010

HOYLE MINING COMPANY LIMITED

MAGNETOMETER SURVEY REPORT

ON

PANACHE LAKE CLAIM GROUP

By

Pioneer Consultants Limited

Haileybury, Ontario

April 30, 1957

INTRODUCTION

On February 18, 1957, an exploration program consisting of a magnetometer survey, commenced on 16 claims in the Sudbury area. This work was completed on the 22nd of April.

The object of the survey was to try to establish a continuation of the known mineralized area, locate geological structures and any new zones of mineralization elsewhere on the group.

The claim group covers a large east-west quartz vein with which encouraging nickel values are associated.

LOCATION AND ACCESS

The F.E. Harrington group consists of 33 unpatented claims numbered S 98470-77 incl., S 98573-78 incl., S 98728-34 incl., S 98856-61 incl., S 98914-15, S 98920-21, and S 99317-18. Of these, 5 lie in the extreme north-east corner of Truman Township, 8 in Louise Township covering the south half of concession I, lots 11 and 12. The remaining claims are in the extreme north-west corner of Dieppe Township.

The magnetometer survey covered only 16 claims numbered S 98470-77 incl., S 98573, S 98576, S 98728-31 incl., and S 98733-34. These claims are all in the north-west corner of Dieppe Township except 4 in the north-east corner of Truman Township.

These claims may be reached by water in the summer months, from the end of Highway 549, going west on Lake Panache to Stoney Bay, then into Brady Lake. The property is also accessible by a 2-mile secondary road from Highway 549 then by foot along a 3-mile trail to Brady Lake. In the winter months, the only accessibility is by snowmobile service from Mr. William Gemmell's at the end of Highway 549.

TOPOGRAPHY

The claim group is located on generally high ground, with two lakes within its boundaries; Northwest Lake to the north and Brady Lake to the south. An east-west ridge traverses the group between the two lakes, and gradually slopes off on the eastern claims to a low swampy area. The extreme eastern section, claim S 98728 and

part of S 98729, are open bog which is inaccessible during the summer months.

Most of the higher ground is rock outcrop or very lightly covered with drift. Some 20-foot vertical cliffs were noted on the north shore of Brady Lake.

The low areas are overgrown with a thick second growth of alders, birch, small pine and poplar; hawthorne bushes and ferns predominate as underbrush. The slopes are covered with birch and poplar with some maple.

In some areas, both red and white pine of nearly commercial size were noted.

WILD LIFE

The area seems to be well populated with deer, partridge, rabbits, and other smaller animals. Muskrat and beaver dwellings were noted in the ponds. Bush wolves are also known to inhabit the area.

GENERAL GEOLOGY

The area is mostly Serpent quartzite with Espanola formation and Bruce conglomerate to the north by Northwest Lake.

On claims S 98470 and S 98475, the Serpent quartzites are intruded by a quartz vein which is exposed for a length of about 200 feet, and has an average width of 25 feet. Two pits, 100 feet apart, were sunk in 1956 on sulphide mineralisation in the south contact of the vein, near the east boundary of claim No. S 98475. The sulphides are massive pyrite, pyrrhotite and chalcopyrite. This material assays about 0.5% nickel and very low in copper. The mineralization, if it is continuous, is covered by light overburden between the pits and to the east and west.

As this survey was conducted during the winter months, little geology was observed. A partial geological survey will be undertaken later in the summer and will be presented in a following report.

MAGNETOMETER SURVEY

A "Radar" magnetometer was used to conduct the survey. This instrument has a sensitivity of 20 gammas and readings were recorded at 300 foot intervals along the base line and at 100 foot intervals along the picket lines.

A map showing all the readings, and another showing the magnetic contours with the initial interpretation, accompany this report.

The magnetometer work does not reveal a clear cut picture and without surface geological information, it is difficult to interpret the results. The suggestion is that the veins and shears strike about N 60°- 70° E, and are repeatedly dislocated by north-west striking faults.

Based on this interpretation, the main showing might have a maximum length of about 500 feet, before being cut off by faults.

A promising anomaly lies 1,000 feet east of the main showing, but again it appears to be restricted in length by faults. It might have a length of 500 feet.

Reconnaissance geological mapping should be done to establish the contacts between formations, and locate faults, shears, veins, etc. A new interpretation of the magnetometer work could then be made, using all the above information.

The magnetometer survey gave very few strong, positive or negative anomalies. It was noted that the pyrrhotite of the area is of both the magnetic and non magnetic variety; therefore, the latter does not affect the instrument to any appreciable degree. Also very little difference is noted in magnetic intensities between the different rock types.

WORK SUMMARY

The survey began on February 18th and was completed on the 22nd of April. An east-west base line was cut through the centre of the property, then picket lines at 300 foot intervals were cut normal to the base line and extended to the boundaries of the area covered by the survey. All lines were chained at 100 foot intervals.

Magnetometer readings were recorded along all the north-south lines at 100 foot stations, giving a total of 1,228 magnetometer stations along 24.7 miles of line. These lines will also be used for the intended Geological Survey.

This work will keep the claims in good standing for one year.

CONCLUSION AND RECOMMENDATIONS

It must be concluded that some geological mapping must be done to realize the full value of the magnetometer survey. When this is completed, and a new interpretation of the work made, a more thorough understanding of the structure should be known.

The anomalies already shown should be looked at and completely investigated.

Diamond drilling of the known mineralized area, as well as the high anomalies is recommended, possibly with a Packsack Drill.

Respectfully submitted,

PIONEER CONSULTANTS LIMITED

C. J. Cunningham-Dunlop, P. Eng.,
President.

Haileybury, Ontario,
April 30, 1957.

Report and field work by C. M. Giddings

Bibliography: -

W. H. Collins 1925 No. 124 Geological Series

STATEMENT OF WORK
ON
BOYLE MINING CO. LTD. PANACHE LAKE OPTION
MAGNETOMETER SURVEY ON MINING CLAIMS IN SUDBURY MINING DIVISION
16 CLAIMS - S 98470-77, S 98573, S 98576, S 98728-31, S 98733-34 INCL
FEB. 18, 1957 to APR. 22, 1957

NAME	ADDRESS	LINE CUTTING	INSTRUMENT WORK	DRAFTING & OFFICE	DAYS	REMARKS
C. J. Cunningham-Dunlop	Haileybury, Ontario			Feb. 5,9-13 incl. Mar. 12,16,19-20 Apr. 12,22	12	Engineer in charge B.A.Sc.
F. E. Harrington	Woodstock, Ontario	Feb. 18-27, Mar. 3-16			24	Chief Cutter
A. Mackenzie	N. Temiskaming, P.Q.	Feb. 18-28, Mar. 1-16			27	Linecutter
J. McKenzie	N. Temiskaming, P.Q.	Feb. 18-28, Mar. 1-16			27	Linecutter
J. Kivi	Whitefish, Ontario	Feb. 18-23,25-27, Mar. 3-16			23	Linecutter
S. Chief	N. Temiskaming, P.Q.	Feb. 18-28, Mar. 1-16			27	Linecutter
C. M. Giddings	Haileybury, Ontario		Mar. 13-22	Mar. 7-12,23-31, Apr.1-22	47	Instrument Man
J. G. Eno	Haileybury, Ontario		Mar. 13-22	Mar. 23-31	19	Assistant to Instrument Man
G. Ninacs	Haileybury, Ontario			Mar. 19-21, 25-29, Apr.2 3,6,8,9, 12-17	19	Draftsman

SUMMARY

	Man Days			
Engineers & Draftsmen	77	x 4	308	
Instrument Work	20	x 4	80	
Line Cutters	128	x 4	512	
TOTAL	225			
Total No. Assessment Days Required	640			

Assessment Credit

308	
80	
320	Max. Allowable
708	

We hereby certify that the above statement is true and correct.

PIONEER CONSULTANTS LIMITED

C. J. Cunningham-Dunlop, B.A.Sc., P. Eng.

NOTE:
Lines 300' apart North & South
from Base Line
Total of 24.7 miles of line.

GEOPHYSICAL SURVEY:

Names and addresses of men employed and the dates on which each worked are:

C.J. Cunningham-Dunlop	Haileybury, Ontario	12 days	Feb. 5, 9-13 incl., Mar. 12, 16, 19, 20, Apr. 12, 22
F.E. Harrington	Woodstock, Ontario	24 days	Feb. 18-27 incl., Mar. 3-16 incl.,
A. McKenzie	N. Temiskaming, P.Q.	27 days	Feb. 18 - Mar. 16 incl.
J. McKenzie	N. Temiskaming, P.Q.	27 days	Feb. 18 - Mar. 16 incl.
J. Kivi	Whitefish, Ontario	23 days	Feb. 18-23 incl., Feb. 25-27 incl., Mar. 3 -16 incl.
S. Chief	N. Temiskaming, P.Q.	27 days	Feb. 18 - Mar. 16 incl.
C.M. Giddings	Haileybury, Ontario	47 days	Mar. 7 - Apr. 22 incl.
J.G. Eno	Haileybury, Ontario	19 days	Mar. 13 - 31 incl.
G. Minaco	Haileybury, Ontario	19 days	Mar. 19-21 incl., Mar. 25-29 incl., Apr. 2, 3, 6, 8, 9 and 12-17 incl.

Total Days 225

020

HOYLE MINING COMPANY LIMITED

REPORT ON GEOLOGICAL AND GEOCHEMICAL SURVEYS

PANACHE LAKE CLAIM GROUP

By

Pioneer Consultants Limited
Haileybury, Ontario.

Haileybury, Ontario

September 20th, 1957

TABLE OF CONTENTS

INTRODUCTION

The following is a summary report on a combined Geological and Geochemical Survey and Diamond drilling conducted on the Panache Lake claims of Hoyle Mining Company Limited, by Pioneer Consultants Limited of Haileybury, Ontario.

The field work was commenced on May 13, 1957 and terminated on August 1, 1957. The object of this work was to explore the extent and economic possibilities of a copper-nickel showing in a large quartz vein. During the spring of 1957, a magnetic survey was conducted over the claims by this company; and further work was deemed necessary to properly interpret the results.

The claims immediately sorrounding the showing were geologically mapped in detail to outline the known mineralized zone and to expose any others that may have existed.

The geochemical survey wasmade over most of the magnetic anomalies, found in the spring, to test for copper mineralization. This survey also covered the east and west extension of the copper-nickel showing in the quartz vein to test for further similar deposits along the vein.

The showing mentioned above and its east and west extensions were diamond drilled to sample the mineralization and outline its extent. In addition, a small burned to gossan zone to the east was sampled with the diamond drill.

LOCATION AND ACCESS

The Panache Lake group consists of 33 unpatented mining claims numbered S-98470-77 incl; S-98573-78 incl; S-98728-34 incl; S-98914-15, S-98920-21, and S-99317-18. Of these 5 lie in the extreme north-east corner of Truman Township, and 8 are in Louise Township covering the south half of concession I, lots 11 and 12. The remaining claims are in the extreme north-west corner of Dieppe Township. The 33 claims are under option from F.E.Harrington Grubstake.

The geochemical survey covered parts of 16 claims; Nos.S-98470-77 incl; S-98573, S-98576, S-98728-31 incl; and S-98733-34, whereas the geological survey only covered 8 claims, Nos. S-98733-34, S-98470-71, and S-98474-77 incl.

The group of 16 claims are all in the north-west corner of Dieppe Township; except 4 that are in the north-east corner of Truman Township.

These claims may be reached by water in the summer months; from the end of Highway 549, going west on Lake Panache to Stoney Bay,

then into Brady Lake. The propertyis also accessible by a two mile secondary road from Highway 549 then by foot along a 3 mile trail to Brady Lake. In winter months, the only accessibility is by automobile service from Mr. William Gemmel at the end of Highway 549.

TOPOGRAPHY

The claim group is located on generally high ground, with two lakes within its boundaries; Norwest Lake to the north and Brady lake to the south. An east-west ridge traverses the group between the two lakes, and gradually slopes off on the eastern claims to a low,swamy area. The extreme eastern section, claim S-98728 and part of S-98729 is open bog which is inaccessible during the summer months.

Most of the higher ground is rock outcrop or very lightly covered with drift. Some 20-foot vertical cliffs were noted on the north shor of Brady Lake.

The area gradually rises north from Brady Lake for ½of a mile then drops off gradually into Norwest Lake, this gives an elevation rise of approximately 300 feet above Brady Lake.

NATURAL RESOURCES

Timber

There are a few isolated stands of nearly commercial red and white pine but not enough to warrant any sizeable timber operations. The higher areas are covered with birch and poplar with small maple. In the low areas, second growth alders, birch and small pine predominate while the underbrush is mainly hawthorne bushes and ferns.

Commerical lumbering was carried out in this area years ago.

Power Sources

The H.E.P.C have power lines within 3 miles east of the property.

Game

The area seems well populated with deer, partridge, rabbits and other small animals. Muskrat, beaver and mink were noted in the ponds and are commercially trapped by residents of the area. Brush wolves are also known to inhabit the area.

The lakes abound with fish such as pickerel, blackbass, lake trout and pike.

Water : The water of Brady Lake is muddy and not fit to drink; whereas Northwest Lake and Stoney Bay have fresh clear water. There is ample water on the property to supply any drilling or mining operations which might be undertaken in the future.

GENERAL GEOLOGY

Introduction : All the consolidated rocks inthe area are of Precambrian age. They consist of an old sedimentary series of conglomerates and quartzites with some limestones and greywacke, all intruded by gabbro and quartz. The old sedimentary rocks, because of their similarity to rocks of the same origin in other parts of Ontario, are herein classfied as Huronian. It is probable that the gabbro dikes and masses which intrude the sediments are of Keweenawan age. The mineralized quartz vein is possibly of the same age relationship as the gabbros. A geological map covering 8 claims on a scale of 200 feet to one inch is attached to this report.

Table of contents

Cenozoic		
Recent :	Swamp and [illegible]	
Pleistocene :	Unsorted deposits [illegible] and gravel	
	Regional Unconformity.	
Precambrian		
	Keweenawan	Basic Intrusives
	"	Intrusive Contact
Huronian	Bruce Series -	Serpent Quartzite
		Espanola Limestone
		Espanola Greywacke
		Bruce Limestone
		Bruce Conglomerate

Bruce Conglomerate

The Bruce conglomerate is a massive boulder conglomerate consisting of subangular to rounded boulders of all sizes, with a dark grey matrix resembling greywacke. The boulders are largest and most abundant in the lower part of the formation; then towards the top, they become smaller and less frequent. The upper part may only have 3 or 4 pebbles per square yard and at the top, the nearly pebble free greywacke grades into a thinly stratified siliceous silt which forms the base of the Bruce LImestone.

The pebbles of the Bruce conglomerate are predominantly quartz although in places, boulders of quartzite were noted. Near the upper contact of the series, the pebbles seem to be only enlarged grains of quartz

This formation is found at the north-east end of Norwest Lake and continues north off the claim group.

Bruce Limestone : The Bruce Limestone overlies the conglomerate and is a dull grey to greenish grey in colour. It grades through a few feet of thinly bedded siliceous material into limestone that is almost free from interbedded silt.

None of this limestone was noted on the claim group, although a small isolated patch was noted on the north side of the Norwest Lake. The limestone there was highly altered with small stringers of quartz varying in size from ½inch to 3 inches. The attitude was not determined.

Espanola Greywacke : This formation is closely allied to the limestone beneath. It consists of the same silty material and limestone interlaminated, but the limestone constituent is reduced to an almost negligible number of thin layers occuring at irregular intervals and a variable amount of carbonate is disseminatee through the silt. It is a thinly bedded siliceous-looking rock, ranging in different beds from pale grey to dark or greyish green. The beds vary in thickness from an inch to a foot in width. They weather unequally, producing a harsh corrugated surface.

The layers that are in relif are siliceous and are usually dark coloured; whereas the sunkers layers are usually more or less calcareous and light in colour.

The formation in this area is in contact with Bruce conglomerate to the north and the Serpent quartzite to the south. The strike is east-west to slightly north of east and the dip is between 70 degrees south and vertical. The softer material seems tobe composed of dolomite as H Cl does not affectit, some small areas of calcium carbonate was noted

Espanola Limestone: This top series is not present in this area, but is composed oflimestone grading out of the greywacke. This bed weathers to a brick red owing to the large content of iron oxide.

Serpent Quartzite : This formation grades out of the Espanola limestone getting lighter in colour and a little coarser and more quartzite in appearance, but fine laminations still persist. The first part of the formtion is fine grained, greenish white, impure quartzite, then it grades into a pure white medium to coarse rock. This dead white, close grained texture is characterstic of the formation. The upper part of the Serpent grades into a coarse grained pink variety of great thickness.

This quartzite is composed of quartz and feldspar grains. The feldspar includes orthoclase, microline, and acid pagioclase. There are no dark minerals present, but some carbonate present weathers brown suggesting a small percentage of siderite.

This formation covers the majority of the group and contacts with the Espanola formations near Norwest Lake. Small bands, 1 to 4 inches of calcarious material were noted in the Serpent. These limy bands tend to show as depressions in the quartzite and are mainly thin beds of dolomite.

The strike is the same as the other formation, that is, east-west approximately with the dip in this area 70 to 90 degrees south, but a few steep north dips were noted between the two lakes. Since the Serpent is badly fractured, these north dips could possibly be fractures.

Keweenawan : The intrusives of this area are called Gabbro. These rocks are light in colour and their grain size varies from medium to coarse, and they do not have diabse texture. They are in the form of dikes and irregular masses and are quite prominent throughout the mapped area. The dikes vary in width from 1 to 30 feet. The masses are irregular in shape and size and have no strike.

These intrusions cut all the formations, but chilling was not notedon the edges. All the outcrops have well rounded and smooth surfaces

Pleistocene : Very few sand and gravel deposits are known to exist. Some unsorted gravel was noticed in the high valley where it was not covered by humus.

Recent : Deposits of this nature cover a great deal of the area. Humus consisting of decayed vegetation is found everywhere on top of sand and fine clay. Open swamp and bogs are formed in the low ground at the end of each lake and where beavers have backed up the river or trapped water in low areas. Most of these swamps dry up in the late summer. The depth of overburden is shallow except in the swampy areas where it may be quite deep.

STRUCTURAL GEOLOGY

Introduction : The information obtained pertaining to structure was somewhat conclusive as to the attitude of the beds. Faulting as indicated by the previously completed magnetometer work, failed to show up, but the intrusives indicated did show somewhat.

Some of the Keweenawan intrusives are essentially dikes mostly striking east-west with a vertical dip or possibly dipping with the formation. It isimpossible to determine the attitude of the gabbro masses.

Bruce Series : Except for a few places of claim S-98470, the whole series dips from 60 to 90 degrees south. On Claim S-98470 the dips are 70 to 90 degrees north. This may be due to conflusion of dips with the innumerable fractures that are in the sediments or possibly a small fold is indicated.

Faults : One fault was recognized and a number indicated; the recognized fault runs about N75 E through the pits on the vein and was found again in D.H. # 12. This seems to be a normal fault and the amount of displacement if any, is unknown.

Graphitic zones ranging from 1 to 6 inches wide were noted in the pits and the dimaond drilling. These graphitic zones seems to be running parallel to the fault and quartz vein.

Other indications of faulting were noted but these may be just fractures.

According to the geological map by W. H. Collins, No.292A; a fault is indicated running N.E. through Norwest Lake.

Quartz Vein : A quartz vein 25 to 30 feet wide and 750 feet long (striking east and west) was found on claims S-98470 and S-98475, carrying heavy pyrrhotite and pyrite mineralization. This vein strikes N70E and the dip is nearly vertical. The bluish-white quartz intrudes the Serpent quartzite and contacts the mass of gabbro at the north-west end. The contacts with the Serpent show no chilling along the edges and are very sharply defined.

Diamond Drilling : This vein was drilled this summer with a Packsack diamond drill. The section under the pits and the anomaly directly east of the pits on line 3000E, showed massive mineralization averaging 5.5 feet wide in 6 holes for alength of 260 feet. A composite sample of the best sections in these holes assayed as follows :

Nickel %	Copper %	Cobalt %	Selenium %
0.48	0.13	0.13	0.002

Drilling further along the strike of the vein to the east and west showed disseminated pyrite mineralization.

At the eastern end, the vein breaks up into a series of quartz stringers and calcarious sections. The mineralization is very low at this point.

On line 4200E on claim S-98470, a magnetic anomaly coincides with a burned zone in the quartzite. The zone is 60 feet long and 25 feet wide, striking north-west - south-east. Two holes drilled under this cut disseminated pyrrhotite and chalcopyrite which returned very low assays. This zone has no extension to the east or west.

More detailed information on the drilling may be found in the drill logs in the back of this report.

GEOCHMEICAL SURVEY

A geochemical survey was conducted on the soil in areas of combined high and low magnetic anomalies. Picket lines were cutin these areas between the lines previously cut for the magnetic survey, to provide a line interval of 150 feet. This resulted in an additional 4.4 miles of line. Soil samples were taken at 25-foot intervals along all lines in the anomalous areas.

Each sample consisted of about a half pound of material taken at the top of the sandy layer, below the humus, at depths from 12 to 18 inche

The samples were assayed at Consolidated Sudbury Basin Mines Limited, Chelmsford, Ontario, by the bi-quinaline method, and the results reported in parts per million of copper. The results were plotted on drawings at 50 feet to the inch and contoured at 25 parts per million intervals. These drawings are attached to this report.

Several localized anomalies resulted from this work. The three anomalies south of the pits at : 2550E, 875S; 3000E; 900S; and 3300E, 1025S appear to result from the known mineralized zone inthe vein. They occur along a minor water course draining a swamp south of the vein.

The anomaly at 2250E, 625S is due to one high assay of 416 parts per million copper. There are no supporting high assays around it and therefore, it is thought to constitute an erratic.

The anomaly having a high of 83 parts per million, at 3150E, 825S(east of the pits) is probably due to weak mineralization in the vein at this point and was confirmed by the drilling of 3 holes.

An anomlay having a high of 212 parts per million and about 600 feet long, east to west, lies 125 feet north of the pits. It compares in magnitude with those south of the pits but occurs over an outcrop area on a hill sloping to the north. It may be due to a mineralized zone beneath the soil immediately to the north. It may also be due to the gabbro to the west which is slightly mineralized and which is up hill from the anomaly. The anomaly does not, however, follow any water course.

The small anomaly at 1200E, 1100S, is probably due to weak mineralization in the gabbro over which it lies.

The small anomaly with a high of 412 parts per million at 9000E, 700N is due to ore assay and may be considered an erratic. The area is Bruce boulder conglomerate in which no mineralization was seen.

In general, the soil sampling did not indicate any new mineralization in the quartz vein or its extensions. There is a suggestion, however, of a second zone to the north of the pits.

CONCLUSIONS AND RECOMMENDATIONS:

The magnetic, geological, geochemical surveys, and the diamond drilling indicate a definite association of nickel-copper mineralization with the foot wall of the quartz vein. Although the values at surface are not of ore-grade, the assays are sufficiently high to warrant further work.

Apart from the geochemical indication 125 feet north of the pits, there do not appear to be any other interesting areas on the property.

It is theorized that the copper-nickel mineralization could improve to ore-grade where the vein cuts another rock-type such as limestone or greywacke. The geological work has shown that the contact between the Serpent quartzite and the Espanola limestone and greywacke, is cut by the vein at a depth of approximately 350 feet.

On the basis of this theory and the encouraging surface value, two or three diamond drill holes should be put down to intersect the vein at depths below 350 feet. Indications are that the mineralization rakes to the west. Therefore, one hole should be drilled near the western pit and two more at 200-foot intervals to the east. Further work would depend upon the results obtained.

Respectfully submitted,
PIONEER CONSULTANTS LIMITED

C. J. Cunningham-Dunlop
President.

CJC-D/jd
Haileybury, Ontario
September 20, 1957

Report and field work by C. M. Giddings

References : W. H. Collins, No. 124, Geological Series G.S.C. 1925
E. S. Moore, Vol. XXXVIII, Part 7, O.D.M. 1929.

APPENDIX

Diamond drill logs — Envelope on Back Cover

Drawing accompanying this report

Drawing No.	Title	Scale
206-3	Geological Survey	1" - 200'
206-4	Geochemical Survey Block 1	1" - 50'
206-5	Geochemical Survey Block 2	1" - 50'
206-6	Geochemical Survey Block 3	1" - 50'
206-7	Geochemical Survey Block 4	1" - 50'
206-8	Geochemical Survey Block 5	1" - 50'

HOYLE MINING COMPANY LIMITED

REPORT ON GEOLOGICAL AND GEOCHEMICAL SURVEYS

PAUACHE LAKE CLAIM GROUP

By

Pioneer Consultants Limited
Haileybury, Ontario

Haileybury, Ontario

September 20th, 1957

TABLE OF CONTENTS

INTRODUCTION

The following is a summary report on a combined Geological and Geochemical Survey and Diamond Drilling conducted on the Panache Lake claims of Hoyle Mining Company Limited, by Pioneer Consultants Limited of Haileybury, Ontario.

The field work was commenced on May 13, 1957 and terminated on August 1, 1957. The object of this work was to explore the extent and economic possibilities of a copper-nickel showing in a large quartz vein. During the spring of 1957, a magnetic survey was conducted over the claims by this company; and further work was deemed necessary to properly interpret the results.

The claims immediately surrounding the showing were geologically mapped in detail to outline the known mineralized zone and to expose any others that may have existed.

The geochemical survey was made over most of the magnetic anomalies, found in the spring, to test for copper mineralization. This survey also covered the east and west extensions of the copper-nickel showing in the quartz vein to test for further similar deposits along the vein.

The showing mentioned above and its east and west extensions were diamond drilled to sample the mineralization and outline its extent. In addition, a small burned or gossan zone to the east was sampled with the diamond drill.

LOCATION AND ACCESS

The Panache Lake group consists of 33 unpatented mining claims numbered S-98470 - 77 incl., S-98573 - 78 incl., S-98728 - 34 incl., S-98914 - 15, S-98920 - 21, and S-99317 - 18. Of these, 5 lie in the extreme north-east corner of Truman Township, and 8 are in Louise Township, covering the south half of concession I, lots 11 and 12. The remaining claims are in the extreme north-west corner of Dieppe Township. The 33 claims are under option from the P. E. Harrington Grubstake.

The geochemical survey covered parts of 16 claims; Nos. S-98470 - 77 incl., S-98573, S-98576, S-98728 - 31 incl., and S-98733 - 34, whereas the geological survey only covered 8 claims, Nos. S-98733 - 34, S-98470 - 71, and S-98474 - 77 incl.

The group of 16 claims are all in the north-west corner of Dieppe Township; except 4 that are in the north-east corner of Truman Township.

These claims may be reached by water in the summer months; from the end of Highway 549, going west on Lake Panache to Stoney Bay, then into Brady Lake. The property is also accessible by a two mile secondary road from Highway 549 then by foot along a 3 mile trail to Brady Lake. In the winter months, the only accessibility is by snowmobile service from Mr. William Gemmell at the end of Highway 549.

TOPOGRAPHY

The claim group is located on generally high ground, with two lakes within its boundaries; Norwest Lake to the north and Brady Lake to the south. An east-west ridge traverses the group between the two lakes, and gradually slopes off on the eastern claims to a low swampy area. The extreme eastern section, claim S-98728 and part of S-98729, is open bog which is inaccessible during the summer months.

Most of the higher ground is rock outcrop or very lightly covered with drift. Some 20-foot vertical cliffs were noted on the north shore of Brady Lake.

The area gradually rises north from Brady Lake for ¼ of a mile then drops off gradually into Norwest Lake, this gives an elevation rise of approximately 300 feet above Brady Lake.

NATURAL RESOURCES

Timber

There are a few isolated stands of nearly commercial red and white pine but not enough to warrent any sizeable timber operations. The higher areas are covered with birch and poplar with some small maple. In the low areas, second growth alders, birch and small pine predominate while the undertrush is mainly hawthorne bushes and ferns.

Commercial lumbering was carried out in this area years ago.

Power Sources

The H.E.P.C. have power lines within 3 miles east of the property.

GAME

The area seems well populated with deer, partridge, rabbits and other small animals. Muskrat, beaver and mink were noted in the ponds and are commercially trapped by residents of the area. Brush wolves are also known to inhabit the area.

The lakes abound with fish such as pickerel, black bass, lake trout and pike.

Water

The water of Brady Lake is muddy and not fit to drink; whereas Norwest Lake and Stoney Bay have fresh clear water. There is ample water on the property to supply any drilling or mining operations which might be undertaken in the future.

GENERAL GEOLOGY

Introduction

All the consolidated rocks in the area are of Precambrian age. They consist of an old sedimentary series of conglomerates and quartzites with some limestones and greywacke, all intruded by gabbro and quartz. The old sedimentary rocks, because of their similarity to rocks of the same origin in other parts of Ontario, are herein classified as Huronian. It is probable that the gabbro dikes and masses which intrude the sediments are of Keweenawan age. The mineralized quartz vein is possibly of the same age relationship as the gabbros. A geological map covering 8 claims on a scale of 200 feet to one inch is attached to this report.

Table of Formations

Cenozoic		
Recent:		Swamp and Muskeg accumulations
Pleistocene:		Unsorted deposits of Sand and Gravel
		Regional Unconformity
Precambrian		
		Keweenawan Basic Instrusives
		Keweenawan Intrusive Contact
Huronian	Bruce Series	- Serpent Quartzite
		- Espanola Limestone
		- Espanola Greywacke
		- Bruce Limestone
		- Bruce Conglomerate

BRUCE CONGLOMERATE

Bruce Conglomerate

The Bruce conglomerate is a massive boulder conglomerate consisting of subangular to rounded boulders of all sizes, with a dark grey matrix resembling greywacke. The boulders are largest and most abundant in the lower part of the formation; then towards the top, they become smaller and less frequent. The upper part may only have 3 or 4 pebbles per square yard and at the top, the nearly pebble free greywacke grades into a thinly stratified siliceous silt which forms the base of the Bruce limestone.

The pebbles of the Bruce conglomerate are predominately quartz although in places, boulders of quartzite were noted. Near the upper contact of the series, the pebbles seem to be only enlarged grains of quartz.

This formation is found at the north-east end of Norwest Lake and continues north off the claim group.

Bruce limestone

The Bruce limestone overlies the conglomerate and is a dull grey to greenish grey in colour. It grades through a few feet of thinly bedded siliceous material into limestone that is almost free from interbedded silt.

None of this limestone was noted on the claim group, although a small isolated patch was noted on the north side of Norwest Lake. The limestone there was highly altered with small stringers of quartz varying in size from ½ inch to 3 inches. The attitude was not determined.

Espanola Greywacke

This formation is closely allied to the limestone beneath. It consists of the same silty material and limestone interlaminated, but the limestone constituent is reduced to an almost negligible number of thin layers occurring at irregular intervals and a variable amount of carbonate is disseminated through the silt. It is a thinly bedded siliceous-looking rock, ranging in different beds from pale grey to dark or greyish green. The beds vary in thickness from an inch to a foot in width. They weather unequally, producing a harsh corrugated surface.

The layers that are in relief are siliceous and are usually dark coloured; whereas the sunken layers are usually more or less calcarious and light in colour.

The formation in this area is in contact with Bruce conglomerate to the north and the Serpent quartzite to the south. The strike is east-west to slightly north of east and the dip is between 70 degrees south and vertical. The softer material seems to be composed of dolomite as H Cl does not affect it, but some small areas of calcium carbonate were noted.

Espanola limestone

This top series is not present in this area, but is composed of limestone grading out of the greywacke. This bed weathers to a brick red owing to the large content of iron oxide.

Serpent Quartzite

This formation grades out of the Espanola limestone getting lighter in colour and a little coarser grained and more quartzite in appearance, but fine laminations still persist. The first part of the formation is fine grained, greenish white, impure quartzite, then it grades into a pure white medium to coarse rock. This dead white, close grained texture is characteristic of the formation. The upper part of the Serpent grades into a coarse grained pink variety of great thickness.

This quartzite is composed of quartz and feldspar grains. The feldspar includes orthoclase, microcline, and acid plagioclase. There are no dark minerals present, but some carbonate present weathers brown suggesting a small percentage of siderite.

This formation covers the majority of the group and contacts with the Espanola formations near Norwest Lake. Small bands, 1 to 4 inches of calcarious material were noted in the Serpent. These limy bands tend to show as depressions in the quartzite and are mainly thin beds of dolomite.

The strike is the same as the other formation, that is, east-west approximately with the dip in this area 70 to 90 degrees south, but a few steep north dips were noted between the two lakes. Since the Serpent is badly fractured, these north dips could possibly be fractures.

KEWEENAWAN.

Intrusives

The intrusives of this area are called Gabbro. These rocks are light in colour and their grain size varies from medium to coarse, and they do not have diabase texture. They are in the form of dikes and irregular masses and are quite prominent throughout the mapped area. The dikes vary in width from 1 to 30 feet. The masses are irregular in shape and size and have no strike.

These intrusions cut all the formations, but chilling was not noted on the edges. All the outcrops have well rounded and smooth surfaces.

Pleistocene

Very few sand and gravel deposits are known to exist. Some unsorted gravel was noticed in the high valley where it was not covered by humus.

Recent

Deposits of this nature cover a great deal of the area. Humus consisting of decayed vegetation is found everywhere on top of sand and fine clay. Open swamp and bogs are formed in the low ground at the ends of each lake and where beavers have backed up the water or trapped water in low areas. Most of these swamps dry up in the late summer. The depth of overburden is shallow except in the swampy areas where it may be quite deep.

STRUCTURAL GEOLOGY

Introduction

The information obtained pertaining to structure was somewhat conclusive as to the attitude of the beds. Faulting as indicated by the previously completed magnetometer work, failed to show up, but the intrusives indicated did show somewhat.

Some of the Keweenawan intrusives are essentially dikes mostly striking east-west with a vertical dip or possibly dipping with the formations. It is impossible to determine the attitude of the gabbro masses.

Bruce Series

Except for a few places on claim S-98470, the whole series dips from 60 to 90 degrees south. On claim S-98470 the dips are 70 to 90 degrees north. This may be due to confusion of dips with the innumerable fractures that are in the sediments or possibly a small fold is indicated.

FAULTS

Faults

One fault was recognized and a number indicated; the recognized fault runs about N 75 E through the pits on the vein and was found again in D.H. #12. This seems to be a normal fault and the amount of displacement if any, is unknown.

Graphitic zones ranging from 1 to 6 inches wide were noted in the pits and the diamond drilling. These graphitic zones seem to be running parallel to the fault and quartz vein.

Other indications of faulting were noted but these may be just fracturing.

According to the geological map by W. H. Collins, Number 292A; a fault is indicated running N.E. through Norwest Lake.

Quartz Veins

A quartz vein 25 to 30 feet wide and 750 feet long (striking east and west) was found on claims S-98470 and S-98475, carrying heavy pyrrhotite and pyrite mineralization. This vein strikes N 70 E and the dip is nearly vertical. The bluish-white quartz intrudes the Serpent quartzite and contacts the mass of gabbro at the north-west end. The contacts with the Serpent show no chilling along the edges and are very sharply defined.

Diamond Drilling

This vein was drilled this summer with a Packsack diamond drill. The section under the pits and the anomaly directly east of the pits on line 3000 E, showed massive mineralization averaging 5.5 feet wide in 6 holes for a length of 260 feet. A composite sample of the best sections in these holes assayed as follows:

Nickel %	Copper %	Cobalt %	Selenium %
0.48	0.13	0.13	0.002

Drilling further along the strike of the vein to the east and west showed disseminated pyrite mineralization.

At the eastern end, the vein breaks up into a series of quartz stringers and calcarious sections. The mineralization is very low at this point.

On line 4200 N on claim S-98470, a magnetic anomaly coincides with a burned zone in the quartzite. The zone is 60 feet long and 25 feet wide, striking north-west - south-east. Two holes drilled under this cut disseminated pyrrhotite and chalcopyrite which returned very low assays. This zone has no extension to the east or west.

More detailed information on the drilling may be found in the drill logs in the back of this report.

GEOCHEMICAL SURVEY

A geochemical survey was conducted on the soil in areas of combined high and low magnetic anomalies. Picket lines were cut in these areas between the lines previously cut for the magnetic survey, to provide a line interval of 150 feet. This resulted in an additional 4.4 miles of line. Soil samples were taken at 25-foot intervals along all lines in the anomalous areas.

Each sample consisted of about a half pound of material taken at the top of the sandy layer, below the humus, at depths from 12 to 18 inches.

The samples were assayed at Consolidated Sudbury Basin Mines Limited, Chelmsford, Ontario, by the bi-quinaline method, and the results reported in parts per million of copper. The results were plotted on drawings at 50 feet to the inch and contoured at 25 parts per million intervals. These drawings are attached to this report.

Several localized anomalies resulted from this work. The three anomalies south of the pits at: 2550 E, 875 S; 3000 E, 900 S; and 3300 E, 1025 S appear to result from the known mineralized zone in the vein. They occur along a minor water course draining a swamp south of the vein.

The anomaly at 2250 E, 625 S is due to one high assay of 416 parts per million copper. There are no supporting high assays around it and therefore it is thought to constitute an erratic.

The anomaly having a high of 83 parts per million, at 3150 E, 825 S (east of the pits) is probably due to weak mineralization in the vein at this point and was confirmed by the drilling of 3 holes.

An anomaly having a high of 212 parts per million and about 600 feet long, east to west, lies 125 feet north of the pits. It compares in magnitude with those south of the pits but occurs over an outcrop area on a hill sloping to the north. It may be due to a mineralized zone beneath the soil immediately to the north. It may also be due to the gabbro to the west which is slightly mineralized and which is up hill from the anomaly. The anomaly does not, however, follow any water course.

The small anomaly at 1200 E, 1100 S, is probably due to weak mineralization in the gabbro over which it lies.

The small anomaly with a high of 412 parts per million at 9000 E, 700N is due to one assay and may be considered an erratic. The area is Bruce boulder conglomerate in which no mineralization was seen.

In general, the soil sampling did not indicate any new mineralization in the quartz vein or its extensions. There is a suggestion, however, of a second zone to the north of the pits.

CONCLUSIONS AND RECOMMENDATIONS

The magnetic, geological, geochemical surveys, and the diamond drilling indicate a definite association of nickel-copper mineralization with the foot wall of the quartz vein. Although the values at surface are not of ore-grade, the assays are sufficiently high to warrant further work.

Apart from the geochemical indication 125 feet north of the pits, there do not appear to be any other interesting areas on the property.

It is theorized that the copper-nickel mineralization could improve to ore-grade where the vein cuts another rock-type such as limestone or greywacke. The geological work has shown that the contact between the Serpent quartzite and the Espanola limestone and greywacke, is cut by the vein at a depth of approximately 350 feet.

On the basis of this theory and the encouraging surface values, two or three diamond drill holes should be put down to intersect the vein at depths below 300 feet. Indications are that the mineralization rakes to the east. Therefore, one hole should be drilled near the western pit and two more at 200-foot intervals to the east. Further work would depend upon the results obtained.

Respectfully submitted,

PIONEER CONSULTANTS LIMITED

C. J. Cunningham-Dunlop,
President.

CJC-D/jd

Haileybury, Ontario

September 20, 1957

Report and field work by C. M. Giddings

References: W. H. Collins, No. 124, Geological Series G.S.C. 1925

E. S. Moore, Vol. XXXVIII, Part 7, C.D.M. 1929

APPENDIX

Diamond Drill Logs - Envelope on Back Cover

Drawing Accompanying This Report

Drawing No.	Title	Scale
206 - 3	Geological Survey	1" - 200'
206 - 4	Geochemical Survey Block 1	1" - 50'
206 - 5	Geochemical Survey Block 2	1" - 50'
206 - 6	Geochemical Survey Block 3	1" - 50'
206 - 7	Geochemical Survey Block 4	1" - 50'
206 - 8	Geochemical Survey Block 5	1" - 50'

STATEMENT OF WORK

HOYLE MINING COMPANY LIMITED - PARADISE LAKE CLAIMS

GEOLOGICAL AND GEOCHEMICAL SURVEY ON 16 CLAIMS

NO.-898470-77 Incl. 898573, 898576, 898720-31 Incl. and 898733-34 Incl.

Name	Address	Line Cutting	Sampling	Mapping	Drafting & Reports	Days	Remarks
G.J. C-Dunlop	Haileybury				June 27, July 18-19	3	Engineer in charge B.A.Sc.
G.M. Giddings	Haileybury	May 13-17	May 24-27 June 1-8 June 16-26	May 18-23,28-31,June 9-15, July 27-31	Aug. 1,19-31, Sept. 1-20	84	Person in charge of Mapping & Sampling
E. Minaes	Haileybury	May 13-17		May 18-31,June 1-26	June 27-29,July 1-6, 8-13, 15	61	Assistant Mapper & Draughtsman
A. McKenzie	N.Temiskaming P.Q.	May 13-23, June 19-21	May 24-31 June 1-18, 22-26			45	Linecutter and Sampleman
W.K. Polson	N.Temiskaming P.Q.	May 13-23, June 19-21	May 24-31 June 1-18, 22-26			45	Linecutter and Sampleman
G. Minaes	Haileybury				Sept. 4,5,11,12,20	5	Draughtsman
A. Nelson	Haileybury				Sept. 16-20	5	Draughtsman
E. Cornman	LaSarre, P.Q.		May 28-31,June 3,5-8,11-15,17, 20-22, July 3			19	Sample Preparation
G. Ouellette	Hanmer, Ont.		June 25-29, July 2-31, Aug. 1,2,7,12-20			47	Assayer
J. Loiselle	Chelmsford, Ont.		July 23-31 Aug. 1-20			29	Assayer

SUMMARY

Geological Survey on 8 claims:

Mapping	-	62 man days	x	4	=	248 days assessment work
Draughting and Office	-	31 man days	x	4	=	124 days assessment work
		93				372

Total work applied for: 320 days

Geochemical Survey on 16 claims:

Line cutting	-	38 man days	x	4	=	152 days assessment work
Sampling	-	180 man days	x	4	=	720 days assessment work
Draughting and Office	-	32 man days	x	4	=	128 days assessment work
		250				1000

Total work applied for: 640 days

DISTRIBUTION OF ASSESSMENT WORK

Claim No.	Geological Survey	Geochemical Survey
S 98470	40	40
S 98471	40	40
S 98472	-	40
S 98473	-	40
S 98474	40	40
S 98475	40	40
S 98476	40	40
S 98477	40	40
S 98728	-	40
S 98729	-	40
S 98730	-	40
S 98731	-	40
S 98733	40	40
S 98734	40	40
S 98573	-	40
S 98576	-	40

We hereby certify that the above statement is true and correct.

PIONEER CONSULTANTS LIMITED

C. J. Cunningham-Dunlop, B.A.Sc., P. Eng.,
President.

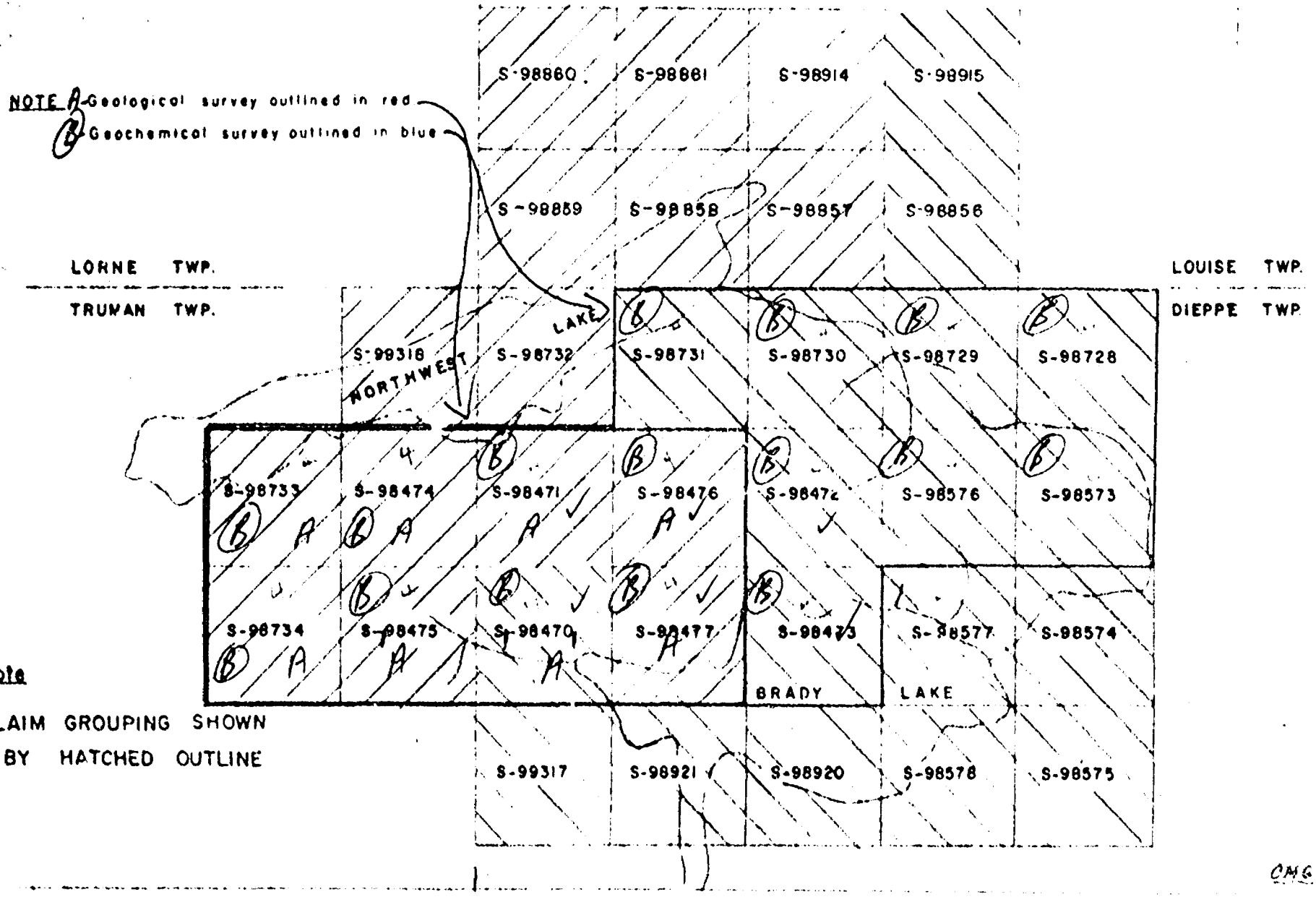
NOTE: Time for Draughting and Reports equally split between Geological and Geochemical.

63.901

HOYLE MINING COMPANY LIMITED

Panache Lake Claims

Scale: 1" = 20 chains August 1957



Note

CLAIM GROUPING SHOWN
BY HATCHED OUTLINE

CMG

COMPANY HOYLE-PANACHE

PROPERTY

DIAMOND DRILL RECORD

HOLE NO. 1

SHEET NO. 1

DATE June 23,1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	Due South	2800E	June 19, 1957
	LENGTH 10.0°	DEPARTURE 820S	STOPPED June 19, 1957
	LOCATION	ELEVATION	LOGGED BY C. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
0 - 10.0'	Quartz	Bluish white (Barren) Hole cemented at 10'						
10.0'		END OF HOLE						

COMPANY [redacted]

PROPERTY

DIAMOND DRILL RECORD

SHEET NO. 2

DIP ANGLES	BEARING	LATITUDE	STA
-45°	Due South	8200 E	
	LENGTH 20.0'	DEPARTURE 820 E	STO
	LOCATION	ELEVATION	LOG

ROCK

FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH
0 - 20.0'	QUARTZ	Bluish white (barren) Vein cemented at 20'		
20.0'		END OF HOLE.		

COMPANY [redacted]

PROPERTY

DIAMOND DRILL RECORD

HOLE NO. 1

SHEET NO. 1

DATE June 23, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	Due South	2600 E	June 19, 1957
	LENGTH 20.0'	DEPARTURE 820 S	STOPPED June 19, 1957
	LOCATION	ELEVATION	LOGGED BY C. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
0 - 20.0'	QUARTZ	Bluish white (barren) Hole cemented at 20'						
20.0'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 2

PROPERTY

SHEET NO. 1

DATE June 23/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-49°	Due South	3000E	June 21, 1957
	LENGTH 63.2'	DEPARTURE 825S	STOPPED June 22, 1957
	LOCATION	ELEVATION	LOGGED BY C.M.GIDDINGS

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
		No Casing						
0 - 8.0	QUARTZITE	Dark, medium grained with quartz stringers from 2-3" at .5', 1.4', 5.5' and 7.5' - along most fracture planes Limonite and small quantities of Pyrite.						
8.0 - 10.0	QUARTZITE	Darker, finer grained with pyrite and limonite scattered through along fractures.						
10.0 - 10.4	GRAPHITE	Possible fault zone (?)						
10.4 - 20.1	QUARTZITE	Dark, fine grained grading into a lighter fine-grained quartzite with a black spotting-quartz stringer at 16.4.						
20.1'- 20.2	GRAPHITE	Zone 45 degrees to core.						
20.2 - 21.3	QUARTZ	Vein (Barren)						
21.3 - 32.3	QUARTZITE	Light, medium grained.						
32.3 - 33.5	SLATE ?	Dark, fine grained - brecciated in places. Slip and fractures have graphite, pyrite and limonite in small quantities.						
33.5 - 63.2	QUARTZITE	Medium grained - mineralization scattered squarely 44.7 pyrite bands for 1" some graphite in fractures-very little mineralization from 48.0' on.						
63.2		END OF HOLE						

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. 2

PROPERTY

SHEET NO. 1

DATE June 23/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	Due South	3000 E	June 21, 1957
	LENGTH 63.2'	DEPARTURE 625 S	STOPPED June 22, 1957
	LOCATION	ELEVATION	LOGGED BY C. M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
		No Casing						
0 - 8.0'	QUARTZITE	Dark, medium grained with quarts stringers from 2-3" at .5', 2.4', 5.5' and 7.5' - along most fracture planes limonite and small quantities of Pyrite.						
8.0'-20.0'	QUARTZITE	Darker, finer grained with pyrite and limonite scattered through along fractures.						
20.0'-20.4'	GRAPHITE	Possible fault zone (?)						
20.4'-20.1'	QUARTZITE	Dark, fine grained grading into a lighter fine-grained quartzite with a black spotting-quarts stringer at 16.4.						
20.1'-20.2'	GRAPHITE	Zone 45 degrees to core.						
20.2'-21.3'	QUARTZ	Vein - (Barren)						
21.3'-32.3'	QUARTZITE	Light, medium grained.						
32.3'-33.5'	SLATE ?	Dark, fine grained - brecciated in places. Slip and fractures have graphite, pyrite and limonite in small quantities.						
33.5'-63.2'	QUARTZITE	Medium grained - mineralization scattered sparsely 44.7 pyrite bands for 1" some graphite in fractures-very little mineralization from 48.0' on.						
63.2'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 3

PROPERTY

SHEET NO. #1

DATE July 7, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
- 43°	Due North	2000E	June 22, 1957
	LENGTH 49.6'	DEPARTURE 825S	STOPPED June 25, 1957
	LOCATION S-98470	ELEVATION	LOGGED BY C. Giddings.

ROCK			CORE SAMPLES &					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY CU	ASSAY NI	ASSAY AU
		No Casing						
0 - 2'	QUARTZ	White - barren - limonite on fractures.						
2 - 10.8'	QUARTZITE	Darkish, fine grained-limonite and pyrite on some fractures.						
10.8- 11.5'		Graphite zone in quartzite (schist ?) some pryite.						
11.5- 12.8'	QUARTZ	White with pieces of quartzite mixed in.						
12.8-13.8'	QUARTZITE	Dark, fine grained graphite on slips and fractures. Graphitic inclusions in quartzite - pyrite and limonite with graphite.						
13.8-16.5'	QUARTZ	Bluish white with graphitic inclusions - some pyrite mineralization in quartz.						
16.5-17.9'	QUARTZITE	Fine grained, dark grading in and out of quartz Graphitic inclusions throughout.						
17.9-20.3	QUARTZITE	Very dark - fine grained - graphite throughout on slips-some chlorite noted also along some slips - core badly fractured with slips. Quartz stringer at 19.9 - 1" wide.						
20.3-24.8	QUARTZ	Bluish white-possibly some chlorite on fractures pieces of quartzite in places with graphitic inclusions - some pyrite mineralization in quartz and pyriteand limonite on slips.						
24.8-27'	QUARTZITE	Very dark, fine grained, graphite on slips and also some pyrite and chlorite ?? Contact with quartz about 30° to core.						
27' -27.4'	QUARTZ	White with heavy cyrstalline pyrite mineralization -possibly some chalcopyrite and pyrrhotite.	804	3'	27-30'	0.03	0.09	
27.4-28'	QUARTZITE	Dark, fine grained, some pyrite mineralization contact about 40° to core.						
28 - 30'	QUARTZ	White-heavily mineralized with pyrite, some chalcopyrite and pyrrhotite about 5% of core volume mineral.						
30 - 33.5	QUARTZ	Heavily mineralized - massive pyrrhotite and pyrite - some chalcopyrite 65% mineralization	805	2'	30-32'	0.14	0.52	Tr
		pyrite both massive and crystalline	806	1.5'	32-33.5	0.07	0.52	Tr
33.5-33.6		Graphitic zone at end of quartz-possible graphitic schist ??						

COMPANY .....

DIAMOND DRILL RECORD

HOLE NO. 3

PROPERTY .....

SHEET NO. 2

DATE

DIP ANGLES	BEARING	LATITUDE	STARTED
	LENGTH	DEPARTURE	STOPPED
	LOCATION	ELEVATION	LOGGED BY

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS

33.6 - 40.6' QUARTZITE — Very dark and fine grained graphite on slips- some pyrite mineralization also on slips - grades into a lighter fine grained quartzite

40.6 - 41.6' SLATE? — Very fine grained slaty material - banded horizontal to core with thin (¼") band of quartzite.

41.6 - 44' QUARTZITE — Dark, fine grained, graphite on slips - very little mineralization.

44.0 - 45.9' QUARTZITE — Dark, fine grained, heavily fractured with graphitic slips - pyrite mineralization on slips - some massive pyrite at 45.9'

45.9 - 49.6' QUARTZ — Bluish white (barren)

49.5' — END OF HOLE.

STOPPED HOLE IN BARREN QUARTZ

DIAMOND DRILL RECORD

HOLE NO. 3

PROPERTY: _____ SHEET NO. 1 DATE July 7, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	Due North	800E	June 22, 1957
	LENGTH 49.6'	DEPARTURE 800E	STOPPED June 25, 1957
	LOCATION S- 98W70	ELEVATION	LOGGED BY C. Gillings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu.	ASSAY Ni.	AS
		No Casing.						
0 - 2'	QUARTZ	White - brown - limonite on fractures.						
2'-10.8'	QUARTZITE	Dartish, fine grained - limonite and pyrite on some fractures.						
10.8'-11.5'		Graphitic zone in quartzite (schist?) some pyrite.						
11.5'-12.8'	QUARTZ	White with pieces of quartzite mixed in.						
12.8'-13.8'	QUARTZITE	Dark, fine grained graphite on slips and fractures.						
		Graphitic inclusions in quartzite - pyrite and limonite with graphite.						
13.8'-16.5'	QUARTZ	Rimish white with graphitic inclusions - some pyrite mineralization in quartz.						
16.5'-17.9'	QUARTZITE	Fine grained, dark grading in and out of quartz Graphitic inclusions throughout.						
17.9'-20.3'	QUARTZITE	Very dark - fine grained - graphite throughout on slips - some chlorite noted also along some slips - core badly fractured with slips. Quartz stringer at 19.9 - 1" wide.						
20.3'-24.8'	QUARTZ	Rimish white - possibly some chlorite on fractures pieces of quartzite in places with graphitic inclusions - some pyrite mineralization in quartz and pyrite and limonite on slips.						
24.8'-27'	QUARTZITE	Very dark, fine grained, graphite on slips and also some pyrite and chlorite?? Contact with quartz about 30° to core.						
27'-27.4'	QUARTZ	White with heavy crystalline pyrite mineralization - possibly some chalcopyrite and pyrrhotite.	804	3'	27-30'	0.03	0.09	
27.4'-49'	QUARTZITE	Dark, fine grained - some pyrite mineralization contact about 40° to core.						

COMPANY [illegible]

DIAMOND DRILL RECORD

HOLE NO. 3

PROPERTY

SHEET NO. 2

DATE July 7, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
	LENGTH	DEPARTURE	STOPPED
	LOCATION	ELEVATION	LOGGED BY C. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu.	ASSAY Ni.	ASS Au
28'-30'	QUARTZ	White - heavily mineralised with pyrite, some chalcopyrite and pyrrhotite about 5% of core volume mineral.						
30'-33.5'	QUARTZ	Heavily mineralised - massive pyrrhotite and pyrite - some chalcopyrite. 65% mineralisation pyrite both massive and crystalline	805	2'	30'-32'	0.14	0.52	Tr.
			806	1.5'	32-33.5'	0.07	0.52	Tr.
33.5'-33.6'		Graphitic zone at end of quartz - possible graphitic schist??						
33.6'-40.6'	QUARTZITE	Very dark and fine grained graphite on slips - some pyrite mineralisation also on slips - grades into a lighter fine grained quartzite.						
40.6'-41.6'	SLATE??	Very fine grained slaty ~~Fi~~ material - banded horizontal to core with thin ($\frac{1}{8}$") band of quartzite.						
41.6'-44'	QUARTZITE	Dark, fine grained, graphite on slips - very little mineralisation.						
44'-45.9'	QUARTZITE	Dark, fine grained, heavily fractured with graphitic slips - pyrite mineralisation on slips, some massive pyrite at 45.9'.						
45.9'-49.6'	QUARTZ	Bluish white (Barren).						
49.5'		END OF HOLE						
		Stopped hole in barren quartz.						

COMPANY HOYLE - PANACHE

DIAMOND DRILL RECORD

HOLE NO. 4

PROPERTY

SHEET NO. 1

DATE July 8/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-51°	Due South	2770E	June 26, 1957
	LENGTH 81.1'	DEPARTURE 790S	STOPPED July 6, 1957
	LOCATION S-98475	ELEVATION	LOGGED BY C.Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu	ASSAY Ni	ASSAY Au
0.0 - 2.0'		Casing						
2.0 - 20.1'	QUARTZITE	Light, medium grained, grading into a darker finer grained quartzite. Pyrite mineralization along slips and fractures - sparse chlorite also in slips.						
20.1 - 23.0	SLATE??	Very fine grained, dark, farily heavily mineralized along slips with pyrite. Some chalcopyrite also.						
23.0 - 33.9'	QUARTZITE	Dark, fine grained, mineralized with pyrite on slips and also in the rock itself. Quartzite in places becomes very dense - extremely fine grained. Near 33',coarsens out and become a bit siliceous, upon contact with quartz. Contact about 60° to core.						
33.9 - 43.1'	QUARTZ	Dark - bluish-white, iron stained for first few feet with a few specks of fine pyrite showing at 36.3' pyrite begins to show in slips and fractures all along. Possibly a little pyrrhotite along some of the slips.	801	1'	42.1-43.1.02	0.04		
43.1-48.3'	QUARTZ	Dark, bluish-white. very heavily mineralized with pyrite, pyrrhotite and chalcopyrite in minor quantities. Pyrite and quartz are in crystalline form in places(small vugs) 50% of core mineralized fairly heavily mineralization in contact between quartz and quartzite.	802	3'	43.1-46.1.10	0.56	0.0	
			803	2.2'	46.1-48.3.19	0.33	0.0	
48.3-49.0	QUARTZITE	Light, medium grained,no mineralization.						
49.0-49.5		Graphitic Zone - some pyrite on slips.						
49.5-51.0	QUARTZITE	Dark - bluish-white, with graphite and quartzite inclusions.						
51.0-53.4	QUARTZITE	Light, medium grained, some pyrite on slips.						
53.4-54.2	QUARTZ	Dark - bluish-white, no mineralization.						
54.2-54.8'		Graphitic zone - some pyrite on slips.						
54.8-56.0	QUARTZITE	Light, medium grained, pyrite mineralization along slips and in the rock - heavy pryite at 55.0', possible some chlorite in core.						
56.0-56.6	QUARTZ	Dark-bluish-white, little pyrite mineralization, some quartzite inclusions in quartz.						

COMPANY .....

DIAMOND DRILL RECORD

HOLE NO. 4

PROPERTY .....

SHEET NO. 2

DATE

DIP ANGLES	BEARING	LATITUDE	STARTED
	LENGTH	DEPARTURE	STOPPED
	LOCATION	ELEVATION	LOGGED BY

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
56.6-57.9	QUARTZITE	Dark, fine grained, little mineralization on slips.						
57.9-58.7	QUARTZ	Bluish-white, no mineralization, Chopped from 58.1 to 58.6'						
58.7-81.1	QUARTZITE	Light, fine grained, greenish coloured with dark spotting - grading into a darker quartzite - some pyrite and graphite along slips. Near end of this hole, mineralization becomes very scarce.						
81.1'		END OF HOLE						

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. A

PROPERTY

SHEET NO. 1

DATE July 8/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-51°	Due South	2770 E	June 26, 1957
	LENGTH 81.1'	DEPARTURE 790 S	STOPPED July 6, 1957
	LOCATION 8-98475	ELEVATION	LOGGED BY C. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu.	ASSAY Ni.	ASS Au.
0 - 2'		Casing.						
2'-20.1'	QUARTZITE	Light, medium grained, grading into a darker, finer grained quartzite. Pyrite mineralisation along slips and fractures - sparse chlorite also in slips.						
20.1'-23'	SLATE??	Very fine grained, dark, fairly heavily mineralised along slips with pyrite. Some chalcopyrite also.						
23'-33.9'	QUARTZITE	Dark, fine grained, mineralised with pyrite on slips and also in the rock itself. Quartzite in places because very dense - extremely fine grained. Near 33', ccarsens out and becomes a bit siliceous, upon contact with quartz. Contact about 60° to core.						
33.9'-43.1'	QUARTZ	Dark - bluish-white, iron stained for first few feet with a few specks of fine pyrite showing at 36.3' pyrite begins to show in slips and fractures all along. Possibly a little pyrrhotite along some of the slips.	801	1'	42.1-43.1	0.02	0.04	
43.1'-46.3'	QUARTZ	Dark, bluish-white, very heavily mineralised with pyrite, pyrrhotite and chalcopyrite in minor quantities. Pyrite and quartz are in crystalline form in places (small vugs) 90% of core mineralised. Fairly heavy mineralisation in contact between quartz and quartzite.	802 803	3' 2.2'	43.1-46.1 46.1-48.3	0.10 0.19	0.56 0.33	0. 0.
48.3'-49.0'	QUARTZITE	Light, medium grained, no mineralisation.						
49.0'-49.5'		Graphitic zone - some pyrite on slips.						
49.5'-51.0'	QUARTZ	Dark - bluish-white, with graphite and quartzite inclusions.						
51.0'-53.4'	QUARTZITE	Light, medium grained, some pyrite on slips.						
53.4'-56.2'	QUARTZ	Dark - bluish-white, no mineralisation.						
56.2'-56.8'		Graphitic zone - some pyrite on slips.						

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. 4

PROPERTY

SHEET NO. 2

DATE July 8/57

DIP ANGLES	BEARING	LATITUDE	STARTED
	LENOTH	DEPARTURE	STOPPED
	LOCATION	ELEVATION	LOGGED BY C. Gibbings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
54.8'-56.0'	QUARTZITE	Light, medium grained, pyrite mineralization along slips and in the rock - heavy pyrite at 55.0', possibly some chlorite in core.						
56.0'-56.6'	QUARTZ	Dark - bluish-white, little pyrite mineralization, some quartzite inclusions in quartz.						
56.6'-57.9'	QUARTZITE	Dark, fine grained, little mineralization on slips.						
57.9'-58.7'	QUARTZ	Bluish-white, no mineralization. Chopped from 58.1 to 58.6'.						
58.7'-61.1'	QUARTZITE	Light, fine grained, greenish coloured with dark spotting - grading into a darker quartzite - some pyrite and graphite along slips. Near end of hole, mineralization becomes very scarce.						
61.1'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 5

PROPERTY

SHEET NO. 1

DATE July 24/57

DIP ANGLES	BEARING	LATITUDE	STARTED
- 45°	North	925S	July 7, 1957
	LENGTH 60.9	DEPARTURE 4180E	STOPPED July 19, 1957
	LOCATION S-98470	ELEVATION	LOGGED BY C.M.Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu	ASSAY Ni	ASSAY Au
		No Casing, medium grained.						
0.0 - 2.0'	QUARTZITE	Very white, no mineralization and no bedding planes.						
2.0 - 27.1'	QUARTZITE	Brownish-white, medium grained, impure. No mineralization. Small (1/8-¼") quartz veinlets scattered throughout.						
27.1 - 35.5'	QUARTZITE	Whitish-brown, medium grained, with disseminated mineralization throughout core - pyrrhotite and some chalcopyrite. Some pyrite showing on slips. In places, 30-40% of core mineralized.	807	4"	27.1-31.1	0.05	0.07	Tr.
			808	4.4'	31.1-35.5	0.02	0.02	Tr.
35.5 - 41.5'	QUARTZITE	Brownish-white, medium grained, very little mineralization but some pyrrhotite and chalcopyrite in places with some pyrite on the slips. Vug at 39'						
41.5' - 42.8'	QUARTZITE	Dark, fine grained - pyrrhotite mineralization with some chalcopyrite disseminated in core - some places fairly massive pyrrhotite.	809	1.3'	41.5-42.8	0.09	0.08	Tr.
42.8' - 47.5'		Dark, fine grained - altered, very little mineralization.						
47.5' - 47.6'		Pyrite bleb in quartzite						
47.6' - 60.9'	QUARTZITE	Brownish-white, medium grained, altered. Some pyrite mineralization on slips. Core shows signs of vugs at 59'.						
60.9'		END OF HOLE						

COMPANY BOYLE-DAMACON

DIAMOND DRILL RECORD

HOLE NO. 5

PROPERTY

SHEET NO. 2

DATE July 24/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	North	925 S	July 7, 1957
	LENGTH 60.9	DEPARTURE 4180 E	STOPPED July 19, 1957
	LOCATION 8-9870	ELEVATION	LOGGED BY Clyde H. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	% ASSAY Cu.	% ASSAY Ni.	% ASSAY
		No Casing, medium grained.						
0 - 2'	QUARTZITE	Very white, no mineralization and no bedding planes.						
2'-27.1'	QUARTZITE	Brownish-white, medium grained, impure. No mineralization. Small (1/8 - 1/4 inch) quartz veinlets scattered throughout.						
27.1'-35.5'	QUARTZITE	Whitish-brown, medium grained, with disseminated mineralization throughout core - pyrrhotite and some chalcopyrite. Some pyrite showing on slips. In places, 30-40% of core mineralized.	807	4'	27.1-31.1	0.05	0.07	Tr.
			808	4.4'	31.1-35.5	0.02	0.02	Tr.
35.5'-41.5'	QUARTZITE	Brownish-white, medium grained, very little mineralization but some pyrrhotite and chalcopyrite in places with some pyrite on the slips. Vug at 39'						
41.5'-42.8'	QUARTZITE	Dark, fine grained - pyrrhotite mineralization with some chalcopyrite disseminated in core - some places fairly massive pyrrhotite.	809	1.3'	41.5-42.8	0.09	0.08	Tr.
42.8'-47.5'		Dark, fine grained - altered, very little mineralization.						
47.5'-47.6'		Pyrite blob in quartzite.						
47.6'-60.9'	QUARTZITE	Brownish-white, medium grained, altered. Some pyrite mineralization on slips. Core shows signs of vugs at 59'.						
60.9'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 6

PROPERTY

SHEET NO. 1

DATE July 24/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-47°	South	850S	July 11/57
	LENGTH 47.0	DEPARTURE 4120E	STOPPED July 18/57
	LOCATION	ELEVATION	LOGGED BY C.M.Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
		No Casing						
0 - 47.0'	QUARTZITE	Brownish-white, medium grained with small soft limy bands in places. Throughout the hole, mineralization very scarce. Beddings scarace, but seems to 60° to core. Quartzite altered throughout hole.						
47.0'		END OF HOLE						

DIAMOND DRILL RECORD

HOLE NO. 6

PROPERTY

SHEET NO. 1

DATE July 24/57

DIP ANGLES	BEARING	LATITUDE	STARTED
-47°	South	830 S	July 11, 1957
	LENGTH 47.0	DEPARTURE 1320 E	STOPPED July 12, 1957
	LOCATION S 98W70	ELEVATION	LOGGED BY Clyde M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
0 - 47.0'	QUARTZITE	No Casing. Brownish-white, medium grained with small soft limy bands in places. Throughout the hole, mineralization very scarce. Bedding scarce, but seems to 60° to core. Quartzite altered throughout the hole.						
47.0'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 7

PROPERTY

SHEET NO. 1 DATE July 24, 195

DIP ANGLES	BEARING North	LATITUDE 870S	STARTED July 23, 1957
-44°	LENGTH 60.5	DEPARTURE 2740E	STOPPED July 24, 1957
	LOCATION S-98475	ELEVATION	LOGGED BY C.M.Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY CU	ASSAY NI	ASS AU
		No Casing						
0 - 25.5'	QUARTZITE	Greyish-white, medium grained. Bedding 45° to 50° to core, some pyrite mineralization on slips. Rusty soft limonite on fractures near surface.						
25.5- 42.4'	QUARTZITE	Dark, fine grained, altered, some graphite on slips and graphitic inclusions in places. Some pyrite on slips and a bit in the rock.						
42.4- 46.0	QUARTZ	Dark, white pyrite mineralization scattered throughout. 1" massive pyrite at 44.1	810	1.3'	43.5-44.8	.01 Ag. Trace	0.04	Tr
46.0- 50.0'	QUARTZITE	Dark, fine grained, altered - some pyrite on slips.						
50.0- 51.6'	QUARTZITE	Dark, glassy-massive pyrite from 50.0-51.0' some chalcopyrite. Disseminated pyrite in remainder.	811	1.6'	49.9-51.5	.02 Ag.Trace Co - .092%	0.46	Tr
51.6- 54.0	QUARTZ	White - some mineralization at beginning and massive pyrite 53.5-54.0 some chalcopyrite.						
54.0-58.7'	QUARTZITE	Dark, glassy, heavy pyrite mineralization scattered throughout core - some chalcopyrite very little pyrrhotite.	812	3°	53.3-56.3	0.22 Ag. Trace	0.13	Tr
			813	2.5'	56.3-58.8	0.12 Ag.Trace	0.09	Tr
58.7-60.5'	QUARTZ	Dark, bluish - black, little pyrite on slips.						
60.5'		END OF HOLE						

COMPANY BOYLE-PARACHE

DIAMOND DRILL RECORD

HOLE NO. 7

PROPERTY

SHEET NO. 1

DATE July 24, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-44°	North	870 S	July 23, 1957
	LENGTH 60.5	DEPARTURE 2740 E	STOPPED July 24, 1957
	LOCATION S-9875	ELEVATION	LOGGED BY Clyde M. Giddings

ROCK

FOOTAGE	NAME OF ROCK	DESCRIPTION
		No Casing
0 - 25.5'	QUARTZITE	Greyish-white, medium grained. Bedding 45° to 50° to core, some pyrite mineralization on slips. Rusty soft limonite on fractures near surface.
25.5'-42.4'	QUARTZITE	Dark, fine grained, altered, some graphite on slips and graphitic inclusions in places. Some pyrite on slips and a bit in the rock.
42.4'-46.0'	QUARTZ	Dark, white pyrite mineralization scattered throughout. 1" massive pyrite at 44.1'
46.0'-50.0'	QUARTZITE	Dark, fine grained, altered - some pyrite on slips.
50.0'-51.6'	QUARTZITE	Dark, glassy - massive pyrite from 50.0'-51.0' some chalcopyrite. Disseminated pyrite in remainder.
51.6'-54.0'	QUARTZ	White - some mineralization at beginning and massive pyrite 53.5 - 54.0 some chalcopyrite.
54.0'-58.7'	QUARTZITE?	Dark, glassy, heavy pyrite mineralization scattered throughout core - some chalcopyrite very little pyrrhotite.
58.7'-60.5'	QUARTZ	Dark, bluish - black, little pyrite on slips.
60.5'		END OF HOLE.

CORE SAMPLES

SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu.	ASSAY Ni.	ASSAY
810	1.3'	43.5-44.8	0.01	0.04	Tr
			Ag. Trace		
811	1.6'	49.9-51.5	0.022	0.46	Tr
		Co - .092%	Ag. Trace		
812	3'	53.3-56.3	0.22	0.13	Tr
			Ag. Trace		
813	2.5'	56.3-58.8	0.12	0.09	Tr
			Ag. Trace		

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 8

PROPERTY

SHEET NO. 1

DATE July 26/57

DIP ANGLES	BEARING North	LATITUDE 870S	STARTED July 24, 1957
-45°	LENGTH 60.0	DEPARTURE 2670E	STOPPED July 26, 1957
	LOCATION S-98475	ELEVATION	LOGGED BY C.M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
0.0 - 4.0		CASING						
4.0 - 12.3	QUARTZITE	BROWNISH, medium grained, very little mineralization Bedding - nil						
12.3 - 13.0	QUARTZITE	Black altered - no bedding or mineralization. Fine grained.						
13.0 - 35.8	QUARTZITE	Brownish, medium grained, some pyrite mineralization on slips - core cut in place with ¼" quartz veinlets 35.4-35.8 core mineralized slightly with fine specks of pyrite						
35.8 - 42.7	QUARTZITE	Dark, fine grained, altered - graphite on most slips with pyrite. Core in places almost complete quartz - no heavily mineralized area.						
42.7 - 44.2	QUARTZ	White - in places being cut by quartzite - very impure.						
44.2 - 50.7	QUARTZITE	Dark, medium-grained - bedding nil - pyrite mineralization on slips. Also graphite on most slips. Core badly fractured.						
50.7 - 52.5	QUARTZ	White - very impure having quartzite inclusions with graphite on slips. No mineralization.						
52.5 - 55.5	QUARTZITE	Dark, medium grained, altered with quartz, very little mineralization. Chop 1.5' 53.5-55.0						
55.5 - 56.5	QUARTZ	White with veinlets ofcalcite(?) cutting quartz No mineralization.						
56,5 - 57.2	FAULT	Fault zone consisting of brecciated mud containing small pieces of quartzite and quartz - some graphite noted past mud zone in quartz-quartzite core.						
57.2 - 59.3	QUARTZITE	Dark, fine grained, altered - mineralization - nil.						
59.3 - 60.0	QUARTZ	Dark, blackish, little mineralization.						
60.0		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 8

PROPERTY

SHEET NO. 1

DATE July 26/57

DIP ANGLES	BEARING	North	LATITUDE	870 S	STARTED	July 24, 1957
-45°	LENGTH	60.0	DEPARTURE	2670 E	STOPPED	July 26, 1957
	LOCATION	8-9875	ELEVATION		LOGGED BY	C. M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	AS
0 - 4.0'		CASING						
4.0'-12.3'	QUARTZITE	Brownish, medium grained, very little mineralisation Bedding - nil.						
12.3'-13.0'	QUARTZITE	Black altered - no bedding or mineralisation. Fine grained.						
13.0'-35.8'	QUARTZITE	Brownish, medium grained, some pyrite mineralisation on slips - core cut in place with ½" quartz veinlets 35.4-35.8 core mineralized slightly with fine specks of pyrite.						
35.8'-42.7'	QUARTZITE	Dark, fine grained, altered - graphite on most slips with pyrite. Core in places almost completely quartz no heavily mineralised area.						
42.7'-44.2'	QUARTZ	White - in places being cut by quartzite - very impure.						
44.2'-50.7'	QUARTZITE	Dark, medium grained - bedding nil - pyrite mineralisation on slips. Also graphite on most slips. Core badly fractured.						
50.7'-52.5'	QUARTZ	White - very impure having quartzite inclusions with graphite on slips. No mineralisation.						
52.5'-55.5'	QUARTZITE	Dark, medium grained, altered with quartz, very little mineralisation. Chop 1.5' 53.5-55.0						
55.5'-56.5'	QUARTZ	White with veinlets of calcite (?) cutting quartz No mineralisation.						
56.5'-57.2'	FAULT	Fault zone consisting of brecciated mud containing small pieces of quartzite and quartz - some graphite noted past mud zone in quartz - quartzite core.						
57.2'-59.3'	QUARTZITE	Dark, fine grained, altered - mineralisation - nil.						
59.3'-60.0'	QUARTZ	Dark, blackish - little mineralisation.						
60.0'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 9

PROPERTY

SHEET NO. 1

DATE Aug.1/1957

DIP ANGLES	BEARING	North	LATITUDE	860S	STARTED	July 27, 1957
-44°	LENGTH	61.0	DEPARTURE	3210E	STOPPED	July 28, 1957
	LOCATION	S-98470	ELEVATION		LOGGED BY	C.M.Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS.
0.0 - 16.5'	QUARTZITE	Medium grained, no mineralization. Grey-green in colour - having black specks. No beddings.						
16.5 - 19.6'	QUARTZITE	Darker, medium grained with disseminated pyrite mineralization throughout - possibly some chalcopyrite.						
19.6'- 19.9'	DOLOMITE?	Soft, fine grained - greenish-grey. Not affected by acid.						
19.9 - 24.4'	QUARTZITE	Light coloured, fine grained, no mineralization. Bedding indistinct.						
24.4'- 25.2'	?	Dark, medium-grained, soft-phlogopite mica with some mineralization. Reaction to # Cl						
25.2 - 31.1'	QUARTZITE	Greenish-grey, fine grained mineralization scattered in places in core. Pyrite and some Chalcopyrite. Bedding showing in places at 50° to core.						
31.1 - 38.0'	QUARTZITE	Dark, altered, fine grained, some mineralization on slips. Graphite prevalant throughout core.						
38.0 - 39.9'	QUARTZITE	Medium grained, greenish-grey, little mineralization - Bedding 50° to core.						
39.9 - 61.0'	QUARTZITE	Altered medium grained, darkish green grading into areas of black, fine grained graphitic texture - mineralization widely scattered throughout core - pyrite and some chalcopyrite (?) Bedding predominant 50° to core.						
61.0'		END OF HOLE.						

At 41.9" grind 10"

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. 9

PROPERTY

SHEET NO. 1

DATE Aug. 1, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-44°	North	860 S	July 27, 1957
	LENGTH 61.0	DEPARTURE 3210 E	STOPPED July 28, 1957
	LOCATION S-93E70	ELEVATION	LOGGED BY Clyde M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	AS
0 - 16.5'	QUARTZITE	Medium grained, no mineralization. Grey-green in colour - having black specks. No beddings.						
16.5'-19.6'	QUARTZITE	Darker, medium grained with disseminated pyrite mineralization throughout - possibly some chalcopyrite.						
19.6'-19.9'	DOLOMITE?	Soft, fine grained - greenish-grey. Not effected by acid.						
19.9'-24.4'	QUARTZITE	Light coloured, fine grained, no mineralization. Bedding indistinct.						
24.4'-25.2'	?	Dark, medium grained, soft - phlogopite mica with some mineralization. Reaction to H Cl.						
25.2'-31.1'	QUARTZITE	Greenish-grey, fine grained, mineralization scattered in places in core. Pyrite and some chalcopyrite. Bedding showing in places at 50° to core.						
31.1'-38.0'	QUARTZITE	Dark, altered, fine grained, some mineralization on slips. Graphite prevalent throughout core.						
38.0'-39.9'	QUARTZITE	Medium grained, greenish-grey, little mineralization Bedding 50° to core.						
39.9'-61.0'	QUARTZITE	Altered medium grained, dark-ish green grading into areas of black, fine grained graphitic texture - mineralization widely scattered throughout core - pyrite and some chalcopyrite (/1/) Bedding predominant 50° to core.						
61.0'		END OF HOLE.						
		At 41.9' grind 10"						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 10

PROPERTY

SHEET NO. 1

DATE Aug.1/1957

DIP ANGLES	BEARING	LATITUDE	STARTED
- 41°	North	815S	July 28, 1957
	LENGTH 60.1	DEPARTURE 3210W	STOPPED July 29, 1957
	LOCATION	ELEVATION	LOGGED BY C.M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
0 - 2.0'		Casing						
2 - 60.1'	QUARTZITE	Altered dark, medium grained having quartz inclusion throughout the hole intermingled with The quartzite. Graphite is noted along the slips in the hole increasing shear the end of hole. Mineralization very scare, some pryite on slips. Bedding very indistinct but where noticed, is about 45° to core.						
60.1'		END OF HOLE						

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. 10

PROPERTY

SHEET NO. 1

DATE Aug. 2, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-41°	North	815 S	July 28, 1957
	LENGTH 60.1	DEPARTURE 3210 E	STOPPED July 29, 1957
	LOCATION [illegible]	ELEVATION	LOGGED BY Clyde M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASS
0 - 2.0' 2.0'-60.1'	QUARTZITE	CASING Altered, dark, medium grained having quartz inclusion throughout the hole intermingled with the quartzite. Graphite is noted along the slips in the hole increasing near the end of hole. Mineralization very scarce, some pyrite on slips. Bedding very indistinct but where noticed, is about 45° to core.						
60.1'		END OF HOLE.						

COMPANY HOYLE-PANACHE

PROPERTY

DIAMOND DRILL RECORD

HOLE NO. 11

SHEET NO. 1

DATE Aug.1,57

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	North	815S	July 29, 1957
	LENGTH 25.0	DEPARTURE 3150E	STOPPED July 29, 1957
	LOCATION S-98470	ELEVATION	LOGGED BY C.M.GIDDINGS

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
		NO CASING						
0.0-4.3'	QUARTZITE	Dark, medium grained -no bedding						
4.3-4.8'	QUARTZITE?	Dark, fine grained. Heavy graphite throughout - altered zone --some iron rust on slips.						
4.8-25.0'	QUARTZITE	Dark, medium grained - little mineralization. Quartz at 5.5' - 5.3" - 21.4'-21.9'						
25.0'		END OF HOLE						
15.8'		2' chop						

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. 11

PROPERTY

SHEET NO. 1

DATE Aug. 2, 1957

DIP ANGLES	BEARING	North	LATITUDE	815 S	STARTED	July 29, 1957
-45°	LENGTH	25.0	DEPARTURE	2150 E	STOPPED	July 29, 1957
	LOCATION	893470	ELEVATION		LOGGED BY	Clyde M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	A'
		NO CASING						
0 - 4.3'	QUARTZITE	Dark, medium grained - no bedding.						
4.3'-4.8'	QUARTZITE?	Dark, fine grained. Heavy graphite throughout - altered zone - some iron rust on slips.						
4.8'-25.0'	QUARTZITE	Dark, medium grained - little mineralization. Quartz at 5.5' - 5.3' - 21.4'-21.9'.						
25.0'		END OF HOLE.						
25.8'		2° dip						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 12

PROPERTY

SHEET NO. 1

DATE Aug.1/57

DIP ANGLES	BEARING	LATITUDE	STARTED
- 44°	North	885S	July 30/1957
	LENGTH 60.2	DEPARTURE 2625E	STOPPED Jly 31/1957
	LOCATION S-98475	ELEVATION	LOGGED BY C.M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
0.0 - 6.0'		CASING						
6.0 - 60.2'	QUARTZITE	Dark, medium grained - very little mineralization. Some pyrite on slips. Bedding about 70° to core - grading into light medium grained quartzite in places for one to two feet then back into dark variety. Some black spotting noted in core near end of hole.						
60.2'		END OF HOLE						

COMPANY [redacted] DIAMOND DRILL RECORD HOLE NO. 12

PROPERTY ..... SHEET NO. 1 DATE Aug. 1, 1957

DIP ANGLES	BEARING North	LATITUDE 885 S	STARTED July 30, 1957
-44°	LENGTH 60.2	DEPARTURE 2625 E	STOPPED July 31, 1957
	LOCATION S 98W75	ELEVATION	LOGGED BY Clyde H. Gladding

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	A
0 - 6.0' 6.0'-60.2'	QUARTZITE	CASING Dark, medium grained - very little mineralization. Some pyrite on slips. Bedding about 70° to core - grading into light medium grained quartzite in places for one to two feet then back into dark variety. Some black spotting noted in core near end of hole.						
60.2'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 13

PROPERTY

SHEET NO. 1

DATE Aug.1/1957

DIP ANGLES	BEARING	LATITUDE	STARTED
- 43°	North	840S	July 31, 1957
	LENGTH 34.9	DEPARTURE 2830E	STOPPED July 31, 1957
	LOCATION S-98475	ELEVATION	LOGGED BY C.M. Giddings

ROCK			CORE SAMPLES &					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY CU	ASSAY NI	ASSAY AU
0.0 - 6.0		CASING						
6.0 - 6.6'		Recemented Quartz - Quartzite pieces. Heavily covered with iron.						
6.6 - 8.7'	QUARTZITE	Light, medium grained. Broken - some bluish white quartz. Iron stain on pieces.						
8.7 - 11.3'	QUARTZITE	Altered - dark (black) fine grained. Broken - heavy graphite on slips - no mineralization.						
11.3'- 12.8'	QUARTZ	Dark white - iron rust on slips.						
12.8 - 16.6	QUARTZITE	Dark, fine grained, altered - pyrite on slips						
16.6 - 17.6	QUARTZITE	Altered, dark, fine grained. Heavy graphite specs in core-quartzite mingled with white quartz. Some pyrite in slips.						
17.6 - 18.1	QUARTZ	White - some inclusions of quartzite						
18.1 - 19.4	QUARTZITE	Dark, altered, fine grained. Some pyrite and chalcopyrite on slips.						
19.4 - 21.3'	QUART(?)	White, altered, heavy mineralization of pyirte chalcopyrite and some pyrrhotite. In places 50% core mineralized. Some of the pyrite in crystalline form. Small balls of marcasite(?) in pyrite mineralization.	814	1.9'	19.4-21.3	0.19	0.48	Tr
21.3 - 29.2'	QUARTZITE	Dark, fine grained altered. Some mineralization on slips - no bedding noted.						
29.2 - 29.6'	PYRRHOTITE	Massive with small balls of marcasite enclosed.	815	0.4'	29.2-29.6	0.01	0.046	Tr
29.6 - 34.9'	QUARTZ	White barren.						
						CO	0.48	
34.9'		END OF HOLE						

COMPANY HOLLINGER-HARACHE

DIAMOND DRILL RECORD

HOLE NO. 29

PROPERTY

SHEET NO. 1

DATE Aug. 2, 1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-45°	North	860 S	July 31, 1957
	LENGTH 34.9	DEPARTURE 1830 E	STOPPED July 31, 1957
	LOCATION [illegible]	ELEVATION	LOGGED BY Clyde M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY % Cu.	ASSAY % Ni.	ASS %
0 - 6.0'		CASING						
6.0'-6.6'		Recemented quartz - quartzite pieces. Heavily covered with iron.						
6.6'-8.7'	QUARTZITE	Light, medium grained. Broken - some blueish white quartz. Iron stain on pieces.						
8.7'-11.3'	QUARTZITE	Altered - dark (black) fine grained. Broken - heavy graphite on slips - no mineralization.						
11.3'-12.8'	QUARTZ	Dark white - iron rust on slips.						
12.8'-16.6'	QUARTZITE	Dark, fine grained, altered - pyrite on slips.						
16.6'-17.6'	QUARTZITE	Altered, dark, fine grained. Heavy graphite areas in core - quartzite mingled with white quartz. Some pyrite on slips.						
17.6'-18.1'	QUARTZ	White - some inclusions of quartzite.						
18.1'-19.4'	QUARTZITE	Dark, altered, fine grained. Some pyrite and chalcopyrite on slips.						
19.4'-21.3'	QUARTZ (?)	White, altered, heavy mineralization of pyrite chalcopyrite & some pyrrhotite. In places, 90% core mineralized. Some of the pyrite in crystalline form. Small balls of marcasite in pyrite mineralization.	814	1.9'	19.4-21.3	0.19	0.48	Tr
21.3'-29.2'	QUARTZITE	Dark, fine grained altered. Some mineralization on slips - no bedding noted.						
29.2'-29.6'	PYRRHOTITE	Massive with small balls of marcasite enclosed.	815	0.4'	29.2-29.6	0.01	0.046	Tr.
29.6'-34.9'	QUARTZ	White - barren.						
					Co. .046%			
34.9'		END OF HOLE.						

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. 14

PROPERTY

SHEET NO. 1

DATE Aug.1/1957

DIP ANGLES	BEARING	LATITUDE	STARTED
-40°	North	835S	Aug. 1/1957
	LENGTH 25.0	DEPARTURE 2865E	STOPPED Aug. 1/1957
	LOCATION S-98475	ELEVATION	LOGGED BY C.M. Giddings

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY AU	ASSAY NI	ASSAY AU
0.0 - 3.1'	QUARTZITE	Dark, medium grained, altered. Iron rust on all slips - bedding nil.						
3.1 - 4.1'	QUARTZ	Bluish-white, no mineralization. Inclusions of quartzite.						
4.1 - 4.3	QUARTZITE	Impure. Fine graphitic zone.						
4.3 - 5.6'	QUARTZITE	Altered, dark, fine grained. Quartz inclusions in places.						
5.6 - 7.0'	QUARTZ	Bluish-white, barren.						
7.0 -12.5'	QUARTZITE	Dark, altered, medium grained. Bedding planes - none. Quartz inclusions in core. Some pyrite mineralization in core - heavier near 12.0'						
12.5 -14.1'	QUARTZITE	Dark, altered, medium grained, heavily mineralized with pyrite and some chalcopyrite. Some mineral disseminated in core.	817	1.7'	12.4-14.1	0.04	0.19	Tr
14.1 -16.7'	QUARTZITE	Dark, altered,medium grained, very little mineralization.						
16.7 -19.4'	QUARTZITE	Dark, altered, grading into quartz andback. Heavily mineralized in spots and mineralization disseminated, pyrite and some pyrrhotite and chalcopyrite.	818	2.7'	16.7-19.4	0.05	0.22	Tr
19.4 -25.0'	QUARTZITE	Dark, altered, fine grained with quartz inclusions mineralization in places - throughout core. Fairlymassive at 21,7'						
25.0		END OF HOLE						

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. 2A

PROPERTY

SHEET NO. 1

DATE Aug. 2, 195?

DIP ANGLES	BEARING	LATITUDE	STARTED
-40°	North	835 S	August 1, 1957
	LENGTH 25.0	DEPARTURE 2865 E	STOPPED August 1, 1957
	LOCATION S 9875	ELEVATION	LOGGED BY Clyde M. Gidding

ROCK			CORE SAMPLES				
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY Cu.	ASSAY Ni.
0 - 3.1'	QUARTZITE	Dark, medium grained, altered. Iron rust on all slips - bedding nil.					
3.1'-4.1'	QUARTZ	Bluish-white, no mineralisation. Inclusions of quartzite.					
4.1'-4.3'	QUARTZITE	Impure. Fine graphite zone.					
4.3'-5.6'	QUARTZITE	Altered, dark, fine grained. Quartz inclusions in places.					
5.6'-7.0'	QUARTZ	Bluish-white, barren.					
7.0'-12.5'	QUARTZITE	Dark, altered, medium grained. Bedding planes - none Quartz inclusions in core. Some pyrite mineralisation in core - heavier near 12.0'.					
12.5'-14.1'	QUARTZITE	Dark, altered, medium grained, heavily mineralised with pyrite and some chalcopyrite. Some mineral disseminated in core.	817	1.7'	12.4-14.1	0.04	0.19
14.1'-16.7'	QUARTZITE	Dark, altered, medium grained, very little mineralisation					
16.7'-19.4'	QUARTZITE	Dark, altered, grading into quartz and back. Heavily mineralised in spots and mineralisation disseminated, pyrite and some pyrrhotite and chalcopyrite.	818	2.7'	16.7-19.4	0.05	0.22
19.4'-25.0'	QUARTZITE	Dark, altered, fine grained with quartz inclusions mineralisation in places - throughout core. Fairly massive at 21.7'.					
25.0'		END OF HOLE.					

COMPANY HOYLE-PANACHE

DIAMOND DRILL RECORD

HOLE NO. ---

PROPERTY .....

SHEET NO.

DATE Sep.5/57

DIP ANGLES	BEARING	LATITUDE	STARTED
	LENGTH	DEPARTURE	STOPPED
	LOCATION	ELEVATION	LOGGED BY

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	FOOTAGE	ASSAY	ASSAY	ASSAY
						Se	Ni	Cu	Co
		Composite samples of samples from Hole Nos.							
		3, 4, 7, 13							
		Sample Nos. 802, 803, 805, 806, 811, 814, 815	827		0.002	0.48	0.13	0.13

COMPANY [redacted]

DIAMOND DRILL RECORD

HOLE NO. _____

PROPERTY _____ SHEET NO. DATE Sept. 9/57

DIP ANGLES	BEARING	LATITUDE	STARTED
	LENGTH	DEPARTURE	STOPPED
	LOCATION	ELEVATION	LOGGED BY

ROCK			CORE SAMPLES					
FOOTAGE	NAME OF ROCK	DESCRIPTION	SAMPLE NO.	WIDTH	[redacted]	ASSAY [redacted]	ASSAY Cu.	A
		Composite samples of samples from Hole Nos. 3, 4, 7, 23 Sample Nos. - 802, 803, 805, 806, 811, 814, 815	827		0.002	0.48	0.23	0.

LOUISE TWP. M.998

12 11 10 9. 8 WEST AST 7 6

Norwest Lake

Brady L.

Little Panache L.

Reserve

I.R. 97

DIEPPE

904

(FLOODING CLAUSE)
(SEE REF. COLUMN)

Lake Panache

Navy Is.

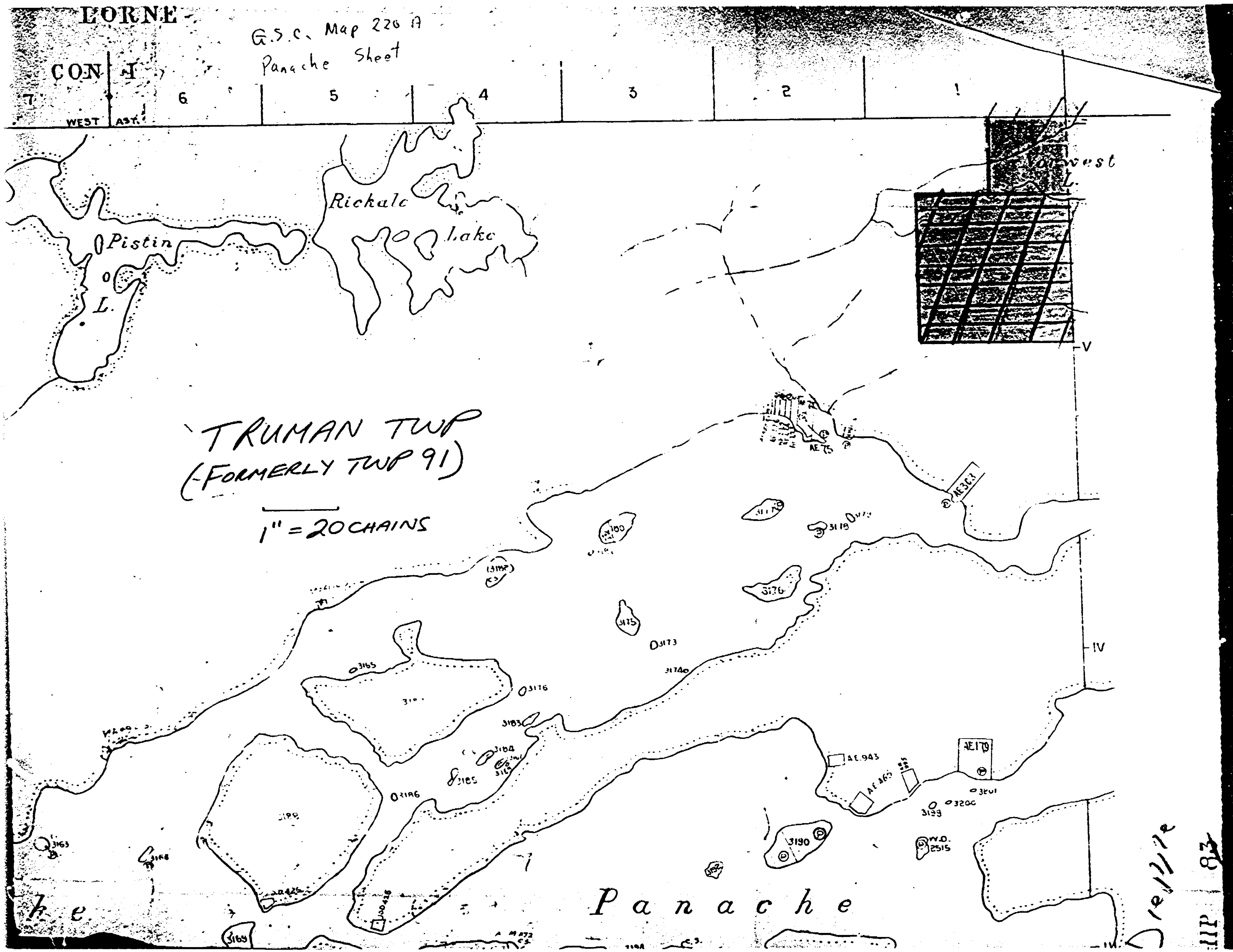
TOWNSHIP OF

DIEPPE

DISTRICT OF SUDBURY

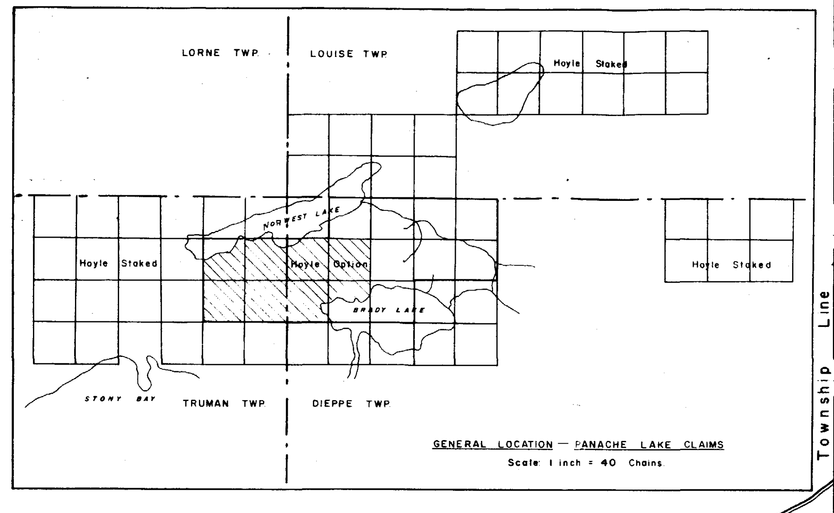
SUDBURY MINING DIVISION

SCALE: 1-INCH = 20 CHAINS


LORNE
CON I
G.S.C. Map 220 A
Panache Sheet
WEST
AST.
7
6
5
4
3
2
1
Pistin
L.
Rickale
Lake
Vauvest
L.
V
IV
TRUMAN TWP
(FORMERLY TWP 91)
1" = 20 CHAINS
AE 303
AE 943
AE 179
3190
W.D. 2515
3188
3176
3175
3173
3165
3186
3183
3184
3185
3163
3168
3169
Panache

TRUMAN TOWNSHIP

DIEPPE TOWNSHIP



GENERAL LOCATION — PANACHE LAKE CLAIMS
Scale 1 inch = 40 Chains

N

NORWEST LAKE

Base Line

98731 98730 98729 98728 98573 98576 98472 98476 98471 98474 98733 98734 98475 98470 98477 98473

BRADY LAKE

23+00N 22+00N 21+00N 20+00N 19+00N 18+00N 17+00N 16+00N 15+00N 14+00N 13+00N 12+00N 11+00N 10+00N 9+00N 8+00N 7+00N 6+00N 5+00N 4+00N 3+00N 2+00N 1+00N 0+00 1+00S 2+00S 3+00S 4+00S 5+00S 6+00S 7+00S 8+00S 9+00S 10+00S 11+00S 12+00S 13+00S 14+00S 15+00S 16+00S 17+00S 18+00S 19+00S 20+00S 21+00S 22+00S 23+00S 24+00S

0+00E 3+00E 6+00E 9+00E 12+00E 15+00E 18+00E 21+00E 24+00E 27+00E 30+00E 33+00E 36+00E 39+00E 42+00E 45+00E 48+00E 51+00E 54+00E 57+00E 60+00E 63+00E 66+00E 69+00E 72+00E 75+00E 78+00E 81+00E 84+00E 87+00E 90+00E 93+00E 96+00E 99+00E 102+00E

LEGEND

		SYMBOL
	OVERBURDEN	
1.	GABBRO	
2	QUARTZ VEINS	
3	SERPENT QUARTZITE	
4	ESPANOLA FORMATION	
5	BRUCE CONGLOMERATE	
	CALCAREOUS BANDS	

HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

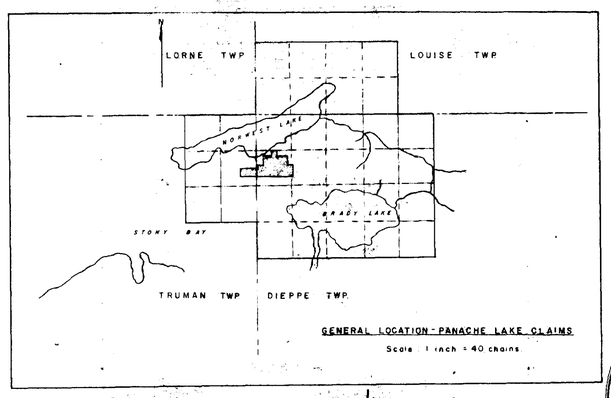
GEOLOGICAL AND GEOCHEMICAL SURVEY

SCALE 1 INCH = 200 FEET AUGUST, 1957

BY

PIONEER CONSULTANTS LIMITED 206-3

DIEPPE-0012, #1



GENERAL LOCATION - PANACHE LAKE CLAIMS

Scale 1 inch = 40 chains

Base Line

Witness Post

TRUMAN TWP

DIEPPE TWP

98474

98475

HOYLE MINING COMPANY LIMITE

PANACHE LAKE CLAIMS

GEOCHEMICAL SURVEY — BL

SCALE: 1 INCH = 50 FEET JULY ,1957

BY

PIONEER CONSULTANTS LIMITED

DIEPPE - 0012, #2

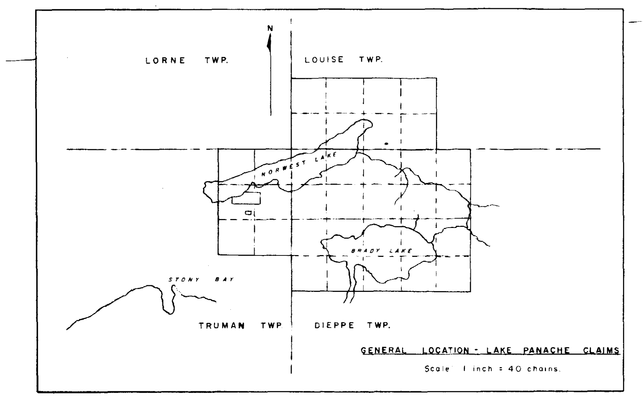
Base Line

98733

98734

98474

98475



GENERAL LOCATION - LAKE PANACHE CLAIMS

Scale 1 inch = 40 chains.

HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

GEOCHEMICAL SURVEY — BLOCK # 1

SCALE: 1 INCH = 50 FEET JULY ,1957

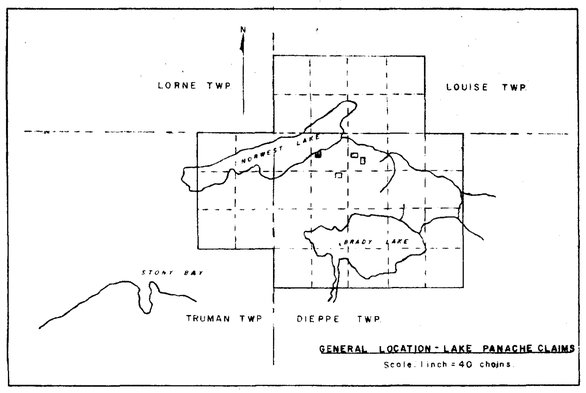
BY

PIONEER CONSULTANTS LIMITED 206-4

READINGS IN PARTS PER MILLION OF COPPER

- 100 AND ABOVE
- 75 TO 100
- 50 TO 75
- 25 TO 50
- 0 TO 25

DIEPPE-0012 #3



GENERAL LOCATION - LAKE PANACHE CLAIMS

Scale, 1 inch = 40 chains

NORWEST LAKE

98731

98476

17+00N
16+00N
15+00N
14+00N
13+00N
12+00N
11+00N
10+00N
9+00N
8+00N
7+00N
6+00N
5+00N
4+00N
3+00N

46+50E
48+00E
49+50E
51+00E
52+50E
54+00E
55+50E
57+00E
58+50E
60+00E

HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

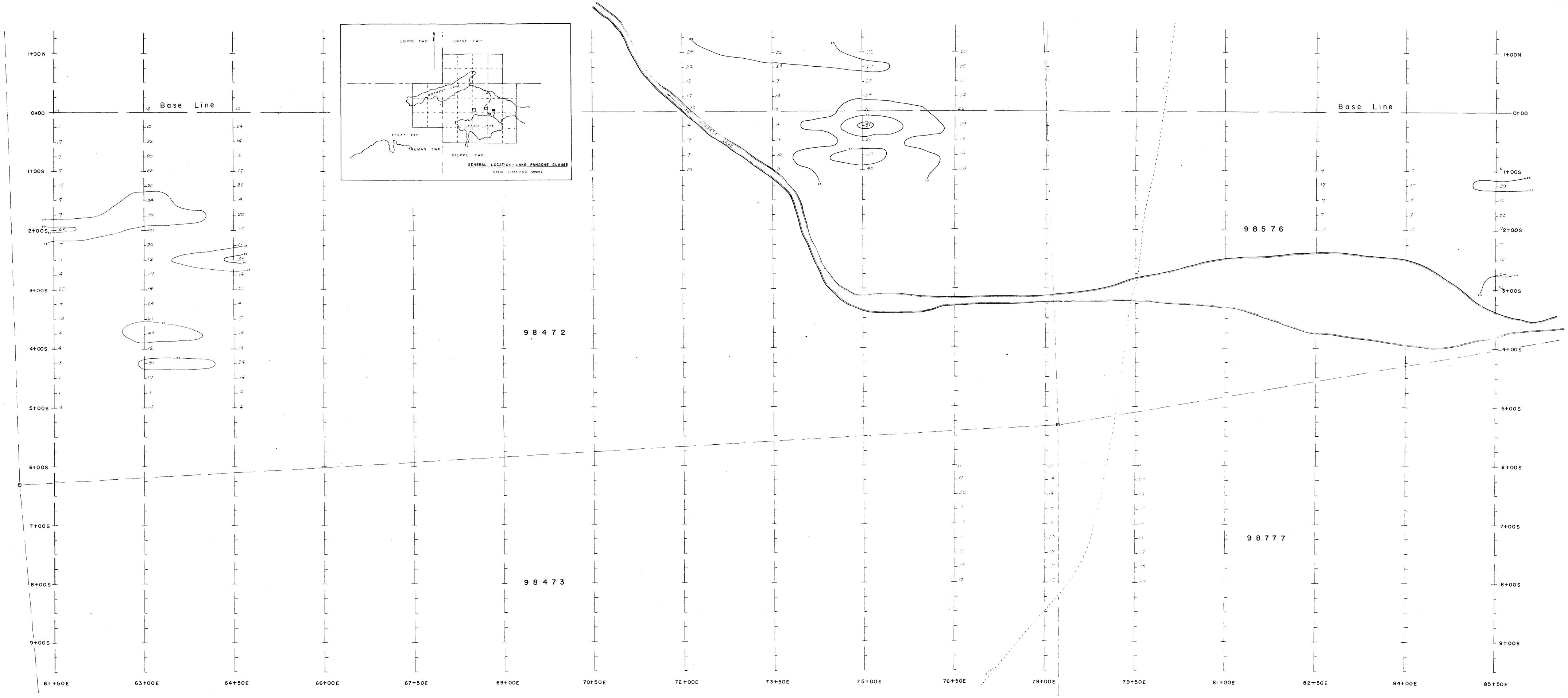
GEOCHEMICAL SURVEY — BLOCK #3

SCALE 1 INCH = 50 FEET JULY ,1957

BY

PIONEER CONSULTANTS LIMITED

206-6



HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

GEOCHEMICAL SURVEY — BLOCK #4

SCALE 1 INCH = 50 FEET JULY, 1957

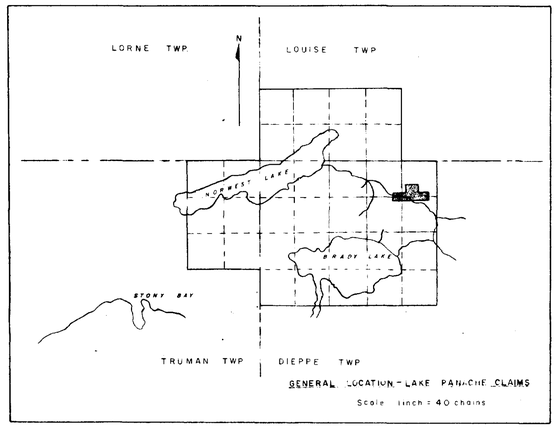
BY

PIONEER CONSULTANTS LIMITED 206-7

READINGS IN PARTS PER MILLION OF COPPER

- 100 AND ABOVE
- 75 TO 100
- 50 TO 75
- 25 TO 50
- 0 TO 25

DIEPPE-0012, #5



GENERAL LOCATION - LAKE PANACHE CLAIMS

Scale 1 inch = 40 chains

98729

98728

98576

98573

16+00N
15+00N
14+00N
13+00N
12+00N
11+00N
10+00N
9+00N
8+00N
7+00N

85+50E
87+00E
88+50E
90+00E
91+50E
93+00E
94+50E
96+00E
97+50E
99+00E
00+50E

HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

GEOCHEMICAL SURVEY — BLOCK #5

SCALE: 1 INCH = 50 FEET JULY ,1957

BY

PIONEER CONSULTANTS LIMITED

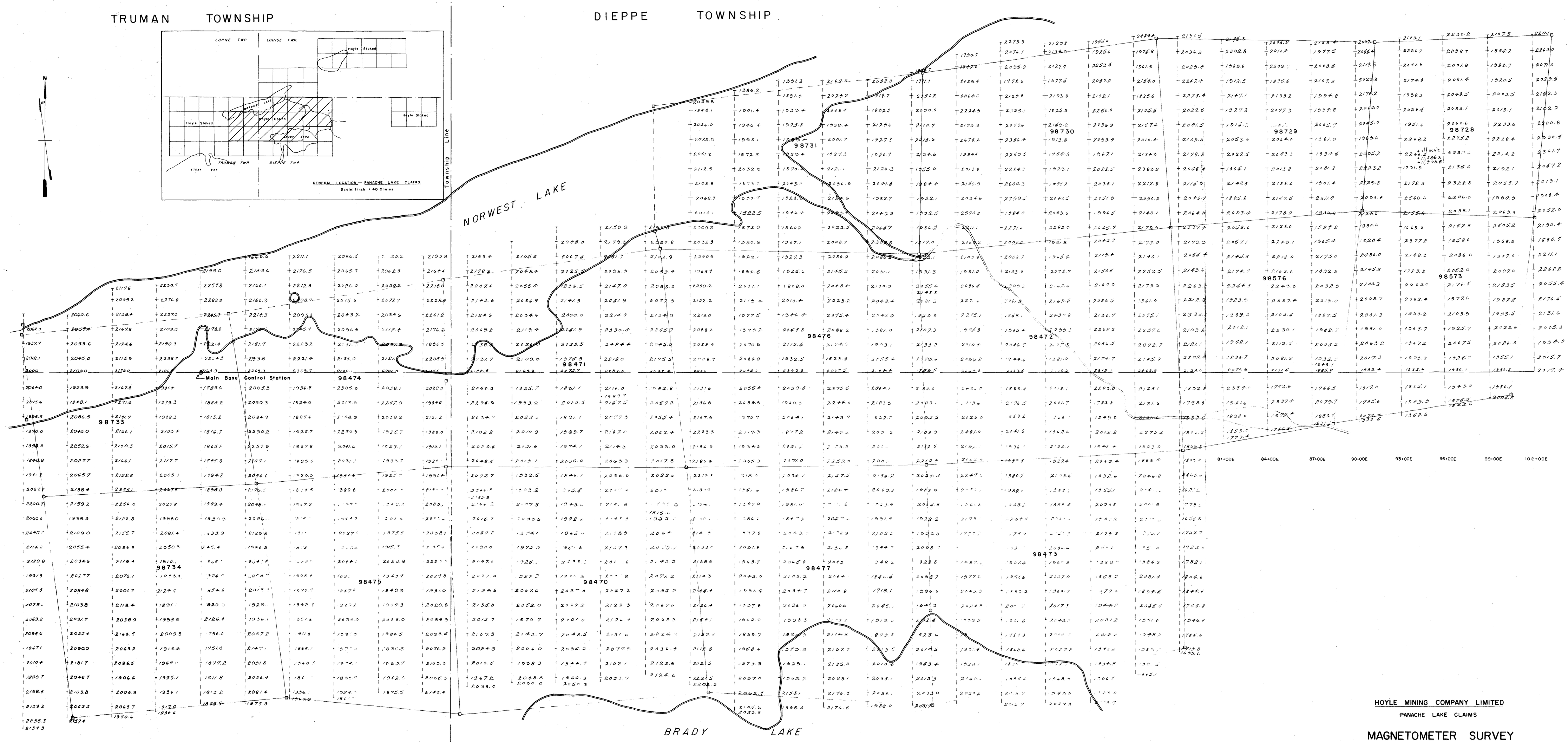
206-8

READINGS IN PARTS PER MILLION OF COPPER

- 100 AND ABOVE.
- 75 TO 100.
- 50 TO 75.
- 25 TO 50.
- 0 TO 25.

DIEPPE-0012, #6


TRUMAN TOWNSHIP
DIEPPE TOWNSHIP
LORNE TWP
LOUISE TWP
Hoyle Staked
Hoyle Option
TRUMAN TWP
DIEPPE TWP
GENERAL LOCATION — PANACHE LAKE CLAIMS
Scale: 1 inch = 40 Chains
Township Line
NORWEST LAKE
BRADY LAKE
Base Line
98728
98729
98730
98731
98573
98576
98472
98476
98471
98474
98733
98734
98475
98470
98477
98473
MAGNETIC INTERPRETATION
4c QUARTZ INTRUSIONS
FAULTS
LEGEND
5 BASIC INTRUSIVE
4a QUARTZ VEIN
4b QUARTZ STRINGERS
3 SERPENT QUARTZITE
2 BRUCE LIMESTONE
1. HURONIAN CONGLOMERATE
SYMBOLS
2000 GAMMA LINE
ASSUMED CONTACT
SHEAR ZONE
PITS
SWAMP
BLUFF
TRAIL
LAKESHORE
DISUSED TELEPHONE LINE
HOYLE MINING COMPANY LIMITED
PANACHE LAKE CLAIMS
MAGNETOMETER SURVEY
SCALE: 1 INCH = 200 FEET
APRIL 1, 1957
BY
PIONEER CONSULTANTS LIMITED
206-2
Certified Correct
C.M.G.
DIEPPE-0012 #7



HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

MAGNETOMETER SURVEY

SCALE 1 INCH = 200 FEET APRIL 1, 1957

BY

PIONEER CONSULTANTS LIMITED 206-1

Certified Correct

DIEPPE-0012, #8

Base Line

3+00N
2+00N
1+00N
0+00
1+00S
2+00S
3+00S
4+00S
5+00S
6+00S
7+00S
8+00S
9+00S
10+00S
11+00S
12+00S

98471
98470
98476
98477

NO.6 474' AT 47°
NO.5-22 609' AT 45°

34+50E
36+00E
37+50E
39+00E
40+50E
42+00E
43+50E
45+00E
46+50E
48+00E
49+50E

HOYLE MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

ICAL SURVEY — BLOCK #2

SCALE: 1 INCH = 50 FEET JULY ,1957

BY

PIONEER CONSULTANTS LIMITED 206-5

READINGS IN PARTS PER MILLION OF COPPER

- 100 AND ABOVE
- 75 TO 100
- 50 TO 75
- 25 TO 50
- 0 TO 25

DIEPPE-0012,#2

98730

98472

17+00N
16+00N
15+00N
14+00N
13+00N
12+00N
11+00N
10+00N
9+00N
8+00N
7+00N
6+00N
5+00N
4+00N
3+00N

7+00E
58+50E
60+00E
61+50E
63+00E
64+50E
66+00E
67+50E

MINING COMPANY LIMITED

PANACHE LAKE CLAIMS

L SURVEY — BLOCK #3

E: 1 INCH = 50 FEET JULY ,1957

BY

PIONEER CONSULTANTS LIMITED 206-6

READINGS IN PARTS PER MILLION OF COPPER

- 100 AND ABOVE.
- 75 TO 100
- 50 TO 75
- 25 TO 50
- 0 TO 25

DIEPPE-0012, #4