



31M04SW0109 63A.435 STRATHY

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REPORT ON
SELF POTENTIAL SURVEY
DORIS LAKE GROUP
STRATHY TOWNSHIP, ONTARIO
FOR
KEEVIL CONSULTANTS LIMITED
BY
GEOPHYSICAL ENGINEERING & SURVEYS LIMITED

PROPERTY

The property consists of 6 unpatented mining claims (T52186, T52187, T52189, T52190, T52191, T52403) in Strathy Township, Province of Ontario.

The claims may be reached by a bush road from the west side of No. 11 Highway near Goward to the north boundary of the property.

GENERAL GEOLOGY

The claims are underlain by Keewatin-type volcanic rocks that include acid volcanic breccias and carbonate-sericite schists that have probably been derived from acid volcanic rocks. Gabbro and quartz diorite have been mapped by Ontario Department of Mines geologists in the northern section of the property.

Previous work on the claims includes trenching and diamond drilling by former owners in the northern portion of claim 52189, near the southwest corner of 52189 and trenching on pyritic zones on the other claims.

The present owners carried out geological mapping on the three southern claims and did additional trenching.

GEOPHYSICAL SURVEY

An electrical self-potential survey was made along N 10° W picket lines spaced 200 feet apart. Readings were taken at 100 foot intervals using a D.C. potentiometer and porous pots filled with saturated copper sulphate solution. The readings were taken using a pot carried along the picket line and connected through a reel of wire and a potentiometer to a stationary pot. Corrected readings were plotted on a base map to the scale of 1" = 200'.

DISCUSSION OF GEOPHYSICAL RESULTS

An apparent gradient of about 2000 millivolts from north to south, or 50 millivolts per 100 feet, shows up when the results of the self-potential survey are plotted. There is no obvious explanation for this gradient.

Three self-potential anomalies are clearly resolved on claim 52191 between Vermilion Lake and Doris Lake, on claim 52190 east northeast of Doris Lake, and at the boundary between claims 52186 and 52189 south of Alfreda Creek.

After removal of the regional gradient the anomalies have intensities of about 300 millivolts suggesting significant sulphide concentrations. The southern anomaly areas have been mapped and partially trenched. Sulphides without significant metal values were found.

There is no record of work on the northern anomaly which is probably caused by sulphides.

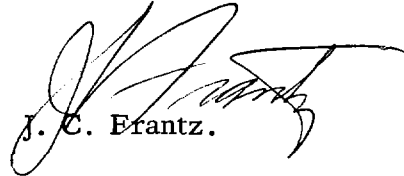
RECOMMENDATIONS

Geological mapping and trenching or stripping are recommended to investigate

the anomaly south of Alfreda Lake at the boundary between claims 52186 and
52189.

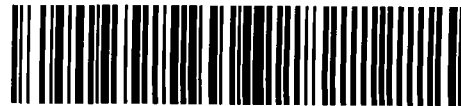
Respectfully submitted,

GEOPHYSICAL ENGINEERING & SURVEYS LIMITED,


J. C. Erantz.

Toronto, Ontario,
November 4, 1964.

This report is accompanied by Drawing No. 2762



31M04SW0109 63A.435 STRATHY

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REPORT ON
GEOLOGICAL MAPPING AND EXPLORATION
DORIS LAKE GROUP
STRATHY TOWNSHIP, ONTARIO

INTRODUCTION

The object of the operation was to construct a detailed geological impression of claims in the Doris Lake area held by Keevil Mining Group. Also, to find, and to expose, on these claims, any zones of mineralization which might prove to be of economic (ore) value. And, if any such zones were found, to sample them for assay values to prove their worth.

Such mineralized zones have been found on the ground examined, and they have proved to be of no value.

Doris Lake is some one and a half (1 1/2) miles north, and some two and a half (2 1/2) miles west from the town of Temagami which itself is approximately sixty-five (65) miles north, on Highway No. 11, from North Bay. This may be seen on Map No. 51e accompanying Vol. LI, Part VI, 1942 of the Fifty-First Annual Report of the Ontario Department of Mines.

Access is reasonably simple. At Goward, three miles north of Temagami, on Highway No. 11, a bush road goes westward crossing the south arm of Kanichee Lake one and a half miles in. Here, canoe travel may be resorted to, travelling south, and the creek at the southern extremity may be followed into the property. Otherwise, the road may be taken, passing Trebor Mines Limited, to the north boundary of the property - some five miles from Highway No. 11.

RESULTS

Trench "A": as seen on the accompanying map of the area, this trench lies 1,800 feet north-west of Doris Lake, on the boundary of claims 52186 and 52189. This lies in a zone of carbonate, and quartz-carbonate containing pyrite bands, in which the pyrite forms ten to sixty percent by volume of the rock. The whole lies in an area of carbonate schist and agglomerate - after shearing of rhyolite. Shearing is at 55° and dips at approximately 75° to the south. The mineralized zone strikes at 55° on the south edge, but probably at 25° to 30° on the north edge.

The mineralization is mainly pyritic. However, traces of chalcopryrite were seen. The writer cannot verify reports indicating the presence of arsenopyrite. The whole was badly weathered leaving much limonite material; and hematite was present around pyrite in the more highly silicified veins.

Results of assays on channel samples from Trench "A": centre of floor: south to north.

<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>	<u>Sample Length in Feet</u>
D.L. 1	Tr.	0.07	1.7
2	Tr.	0.08	0.5
3	Tr.	0.03	2.1
4	0.36	0.50	1.1
5	0.64	0.91	2.7

<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>	<u>Sample Length in Feet</u>
D.L. 6	0.55	0.78	1.6
7	Tr.	0.17	1.1
8	Tr.	0.10	2.4

Assay results, Trench "A" of samples from west wall: north to south

D.L. 9	Tr.	0.10	2.4
10	0.09	0.69	3.1
11	0.05	0.39	2.0
12	0.01	0.13	1.0
13	0.37	0.89	1.0
14	Tr.	0.06	2.6

Stripping and excavation 15 feet west of this trench revealed only traces of pyrite. To the east overburden was very deep. This zone seems to have no continuity, and may simply be filling of a short tension fracture.

Five hundred and fifty feet south of Trench "A", was an outcrop with approximately eight feet of mineralization, and immediately west of this a series of old trenches. A chip sample was taken from the outcrop: D.L. 15.

D.L. 15 0.005 oz. gold 0.06 oz. silver

From the easternmost trench a chip sample over eight feet gave:

D.L. 16 0.005 oz. gold 0.14 oz. silver

Moorhouse reports that values of up to 0.085 oz. gold were taken from the westernmost trench.

Trench "B" is approximately 650 feet east of the east tip of Doris Lake. The mineralization lies in a gray quartz carbonate zone, mainly quartz. This appears rhyolitic, but is probably a zone of late, secondary silicification. The surrounding rock is interbanded sericite-carbonate schist and agglomerate, with the latter predominating to the immediate south of the pyritized zone.

Pyrite is found throughout, but the intensity of pyritization varies from weak dissemination, to veins, up to six inches, of 75% pyrite. Traces of chalcopyrite were seen; limonite and hematite were common in zones of strong pyritization. Strike and dip of formation are 55° and 75° south.

Assay results from samples from floor of trench: south to north.

<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>	<u>Sample Length in Feet</u>
D.L. 17	Tr.	0.13	1.0
18	Tr.	0.13	2.7
19	0.01	0.26	1.0
20	0.005	0.31	3.7
21	0.01	0.30	2.9
22	0.015	0.16	1.5
23	0.03	0.27	2.2
24	0.005	0.13	1.5

Trench "B": assay results, samples from west wall: south to north

<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>	<u>Sample Length in Feet</u>
D.L. 25	0.01	0.28	0.5
26	Tr.	0.12	2.9
27	0.005	0.25	3.3
28	0.01	0.24	3.3
29	0.01	0.29	2.6
30	0.025	0.40	2.0
31	0.025	0.37	1.8

260 feet north-east a small showing gave results as follows:

D.L. 32	0.01	0.30	6.5
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230 feet north-east of Trench "B", south of the one above:

D.L. 35	Tr.	0.24	4.0
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120 feet north-east of Trench "B", gave these results

D.L. 38	Tr.	0.09	4.0
39	0.04	0.33	4.0
40	0.04	0.25	4.0

These results give negligible values, and the zone, from surface indications, most certainly is far removed from being an economic possibility.

North of Vermilion Lake by some 125 feet, is a strong pyrite-quartz-carbonate zone; veins of pyrite, three or four inches wide, are massive. Grab samples from each of the two easternmost trenches gave assay values as follows:

D.L. 33	Tr. oz. gold	0.26 oz. silver
D.L. 34	0.005 oz. gold	0.28 oz. silver easternmost trench

Much drilling, by a previous claim holder, has been done, as many hundreds of feet of core, in boxes, lie in the vicinity. All the sulphide in this core has been split; the greater part of the sulphide was pyrite; with pyrrhotite and chalcopyrite being present, the latter forming the smaller portion. This is found in a fresh, dense, gray rhyolite.

A sulphide showing, pyrite, was found, in rhyolite, 220 feet north of the tip of Vermilion Lake. A chip sample, three feet across, gave these values:

D.L. 36	0.01 oz. gold	0.32 oz. silver
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And 100 feet from the tip of Vermilion Lake, close to the south shore, a sulphide showing assayed thus:

D.L. 37	0.01 oz. gold	0.22 oz. silver
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A nearby trench, through overburden, showed quartz-carbonate, but only traces of mineralization were seen.

Nine hundred and fifty feet west of Trench "A"; in the south-west corner of claim 52186, was a further showing. Stripping revealed this to be about 60 feet in length, and under 6 feet in width. The best

mineralization was found near the north end of this zone. A small trench was opened revealing 25-30% mineralization, this pyrite; and again the writer cannot verify the presence of arsenopyrite, as has been reported.

Chip Sample	D.L. 41 (north wall)	0.005 oz. gold	0.10 oz. silver	4.0 feet
	D.L. 42 (south wall)	0.01 oz. gold	0.37 oz. silver	4.0 feet

On the claim adjoining Doris Lake in the north are a great many feet of stripping and trenching through three to five feet of glacial till. None of these revealed more than five percent mineralization (pyrite). They proved useful in geological mapping, as there is little outcrop in evidence.

GEOLOGY

The geology of the area is not complex, the greater part of the rock being interbedded carbonate and sericite schist and agglomerate, this being Moorehouse's classification of the particular area, in the O.D.M. report mentioned in the introduction. But these are probably a result from intense shearing in this region.

Toward Vermilion Lake the rock is a fresh dense, gray rhyolite with creamy rhyolite, and buff, carbonatized rhyolite sometimes present. This is rock type 2 on the accompanying map, coloured green. The areas of more "fresh" agglomerates are similar to the "Rhyolite Breccia" as designated at Temagami Mine, and are probably just that - breccias, due to the shearing which causes the schists. And so, the conclusion is that the schists and agglomerates are secondary after acidic volcanics, and result from more intense and less intense distribution of shearing forces respectively.

The sub-areas, or rock types (i.e. 1.s and 1.a) simply show the rock type predominant. Thus, in the areas of interbanded schist and agglomerate, 1.s indicates that schists predominate, 1.a that agglomerate is predominant.

The rhyolite can be seen, in areas, in schist and agglomerate, and its very occurrence may support the conclusion that schist and agglomerate are due to alteration of volcanics under shear.

The area, south and east of Vermilion Lake, is occupied by basic and intermediate volcanics according to Moorhouse. The writer could not tell, in hand specimens, any difference between the rocks designated basalt, and the rhyolite mapped to the north. All of this rock is dark/medium gray, fine grained - dense. Hence the whole area has been mapped as a unit - rhyolite.

The olivine diabase is quite distinctive except where it outcrops in basalt north-east from Vermilion Lake. In this area it is medium-fine in grain, very dark, and olivine (?) shows as small acicular crystals. This also is found along the contact to the north and west, and is caused either by chilling or by intrusion and recrystallization of the intruded volcanics. The division, between Doris and Vermilion Lakes, may be simply explained: i.e. the olivine diabase simply failed to intrude so high in this region, and would probably be found a short distance below surface under the dividing rhyolite.

STRUCTURE

The general trend of the schistosity in the area examined is N 55° E and the dip is 75° south. The writer concludes that this schistosity is simply an expression of shearing, and thus the shearing becomes the main feature of the region. The mineralized zones follow the shearing trend, generally.

No indication of faulting across this main structure, or feature, was found. But the deep valley running through Vermilion and Cooke Lakes, is a marked topographical feature and may represent a major fault. It is possible that this is due to weathering along the contact between acidic and basic volcanics, but it is still likely to represent a major area of lithologic weakness and may harbour a fault of major proportions.

Again, the ground (rock) slopes steeply north into Doris Lake along its south shore. And parallel to this, 250 feet from shore, is a cliff and a sharp drop of approximately 100 feet. Most of the rock between is extremely schistose. A line formed by the south shore of Doris Lake, through a point 200 to 300 feet east of the No. 3 post of claim 52186, adjoins another steep drop to the creek at the north boundary of claim 52189. This, almost straight lineament, may also represent a zone of major movement.

SUMMARIZATION AND RECOMMENDATIONS

The area, and the examination thereof, has revealed no mineral deposit of economic value. The many old workings, and previous drilling followed by abandonment indicate that previous claims holders have reached conclusions concurring with those of the writer: namely, that there are no economic mineral deposits on these claims.

However, should the decision be made to hold these claims, due to the presence of anomalies found by S.P. and/or other geophysical surveys, it is recommended that a programme of diamond drilling be undertaken to prove the worth, or worthlessness, of any such anomalies.

Immediately south of the creek in the central north part of claim 52189 are the workings of Temagami Gold Mines. These workings, as reported by W.W. Moorehouse, encompass many feet of trenching (seen by the writer) and no less than five (5) diamond drill holes. Values up to 0.348 ounces gold were reported. The workings were abandoned.

CONCLUSION

The results obtained from the recent examination would indicate that there is little mineralization of worth, and almost certainly none large enough to be of economic value. Evidence of past workings found, and past reports validate this conclusion.

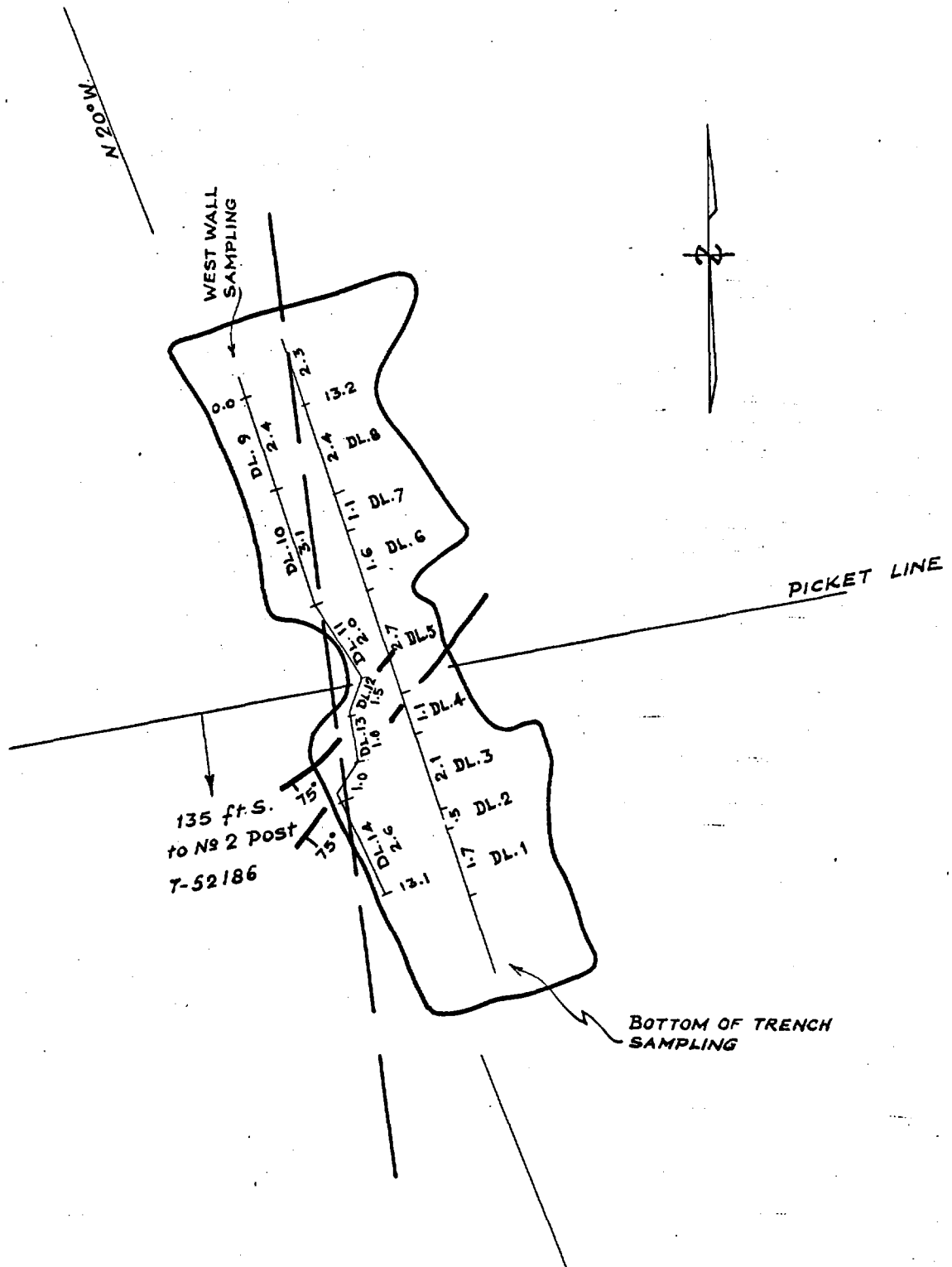
Respectfully submitted,

GEOPHYSICAL ENGINEERING & SURVEYS LIMITED



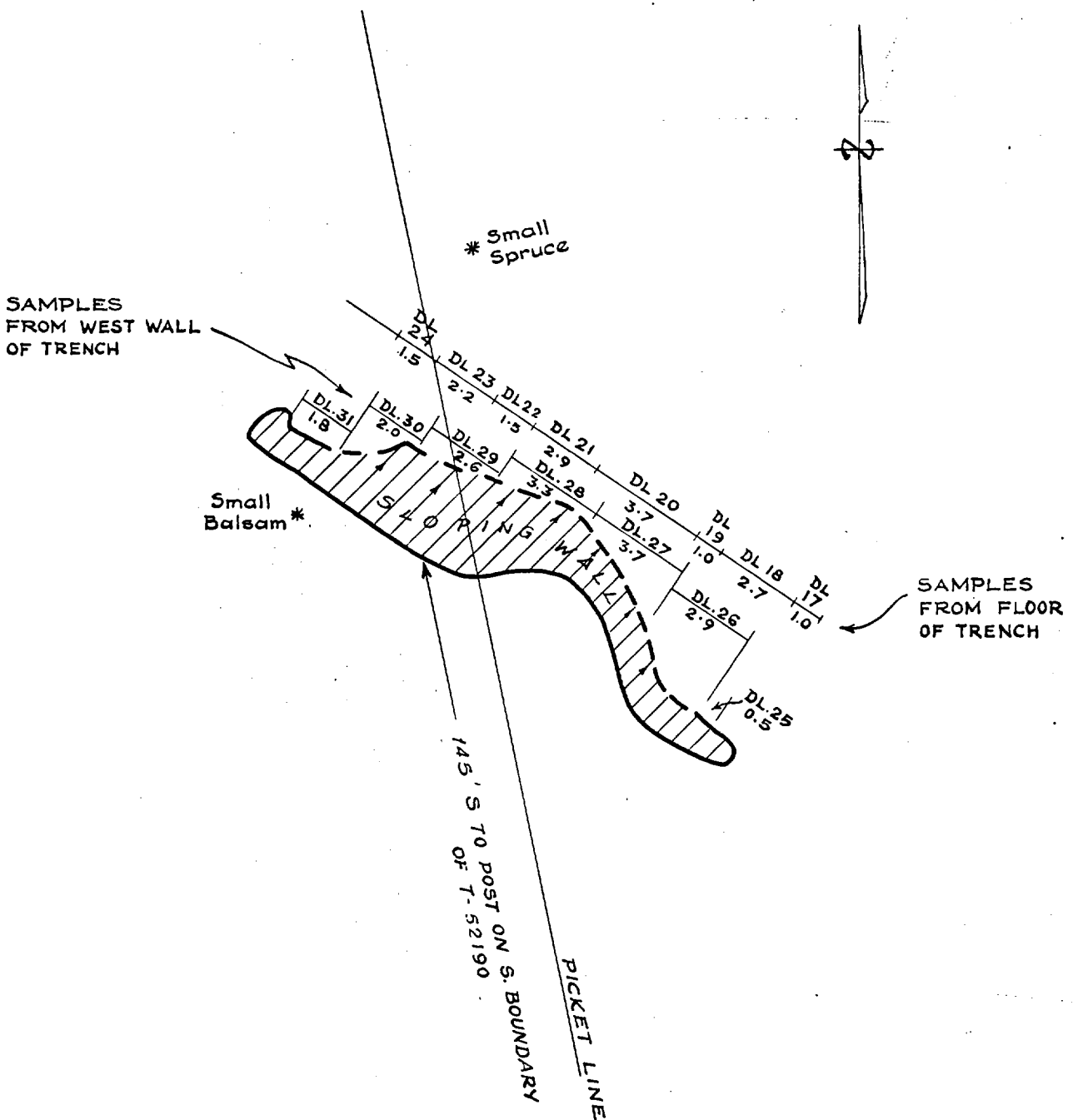
I.F. Downie.

Toronto, Ontario
December 11, 1963



TRENCH "A"
DORIS LAKE GROUP
STRATHY TWP
FOR
KEEVIL CONSULTANTS LTD

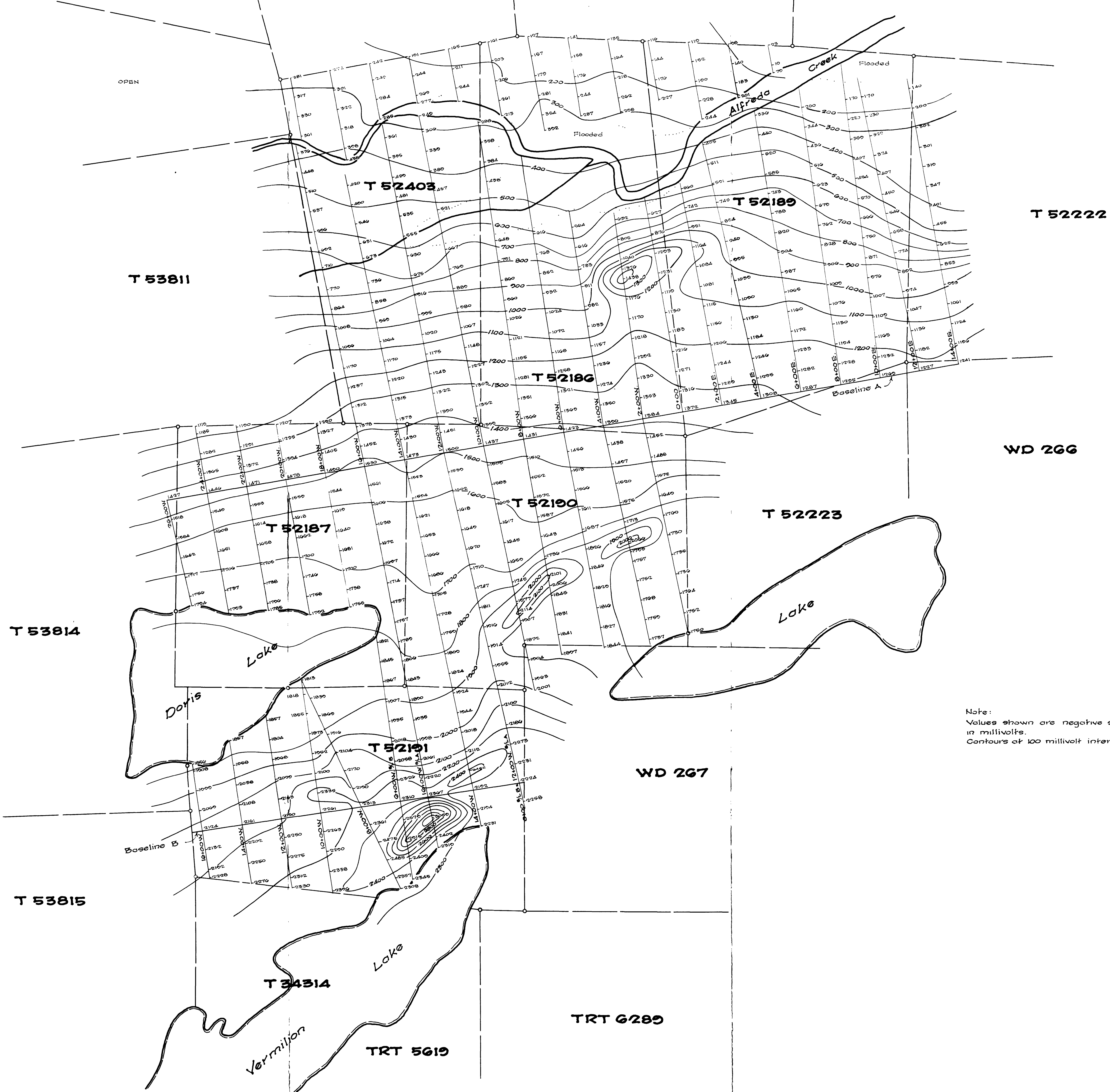
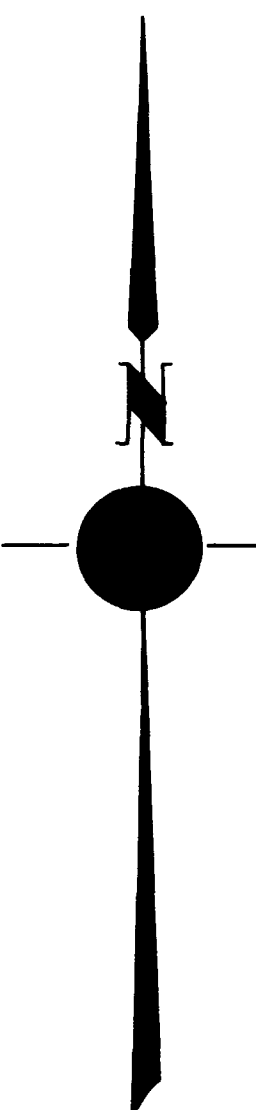
Scale: 1/4 inch = 1 foot (approx)



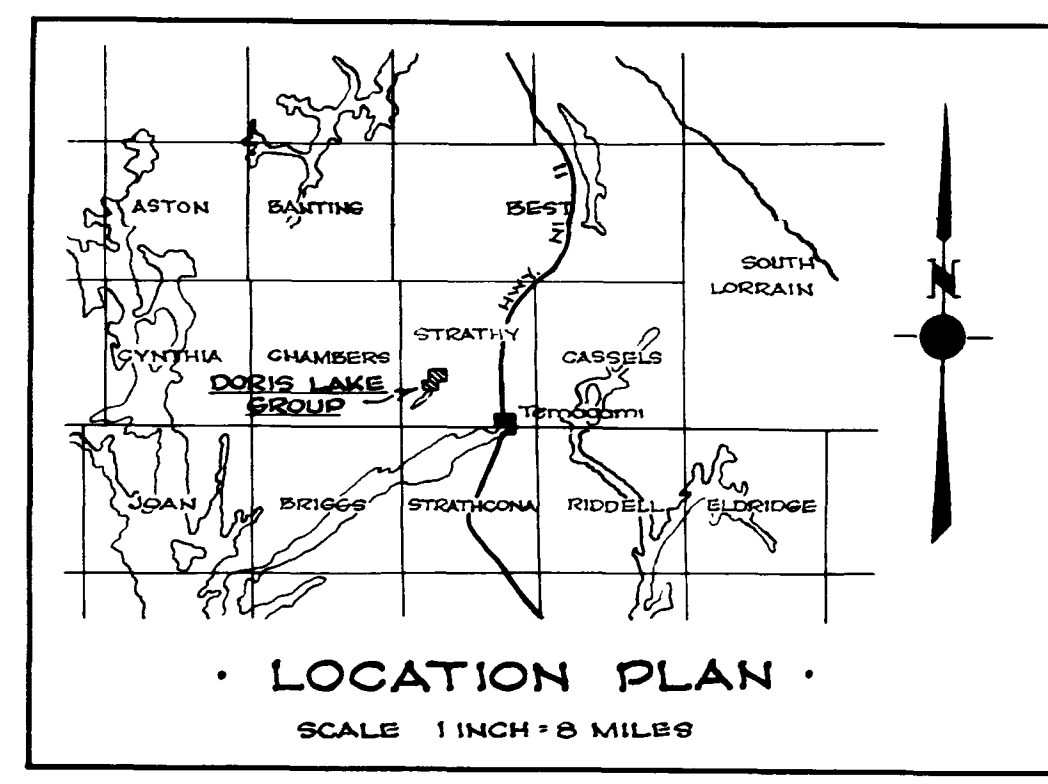
TRENCH "B"
DORIS LAKE GROUP
STRATHY TWP
FOR
KEEVIL CONSULTANTS LTD

Scale: 1/4 inch = 1 foot (approx)

TRT 5955 TRT 5954 TRT 5953 T 52188



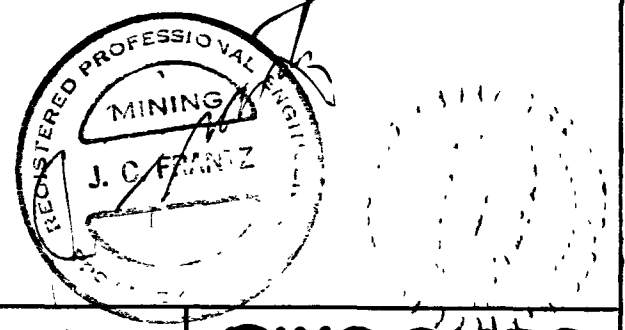
Note:
Values shown are negative self-potentials
in millivolts.
Contours at 100 millivolt intervals.



SELF - POTENTIAL SURVEY
OF PART OF
DORIS LAKE GROUP
TOWNSHIP OF STRATHY
PROVINCE OF ONTARIO
FOR
KEEVIL CONSULTANTS LIMITED
BY
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED

63A-435

SCALE 1 INCH = 200 FEET



Drawn by: J.G.K. Checked: J.G.K. N.T.S. 31 1/4 NOV. 1994 JOB 626 DWG. 2762

