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REPORT ON A GEOLOGICAL SURVEY
ON THE PROPERTY OF
McCOMBE MINING AND EXPLORATION, LIMITED
PICKEREL TOWNSHIP, PATRICIA MINING DIVISION, ONTARIO

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SUMMARY

A detailed geological survey carried out during the months of July and August, 1952, on Group "A" of McCombe Mining and Exploration, Limited, situated in Pickerel Township, disclosed a quartz fracture zone over 2500 feet in length.

The survey covered the patented, as well as the unpatented, claims, so that a complete map of the whole property would be available for proper interpretation of the results.

The property lies on the southeastern flank of a steeply dipping syncline, whose axis strikes northeast-southwest.

The known quartz veins on the property have indicated from surface sampling, and a limited amount of diamond drilling, erratic, but substantial, gold values. The property is one that warrants considerably more exploration, both by surface work and diamond drilling.

INTRODUCTION

The following report covers the results of a detailed geological survey carried out on the property during July and August last, and also incorporates information procured from the report of Dr. Hurst to the Ontario Department of Mines, Volume XLI, Part 6, 1932, and a report on the property made by Bruce M. Arnott, P. Eng., dated April 10, 1952.

EXTENT, LOCATION, AND OWNERSHIP

The property consists of a contiguous group of 26 claims of which 24 are unpatented and two are patented. The unpatented claims consist of KRL 30738 to KRL 30761, inclusive. The patented claims are HW 635 and HW 636. All claims are registered in the name of MCCombe Mining and Exploration Limited.

The claims are located 23 miles southwest of Sioux Lookout, in the Patricia Mining Division, District of Kenora, Ontario. The west boundary is about two miles east of the southern end of Pickerel Arm of Minnitaki Lake and the south boundary touches the north end of Swimit Lake.

TRANSPORTATION

At the present time transportation to the property is either by air from Sioux Lookout to Swimit Lake, or by a trail, 2¾ miles in length, from the southwest end of Pickerel Arm.

For easy movement of equipment and supplies, air service is the easiest means of access. The cost of a chartered trip for a Norseman plane from Sioux Lookout to Swimit Lake is $28.80.

For the first three quarters of a mile, the trail from Pickerel Arm follows a tractor road, which was cut to the property of Arjon Gold Mines, Limited, in 1950. The remaining two miles is a well cut-out bush trail.

If mining developments justify a road, one could be put in from Mileage 29 on the Sioux Lookout-Dinorwic Highway, (No. 72.) via Blackface Portage, part of the present Arjon Road, and a route south of the present trail. During the summer barge transport can be used from Mileage 21, on the Highway 72, to the landing on the southwest end of Pickerel Arm.

TOPOGRAPHY

The claim area occupies a generally hilly area appreciably higher than the basin of Minnitaki Lake.

Very pronounced ridges trend northeast-southwest, and the depressions between these ridges are filled with muskeg and boulder clay.

Rock outcrops, while generally limited in area, are numerous enough to give a very comprehensive interpretation of the geology and rock distribution.

Drainage is generally poor. Except on the claims bordering Swimit Lake, it is northerly to Swimit Creeek.

There is no pronounced topographic feature within the claim area.

HISTORY

HW 635 and HW 636 were formerly known as the Schmidt-Wallbridge property. Gold was discovered on these claims about 1898, when there was considerable prospecting activity in the area, and an inclined shaft was sunk to a depth of 29 feet. The two claims were patented and have been held since that time.

About 1932 considerable amounts of trenching was done, and a very limited amount of apparently shallow X-Ray diamond drilling, of which no records are available.

In November 1950, Central Manitoba mines Limited, put down three diamond drill holes, with a total footage of 1,007 feet. The logs of their holes are attached as Appendix "A".

In April 1952, both the patented and the unpatented claims were transferred, in full, to McCombe Mining and Exploration Company Limited.

SURVEY

A Base Line seven thousand four hundred and forty-five feet in length was cut out on a bearing of N-28 degrees-E (magnetic), parallel to the general trend of the formations.

Traverse lines laid off normal to the Base Line were cut out to the property boundaries at four hundred foot intervals. A total of ninety-nine thousand, two hundred and fifty feet of traverse lines were cut.

Base Line and traverse lines were taped and pickets were placed every one hundred feet.

Rock outcrops were mapped in detail from the closest line or lines by tape and compass.

In running both the Base Line and the traverse lines care was exercised to avoid deviation. Later taping between the ends of the traverse lines at both the northwestern and southeastern extremities proved that extremely little deviation had taken place.

REGIONAL GEOLOGY

The property lies in the southwestern end of a large mass of greenstone that extends from east of the Southeast Bay of Minnitaki Lake to Sandybeach Lake. To the north of the greenstone belt lies a wide area of Temiskaming sediments while to the south the greenstones have been intruded by Algoman granite.

Quartz porphyry, feldspar porphyry, and granite porphyry cut the Keewatin flows and fragmentals which consist of basaltic pillow lava, basalt and andesite flows, agglomerate, diorite, amphibolite, chlorite and sericite schists.

A long, though relatively narrow, zone of shearing follows the margin of the granite mass at the distance of approximately one half mile from the contact.

Evidence points to the presence of a steeply dipping syncline, whose main axis strikes northeast-southwest, in the area between Swimit and Sandybeach Lakes. On the property under discussion the veins, dikes, and Keewatin contacts dip steeply to the northwest, while two and one half miles to the west on the property of Arjon Gold Mines the veins and dikes dip steeply to the southeast.

GEOLOGY OF THE PROPERTY

All of the exposed rocks on the property are Pre-Cambrian in age. Recent and Pleistocene deposits of peat alluvium, boulder clay, and gravel occupy the depressions, and cover in part the higher ground.

Over ninety per cent of the claim area is underlain by Keewatin flows and fragmentals.

The geology is summarized as follows:

Table of Formations

Cenozoic	
Recent	Peat, alluvium
Pleistocene	Clay, sand, gravel
Pre-Cambrian	
Algoman	Quartz porphyry Granite porphyry Granite Quartz veins Feldspar basalt porphyry

Keewatin	Feldspar basalt porphyry Coarse grained flows, gabbro and quartz diorite Pillow lava, chiefly basalt Basic flows, chiefly basalt Chlorite schist Agglomerate

Keewatin

Approximately seventy-five per cent of the claim area is underlain by pillow lava and basic flows.

The pillow lavas are chiefly basaltic, dark green in color, with rusty weathered pillow tops. There is very little evidence of shearing in the pillow lavas, but they have been intruded by a great number of small quartz veins and stringers as well as quartz porphyry and granite porphyry dikes. There are some amygdules in the tops of the pillows.

The basic lavas are dark to olive green in color and all lie within the andesite - basalt series. They are dense in texture and hard and consist of plagiclase feldspar, amphibole, pyroxene, epidote and chlorite. They generally contain minor amounts of pyrite and pyrrhotite.

The agglomerate consists of rough angular fragments of greenstone, partially altered, and about 1½" to 3" in size, in a matrix of basaltic greenstone. On weathered surfaces the fragments stand out conspicuously.

The feldspar basalt porphyry, with which is grouped the coarse grained flows, occupy approximately twenty-five

per cent of the claim area.

The feldspar basalt porphyry on the Swimit Lake property lies in large masses rather than in dikes, and is probably a flow rock. The Feldspar Basalt porphyry grades laterally into a massive coarse grained greenstone, which resembles diorite, diabase or gabbro. As the feldspar basalt porphyry lies on hill tops, and always grades into a coarse grained flow, it is suggested that both the feldspar porphyry and diorite (?) are flows, both having been laid down at roughly the same period in time. The writer puts forward the theory that the first volcanics laid down was the coarse grained flow, which, without interruption in the volcanic action, gradually began to emit larger crystals of feldspar in the liquid lava. Thus, a series of flow rocks could be obtained, which would gradually grade from a coarse grained flow to a porphyry, which is exactly the situation found on the Swimit Lake property.

The feldspar basalt porphyry has phenocrysts of semi-transparent grey-white feldspar, which in places have been partially altered to what seems to be a mixture of calcite, epidote and sericite. The phenocryst surfaces are soft, due to alteration, and rounded. The phenocrysts are normally fractured, or broken up.

The coarse grained matrix is dark green to black in color, and seems to consist of crystals of plagioclase, (probably labradorite) and horneblende (or pyroxine).

The corase grained flow is composed of white crystals of plagioclase, which resembles the larger ones found in the porphyry, and crystals of labradorite, and horneblende (or pyroxine); with some quartz crystals appearing at times.

Algoman

There are numerous quartz porphyry dikes on the property which have a general strike of between N 25 E and N 40 E, and range from minus one foot to thirty feet in width. The quartz porphyry dikes are normally massive, with well defined borders which exhibit little, if any, contact alteration such as chilled borders, exogene or endogene metamorphism. There is very little shearing adjacent to the prophyry dikes which when considered with the parallel nature of the dikes indicates that the intrusives may have introduced along tension fractures in the flow rocks.

The quartz porphyry dikes have a goundmass which is finely phaneroorystalline or verges on being aphalitic. Where the individual minerals in the ground-mass are discernable they consist of about 15% pink orthoclase feldspar and 85% milky white quartz. Biotite mica and other ferromagnesium minerals are present in minor amounts in some places, but generally are absent.

The phenocrysts are quartz crystals, which range in size from 1 mm. to as much as 5mm. in size.

The granite porphyry dikes on the Swimit Lake property resemble the quartz porphyry dikes insofar as strike

and contact metamorphism are concerned. The porphyry dikes range from less than one foot in width to 15 feet in width.

The groundmass of the granite porphyry is composed of 50 to 75% orthoclase feldspar and 25 to 50% milky white quartz. The feldspar gives the dikes a light red to pink color.

The phenocrysts are quartz and orthoclase feldspar crystals which range in size from 1 mm. to 5 mm. In some places there are a few crystals of plagioclase feldspar (probably about labradorite in An. Ab. series) as phenocrysts.

There is a granite plug on the Southeast corner of claim 30746. This plug may possibly be an offset from the granite mass which lies between a half-mile and three-quarters of a mile to the south.

The granite is a pink colored, equigranular phanerite with a grain size of between 2 and 3 mm., and composed of approximately 25% quartz and 75% orthoclase. Minor amounts of mica are present as black biotite.

There are also minor amounts of plagioclase present in the granite.

STRUCTURE

The general trend of the formations within the claim area is N-28-E with a dip to the northwest varying from nearly vertical to 60 degrees. This is also true of most of the veins and dikes which in general conform with the strike and dip of the formations.

Schisting, shearing and folding are very limited and are confined to the narrow shear zone within which the auriferous quartz veins are found. In this zone the flow rocks are represented by chlorite schist while the sheared quartz porphyries have altered to sericite schists. Local folding is very pronounced and this folding has a definite bearing on the width and value of the quartz vein enclosed. It is considered that folding will be found in the vertical as well as the horizontal plane.

No evidence of any major faulting was found, but it is probably that the quartz fracture zone is the direct result of faulting combined with folding.

There would appear to be little doubt that the gold bearing quartz fracture zone is related both structurally and genetically to the intrusive mass of the Swimit Lake batholite. Further surface expressions of this granite intrusive are the series of granite porphyry dikes which generally parallel the quartz fracture zone.

It is of interest that the known gold veins in the area are found to lie at approximately the same distance from the granite margin and that mineralization and vein quartz are similar. Old work would indicate a very defined "break" extending from Twin Flower Bay on the east to east of the Arjon property on the west.

There is ample evidence to support the theory that the quartz fracture zone under discussion lies along the

southeastern flank of a steeply dipping syncline whose axis strikes northeast-southwest. Within the claim area dips are steeply to the north-west while two and one half miles to the southwest the dips are found to be steeply to the southeast. It is considered that where folding is found to be present within the syndline that auriferous quartz veins may be expected to occur.

MINERALIZATION

Veins are of three distinct types. One consists of a massive white quartz that is barren of sulphides but may represent favourable vein material where local folding has produced the necessary fracturing for the free access of gold bearing solutions. The second type is a white sugary quartz that is mineralized with galena, sphalerite, chalcopyrite, and pyrite. The third type is a glassy blue quartz which carries, in very erratic amounts, fine grained galena, sphalerite, and chalcopyrite with some pyrite.

The first vein type is relatively barren of gold values but does yield a few low returns. It should be noted that D.D.H. No. 3 was drilled under a section of this type of quartz but returned 0.44 ozs. Au. over 1.0 feet. At this, lower horizon the quartz had suffered fracturing and contained both galena and sphalerite.

The second type of quartz is responsible for all of the appreciable surface assays except those high erratica

found in the third type yet to be discussed. The pyrite content of the quartz does not appear to have any definite bearing on the contained gold values. Where galena, sphalerite, and chalcopyrite are found high gold values may be expected and are, within few exceptions, found.

The third type is generally very narrow and erratic. It is considered to be the last type of quartz injection but its exact age and structural relationship with the other quartz veins is not at present perfectly understood. Where galena and sphalerite are present good values in gold are usually found, but further work is necessary before any definite opinion on this type of vein may be properly formed.

Examination of a polished section of the ore under the microscope disclosed that the quartz gangue carried no gold but that it occurs in elongated particles along the boundaries of the galena and sphalerite grains. Fine grained chalcopyrite was likewise disseminated. The mode of occurrence accounts for the difficulty of finding gold by any visual inspection and also indicates the extreme importance of the galena sphalerite, and chalcopyrite mineralization.

VEIN SYSTEM

In his report on the property B. M. Arnott, P. Eng. gave an excellent discription of the main vein system and I do not think that I could do better than quote his opening paragraph as follows:

"A fracture zone, having an average strike of N 30 degrees E and dipping at about 60 degrees to the northwest, has been traced by pits and trenches for a length of 1,600 feet across HW 636 and HW 635. Quartz veins fill the fractures, most of which appear to be parallel or at low angles to the general strike of the zone, but a few cut it at right angles. Widths of the veins as exposed vary from one foot to a width of fifteen feet of mixed quartz and schist just north of the shaft. The wall rocks of the veins consist of greenstones and quartz and feldspar porphyries. In places the greenstones are altered to chlorite schist and the older type of quartz porphyry has been altered to quartz-sericite schist."

During the presently described survey stripping and trenching of outcrops was carried on contemporaneously with the line cutting and mapping and although the work in any location was of necessity limited work along the base line did expose further quartz in well defined shearing. This work would indicate that the quartz fracture zone extends across the full width of the property parallel or nearly parallel to the base line.

The most important vein uncovered to date is the original discovery vein on which most of the work has been carried out. This vein carries very interesting values over limited lengths as may be seen by reference to the assay results which are attached as Appendix "B". This vein may

be continuous or may comprise a series of lenses lying in eschelon. Further work is necessary to determine this question.

There are several exposures of the blue quartz veins and from the limited amount of work done to date on this type of vein they appear to be limited in extent. As has been set forth under "Mineralization" this type of vein carries appreciable values where galena, sphalerite, and chalcopyrite are present. Further work is necessary to determine the extent and importance of this type of vein.

An excellent example of this type of vein may be seen in a pit 150' west of the Base Line at a 0 + 1050 S. This narrow vein has returned up to nearly four ounces of gold per ton from samples containing minor amounts of galena and sphalerite. Other veins of this type have been uncovered two thousand feet south on the base line and east of the 2400 N picket on the base Line.

In the extreme northeastern portion of Claim No. 30740 a quartz vein similar in composition to the main showing has been exposed in an old trench and some very minor amounts of galena and sphalerite are present. Insufficient work has been carried out to give any definite information on the possible importance of this vein although it may represent a parallel quartz fracture system.

DIAMOND DRILLING

During November, 1950, Central Manitoba Mines, Limited, drilled three holes with a total footage of 1,006 feet.

The first hole which was put down to explore the vein under the old shaft cut the vein at a vertical depth of 130 feet. This hole cut two sections separated by 3.1 feet of chlorite schist, which returned 0.34 ozs. gold across 1.6 feet and 1.12 ozs. gold across 0.4 feet, giving an average value of 0.19 ozs. across 5.1 feet.

The second hole was drilled from the southeast under the old shaft to explore what was thought to be a faulted structure. No evidence of a fault was found in the hole.

The third hole was located 200 feet southwest of No. 1 and drilled on the same bearing and dip but at a shallower horizon. It cut 1.6 feet of 0.44 ozs. As will be seen from the log in Appendix "A" the width of the shear which contained further sections of mineralized material was 8.4 feet.

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The second hole was drilled from the southeast of No. 1 and drilled on the same bearing and dip but at a shallower horizon. It cut 1.0 feet of 0.44 ozs. As will be seen from the log in Appendix "A" the width of the shear which contained further sections of mineralized material was 8.4 feet.

CONCLUSION AND RECOMMENDATIONS

Both the surface work and the diamond drilling done to date produced interesting values in gold. The main quartz fracture zone has an established length of 1,600 feet and a much greater length is indicated.

The two holes drilled to intersect the vein both cut it and returned values.

The property presents favourable geology and structure and it is considered that further investigation would not only extend the length and importance of the main zone but might well determine other zones of interest and importance.

The property is considered to hold mine making possibilities. Further diamond drilling on the main zone is fully warranted to determine extent and grade, and this drilling should also explore to the northeast and southwest where the quartz fracture zone is obscured by overburden.

The quartz veins in the northeast corner of Claim No. 30740 should be further investigated by surface work and shallow drilling to determine their attitude and importance.

Further surface work should be carried out on the several small quartz veins uncovered during the course of the survey.

Respectfully submitted,

Robert McCombe

RM:VJ
Sioux Lookout, Ont.
Dec. 6, 1952

Robert McCombe, B. Sc.
Mining Geologist

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Respectfully submitted,

RM:bb
Sioux Lookout, Ont.
Aug. 8, 1957

Robert McCombe, B. Sc.
Mining Geologist.

APPENDIX "A"

McCOMBE MINING AND EXPLORATION, LIMITED

DIAMOND DRILL RECORD

LOCATION:- 229' N.55°W. of 0/00 DRILL HOLE NO. 1

BEARING:- S.55°E DRILLING DATE: November, 1950

DIP:- 45° DEPTH: 499'

Depth Feet	Formation	Sample No.	Width of Sample	Gold Oz.
0-21	Casing			
21-57	Agglomerate, scattered fine pyrite & some barren quartz stringers. Flow altered andesite			
57.0-61.4	Tuff. F. C. Diorite			
61.4-65.0	Agglomerate chloritized andesite			
65.0-98.0	Tuff. F. C. Diorite			
98.0-114.3	Feldspar porphyry. Diorite			
114.3-141.0	Rhyolite porphyry			
141.0-149.7	Coarse grained tuff			
149.7-175.8	Variegated feldspar porphyry			
175.8-182.4	Rhyolite porphyry			
182.4-195.0	Coarse grained tuff			
195.0-200.1	Rhyolite porphyry (gray)			
200.1-201.7	Quartz vein, pyrite, chalcopyrite, galena & sphalerite	222	1.6	0.34
201.7-204.8	Chlorite schist			
204.8-205.2	Quartz vein, galena, chalcopyrite, pyrite	223	0.4	1.12
205.2-206.2	Chlorite schist, some quartz stringers with sparse pyrite	224	1.0	Tr.
206.2-343.6	Andesite, vesicular in places			
343.6-361.9	Feldspar porphyry. Diorite porphyry			
361.9-366.6	Andesite, vesicular			
366.6-388.0	Silicified andesite			
388.0-395.1	Fine grained quartz porphyry, some fine disseminated pyrite Rhyolite 388-392	225	4.0	Nil
395.1-442.9	Andesite. Schisted			
442.9-454.9	Feldspar porphyry			
454.9-499	Variegated andesite			
499	END OF HOLE			
	Angle at 250' - 33° Angle at 499' - 23° (approx.)			

McCOMBE MINING AND EXPLORATION, LIMITED

DIAMOND DRILL RECORD

LOCATION:- 131' S.55°E. of 0/00 Shaft

DRILL HOLE NO. 2

BEARING:- N.55° W

DRILLING DATE: November, 1950

DIP:- 45°

DEPTH: 248'

Depth Feet	Formation	Sample No.	Width of Sample	Gold Oz.
0-16	Casing			
16-16.7	Andesite			
16.7-17.0	Quartz porphyry			
17.0-18.1	Andesite			
18.1-62.3	Quartz porphyry			
62.3-63.3	Lost core			
63.3-178.6	Amygdaloidal andesite			
178.6-179.7	Lost core			
179.7-211.5	Amygdaloidal andesite			
211.5-213.0	Chlorite schist with 50% quartz sparse pyrite	226	1.5	Nil
213.0-248	Amygdaloidal andesite			
248	END OF HOLE			

Angle at 248' - 41°

McCOMBE MINING AND EXPLORATION, LIMITED

DIAMOND DRILL RECORD

LOCATION:- 140' No.55°W. of 2/00 W. DRILL HOLE NO. 3

BEARING:- S.55°E. DRILLING DATE: November, 1950

DIP:- 45° DEPTH: 260'

Depth Feet	Formation	Sample No.	Width of Sample	Gold Oz.
0-12	Casing			
12-19.0	Andesite			
19.0-28.5	Feldspar porphyry			
28.5-32.0	Fine grained quartz porphyry			
32.0-32.3	Feldspar porphyry			
32.3-38.0	Fine grained quartz porphyry			
38.0-66.6	Porphyritized andesite			
66.6-91.9	Feldspar porphyry			
91.9-117.0	Andesite, porphyritized in places			
117.0-133.4	Amydaloidal andesite			
133.4-161.4	Basalt feldspar porphyry			
161.4-163.4	Andesite			
163.4-179.6	Basalt feldspar porphyry			
179.6-186.1	Andesite			
186.1-187.8	Chlorite schist, silicified, sparse pyrite	227	1.7	Nil
187.8-191.8	Quartz, sparsely mineralized with galena, sphalerite, chalcopyrite & pyrite	228	4.0	Trace
191.8-192.8	Quartz, heavily mineralized as above	229	1.0	0.44
192.8-194.5	Chlorite schist, silicified, sparse min.	230	1.7	Trace
194.5-204.9	Andesite			
204.9-205.6	Quartz, a little pyrite	231	0.7	Nil
205.6-206.6	Andesite			
206.6-209.2	Quartz, a little pyrite	232	2.6	0.04
209.2-233.0	Amygdaloidal andesite, plain andesite			
233.0-253.8	Feldspar porphyry, diorite porphyry			
253.8-260	Amygdaloidal andesite			
260	END OF HOLE			

Angle at 260' - 40°

APPENDIX "B"

MCCOMBE MINING AND EXPLORATION, LIMITED

ASSAY RESULTS

No.	Location dist.fr.shaft	Description	Width ft.	Au.oz.
1	645'N.E.	Silicified sch. pyrite	3.5	Tr.
2	565'N.E.	Qtz. porph. some qtz. strs.	Grab	Nil
3	335'N.E.	Qtz. & sch. some pyrite	4.0	Tr.
4	329'N.E.	Qtz. & sch. some pyrite	2.5	Nil
5	314'N.E.	Qtz. with fine galena	3.0	0.40
6	305'N.E.	Qtz & sch. no mineral	5.0	Nil
7	270'N.E.	Qtz. & sch. galena & pyrite	2.0	0.76
8	275'N.E.	qtz. & sch. no mineral	Grab	Tr.
9	255'N.E.	Qtz. some galena & pyrite	1.0	0.44
10	240'N.E.	Qtz. some pyrite	1.0	Nil
11	230'N.E.	Qtz. with sparse galena	1.0	3.46
12	225'N.E.	Qtz. sparse galena & chalco.	1.0	0.86
13	220'N.E.	Qtz. some galena & chalco.	1.0	3.08
14	90'N.E.	Black qtz. no sulphides	1.0	Nil
15	30'N.E. 0'-5'from F.W.	Qtz. & sch. some pyrite	5.0	Nil
16	30'N.E. 5'-11'from F.W.	Qtz. & sch. sparse Pb, Zn, Cu.	6.0	3.04
17	24'N.E.	Qtz. & sch. sparse Pb, Zn, Cu.	4.0	0.38
18	18'N.E. 0'-6' fr.F.W.	Qtz. & sch. sparse Pb, Zn, Cu.	6.0	0.30
19	18'N.E. 6'-8' fr.F.W.	Schist	2.0	Tr.
20	18'N.E. 8'-9.5' fr.F. W.	Qtz with Pb, Zn, Cu.	1.5	0.02
21	18'N.E. 9.5'-12' fr.F. W.	Schist	2.5	Nil
22	18'N.E. 12'-15' fr. F.W.	Qtz. with Pb, Zn, Cu.	3.0	0.22
23	15'N.E. 0'-5' fr. F. W.	Qtz. & sch. sparse pyrite	5.0	Nil
24	15'N.E. 5'-9.5' fr. F. W.	Qtz. & sch. pyrite	4.5	0.03
25	10'N.E.	Qtz. & sch. some Pb, Zn, Cu.	5.0	0.46
26	5'N.E.	Qtz. & sch. some Pb. & Zn.	Grab	0.32
27	85'S.W.	Qtz no sulphides	5.0	0.06
28	95'S.W.	Qtz. very sparse galena	2.5	Tr.
29	105'S. W.	Qtz. & sch. sparse sulphides	4.0	0.12
30	110'S.W.	Qtz. no sulphides	3.0	0.02
31	115'S.W.	Qtz. & sch.	3.5	Nil
32	125'S.W.	Qtz. & sch.	4.0	0.03
33	145'S.W. 0'-5' fr. F. W.	Qtz. & sch.	5.0	0.10

McCOMBE MINING AND EXPLORATION, LIMITED

ASSAY RESULTS

No.	Location dist.fr.shaft	Description	Width ft.	Au.oz.
34	145'S.W. 5'-10' fr. F. W.	Qtz. & sch. some pyrite	5.0	Nil
35	155'S. W.	Qtz. & sch. some pyrite	Grab	0.20
36	165'S.W.	Qtz. & sch.	3.0	Tr.
37	500'S.W.	Quartz, no sulphides	Grab	0.08
38	520'S.W.	Quartz, no sulphides	Grab	Nil
39	1030'S.W.	Black qtz. Pb, Zn, & Cu.	Grab	3.86
40	1030'S.W.	Silicified schist	Grab	Nil
41	890'S.W.	Quartz, no sulphides	3.5	Nil
42	900'S.W.	Feldspar porphyry	Grab	Nil
43	900'S.W.	Quartz, no sulphides	Grab	Tr.
44	940'S.W.	Quartz, no sulphides	Grab	0.12
45	535'S.W.	Schist	3.6	Tr.

APPENDIX "C"

REPORT OF WORK

To apply to Mining Claims Nos. KRL 30738 to KRL 30761, inclusive.

Line Cutting & Outcrops

N. Anderson	Sioux Lookout,	July 12th - Aug. 21st	41 days
J. Bernicott	"	" "	41 days
G. Waryck	"	" - Aug. 1st	20 days

Geology & Mapping

Robert McCombe	Sioux Lookout,	July 12th - July 18th	7 days
		Aug. 10th - Aug. 19th	10 days
R.C. McCombe	Sioux Lookout,	July 17th - Aug. 5th	15 days
		Aug. 8th - Aug. 21st	14 days
George Porter	Sioux Lookout	July 12th - Aug. 21st	41 days
V. Bernicott	Sioux Lookout	July 12th - Aug. 21st	41 days

Interpretation, Drafting & Report

Robert McCombe	Sioux Lookout	July 19, 20 & 21st	3 days
		July 26, 27, 28 & 29	4 days
		Aug. 2, 3 & 4th	3 days
		Aug. 20, 22, 23rd	3 days
R.C. McCombe	Sioux Lookout	Aug. 6, 22, 23 & 24	4 days
			247 days

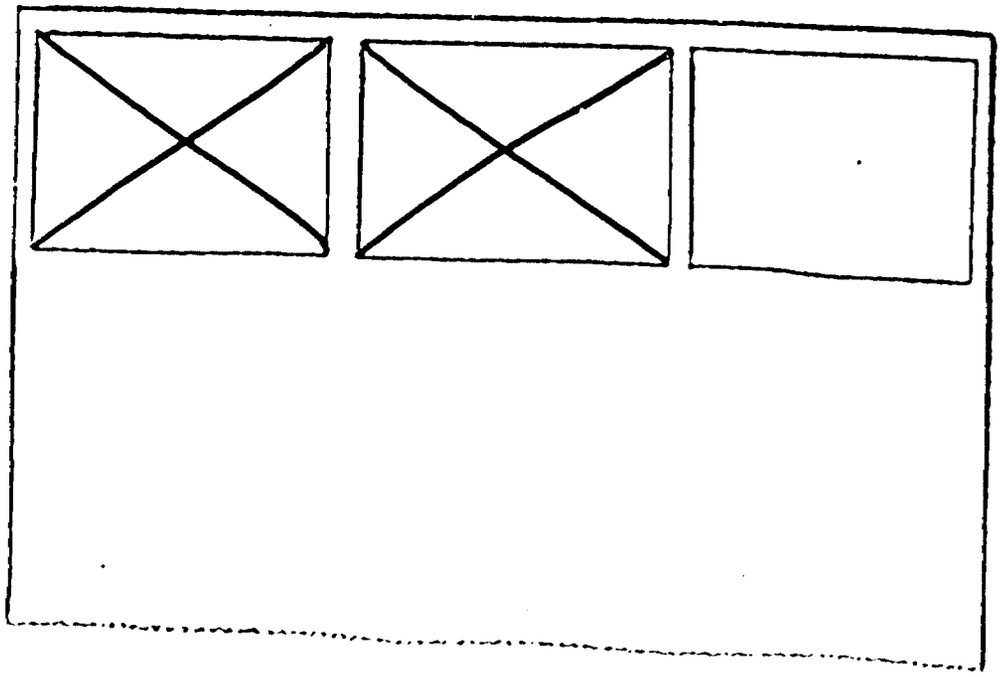
247 x 4 - 988 days

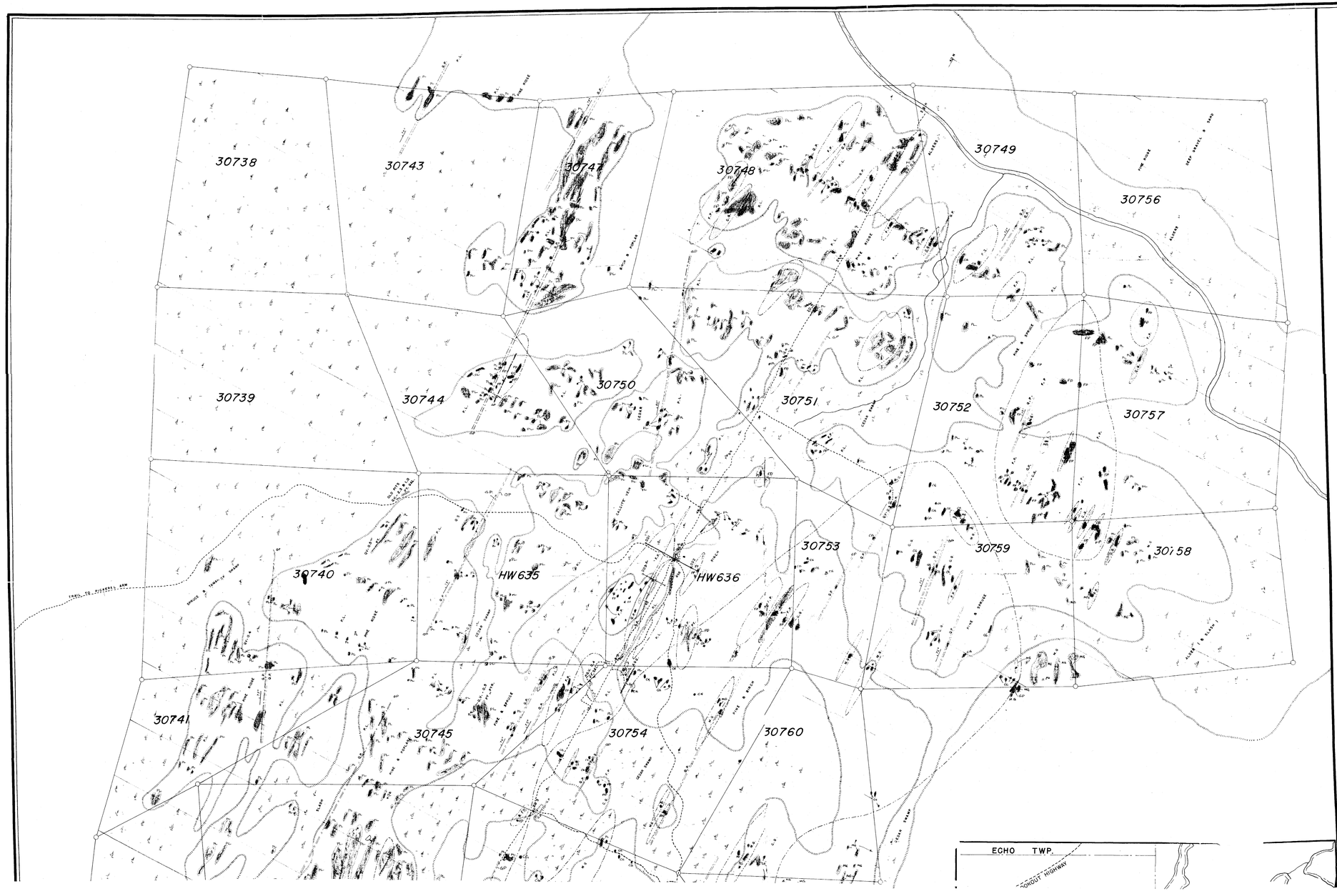
To be divided evenly among above stated claims @ 40 days per claim.

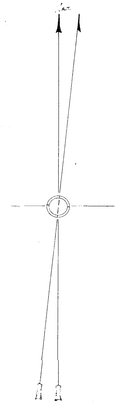
SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52F/16SW-0027, #1

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE (X)







GEOLOGICAL MAP

OF THE

SWIMIT LAKE GROUP

McCOMBE MINING & EXPLORATION LIMITED

PICKEREL TOWNSHIP DISTRICT OF KENORA

ONTARIO

SCALE - 1 INCH EQUALS 200 FEET

0 100 200 300 400

SURVEYED BY R.McCOMBE AUG.& SEPT. 1956
MAPPED BY R.McCOMBE SEPT.& OCT. 1956

SYMBOLS

- GEOLOGICAL BOUNDARY - DEFINED
- GEOLOGICAL BOUNDARY - APPROXIMATE
- GEOLOGICAL BOUNDARY - ASSUMED
- BOUNDARY OF ROCK OUTCROP
- BOUNDARY OF TRENCH OR PIT
- 25 STRIKE & DIP OF CONTACT
- 75 STRIKE & DIP OF SCHISTOSITY
- DIRECTION OF TOP OF LAVA FLOW, BASED ON SHAPE OF PILLOWS
- FAULT, INDICATED OR ASSUMED
- PICKET LINE
- CLAIM LINE

LEGEND

CENOZOIC

REGENT

- PEAT, ALLUVIUM

PLEISTOCENE

- CLAY, SAND, GRAVEL

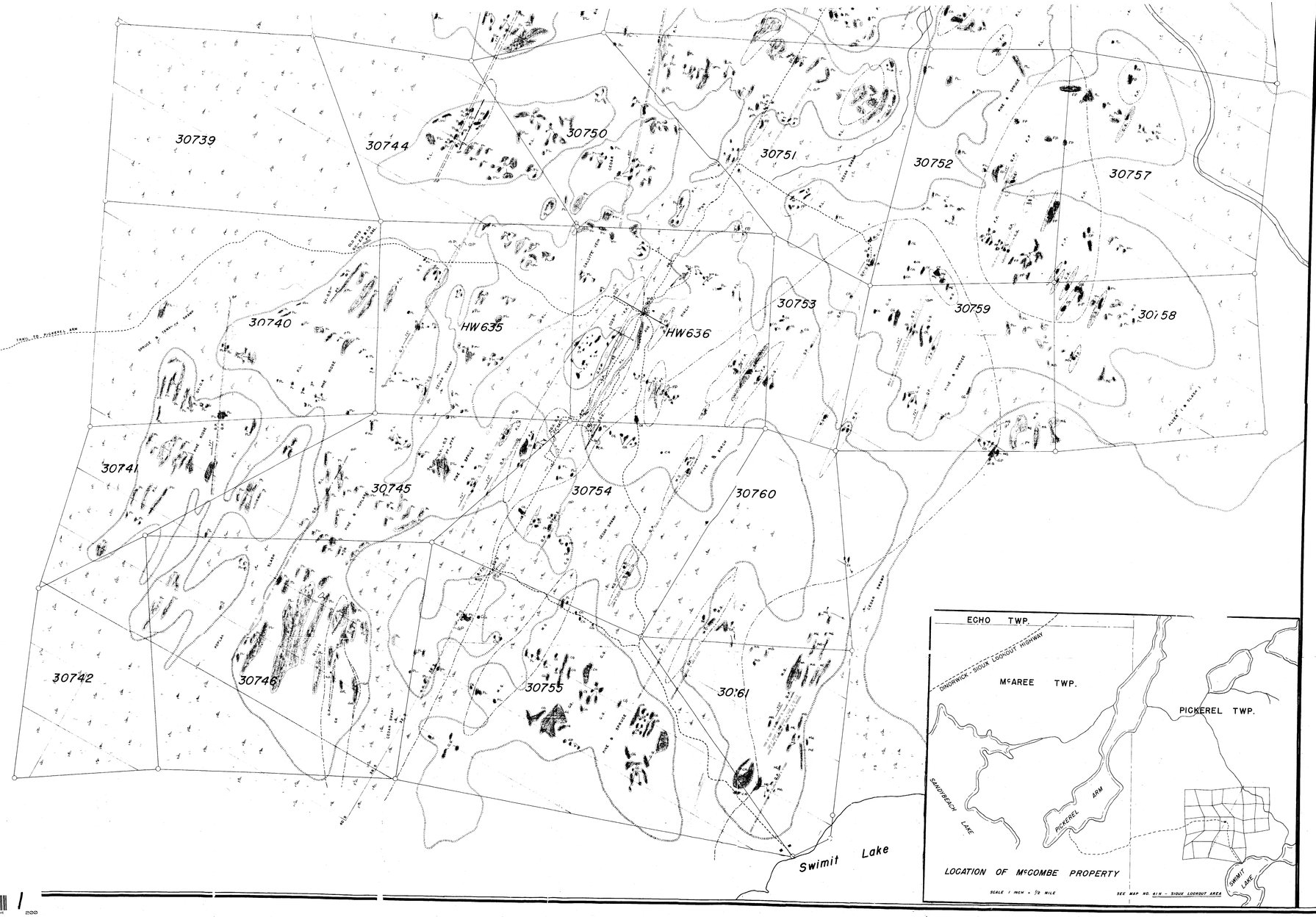
PRE-CAMBRIAN

ALGOMAN

- Q.P. QUARTZ PORPHYRY
- G.P. GRANITE PORPHYRY (QUARTZ-FELOSPAR)
- G.R. GRANITE
- QV-0.6 QUARTZ VEIN - WIDTH IN FEET
- F.P. FELOSPAR BASALT PORPHYRY

KEEWATIN

- F.P. FELOSPAR BASALT PORPHYRY



GEOLOGICAL MAP
OF THE
SWIMIT LAKE GROUP

McCOMBE MINING & EXPLORATION LIMITED
PICKEREL TOWNSHIP DISTRICT OF KENORA
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- DIRECTION OF TOP OF LAVA FLOW, BASED ON SHAPE OF PILLOWS
- FAULT, INDICATED OR ASSUMED
- PICKET LINE
- CLAIM LINE
- CLAIM POST
- DDH DIAMOND DRILL HOLE
- EDGE OF HILL OR SLOPE
- SWAMP
- TRAIL
- CREEK
- CABIN OR TENT FRAME

LEGEND

CENOZOIC

RECENT
- PEAT, ALLUVIUM

PLEISTOCENE
- CLAY, SAND, GRAVEL

PRE-CAMBRIAN

ALGOMAN
- Q.P. QUARTZ PORPHYRY
- G.P. GRANITE PORPHYRY (QUARTZ-FELDSPAR)
- GR. GRANITE
- QV-0.6 QUARTZ VEIN - WIDTH IN FEET
- F.P. FELDSPAR BASALT PORPHYRY

KEEWATIN
- F.P. FELDSPAR BASALT PORPHYRY
- C.G. COARSE GRAINED FLOWS (GABBRO & QUARTZ-DIORITE)
- P.L. PILLOW LAVA (CHIEFLY BASALT)
- M.V. BASIC FLOWS (CHIEFLY BASALT)
- SH. CHLORITE SCHIST
- AGG. AGGLOMERATE

PY. PYRITE
GAL. GALENA
PYR. PYRRHOTITE

THE DARKER COLORED SPOTS INDICATE OBSERVED ROCK OUTCROPS