



52J04NE0024 52J04NE0016A1 SHARRON LAKE

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BANKFIELD CONSOLIDATED MINES LIMITED
REPORT ON
SHARRON LAKE PROPERTY
SIOUX LOOKOUT AREA - ONTARIO

August 26th, 1963

G. L. Holbrooke

G. L. HOLBROOKE

SUMMARY AND CONCLUSIONS

The central part of the property is underlain by a 2,400 foot wide belt of heavily carbonatized tuffaceous volcanics carrying relatively thin lenticular interbeds of both acid and basic agglomerates together with thin flows of both rhyolite and andesite. The belt strikes N55° to 60°E and dips very steeply north. It is strongly sheared by a regional, steeply north dipping shearing striking N80°E to S30°E and is distributed by minor drag folding plunging steeply west along the shearing.

The belt of tuffaceous rocks conformably overlies a thick series of basaltic lavas the northern edge of which crosses the southwest corner of the claim group. It in turn is overlain conformably to the northwest by a thick series of andesitic lavas which across the northern part of the property has been intruded by a 200 to 300 foot wide sill of quartz diorite. An east trending fault is indicated across the northern claims with an apparent left lateral displacement of from 100 to 400 feet.

The property apparently covers part of the northern limb of a steeply west plunging major anticline whose axial plane crosses the area south of the claims with an east strike and a nearly vertical dip.

A number of gold bearing zones of irregular quartz-carbonate veining and scattered sulphide mineralization have been found in the belt of sheared and carbonatized tuffaceous rocks crossing the property. These zones vary in width from 4 to about 20 feet and are frequently near thin lava horizons in the tuffs. Of these the Nos. 1 and 2 zones have been investigated by limited diamond drilling and some of the others by old surface trenching.

With one exception the gold content of the zones is far below ore grade but in the No. 1 showing the drilling has shown a small, lenticular, cigar shaped body, some 25 feet long by 1.5 feet wide, with gold values from 0.24 ounces across 2.0 feet to 2.50 ounces across 1.2 feet. This small rod-like deposit plunges very steeply westward and has an unknown vertical extent in excess of 75 feet. In spite of the appreciable gold content the No. 1 showing is too small to make further exploration attractive. One other recently discovered showing in the tuffs about 1,000 feet northeast of No. 1 showing consists of a 30 foot wide quartz-carbonate stockwork with pyrite and would warrant blasting and thorough bulk sampling.

The only occurrence outside of the belt of tuffs is the No. 4 showing in the northwestern part of the property. Here a quartz-carbonate stockwork with pyrite at least 40 feet wide is found in the quartz diorite sill. This occurrence would also warrant blasting and thorough bulk sampling.

RECOMMENDATIONS

It is recommended that the stockwork 1,000 feet northeast of the No. 1 showing and the stockwork of the No. 4 showing be blasted across and carefully bulk sampled. This is estimated to cost \$500.

Unless very startling results are obtained from this sampling it is recommended that no further exploration of the ground be attempted at this time. The claims however should be kept in good standing pending the results of current exploration on adjoining properties.

* * *

LOCATION, ACCESS, FACILITIES

The property lies in the Patricia Mining Division of Ontario, 14 miles east of the town of Sioux Lookout and a mile south of the main line Canadian National railway. It covers the western end of Black Lake and the area to the south of the lake. It consists of a group of ten contiguous unpatented mining claims numbered as follows:

- P-32278
- P-32290, 32291, 32292
- P-32305, 32306
- P-32310, 32311, 32312
- P-32395

Access to the property is by a 2 mile trail from the railway which skirts the western end of Black Lake. Alternative access is by light aircraft from bases at Sioux Lookout.

Black Lake forms an ample water supply for all mining purposes and a small swampy lake on the southeast claim of the group provides a limited supply for diamond drilling. The property is well wooded with material suitable for both fuel and mine timbers. The nearest source of electric power is at Sioux Lookout 14 miles to the west. Camp accommodation consist of an old log cabin which is still usable and two 14 x 16 foot tent frames on the south shore of Black Lake in the western part of claim P-32305.

HISTORY AND DEVELOPMENT

The area was prospected and a number of claims were staked in the early 1930's but beyond a little stripping and trenching nothing was done and eventually the claims reverted to the Crown. The area was re-examined in the summer of 1962 and high gold values were found in a number of places. A considerable number of claims were staked along a general northeasterly trend and these were divided into four groups of which the property is one. The group adjoining to the southwest is owned by Stormy Mines Limited and is now being explored. The group adjoining to the northeast is owned by Delhi Pacific Mines Limited and has been partially tested by a limited programme of diamond drilling.

On the property itself old stripping and a few rock trenches have been found at the No. 1 showing in the southeast corner of claim P-32312, the No. 2 showing in the central part of claim P-32306, and the No. 3 showing in the northeast corner of claim P-32306. Recently old trenches on the Nos. 1 and 2 showings were re-blasted and sampled and these showings were tested by 9 BXT diamond drill holes totalling 1,013 feet.

A 12 foot wide baseline bearing N60°E has been out for over 4 miles across the four main claim groups in the area and crosses the central part of the property in question for a length of

3,000 feet. Ten picket lines on 200 foot centres and bearing N30°W have been cut across the western claims of the property northwest of the baseline and aggregate 8,650 feet. A 2,400 foot tie line bearing N45°E has also been run across the claims to the south of Black Lake.

The property has been thoroughly prospected and has been mapped geologically in detail on a scale of 1 inch = 200 feet. The geological survey was run from the base and picket lines where these were available and from northwest traverses at 200 foot intervals across the balance of the property. The result is shown on the accompanying map.

GEOLOGY

The geology of the district consists of a large, irregular roof-curtain of early pre-Cambrian volcanics and sediments surrounded by the widespread granites of the region. The roof-curtain varies in width from 15 to 80 miles and extends N60° to 70°E for over 250 miles from the international boundary at Lake of the Woods. In addition to being surrounded by granitic intrusives the roof-curtain has been invaded by large batholithic mass, small stocks, and irregular mass of granitic intrusives and by numerous associated dykes and sills.

The property is located in the northeastern third of the roof-curtain a short distance from the southwestern end of a large mass of granite intruding the central part of the volcanic-sedimentary belt in this section. It also lies only a few hundred feet north of a 3/4 mile long elliptical stock of granite about the periphery of which a number of gold occurrences have been found.

The claims are underlain by part of a thick series of intermediate to basic volcanics and related tuffaceous rocks intruded by a wide, sill-like body of quartz diorite, presumably of early pre-Cambrian age. These formations are grouped in three wide belts trending N55° to 60°E across the property and dipping very steeply to the north.

The southeast corner of the group is underlain by the northwestern 800 feet of a series of dark green basaltic lavas of unknown thickness which extend southeastward beyond the property boundaries. The individual flows are relatively thin, in the order of 150 to 200 feet, and appear to be lenticular in outline. The contacts are indefinite although they are occasionally marked by thin tuffaceous or brecciated horizons. Rare, indefinite pillows indicate a northwestward facing attitude although these determinations are open to question.

To the northwest the basalts are overlain by a belt of much altered tuffaceous and fragmental volcanics, approximately 2,400 feet wide, which extends N55° to 60°E across the central section of the property. These rocks are for the most part relatively

coarse grained tuffs and consist of irregular grains of quartz up to $\frac{1}{8}$ inch in diameter in a fine grained groundmass of chlorite with some quartz and feldspar. They included relatively thin interbedded horizons of agglomerate, composed of elliptical fragments of rhyolite or andesite up to an inch long in a fine grained dark chloritic matrix, and interbedded thin lenticular flows of both rhyolitic and andesitic lavas. The tuffs and fragmentals of this belt are all strongly carbonatized and those forming the southeastern 1,000 feet of the belt are more or less recrystallized, probably by the granitic stock a few hundred feet to the south.

The balance of the property to the northwest of the tuff horizons is underlain by andesitic lavas with some interflow tuffaceous horizons which have been intruded by a 200 to 300 foot wide, sill-like body of quartz diorite. The lavas are light to dark green in colour, relatively fine grained, and occasionally show pillow structures and spherulitic tops. The flows appear to dip and face northwest. The quartz diorite is a dark grey, medium grained rock composed of hornblende and feldspar carrying large "eyes" up to $\frac{1}{4}$ inch in diameter of blue, opalescent quartz.

The formations forming the tuffaceous belt and the southeastern edge of the andesitic belt to the northwest are all strongly sheared as well as being heavily carbonatized. The shearing strikes from $N80^{\circ}E$ to $S80^{\circ}E$ and dips $80^{\circ}N$ to vertical. The other rocks on the property have apparently resisted this shearing although locally the quartz diorite is weakly sheared. However, this rock has tended to yield to stress by fracturing rather than shearing and at the No. 4 showing in the south-central part of claim P-32310 has been shattered and injected by a quartz stockwork across a width of at least 35 feet.

The only folding noted on the property are minor drag folds in the vicinity of the No. 1 and No. 2 showings. These drag folds displace thin lava formations interbedded with the tuffs to the right and show very steep westward plunges along the regional shearing. The attitude of the drag folds together with the east-trending shearing and the $N60^{\circ}E$ trending bedding indicate that the formations across the property lie on the northern limb of a west plunging major anticline whose nearly vertical axial plane strikes east across the area some distance to the south of the claims.

The only other structural feature indicated by the mapping is a $N87^{\circ}E$ striking fault which apparently crosses the north-central section of the ground. This fault has a very steep north dip and apparently displaces the quartz diorite sill from 100 to 400 feet laterally to the left.

ECONOMIC GEOLOGY

Evidence of quartz veining and gold mineralization have been found at four localities on the property and two of these were recently tested by a limited amount of diamond drilling. One of the

showings, No. 4, lies in the quartz diorite sill and the others are all found in the belt of tuffaceous and fragmental rocks where they appear to be associated with relatively thin horizons of more competent andesitic lavas interbedded with the incompetent tuffs.

The No. 1 showing is apparently the most important and is located in the southwest corner of claim P-32312. Here a small outcrop and some old trenching have shown a narrow, 2 to 8 foot wide, andesitic horizon interbedded in the heavily carbonated tuffs. The andesite horizon has been distributed by a steeply west plunging drag fold and has been injected by a narrow quartz-carbonate vein which can be seen on surface for a length of about 30 feet. The vein follows the folding in the lavas and is normally about 1 foot wide but because of the crenulations at one place an 8 foot width of quartz-carbonate is exposed. The vein is fairly well but erratically mineralized by patches of chalcopyrite and galena and the immediate wallrocks show considerable disseminated pyrite. Visible gold is reported from the surface exposures but none could be found in the mapping. Grab samples yielding up to 8.24 ounces gold per ton are also reported from the surface.

The No. 1 showing was tested at a shallow depth of six short diamond drill holes. The first two of these holes, Nos. 4 and 5, were drilled 20 feet apart under the surface exposure and intersected the vein at vertical depths of 24 and 39 feet. They returned gold values of 0.28 ounces across 1.0 feet and 0.24 ounces across 2.0 feet respectively. Hole No. 6 was drilled beneath No. 5, cut the vein at a vertical depth of 77.5 feet, and returned a gold value of 2.50 ounces across 1.5 feet with visible gold in the core. Hole No. 7 was similarly drilled beneath No. 4 and intersected weak vein material at a vertical depth of 75 feet but showed no gold in the assay. Hole No. 9 was drilled 20 feet west of No. 5 and intersected weak vein material at a vertical depth of 65 feet which assayed 0.005 ounces gold across 1.0 feet. The last hole of the series, No. 8, was drilled 40 feet west of No. 5 and at a vertical depth of 75 feet intersected 1.0 feet of indefinite veining and weak mineralization assaying only 0.005 ounces gold.

It would appear from the drilling that any important gold values in the No. 1 showing are confined to the anticlinal crest area of the small drag fold and are therefore very limited in horizontal extent. They apparently form a small lense shaped like a flattened cigar, about 25 feet by 1.5 feet in cross-section, plunging very steeply westward at about 85°. Though of interesting grade this occurrence is too small to warrant further exploration.

The No. 2 showing is located in the central part of claim P-32306 about 1,000 feet northwest of No. 1. It is exposed by old trenching for a length of 50 feet and across a width of from 10 to 18 feet. It lies in a 25 foot wide horizon of a basic fragmentals striking N65°E and lying between acid fragmentals to the north and a thin rhyolite flow to the south. It consists of 6 to 10 foot width of irregular quartz-carbonate splashes and veining and carries a medium mineralization of fine pyrite. Surface samples are reported to have returned gold values up to 0.20 ounces per ton. Three diamond drill holes covering a length of 85 feet were drilled across

this zone of veining and mineralization. Holes No. 1 and 2, 35 feet apart at the western end of length drilled, each intersected the zone for a core length of 24 feet but showed only low gold values up to 0.04 ounces across 2.2 feet in No. 1 and 0.06 ounces across 0.6 feet in No. 2. In hole No. 3 the zone was only 10 feet wide in the core and the best assay was 0.03 ounces across 1.0 feet. While this zone appears to be strong and carries low gold values the results are too low grade to offer any inducement to further drilling. A weak zone of quartz veining and pyrite on the baseline 350 feet to the east is possibly the continuation of the zone in this direction.

No. 3 zone lies in the northeast corner of claim P-32306 and is also found 200 feet to the east in the northwest corner of claim P-32312. It consists of irregular quartz-carbonate veining and pyrite mineralization across a width of from 4 to 8 feet and has returned very low gold values from grab samples. A little surface stripping is the only work on this occurrence and the negligible values do not warrant further investigation of the zone in this area.

The mapping and prospecting have disclosed other zones of veining and mineralization in the belt of tuffaceous rocks, principally in the western part of claim P-32306 about 700 feet west of No. 2 showing, in the southwestern section of claim P-32312 about 250 feet north of No. 1 showing, and in the east-central part of claim P-32312 about 1,000 feet northeast of No. 1 showing. Of these finds only the last appears to have any significance. Here a quartz stockwork with pyrite cuts carbonated tuffs across a width of over 30 feet but has not been blasted or sampled. This showing should be investigated by trenching and thorough sampling.

The No. 4 showing lies in the south part of claim P-32310. It consists of a strong quartz stockwork with pyrite in the quartz diorite sill and has a width of at least 40 feet along the northern edge of a steep outcrop before it is lost under overburden. It is exposed by very limited stripping and apparently has an east strike. Low gold values in the order of 0.10 ounces per ton are reported from grab samples but the occurrence must be blasted and bulk sampled before its possibilities can be assessed.

G. L. Holbrooke

August 26th, 1963

G. L. Holbrooke

CERTIFICATE

I, G. L. Holbrooke of 160 Bay Street, in the City of Toronto,
in the Province of Ontario, do hereby certify as follows:

1. That I am a consulting geologist and a member of the Association of Professional Engineers of Ontario.
2. That I am a graduate of McGill University with degrees of B. Sc. and M. Sc. in 1927 and 1928 and have been practising my profession continuously since graduation.
3. That the accompanying report is based on data in the company's files; on a recently completed programme of diamond drilling; on a recent geologic mapping of the property; and on a personal knowledge of the area acquired from numerous property examinations since 1935. I have personally examined the property and directed the geologic mapping.
4. That I have no direct or indirect interest whatsoever in the properties or securities of the company, nor do I expect to receive any such interest.

G. L. Holbrooke

G. L. Holbrooke,
Consulting Geologist.

Dated this 26th day of August, 1963



52J04NE0024 52J04NE0016A1 SHARRON LAKE

900

Use for one type of survey only

Assessment Work Breakdown

- 1. Type of Survey Geological
- 2. Township or Area Sioux Lookout Area
- 3. Mining claim numbers P-32278, 32290, 32291, 32292, 32305, 32306, 32310, 32311, 32312, 32295

4. Number of miles of line cut 2.7

* 5. Type of instrument used _____

* 6. Scale constant or sensitivity _____

* 7. Number of stations established _____

8. <u>Summary of days worked</u>	(details on reverse side)	
(a) Total technical work		<u>47.25</u>
(b) Total line-cutting	<u>12.50 (max. from 21)</u>	<u>12.50</u>
(c) Total man-days worked		<u>59.75</u>
(d) Assessment days credit per claim		<u>23.9</u>

(Total man-days multiplied by assessment factor 4 divided by total number of claims traversed)

9. Dated September 9th, 1963

Signed G. L. Holbrook

*Complete only if applicable

Complete list of names, addresses and dates on reverse side.

Use for one type of survey only

Assessment Work Breakdown

Technical Work

<u>Name & Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Total</u>	
			<u>Hours</u>	<u>Days</u>
Sherman Tough 160 Bay Street Toronto 1, Ontario	Geological Mapping	July 6th to August 9th, 1963	340	42.50

Line-Cutting

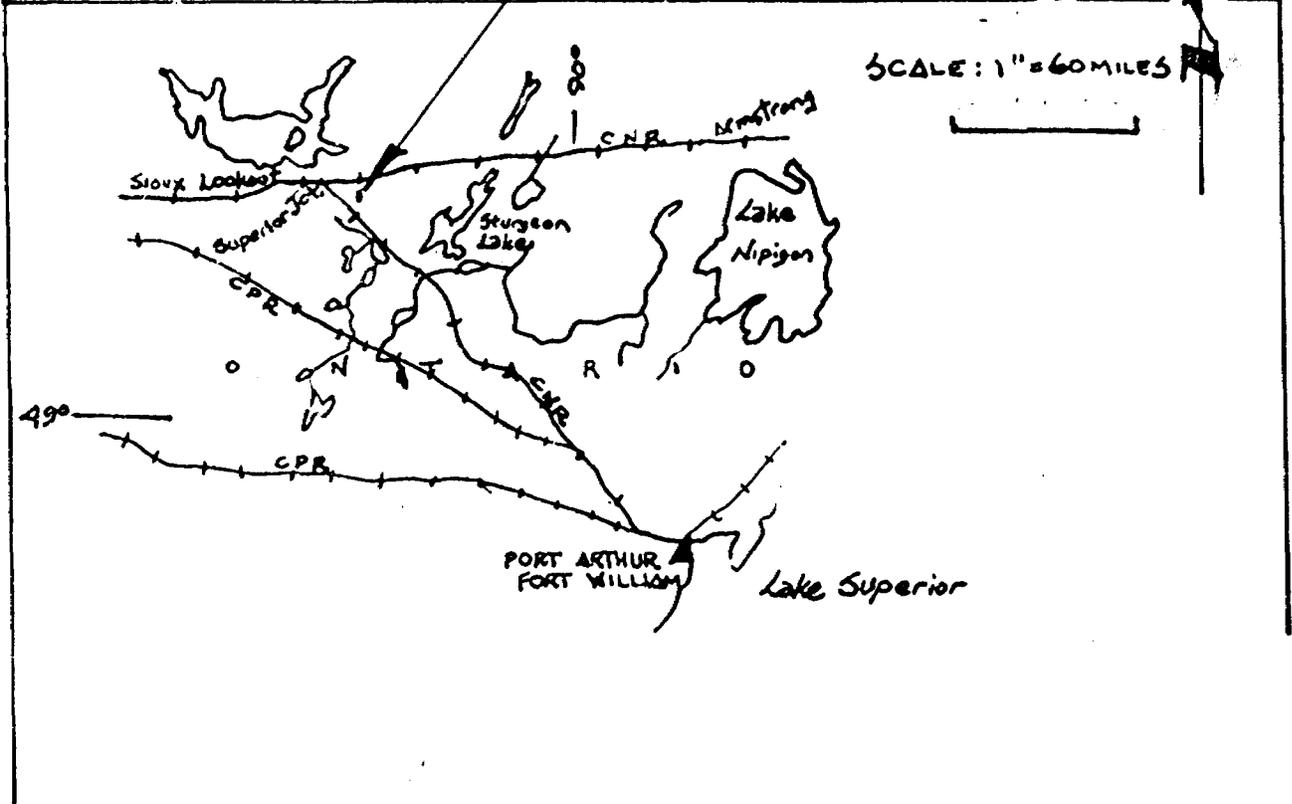
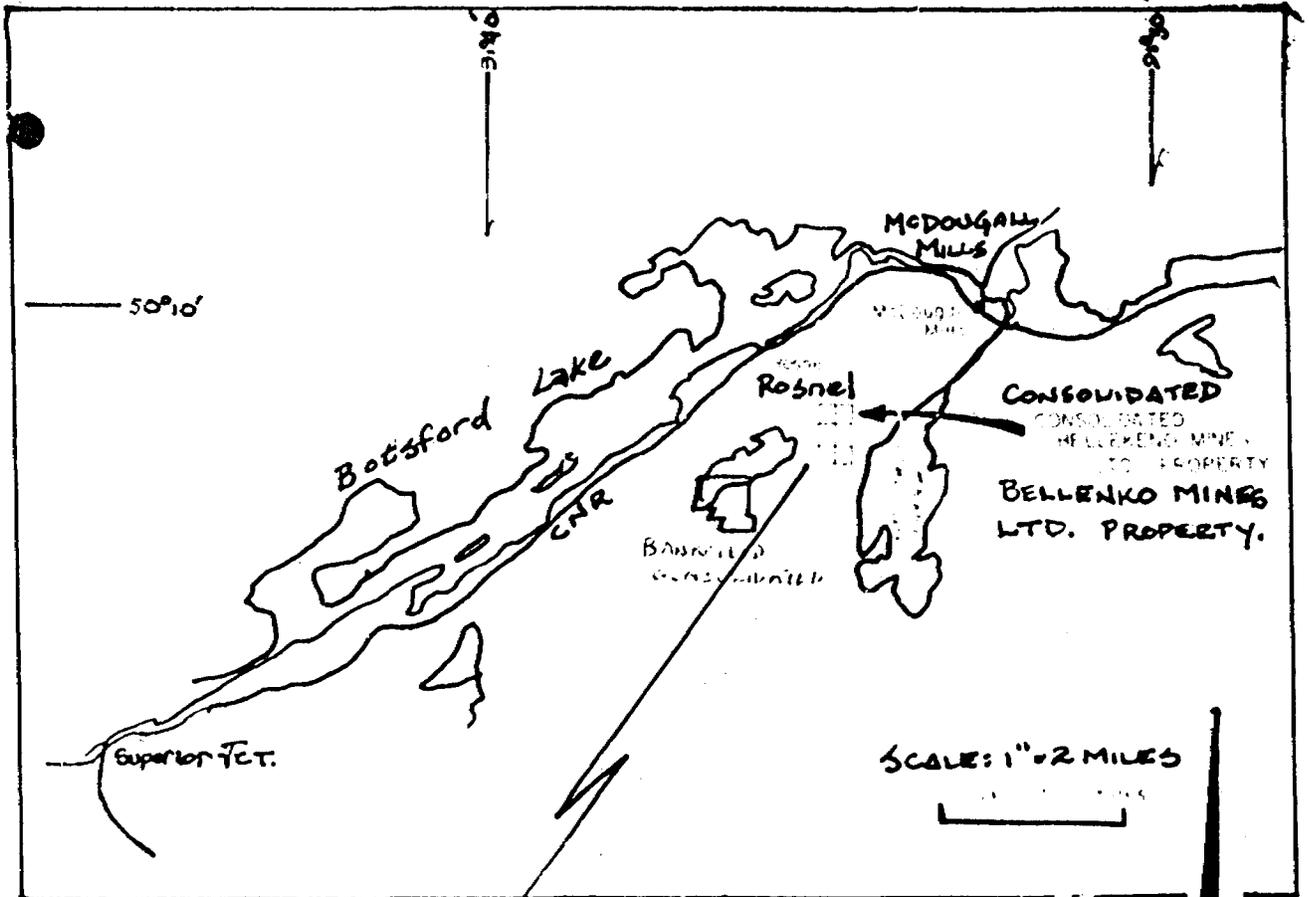
<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Total</u>	
			<u>Hours</u>	<u>Days</u>
Gordon Leliever - Contractor 130 Joicey Blvd. Toronto, Ontario		Between June 20th and July 6th, 1963	168	21.00

Consultants

<u>Name & Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Total</u>	
		<u>Hours</u>	<u>Days</u>
G. L. Holbrooke - Field 160 Bay Street, Toronto (Office)	July 7th and July 15th, 1963 August 23rd, 1963	20 8	2.50 1.00

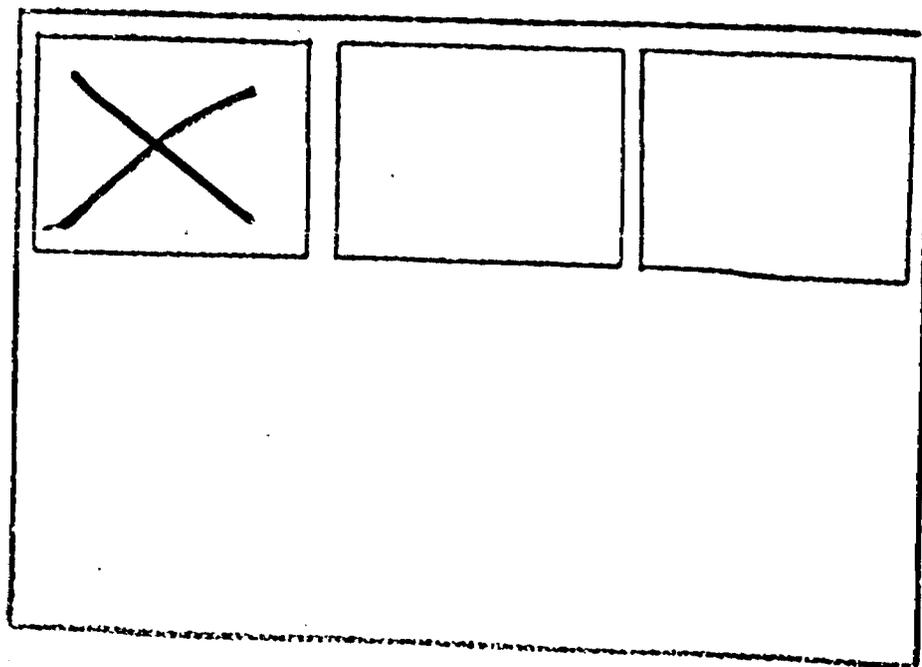
Draughtsman, Typing, others (specify)

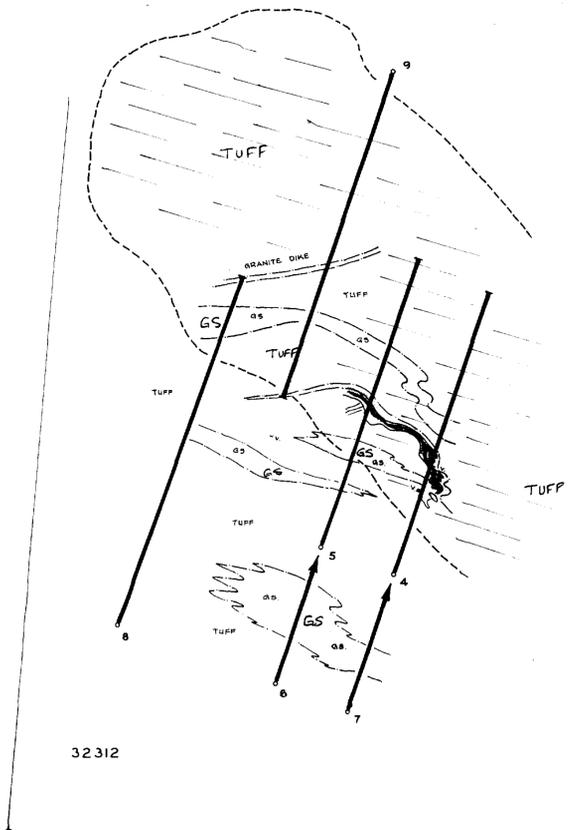
<u>Name & Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Total</u>	
			<u>Hours</u>	<u>Days</u>
W. P. Yawney 40 Hershaw Crescent Toronto 18, Ontario	Draughting	August 17th and 18th, 1963	10	1.25



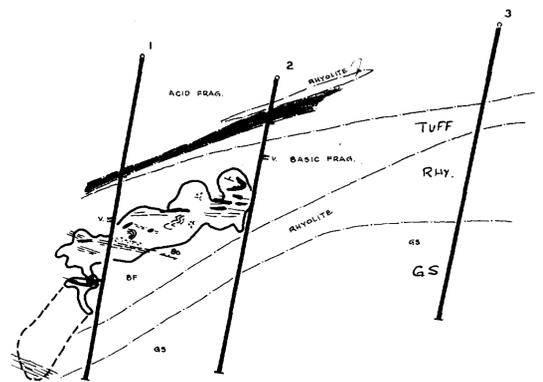
SEE ACCOMPANYING
MAP(S) IDENTIFIED AS
52T/04NE-0016-A1-*1

LOCATED IN THE MAP
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SEQUENCE (X)

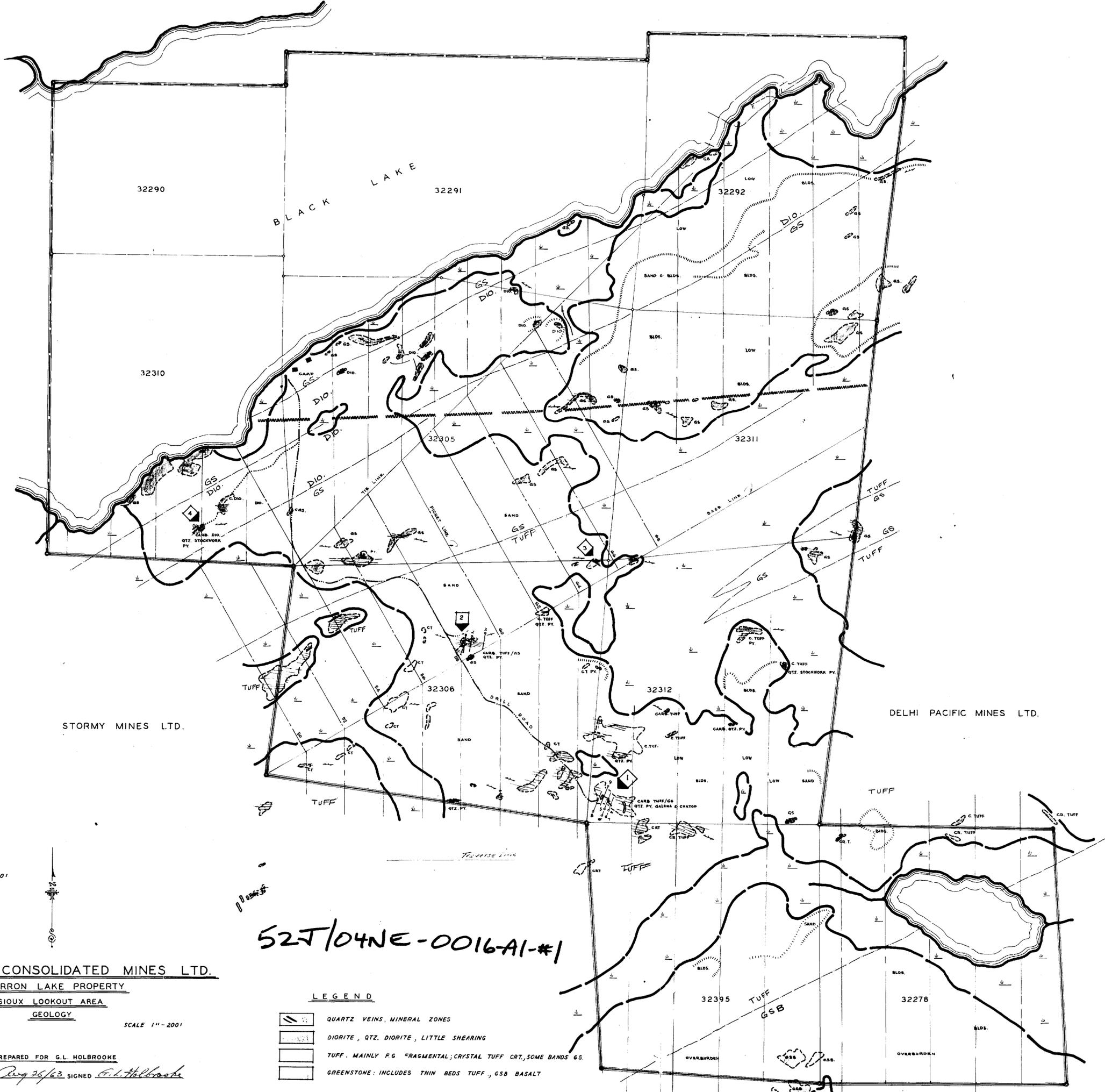




NO. 1 ZONE
SCALE 1" = 201'



NO. 2 SHOWING
SCALE 1" = 201'



STORMY MINES LTD.

DELHI PACIFIC MINES LTD.

52T/04NE-0016A1-#1

BANKFIELD CONSOLIDATED MINES LTD.
SHARRON LAKE PROPERTY
SIOUX LOOKOUT AREA
GEOLOGY
SCALE 1" = 200'

- LEGEND**
- QUARTZ VEINS, MINERAL ZONES
 - DIORITE, QTZ. DIORITE, LITTLE SHEARING
 - TUFF. MAINLY F.G. FRAGMENTAL; CRYSTAL TUFF CRT, SOME BANDS GS.
 - GREENSTONE: INCLUDES THIN BEDS TUFF, GS, BASALT

PREPARED FOR G.L. HOLBROOKE
DATE Aug 26/83 SIGNED G.L. Holbrooke

