1-B	3.41	145	0
1-C	5.8	320	0
1-D	23.96	70	0
1-3	3.65	180	0
2-A	0.87	1265	0
4-A	5.39	65	0
5-A	0.21	1430	0
5-B	9.03	165	0
6-A	3.98	165	0
6-B	14.78	30	0
6-C	15.47	60	0
6-D	7.92	50	0
6-E	6.11	80	0
6-F	12.07	300	0
6-G	13.45	410	0

Sample	H.M.C. Weight (grams)	Au ppb	Gold Grains
7-A	3.21	37990	1
7-B	5.32	470	0
7-C	0.28	12500	0
7-D	1.57	320	0
8-A	8.02	105	0
9-A	13.57	40	0
9-B	15.35	810	0
9-C	7.14	35	0
9-D	0.65	770	0
9-E	1.63	1105	0

CONCLUSIONS

An excellent anomaly exists in the area of hole 7 and probably represents the northwestward extension of the United Kingdom Energy Inc. anomaly previously outlined in the summer of 1985. There is a slightly anomalous area to the south associated with the VLF-EM anomalies, but the low sample weights of the H.M.C. in samples 2-A and 5-A may be giving an exaggerated anomaly. An H.M.C. sample weight less than 1 gram can give false anomalies, but can not be ruled out in this case because of the VLF-EM association.

Hole 6 returned bedrock as a rusty red-brown clay which on the adjacent property was found to be a highly weathered carbonate-rich basaltic komatiite. The basaltic komatiite unit hosted the anomaly on the United Kingdom Energy Inc. property to the east and drilling in July, 1985, located two sericite alteration zones, one of which contained 0.382 oz./ton Au over 4.8 feet.

RECOMMENDATIONS

Two anomalous areas have been indicated in the initial reverse circulation program. To cover the two areas comprehensively, I have recommended 44 reverse circulation holes which are plotted on map 2. Drilling of some of the holes may not be feasible depending on the time of year because of swamp conditions.

The costs for the recommended program are as follows:

Reverse circulation rig 20 days @ $2400./day	$ 48,000.00
Supervision 24 days @ $325./day	7,800.00
Helper 20 days @ $80./day	1,600.00
H.M.C. preparation	5,280.00
Assaying	2,112.00
Transportation	1,000.00
	$ 65,792.00
Contingencies at 10%	6,579.00
Total	$ 72,371.00

Some holes may have to be moved during the process of the survey as more information is acquired.

Respectfully submitted,

GEOLOGICAL ASSOCIATION OF CANADA
W. MacRAE
M. MacRae

REFERENCES

Hopkins, P. E.
1924: Night Hawk Lake Gold Area; Cochrane District, Ontario; Ontario Department of Mines, Annual Report, Vol. 33, Part 3, p.27-36; accompanied by Map No. 33c, Scale: 1 inch to 2640 feet.

Laird, H. C.
1931: German-Currie Area; Cochrane District, Ontario; Ontario Department of Mines, Annual Report. Vol. 40, Part 3, p. 1-22; accompanied by Map No. 40b, Scale: 1 inch to 1 mile.

Leahy, E. J.
1971: Geology of the Night Hawk Lake Area; District of Cochrane; Ontario Department of Mines and Northern Affairs, Geological Report 96; accompanied by Map 2222 (coloured), Scale: 1 inch to 2640 feet.

Pyke, D. R.
1982: Geology of the Timmins Area; District of Cochrane; Ministry of Natural Resources, Ontario Geological Survey Report 219; accompanied by Map 2455, Scale: 1:50,000.

CERTIFICATE

The Management
Hilton Resource Corporation
P.O. Box 34234, Station D
Vancouver, B.C. V6J 4N5

Sirs:

With reference to my Progress Report on Overburden Drilling on the Long Lake Claim Group west block, dated April 16, 1986;

I, William E. MacRae, of the City of Timmins, Ontario, do hereby certify and state that:

(1) I have graduated from Lakehead University with the degree of Bachelor of Science (Honours) in 1975 and have obtained the degree of Masters of Science from McMaster University in 1982;

(2) I have practiced my profession continuously for the past seven years.

(3) I am a fellow of the Geological Association of Canada, a member of the Canadian Institute of Mining and Metallurgy, and a member of the Prospectors and Developers Association (President of the Porcupine Branch);

(4) I have no interest, direct or indirect, in the six (6) mining claims comprising the property described in this report nor do I expect to receive any; and

(5) This report is based upon direct personal supervision of the described program from January 16 to January 20, 1986.

Dated this 16th day of April, 1986.
Timmins, Ontario.

GEOLOGICAL ASSOCIATION OF CANADA
W. MacRAE

W. MacRae, M.Sc.
Consulting Geologist

APPENDIX I

OVERBURDEN DRILL LOGS

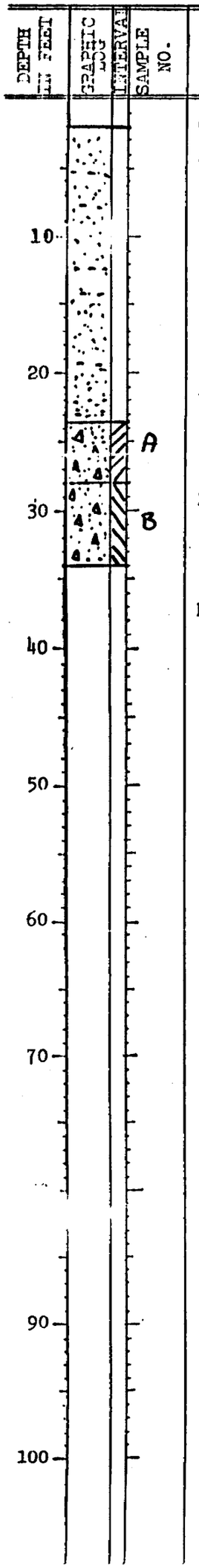
REVERSE CIRCULATION DRILL HOLE LOG

DATE 16/01/86 LOCATION L3W/32+50S

TRICONE # CB67558 HOLE NO. 1-A

LOGGED BY W. MACRAE TOTAL DEPTH 34 feet

START TIME 12:50 pm FINISH TIME 1:30 pm



DESCRIPTIVE LOG	ASSAYS	
		HMC Au ppb
0'-4' Organic Material		
4'-23.5' Fine grained gray sand with minor clay		
23.5'-28' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanic + sediments, 20% granite, 5% quartz, 5% others	1-A	75
28'-34' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% vlocanics + sediments, 10% granite, 20% others	1-B	145
Hole stopped - broken water swivel		

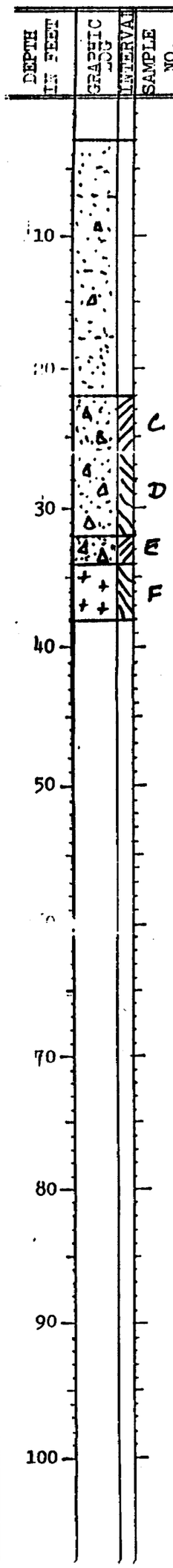
REVERSE CIRCULATION DRILL HOLE LOG

DATE 17/01/86 LOCATION L3W/32+50S

TRICONE # CB67558 HOLE NO. 1-B

LOGGED BY W. MACRAE TOTAL DEPTH 38 feet

START TIME 9:15 am FINISH TIME 10:02 am



DESCRIPTIVE LOG	ASSAYS					
			HMC Au ppb		Au ppb	
0'-3' Organic Material						
3'-22' Fine grained gray sand with minor clay and pebbles						
22'-26' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanics + sediments, 20% granite, 10% others	1-C		320			
26'-32' Pebble Till Matrix:- fine grained gray sand Clasts:- 80% volcanics + sediments, 10% granite, 10% others	1-D		70			
32'-34' Boulder Till Matrix:- minor gray sand Clasts:- numerous volcanic boulders up to 8" in diameter	1-E		180			
34'-38' Bedrock - medium green in color - up to 10% quartz-carbonate veining - minor pyrite				1-F	Nil	
38' END OF HOLE						

REVERSE CIRCULATION DRILL HOLE LOG

DATE 17/01/86 LOCATION L6W/32+50S

TRICONE # CB67558 HOLE NO. 2

LOGGED BY W. MACRAE TOTAL DEPTH 24 feet

START TIME 10:33 am FINISH TIME 10:51 am

DEPTH IN FEET	GRAPHIC LOG	INTERVAL SAMPLE NO.	DESCRIPTIVE LOG	ASSAYS		HMC Au ppb		Au ppb
			0'-2' Organic Material 2'-19' Gray sand with minor clay and pebbles					
10								
20		A	19'-20.5' Pebble Till Matrix:- fine grained gray sand Clasts:- 80% volcanics + sediments, 10% granite, 10% others	2	A	1265		
		B	20.5'-24' Bedrock - medium to dark green volcanics - 8 to 10% quartz-carbonate veining - trace pyrite				2 B	Nil
30								
			24' END OF HOLE					
40								
50								
60								
80								
90								
100								

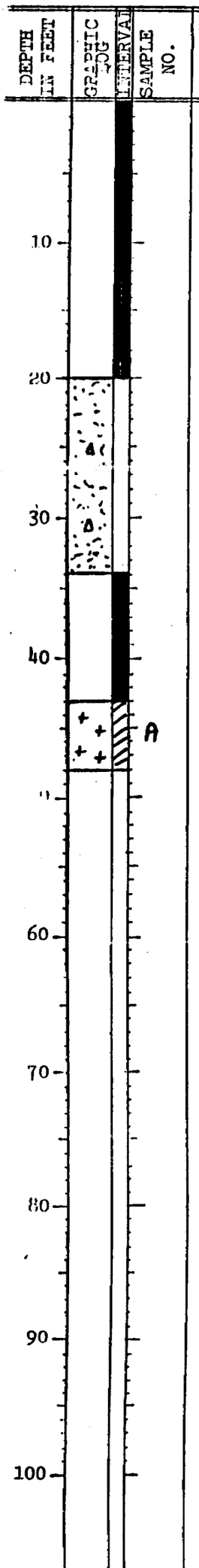
REVERSE CIRCULATION DRILL HOLE LOG

DATE 17/01/86 LOCATION L12W/31+50S

TRICONE # CB67558 HOLE NO. 3

LOGGED BY W. MACRAE TOTAL DEPTH 48 feet

START TIME 12:30 pm FINISH TIME 1:03 pm



DESCRIPTIVE LOG	ASSAYS	
	HMC Au ppb	Au ppb
0'-20' No Return		
20'-34' Gray sand with minor clay and pebbles - poor return		
34'-43' No Return		
43'-48' Bedrock - light green, altered volcanic - 15% quartz-carbonate veining - minor pyrite	3-A	Nil
48' END OF HOLE		

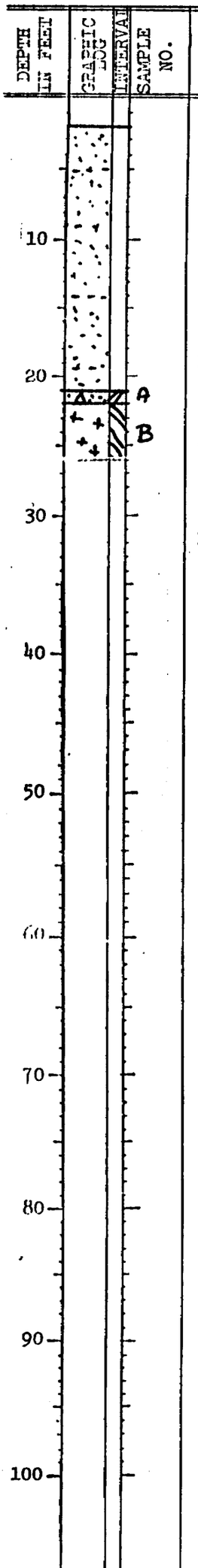
REVERSE CIRCULATION DRILL HOLE LOG

DATE 17/01/86 LOCATION L9W/27S

TRICONE # CB67558 HOLE NO. 4

LOGGED BY W. MACRAE TOTAL DEPTH 26 feet

START TIME 1:50 pm FINISH TIME 2:30 pm



DESCRIPTIVE LOG

0'-2' Organic Material

2'-21' Gray sand with minor clay

21'-22' Pebble Till
Matrix:- fine grained gray sand
Clasts:- 70% volcanics + sediments,
20% granite, 10% others

22'-26' Bedrock
- light green volcanic
- 60% quartz-carbonate veining

26' END OF HOLE

ASSAYS

	HMC Au ppb	Au ppb
4-A	65	
4-B		Nil

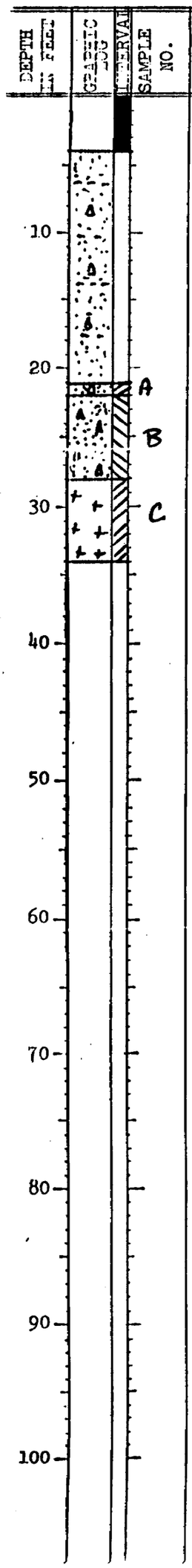
REVERSE CIRCULATION DRILL HOLE LOG

DATE 17/01/86 LOCATION L6W/27S

TRICONE # CB67557 HOLE NO. 5

LOGGED BY W. MACRAE TOTAL DEPTH 34 feet

START TIME 3:30 pm FINISH TIME 4:16 pm



DESCRIPTIVE LOG	ASSAYS		
		HMC Au ppb	Au ppb
0'-4' No Return 4'-21' Gray sand with minor clay and pebbles			
21'-22' Pebble Till Matrix:- fine grained gray sand Clasts:- 80% volcanics + sediments, 20% others	5-A	1430	
22'-28' Pebble Till Matrix:- fine grained gray sand Clasts:- 60% volcanics + sediments, 20% granite, 15% quartz, 5% others - 1.5' boulder of serpentinized peridotite at 22'	5-B	165	
28'-34' Bedrock - light green volcanic - 10% quartz-carbonate veining - trace pyrite		5-C	Nil
34' END OF HOLE			

REVERSE CIRCULATION DRILL HOLE LOG

DATE 18/01/86 LOCATION L0/7S

TRICONE # CB67557 HOLE NO. 6

LOGGED BY W. MACRAE TOTAL DEPTH 174 feet

START TIME 11:27 am FINISH TIME 2:57 pm

DEPTH IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	ASSAYS
				0'-2' Organic Material 2'-13' Silty clay	
10				13'-34' Gray sand with minor clay	
20					
30				34'-126' Fine grained gray sand	
40					
50					
60					
70					
80					
90					
100					

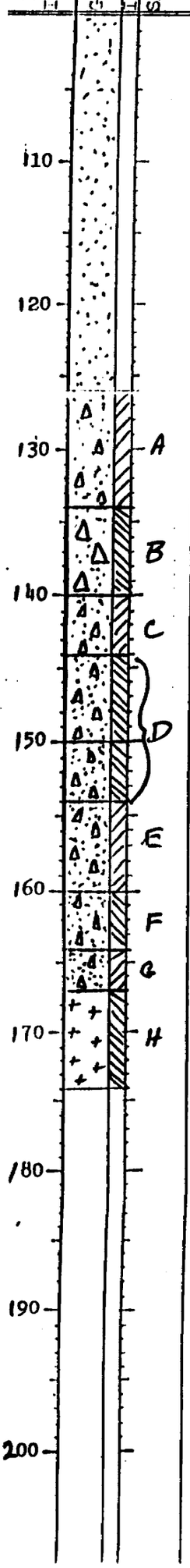
REVERSE CIRCULATION DRILL HOLE LOG

DATE _____ LOCATION _____

TRICONE # _____ HOLE NO. 6 cont'd

LOGGED BY _____ TOTAL DEPTH _____

START TIME _____ FINISH TIME _____



DESCRIPTIVE LOG	ASSAYS		
		HMC Au ppb	Au ppb
126'-134' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanics + sediments, 20% granite, 10% others - 1.5' boulder at 128'	6-A	165	
134'-140' Cobble Till Matrix:- fine grained gray sand Clasts:- 60% volcanics + sediments, 20% grantie, 20% others	6-B	30	
140'-144' Pebble Till Matrix:- fine grained gray sand Clasts:- 60% volcanics + sediments, 30% granite, 10% others	6-C	60	
144'- 150' Pebble Till Matrix:- fine grained gray sand Clasts:- 60% volcanics + sediments, 30% granite, 10% others - poor return	6-D	50	
150'-154' Pebble Till Matrix:- fine grained gray sand Clasts:- 50% volcanics + sediments, 40% granite, 10% others - pyrite in some fragments			
154'-160' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanics + sediments, 20% granite, 10% others	6-E	80	
160'-164' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanics + sediments, 20% granite, 10% others	6-F	300	
164'-167' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanics + sediments, 20% granite, 10% others	6-G	410	
167'-174' Bedrock - returns as a rusty red-brown clay - no sulphides noted - carbonate rich basaltic komatiite	6-H		Nil
174' END OF HOLE			

REVERSE CIRCULATION DRILL HOLE LOG

DATE 19/01/86 LOCATION L6W/6S

TRICONE # CB67557 HOLE NO. 7

LOGGED BY W. MACRAE TOTAL DEPTH 156 feet

START TIME 8:45 am FINISH TIME 10:37 am

DEPTH IN FEET	GRAPHIC LOG	INTERVAL SAMPLE NO.	DESCRIPTIVE LOG	ASSAYS
			0'-2' Organic Material 2'-8' Brown oxidized clay	
			8'-11' Silty clay	
10			11'-64' Gray sand with minor clay	
20				
30				
40				
			64'-128' Fine grained gray sand	
50				
60				
70				
80				
90				
100				

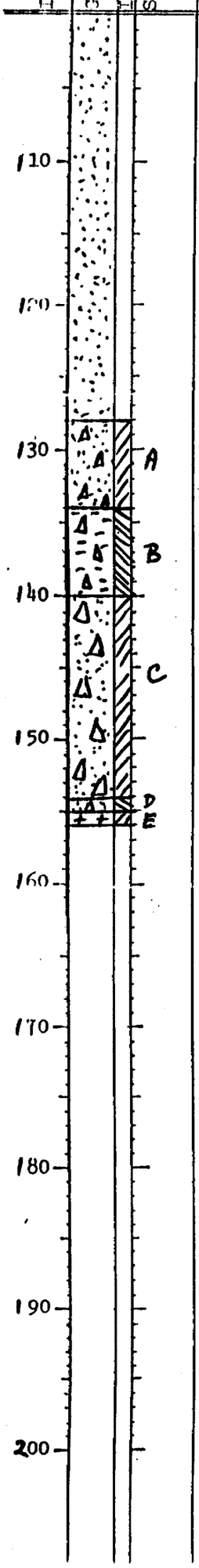
REVERSE CIRCULATION DRILL HOLE LOG

DATE _____ LOCATION _____

TRICONE # _____ HOLE NO. 7 cont'd

LOGGED BY _____ TOTAL DEPTH _____

START TIME _____ FINISH TIME _____



DESCRIPTIVE LOG	ASSAYS		
		HMC Au ppb	Au ppb
128'-134' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanic + sediments, 20% granite, 10% others - no return from 130' to 133'	7-A	37990	
134'-140' Gritty Clay Till Matrix:- gritty gray clay Clasts:- 70% volcanics + sediments, 20% granite, 10% others - poor water return	7-B	470	
140'-154' Boulder Till Matrix:- fine grained gray sand Clasts:- boulders of altered volcanics with 10% quartz-carbonate veining - no return from 140' to 143' and 144.5' to 147'	7-C	12500	
154'-155' Pebble Till Matrix:- fine grained gray sand Clasts:- 80% volcanics + sediments, 10% granite, 10% others	7-D	320	
155'-156' Bedrock - light green altered volcanic - 20% quartz-carbonate veining	7-E		Nil
156' END OF HOLE			

REVERSE CIRCULATION DRILL HOLE LOG

DATE 19/01/86 LOCATION L12W/4S

TRICONE # CB67562 HOLE NO. 8

LOGGED BY W. MACRAE TOTAL DEPTH 148 feet

START TIME 11:25 am FINISH TIME 12:40 pm

DEPTH IN FEET	GRAPHIC LOG	INTERVAL SAMPLE NO.	DESCRIPTIVE LOG	ASSAYS
			0'-2' Organic Material 2'-10' Brown Oxidized Clay	
10			10'-11' Gray Clay 11'-44' Gray sand with minor clay	
20				
30				
40			44'-54' Gray sand	
			54'-64' Gray sand with minor clay	
50				
60			64'-84' No Return	
70				
80			84'-114' Gray sand with minor clay	
90				
100				

REVERSE CIRCULATION DRILL HOLE LOG

DATE _____ LOCATION _____

TRICONE # _____ HOLE NO. 8 cont'd

LOGGED BY _____ TOTAL DEPTH _____

START TIME _____ FINISH TIME _____

DEPTH IN FEET	GRAPHIC LOG	INTERVAL SAMPLE NO.	DESCRIPTIVE LOG	ASSAYS HMC Au ppb	ASSAYS Au ppb
			114'-138' Fine grained gray sand		
110			138'-144' Pebble Till Matrix:- fine grained gray sand Clasts:- 65% volcanics + sediments, 25% granite, 10% others	8-A 105	
120			144'-148' Bedrock - sericite altered volcanic - 1% pyrite - light green-yellow changing to light green in color down hole	8-B	Nil
130					
			148' END OF HOLE		
140		A			
		B			
150					
160					
170					
180					
190					
200					

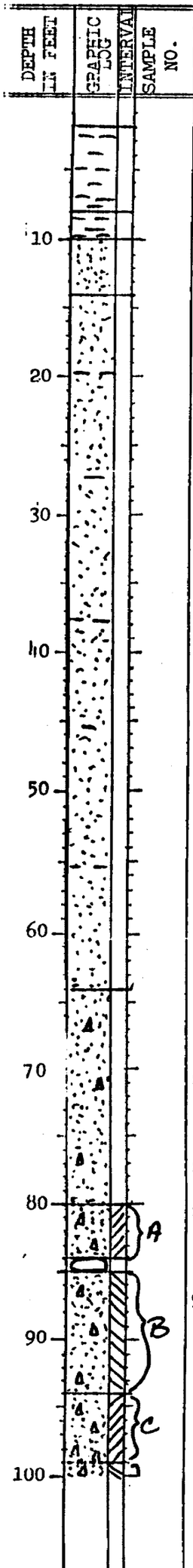
REVERSE CIRCULATION DRILL HOLE LOG

DATE 19/01/86 LOCATION 15+75W/2S

TRICONE # CB67562 HOLE NO. 9

LOGGED BY W. MACRAE TOTAL DEPTH 114 feet

START TIME 1:20 pm FINISH TIME 3:09 pm



DESCRIPTIVE LOG	ASSAYS	
		HMC Au ppb
0'-2' Organic Material		
2'-8' Brown Oxidized Clay		
8'-10' Gray Clay		
10'-14' Gray sand		
14'-64' Gray sand with minor clay		
64'-80' Gray sand with minor pebbles		
80'-84' Sandy Pebble Till Matrix:- fine grained gray sand Clasts:- 45% volcanics + sediments, 35% granite, 20% others	9-A	40
84'-85' Boulder - mottled green volcanic		
85'-94' Sandy Pebble Till Matrix:- fine grained gray sand Clasts:- 50% volcanics + sediments, 30% granite, 20% others	9-B	810
94'-99' Pebble Till Matrix:- fine grained gray sand Clasts:- 60% volcanics + sediments, 30% granite, 10% others	9-C	35

REVERSE CIRCULATION DRILL HOLE LOG

DATE _____ LOCATION _____

TRICONE # _____ HOLE NO. 9 cont'd

LOGGED BY _____ TOTAL DEPTH _____

START TIME _____ FINISH TIME _____

DEPTH IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	ASSAYS HMC Au ppb	ASSAYS Au ppb
			D	99'-104' Pebble Till Matrix:- fine grained gray sand Clasts:- 60% volcanics + sediments, 30% granite, 10% others - gritty clay matrix from 103' to 104'	9-D 770	
			E			
110			F	104'-109' Pebble Till Matrix:- fine grained gray sand Clasts:- 70% volcanics + sediments, 20% granite, 10% others	9-E 1105	
120				109'-114' Bedrock - light green to light green-yellow - 10% to 15% quartz-carbonate veining - mottled altered volcanic	9-F	Nil
130				114' END OF HOLE		
140						
150						
160						
170						
180						
190						
200						

APPENDIX II

ASSAY RESULTS

SWASTIKA LABORATORIES LIMITED

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

Certificate of Analysis

Certificate No. 62817 Date: April 9 1986

Received Apr.4/86 26 Samples of heavy minerals

Submitted by Hilton Resource Corp. c/o Mr. W. MacRae, Timmins, Ontario

SAMPLE NO.	GOLD PPB	SAMPLE NO.	GOLD PPB
BM-1A	75	BM-7A	37990
-1B	145	-7B	470
-1C	320	-7C	12500
-1D	70	-7D	320
-1E	180	-8A	105
-2A	1265	-9A	40
-4A	65	-9B	810
-5A	1430	-9C	35
-5B	165	-9D	770
-6A	165	-9E	1105
-6B	30		
-6C	60		
-6D	50		
-6E	80		
-6F	300		
-6G	410		

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. 62225 Date: January 29 1986

Received Jan. 23/86 9 Samples of chips (Bedrock)

Submitted by W. MacRae, Timmins, Ontario Hilton Resources

SAMPLE NO.	GOLD PPB
98374 1-F	Nil
98375 2-B	Nil
	Nil
98376 3-A	Nil
98377 4-B	Nil
98378 5-C	Nil
98379 6-H	Nil
98380 7-E	Nil
98381 8-B	Nil
98382 9-F	Nil
	Nil

Per G. Lebel

G. Lebel -- Manager

ESTABLISHED 1928

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
BM-1A	No V.G.	1% Euhedral Cubic Py.	92% Volc./Seds 8% Plutonic
BM-1B	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-1C	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-1D	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-1E	No V.G.	1% Anhedral Py.	95% Grn. Volc. 5% Quartz
BM-2A	No V.G.	1% Anhedral Py. and Py. Cubes	95% Volc/Seds 5% Plutonic
BM-4A	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-5A	No V.G.	1% Anhedral Py.	98% Oxidized Porph. or Intrus.,2% Seds
BM-5B	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-6A	No V.G.	1% Anhedral Py. and Py. Cubes	95% Volc/Seds 5% Plutonic
BM-6B	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-6C	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-6D	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-6E	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-6F	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-6G	No V.G.	1% Subhedral Py.	93% Volc/Seds 7% Plutonic

BM-7A	1 Abraded Flake (710 x 140 microns)	1% Anhedral Py.	98% Volc/Seds 2% Quartz
BM-7B	No V.G.	1% Anhedral Py.	95% Grn. Volc. 5% Quartz
BM-7C	No V.G.	1% Anhedral Py.	95% Grn. Volc. 5% Quartz
BM-7D	No V.G.	1% Anhedral Py.	95% Grn. Volc. 5% Quartz
BM-8A	No V.G.	1% Anhedral Py.	95% Volc/Seds 5% Plutonic
BM-9A	No V.G.	1% Subhedral Py.	95% Volc/Seds 5% Plutonic
BM-9B	No V.G.	1% Subhedral Py.	95% Volc/Seds 5% Plutonic
BM-9C	No V.G.	1% Anhedral-Subhedral Py.	90% Volc/Seds 10% Plutonic
BM-9D	No V.G.	1% Anhedral Py. and Py. Cubes	90% Volc/Seds 10% Plutonic
BM-9E	No V.G.	1% Anhedral Py. and Py. Cubes	90% Volc/Seds 10% Plutonic

Sample No.	Wet Weight (kg) Bulk	+10 Mesh	Dry Weight (grams) Table/ L	Superpan/ L	Magnetite	M.I./ H
BM 1A	9.5	1.03	N.A.	38.7	11.88	11.87
BM 1B	3	.21	N.A.	29.45	3.58	3.41
BM 1C	5.9	.51	N.A.	25.86	7.9	5.8
BM 1D	21	.98	N.A.	155.35	22.59	23.96
BM 1E	9.6	.44	N.A.	20.65	4.37	3.65
BM 2A	3.1	.09	N.A.	72.81	2.23	.87
BM 4A	4.6	.63	N.A.	57.15	3.99	5.39
BM 5A	1	.11	N.A.	34.48	.27	.2
BM 5B	5.6	.43	N.A.	100.67	9.46	9.03
BM 6A	6.7	.85	N.A.	126.5	5.5	3.98
BM 6B	6.2	.63	N.A.	153.67	10.56	14.78
BM 6C	6.4	.4	N.A.	146.45	11.15	15.47
BM 6D	3.3	.38	N.A.	90.81	5.89	7.92
BM 6E	7	.65	N.A.	33.91	6.69	6.11
BM 6F	5.4	.5	N.A.	41.22	7.63	12.07

Sample No.	Wet Weight (Kg) Bulk	+10 Mesh	Dry Weight (grams) Table/ L	Superpan/ L	Magnetite	M.I./ H
BM 6G	6.2	.87	N.A.	106.68	9	13.45
BM 7A	2.6	.36	N.A.	28.43	2.14	3.21
BM 7B	2.7	.28	N.A.	27.14	3.71	5.32
BM 7C	2.7	.07	N.A.	34.42	.66	.28
BM 7D	3.8	.03	N.A.	65.69	2.72	1.57
BM 8A	16.2	2.63	N.A.	223.9	12.35	8.02
BM 9A	8.7	.53	N.A.	150.91	11.68	13.57
BM 9B	17.2	.66	N.A.	110.91	20.34	15.35
BM 9C	9.9	2.21	N.A.	72.9	8.76	7.14
BM 9D	10.4	3.14	N.A.	48.6	2.64	.65
BM 9E	11.6	4.05	N.A.	47.21	4.08	1.63

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

O.R. # 340/86

Dec. 2c

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form attach a list.

42A07NW0006 2.9558 MACKLEM

900

Type of Survey(s)
Expenditures

Claim Holder(s)
Hilton Resource Corp. / Livingstone Energy — T-1382 / T1381

Address
P.O. Box 34234, Station D, Vancouver B.C. V6J 4N5

Survey Company
Dominik Drilling

Date of Survey (from & to): 16 01 '66 (Day Mo. Yr.) | 19 01 86 (Day Mo. Yr.)

Total Miles of line Cut

Name and Address of Author (of Geo-Technical report)
William MacRae, P.O. Box 417, Timmins, Ont. P4N 7E3

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
P	780157	60
	780158	60
	780159	60
	780160	60
	780161	60
	780162	60

Prefix	Mining Claim Number	Expend. Days Cr.

RECORDED
OCT 31 1986

PORCUPINE MINING DIVISION
RECEIVED
OCT 31 1986

Total number of mining claims covered by this report of work: 6

Expenditures (excludes power stripping)

Type of Work Performed
Reverse Circulation Drilling

Performed on Claim(s)
P780158, P780159, P780160, P780161, P780162

Calculation of Expenditure Days Credits

Total Expenditures			Total Days Credits
$ 5634.92	÷ 15	=	375

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
360	Oct. 31/86	
	Date Approved as Recorded: 86.11.25	Branch Director

Date	Recorded Holder or Agent (Signature)
31/10/86	

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying
William MacRae, P.O. Box 417, Timmins, Ont. P4N 7E3

Date Certified: 31/10/86 | Certified by (Signature)

MAP SYMBOLOGY

Aerial Cableway
Boundary
International
Interprovincial
District, Township Indian Reserve
Approximate
Lot, Concession
Approximate
Park Boundary
Bridge
Road, Railroad
Building
Chimney
Cliff, Pit, Pile
Contours
Interpolated
Approximate
Depression
Control Points
Horizontal
Vertical
Culvert
Falls
Double line river
Fence, Hedge, Wall
Feature Outline (Construction features, etc.)
Flooded Land
Lock
Marsh or Swamp
Mast
Mine Head Frame
Outcrop

Pipeline (above ground)
Railroad
Single Track
Double Track
Abandoned
Turntable
Road
Highway, County Township
Access (road of doubtful maintenance or significant driveway)
Trail, Bush Road (portage, alley)
Rapids
Double line river with multiple rapids
Double line river with multiple rapids
Reservoir
River, Stream, Canal
Approximate Seasonal direction of flow
Rock
Significant
Shoal
Spot Elevation (lake elevations)
Tower
Transmission Line
Poles
Pylons
Tunnel
Utility Poles
Wharf, Dock, Pier
Wooded Area

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
(R)	Site Preparation	05/02/83		77094 V.6

SAND and GRAVEL

(G1) GRAVEL FILE 105381
(G2) M.T.C. PIT 1121
(P) QUARRY PERMIT

2.00

GERMAN TWP.

CODY TWP.

BOND TWP.

THOMAS TWP.

NIGHT HAWK LAKE

CLM 293
CLM 290
CLM 292
CLM 291

EAST PENINSULA
HRI GOLD ISLAND
ANNIVERSARY ISLAND
BALD ISLAND
HAND ISLAND
CINDY ISLAND
McLEOD ISLAND

PARCEL "C" LO. 931
PARCEL "D" LO 3244
PARCEL "E" LO. 3244

Vader's Lake
Honeyeard Lake
Legare Lake
Low Lake
Deep Lake
Roundel Lake
Lake Tincon
Bonney Lake
Bonney Creek

7M 8M 9M 10M 11M 12M
1M 2M 3M 4M 5M
48°32' 48°28'
537 500mN 537 000mN
80°56' 80°50'
505000mE 510000mE 515000mE

HWY 101

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	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(P)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 5, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

500 0 1000 Metres
10 0 10 20 30 40 50 60 70 Chains
500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
GRID ZONE : 17

Reserve flooding rights on Night Hawk Lake to Ontario Hydro to elevation 903·5', T & N.O. Ry. datum

Area withdrawn (NR + SR) from staking of Section 36 Mining Act. R.S.O. 1980
See N.R.W. 10/85

RECEIVED SEP 27 AM

Rec'd Jan. 23/85

TOWNSHIP

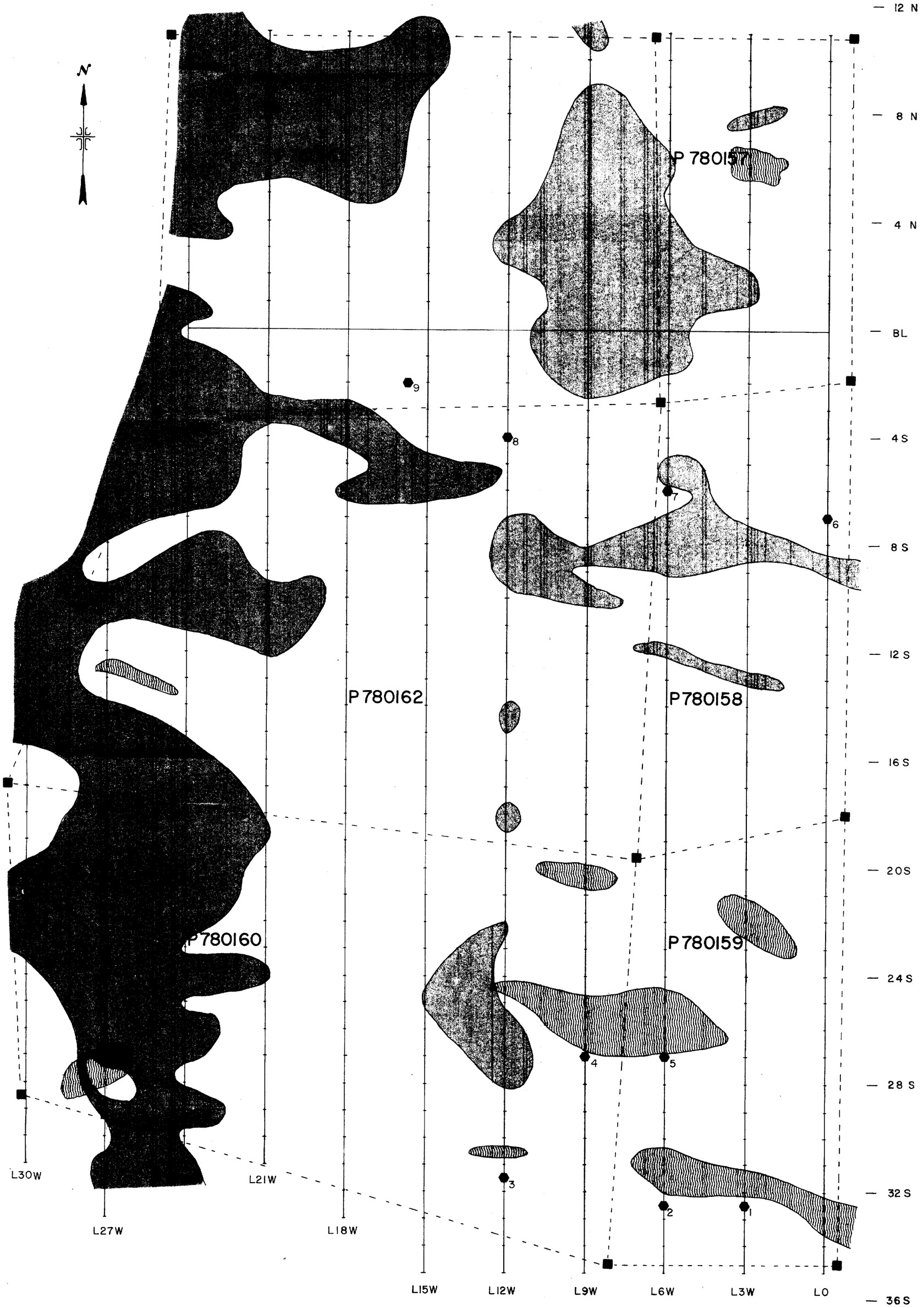
MACKLEM

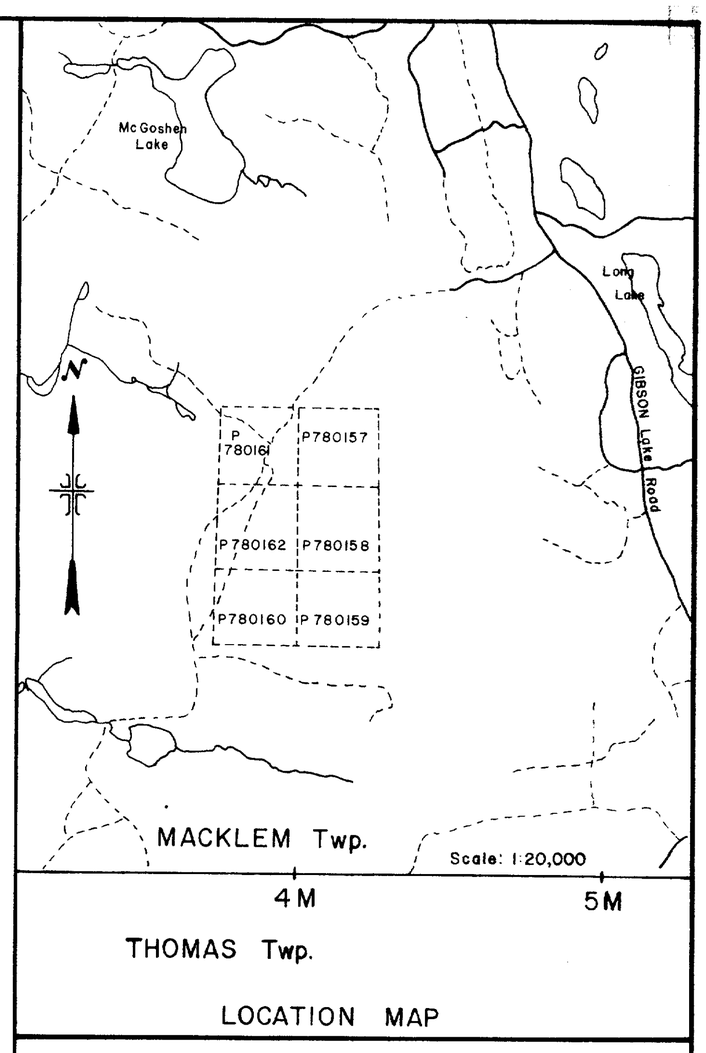
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario Ministry of Natural Resources — Land Management Branch

ORIGINAL COMPILATION JULY 1984
REVISED

Number
G-3997





LOCATION MAP

LEGEND

- Overburden Drill Hole Location
- Magnetometer Anomaly (>220 gammas)
- VLF-EM Fraser Filter Anomaly (>10)

HILTON RESOURCE Corp.

COMPILATION

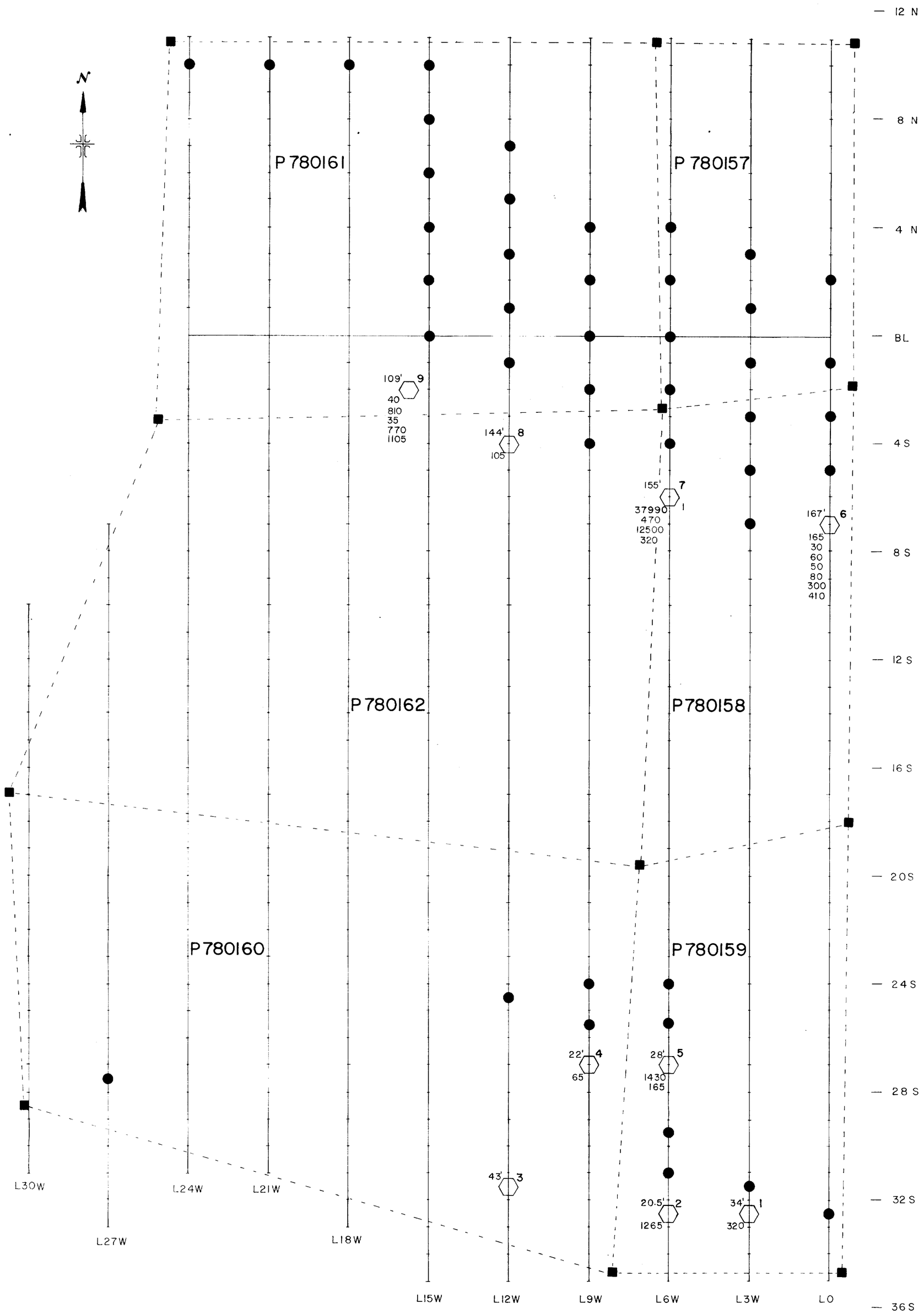
Property: Long Lake - West Block	
Township: MACKLEM	N.T.S. 42 A/7
Drawn by: W. MacRae	Date: 16/04/86
Scale: 1"= 200'	
Revised:	
Drawing No.: 1	

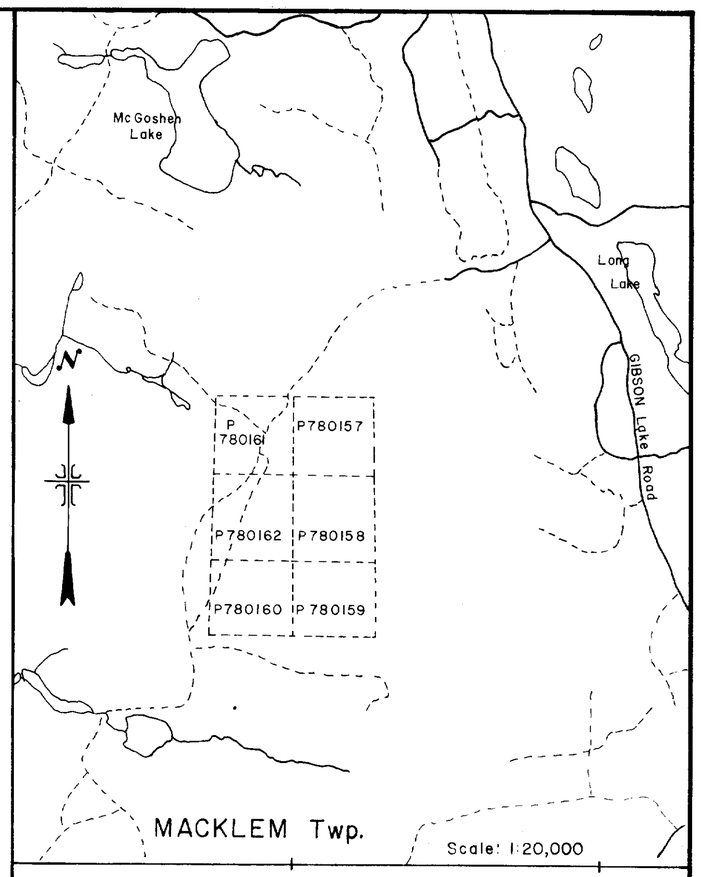
WEM William E. MacRae Geological Services

2.9558

42A07NW0086 2.9558 MACKLEM

210





LOCATION MAP

LEGEND

Overburden Depth — 33' 1 — Overburden Hole Number
1105
Au (ppb) in Heavy Mineral Concentrate from Till — Gold Grain Count in Till

● Proposed Overburden Drill Hole

HILTON RESOURCE Corp.

Overburden Drilling Resuts & Proposed Holes

Property: Long Lake - West Block	
Township: MACKLEM	N.T.S. 42 A/7
Drawn by: W. MacRae	Date: 16/04/86
Scale: 1"= 200'	
Revised:	
Drawing No.: 2	

WEM William E. MacRae Geological Services

2.9558

42A07NW0006 2.9558 MACKLEM

220