

H. B. & O. ENGINEERS
DEANWOOD
STOUFFVILLE
LOH 1LO



42A02SW0017 63.3706 BADEN

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888-1106
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June 21, 1979

The President and Directors
Manitou Lake Gold Mines Inc.
Suite 2914
390 Bay Street
Toronto, Ontario M5M 2Y2

Dear Sirs:

We have just completed an orientation survey (testing a new method) over the known gold zones on and near your Baden Township property. It was a great success and could immediately be applied to the 3/4 mile stretch of geologically favourable ground between the recent drilling and the old Arbade shaft.

The method is a new one that tests for gold directly in the vegetation overlying the gold veins. Samples of humus are collected from the surface of the ground, i.e. years of accumulation of dead leaves, needles and grass, for it has been found that when the soil over a vein has a little more gold in it than normal, the humus on top of that usually has a lot more gold than normal. Although this survey method has been known for years, the recent breakthrough has been in the analytical technique. It is now possible to measure the gold content in one or two parts per billion rather than 20 or 30 parts per million.

The new method is a neutron activation technique done at McMaster University rather than X-ray analysis.

In mid May we collected 150 samples at 25- and 50-foot intervals along seven separate lines over known mineralization.

The accompanying profiles, L-1 to L-7 inclusive, show how simple it is to identify the mineralized areas. The profiles show the sample numbers along the surface of the ground. Under that the assays of gold cut in trenches are shown and any drill intersections are also shown at their correct depth beneath the surface. The analytical results are shown sideways in parts per billion.

Line L-1 shows anomalous results of 14 to 250 P.P.B. in gold for 175 feet over the trenches and exposed veins. Normal background is 1 to 8 P.P.B.

It is fascinating to note the 160, 22, and 66 P.P.B. some 150 feet beyond the trenches that must indicate the blind vein shown by the deep intersection of 0.18 oz. of gold over 1.0 feet in a drill hole.

.../2

Manitou Lake Gold Mines Inc.

June 21, 1979

Line L-2 went near a couple of trenches and got minor indications of their values (10 and 20 P.P.B.).

Profile L-3 ran out of humus (got into swamp) before reaching the vein system, but it did get an indication of the zone with a 53 P.P.B. at the last sample collected.

Lines 4 & 5 were both over the old Arbade shaft and trench system. One assay on each line was the only indication of the mineralization (26 & 36). However, as the old drilling of the Arbade area got nothing, it is unlikely that there is much there to find.

Lines 6 & 7 were both over drilled and trenched exposures of the French veins. Anomalous results of 40 to 740 P.P.B. over widths of 50 to 175 feet clearly indicate the location of the rich little vein.

Conclusion

The method is the answer to a prospector's prayer. It seems to work so well for gold which usually has to be trenched or drilled to be found. But whereas drilling costs are now running \$15 - \$25 per foot, trenching into bedrock \$5 - \$10, this method of humus sampling is 40¢ - 65¢ a foot (assuming a sample interval of not more than 33 feet, i.e. 10 metres).

Recommendations

Survey the ground between the twin ponds and the Arbade Shaft as proposed by McCannell but use this direct method of gold in the humus. Mr. McCannell has seen our test results and agrees it would be a better method than the electrical technique for this ground.

Cost

Using a 10-metre sample interval on lines 100 metres apart (i.e. 33 feet and 330 feet), it would involve about 250 samples and a month in time at an estimated cost of \$3,500.

Respectfully submitted,

MO:TP

Michael Ogden, B.A.Sc., P.Eng.



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MANITOU LAKE GOLD MINES INC.
BADEN TOWNSHIP PROPERTY, ONTARIO

LIUMUS SAMPLE SURVEY FOR GOLD

IN THE AREA FROM THE

FONDEWA SHOWINGS

TO THE OLD

ARBADE SHAFT

BY

MICHAEL OGDEN, B.A.Sc., P.Eng.

TORONTO, ONTARIO

AUGUST 1979

HUMUS SAMPLE SURVEY FOR GOLD IN THE AREA
FROM THE FONDEWA SHOWINGS TO THE OLD ARBADE SHAFT

INTRODUCTION

The initial orientation survey of May and June, 1979, was so successful in detecting the known veins of gold amongst the Fondewa Showings and also the French Vein, that this survey was undertaken to assess the stretch of ground between the Fondewa Showings and the old Arbade Shaft, some 4,000 feet to the northwest. The area has been thoroughly prospected in the thirties by extensive trenching and deep pits. No records exist of any of this work but the quantity of trenches attests to at least sporadic encouragement. Furthermore, a band of syenite lies beneath much of this area and that rock type is often host to gold mineralization. Hence, it was expected that some zones of gold mineralization would be indicated by the humus sample survey.

SURVEY METHOD

Samples of humus (leaves and needles mostly) were selected at 33-foot intervals along lines about 300 feet apart. The lines were run at right angles to the trend of the road which is also that of the syenite, i.e. northwest. A strip of yellow tape with the sample number was left hanging from a nearby tree to mark the spot. The samples were taken to X-Ray Assay Laboratories in Toronto, who dried them, cut an 8-gram sample and compressed it under 60,000 lbs. per square inch to a $1\frac{1}{2} \times \frac{1}{4}$ inch disk.

The disks were then shipped to McMaster University where they were analysed for gold in parts per billion by the neutron activation technique.

PRELIMINARY RESULTS

All the numbers were so low compared to those of the orientation survey that it looked as though there was little or no gold in the area surveyed, or perhaps the technique was at fault.

Consultation with X-Ray Assay Laboratories has disclosed that the analytical technique was changed somewhat in mid-summer, which may well have lowered the level of values, but has not altered the magnitude of change when gold is present.

Another factor - and a most critical one - is that the orientation surveys were run over exposed veins which had been blasted into, some 30 to 40 years ago, and this undoubtedly spread vein material around the nearby bush. Hence the halo of anomalous results would be much larger and of higher value than if the veins had never been opened up, e.g., the samples over the main trenched vein on line zero at 25-foot intervals read 30, 250, 140, 170, 16, 14, 85 or an average of 100 over a width of 150 feet. Normal background of this survey was 5.5 PPB, so that the anomaly has an average magnitude of 18 times background. But the samples over the blind vein,* a couple of hundred feet to the west, are 160, 22, 66 or an average of 82 or 15 times background for only 50 feet. Hence, an unexposed vein, buried under 10 to 20 feet of overburden, may well be hard to detect.

ASSESSMENT OF RESULTS

The survey disclosed: a weak anomaly (3 times background, which is 2 in this survey) on the line 200 feet west of the bridge; a good anomaly (8 times background) on the line at 800 feet west; and another good anomaly (5 times background) on the line at 1400 feet west. Furthermore, these form a line of high results that trend parallel to the trend of the syenite. Thus, they may indicate a zone of gold mineralization beneath.

CONCLUSIONS AND RECOMMENDATIONS

1. Resample, in detail, the vicinity of the newly-indicated veins in order to assess their size and configuration. The blind vein amongst the

* A blind vein is one found in drilling but not yet found at the surface.

Fondewa Showings will require about 45 more samples and the newly-indicated 1200-foot-long zone alongside the road will warrant some 65 more samples.

2. Conduct a reconnaissance survey over the unexplored portion of the claim block to search for an indication of a major through-going, gold-bearing structure. Lines could be run north-south at quarter mile intervals, using the standard spacing of 33 feet. A total of 500 - 600 samples would be required to cover this area of about 18 claims.

TIME AND COST

The drying and analytical cost is now \$5.35 per sample. The collection cost in quantities like this comes down to about \$5.00 each, so a total of \$10.35 may be applied to the 600 or 700 samples to be collected. Estimated cost is thus \$6700.00 ± \$500.00.

The time involved is a month and a half with two weeks to collect the samples and four weeks for drying and analysing them.

Respectfully submitted,



Michael Ogden, B.A.Sc., P.Eng.

Toronto, Ontario

August 1979



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MANITOU LAKE GOLD MINES INC.

BADEN TOWNSHIP PROPERTY

ONTARIO

RECONNAISSANCE SURVEY OF THE PROPERTY

BY SAMPLING HUMUS FOR GOLD

IN PARTS PER BILLION

October 31, 1979

By: Michael Ogden, B.A.Sc., P.Eng.

MANITOW LAKES GOLD MINES INC.

BADEN TOWNSHIP PROPERTY

ONTARIO

RECONNAISSANCE SURVEY OF THE PROPERTY
BY SAMPLING HUMUS FOR GOLD IN PARTS PER BILLION

INTRODUCTION

The concept of using humus samples (leaves, needles and grass) as a guide to underlying gold mineralization is not new. It has been used effectively in the United States for the last twenty years where the residual soil has enabled anomalies in the tens to hundreds of parts per million gold to exist overtop of gold-bearing veins.

The great breakthrough in this country is the recent ability to detect gold accurately in parts per billion, for with our heavily glaciated terrain the soil cover is seldom much more than 25,000 years old (rather than many millions as in the U.S.), hence the gold anomalies are only a few parts per billion and rarely in the tens of p.p.b. The analyzing technique is a method of neutron activating the dried and compressed sample. Analyzing the rate of decay of radioactivity of the gold so as to arrive at an accurate "relative" value of the various samples in parts per billion. I say "relative" because the absolute value of the results has varied considerably throughout the summer, e.g., a series of samples that averaged 7 p.p.b. early in the summer dropped to about 3 when redone later in the season. But amongst themselves, the higher values were still the higher values and vice versa.

The method was tested in May, by taking 150 humus samples from two areas of known gold mineralization. All the samples from the vicinity of the gold mineralization were clearly anomalous. So the method seemed to work perfectly. A survey was done in July by taking 300 samples from the area that had been so extensively trenched and prospected in the thirties and forties, i.e., the area of syenite rock from the Fondewa Trenches to the old Arbade Shaft, a distance

of 4500 feet. The 300 included about 30 samples from the vicinity of a blind vein, i.e., a vein found by earlier diamond drilling but whose surface exposure has never been made. It became very obvious that the results over a blind or unknown and therefore undisturbed vein were very much less than the results found in the vicinity of old trenches, where blasting of the bedrock might well have spread gold onto the surrounding ground. Hence, although the method still worked, the indications may be rather subtle.

Some discontinuous anomalies were indicated in the 4500-foot long area, but further check sampling was needed between the lines that were then about 300 feet apart.

THE RECONNAISSANCE SURVEY

This survey, done in September, entailed 600 samples on broadly-spaced lines (about 2000 feet apart) so as to investigate 18 claims of the property. Much of this ground had never been looked at for 40 years. The lines were laid out so as to avoid the swamp which covers so much of this property. Some short lines of check samples were taken in some of the previous anomalous areas to try and establish the proper orientation of anomalous trends. This last series of samples of needles, leaves, grass and moss were selected at 35-foot intervals in good bush. The sample interval was stretched to 50 feet and sometimes to 60 feet on long lines. Any outcrop found was identified and is also shown on the accompanying maps.

DISCUSSION OF RESULTS

The Blind Vein Amongst the Fondewa Showings Claims 422167 and 401358

This enigma which produced high results in May followed by spotty ones in July, now seems to be resolved into an unexpected trend of west by northwest. A new anomaly on a reconnaissance line some 1200 feet to the west indicates that

the vein may be quite extensive. At least two diamond drill holes should investigate this zone and possibly three.

The Northwest Anomaly (Claim 506541)

The far west line that extends to the north, crosses some old trenches in syenite, where anomalous results were expected. However, the trenched area was blank, but 300 to 400 feet north of them a new anomaly was found, about 200 feet wide, with outcrop of feldspar porphyry nearby. At least one drill hole will be required to investigate this zone.

The West Anomaly (Claim 422265)

This entirely new anomalous zone of about 200 feet in width was found centrally located near the west boundary of the property, with outcrop of feldspar porphyry a hundred feet to the north. The area is almost surrounded by swamp, so a drill hole will be required to explore it.

The Centre Anomaly (near the common post of Claims 496685 -86 -87 & -88)

This anomaly is 300 feet north of a series of old trenches but the ground is low nearby and the overburden may be rather deep, perhaps 20 or 30 feet.

A lineament on the air photos which may reflect a line of weakness or fault in the earth's crust extends along the line between the centre anomaly and the west anomaly. Hence these zones may be connected. In any event, a drill hole will be required to check the centre anomaly.

Nothing found in the 4500-foot long zone of syenite between the Fondewa Trenches and the Arbade Shaft

This area of such intensive trenching in the past has now been well sampled and check sampled, and although the odd high result is found, never are two anomalous values adjacent, nor are they detectable on adjacent lines. Therefore, these erratic results must reflect erratic values in the underlying syenite and this probably explains why so much trenching was done throughout

this area in the thirties and forties and yet so little seems to have been found. We have never had any good results from these trenches, nor is there any evidence that the shaft encountered a well-mineralized zone.

Other Anomalies

There are numerous single high readings and scattered questionable values that should be re-analyzed to see if an anomaly can be identified or if they represent just erratic results. An anomaly would be defined by adjacent, higher than normal readings. An erratic result would be displayed if the high reading disappeared on re-analysis. A few other anomalous zones may be found by such check analysis.

RECOMMENDATIONS AND THEIR EXPECTED COST

1. The questionable results (about 65) should be re-analyzed and the new results assessed to see if any of them may reflect anomalous conditions that should be drilled. This will cost a little less than \$1,000.
2. A call for tenders should be sent out for at least 1200 feet of drilling in six holes. Three of these holes are over half a mile apart, so the overall costs, including mobilization, moving, drilling, engineering and assaying will be close to \$25 per foot. As some extra holes may well be required, sufficient funds should be available for 2000 linear feet of drilling or \$50,000.

Respectfully submitted,



Michael Ogden, B.A.Sc., P.Eng.

October 31, 1979



R. A. HALET, Ph.D., P.ENG.
P. B. BROADHURST, B.Sc., P.ENG.
MICHAEL OGDEN, B.A., B.Sc., P.ENG.

January 14, 1980

Manitou Lake Gold Mines Inc.
Suite 2914
390 Bay Street
Toronto M5H 2Y2

Dear Sirs:

All the anomalous and questionable results of my October 31 report have been re-analyzed. The accompanying maps (North and South Sheets) show these check results of the humus sampling program of September.

Both the "East Anomaly" and the "West Anomaly", which are four claims apart, checked well, with at least two adjacent high assays. Drill holes have been laid out in both these locations and drilling is expected to start any day now.

The "Northwest Anomaly" got some verification of its existence but it is weaker than the East and West Zones.

The "Centre" and "South" Anomalies have disappeared, as have three other questionably anomalous areas of the "South Sheet".

The present program of two drill holes should therefore be done as soon as possible in the hope of locating one or two new zones of gold mineralization.

Respectfully submitted,

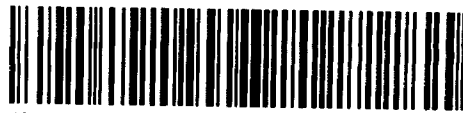
Michael Ogden, P.Eng., B.A.Sc.

MO:TP

Encs.

cc - Mr. Milt Klyman
- Mr. Jack Appleby
- Mr. Larry Murphy
- Dr. R. A. Halet

H. B. & O. ENGINEERS
SUITE 1000,
TORONTO
M5H 1



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MICHAEL OGDEN, B.A.Sc., P.ENG.
R.R. 4 STOUFFVILLE, ONT. L0H 1L0 416-888-1108

January 18, 1980

Mr. Milt Klyman
President
Manitou Lake Gold Mines Inc.
Suite 2914
390 Bay Street
Toronto M5H 2Y2

Dear Sir:

Re: Drilling Program on Baden Township
Property

Hole No. 1 of this drilling program got underway early in the week. The hole got stuck in boulders at 20 feet and another attempt was made with a little steeper hole which was in difficulty this morning at 42 feet and no bedrock yet. I instructed the driller to abandon the hole and move on to location No. 2. Overburden of 30 or more feet in depth is just too much cover for the humus sampling technique to be reflecting bedrock mineralization. The sampling program must have detected some gold mineralization that got caught up in the deep overburden.

The second hole will probe the "West Anomaly" from a bedrock set-up, so no problems are anticipated.

The third and last hole of this program will be near some old trenching to investigate a humus sample anomaly that trends east-west and has some sporadic high results along it. Furthermore, an old drill hole indicated a vein in depth in this area that has never been found on the surface.

The drill program is expected to remain within budget.

Yours very truly

Michael Ogden, B.A.Sc., P.Eng.

MO:TP

cc - Mr. Jack Appleby
Mr. Larry Murphy
Dr. R. A. Halet

Fraser placed Jan 23 - no water cannot continue this hole #2



BADEN TOWNSHIP, ONTARIO

The exploration program for 1979 was confined to a reconnaissance survey of the property, using the relatively new technique of using humus samples as a guide to underlying gold mineralization. The original plan was to do an electromagnetic survey (VLF) over the known mineralized belt to locate some additional drilling targets, but after considerable discussion it was decided that the sulphide content of the probable mineralized zones would be too small for detection by this method, and that the humus sampling method would be positive, at least, in that it measured the actual gold content in the overlying glacial drift, which is fairly shallow in this area, for the most part.

The program was done by Michael Ogden, whose reports and maps dated June 21, 1979, August 1979, October 31, 1979, January 14 and 18, 1980, are attached.

As recommended in Mr. Ogden's letters of January 14 and 18, 1980, it was decided to test three of the anomalous areas by diamond drill holes. (See North Sheet for locations.)

Hole No. 1, designed to test the east anomaly on Claim 401358, had to be abandoned in quicksand and boulders at a depth of 44 feet after two attempts. This condition was totally unexpected, and this area will have to be re-examined in the summer.

Hole No. 2, designed to test the west anomaly on Claim 422265, had to be suspended at 25 feet because the local water supply was insufficient. It will have to be continued in the summer.

Hole No. 3, designed to test an anomalous area in the northeast corner of Claim 422167 (in the area of the Fondewa showings) was drilled to a depth of 202 feet. At 45 degrees the hole passed through massive felsite with numerous short sections of greenstone. This formation has been interpreted as a swarm of syenitic dykes invading bedded tuffs, but there are also numerous fine-grained basic dykes in the area, which complicate the situation.

Minor gold quartz mineralization was encountered in narrow greenstone sections at 58 and 115 feet. These do not appear to have economic significance.

Insufficient work has been done to form an opinion on the efficacy of the humus sampling method in this area. Unfortunately, it was impossible to complete drill holes under the two most interesting indications.

Actually, additional lines of sampling are required to determine the extent along strike of the anomalous conditions revealed by the reconnaissance. Only then, in my opinion, should further drilling be attempted.

The chief disadvantage of this method of prospecting is the long delays in obtaining assay results, as the only commercial laboratory presently equipped for this work is overloaded.



R. A. Halet
Technical Director

February 22, 1980



DIAMOND DRILL LOG

PROPERTY: MANITOU LAKE GOLD MINES INC.

HOLE NUMBER: ML 30 &
ML 30-B

LOCATION: Baden Township - Claim 401358
ft. east of No. 3 Post; ft. north of No. 3 Post


DIP TESTS

Latitude: North astronomic Dip: 49° Footage Reading Corrected

Departure: Depth: 44 ft

Elevation: Commenced: Jan. 16, 1980

Azimuth: Finished: Jan. 18, 1980 Logged by: R. A. Halet

SAMPLE NUMBER	DESCRIPTION		
	<p>Purpose: To test below anomalous gold values in humus.</p> <p>Hole started at 45°. Ran casing to 22 feet through boulders and quicksand. A boulder moved and jammed casing, breaking it off at 18 feet. Unable to line up casing at break for recovery, four feet of casing and shoe lost in hole.</p> <p>Plugged hole ML 30, steepened to 49° and started ML 30-B. Ran casing through quicksand and boulders to 44 feet.</p> <p>Hole abandoned - casing recovered.</p> <div style="text-align: right; margin-top: 20px;">  </div>		

DIAMOND DRILL LOG

PROPERTY: MANITOU LAKE GOLD MINES INC. HOLE NUMBER: ML 31

LOCATION: Baden Township - Claim 422265 ft. south of No. 1 Post, ft. west of No. 1 Post
DIP TESTS
Latitude: Dip: 450 Footage Reading Corrected
Bearing: North astronomic

Departure: Depth: Suspended at 25 ft. Insufficient water near site.
To be completed in spring

Elevation: Commenced: Jan. 22, 1980

Azimuth: Suspended: Jan. 25, 1980

Finished: Logged by: R. A. Halet

SAMPLE NUMBER	DESCRIPTION		
	<p>Purpose: To test below anomalous gold values in humus.</p> <p>0.0 - 2.4 Casing.</p> <p>2.4 - 25.0 Intermediate volcanics. Some banded sections (tuff?) 15.9 - 17.1 - no core</p> <p>Hole suspended - casing left in.</p>		

R. A. Halet

DIAMOND DRILL LOG

PROPERTY: MANITOU LAKE GOLD MINES INC.

HOLE NUMBER: ML 32

LOCATION: Baden Township - Claim 422167
ft. south of No. 1 Post, ft. west of No. 1 Post

DIP TESTS

Latitude: South Astronomic Dip: 45° Footage Reading Corrected

Departure: Depth: 202 ft.

Elevation: Commenced: Jan. 27, 1980

Azimuth: Finished: Jan. 31, 1980 Logged by: R. A. Halet

SAMPLE NUMBER	DESCRIPTION		
	Purpose to test below anomalous gold values in humus		
0 - 6	Casing.		
6 - 25	Felsite, massive, hard, fine grain, variable texture, pinkish alteration throughout, highly fractured.		
25 - 26	No core.		
26 - 29.2	Felsite, banded, pink or grey, hard.		
29.2 - 49	Felsite, massive, hard, pinkish, much chlorite in bunches. Highly fractured.		
49 - 52.7	Greenstone - dark green, fine grain, somewhat schistose. At 51.6 a 0.1' section of felsite, cannot tell relationship. Sharp contacts but no evident chilled edges.		
52.7 - 57.4	Felsite as above.		
57.4 - 63.7	Greenstone - fine grain, massive		
59.7 - 57.9	quartz, vuggy - Sample No. Assay - gold-Tr.		
63.7 - 75.0	Felsite, massive, reddish, some porphyritic sections (small white phenocrysts)		
75.0 - 76.1	Greenstone, massive		
76.1 - 80.0	Felsite, massive, red		
80.0 - 84.0	Greenstone, massive		
84.5 - 92.8	Felsite, massive, red, porphyritic		
92.8 - 94.5	Greenstone		
94.5 - 95.0	Felsite, red, porphyritic		
95.0 - 96.2	Greenstone		
96.2 - 96.5	Felsite, red, porphyritic		
96.5 - 96.7	Greenstone		
96.7 - 99.7	Felsite, red, porphyritic		
99.7 - 100.5	Greenstone		
100.5 - 103.5	Felsite, red porphyritic		

R. A. Halet

SAMPLE NUMBER	DESCRIPTION			
	103.5 - 104.6 Greenstone			
	104.6 - 112.7 Felsite, massive, red, porphyritic			
52	112.7 - 115.5 Greenstone - chilled edge 114.5 - 115.3 - quartz with pyrite Sample No. 52 - Assay - gold - 0.005			
	115.5 - 137.0 Felsite, massive, dark red - porphyritic in places			
	137.0 - 137.6 Greenstone			
	137.6 - 145.0 Felsite, massive, red			
	145.0 - 147.0 Greenstone			
	147.0 - 154.0 Felsite, massive, red			
	154.0 - 159.4 Felsite with several greenstone sections			
	159.4 - 185.0 Felsite, massive, mixed grey and red, numerous small quartz stringers			
	185.0 - 202.0 Felsite, grey, massive			
	202.0 End of hole			

R. A. Halset



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 2405

DATE: February 18, 1980.

SAMPLE(S) OF: Core(2)

RECEIVED: February 15/80.

SAMPLE(S) FROM: Manitou Lake Gold Mines.

<u>Sample No.</u>	<u>Oz. Gold</u>
51	Trace
52	0.005

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE, GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

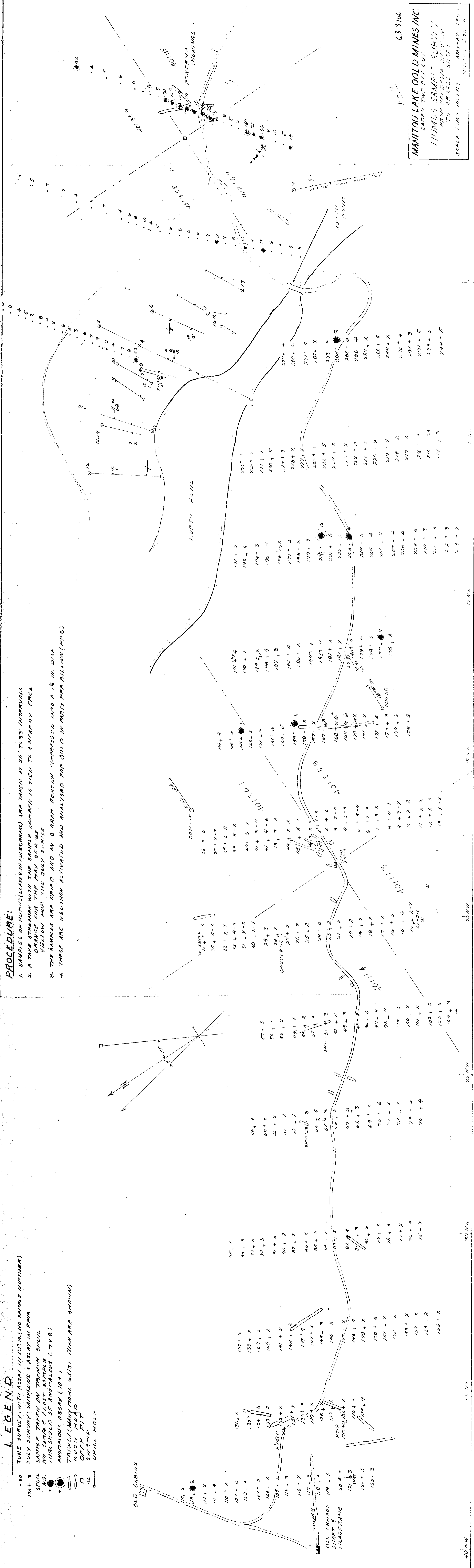
PER

LEGEND

- 30 JUNE SURVEY, WITH ASSAY IN P.P.B. (NO SAMPLE NUMBER)
- 175+3 JULY SURVEY: SAMPLE # + ASSAY IN P.P.B.
- SPILL SAMPLE TAKEN ON TRUNK SPILL
- MS. NO. SAMPLE TRESTLE SAMPLE
- + THRESHOLD OF ANOMALOUS (748)
- + ANOMALOUS ASSAY (10+)
- TRENCH (MANY MORE EXIST THAN ARE SHOWN)
- BUSH ROAD
- DEEP PIT
- SWAMP
- DRILL HOLE

PROCEDURE:

1. SAMPLES OF HUMUS (LEAVES, NEEDLES, GRASS) ARE TAKEN AT 25' TO 33' INTERVALS
2. A TAPE STREAMER WITH THE SAMPLE NUMBER IS TIED TO A NEARBY TREE ORANGE FOR THE MAY SERIES YELLOW FOR THE JULY SERIES
3. THE SAMPLES ARE DRIED AND AN 8 GRAM PORTION COMPRESSED INTO A 1 1/2 IN. DIAM
4. THESE ARE NEUTRON ACTIVATED AND ANALYSED FOR GOLD IN PARTS PER BILLION (PPB)



MANITOU LAKE GOLD MINES INC.
 BADEN TNR. PTK. ONT.
 HUMUS SAMPLE SURVEY
 FROM FONDENA SHOWINGS
 TO ARCADE SHAFT
 SCALE 1/4000=100 FEET
 M.M.Y. AUG. 1977
 MICHAEL GRIFFIN

63-3706



PROCEDURE

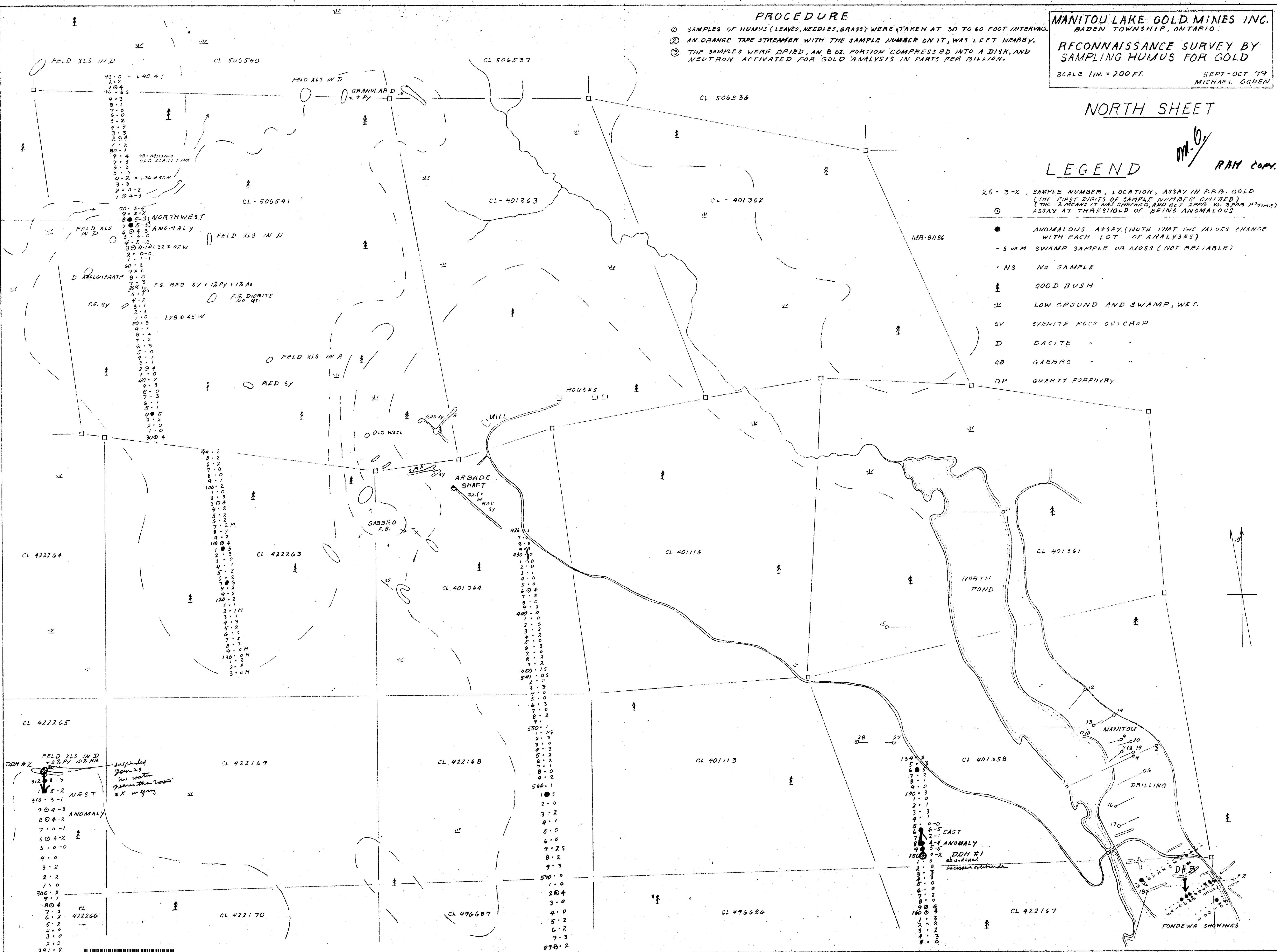
- ① SAMPLES OF HUMUS (LEAVES, NEEDLES, GRASS) WERE TAKEN AT 30 TO 60 FOOT INTERVALS.
- ② AN ORANGE TAPE STREAMER WITH THE SAMPLE NUMBER ON IT, WAS LEFT NEARBY.
- ③ THE SAMPLES WERE DRIED, AN 8.0Z. PORTION COMPRESSED INTO A DISK, AND NEUTRON ACTIVATED FOR GOLD ANALYSIS IN PARTS PER BILLION.

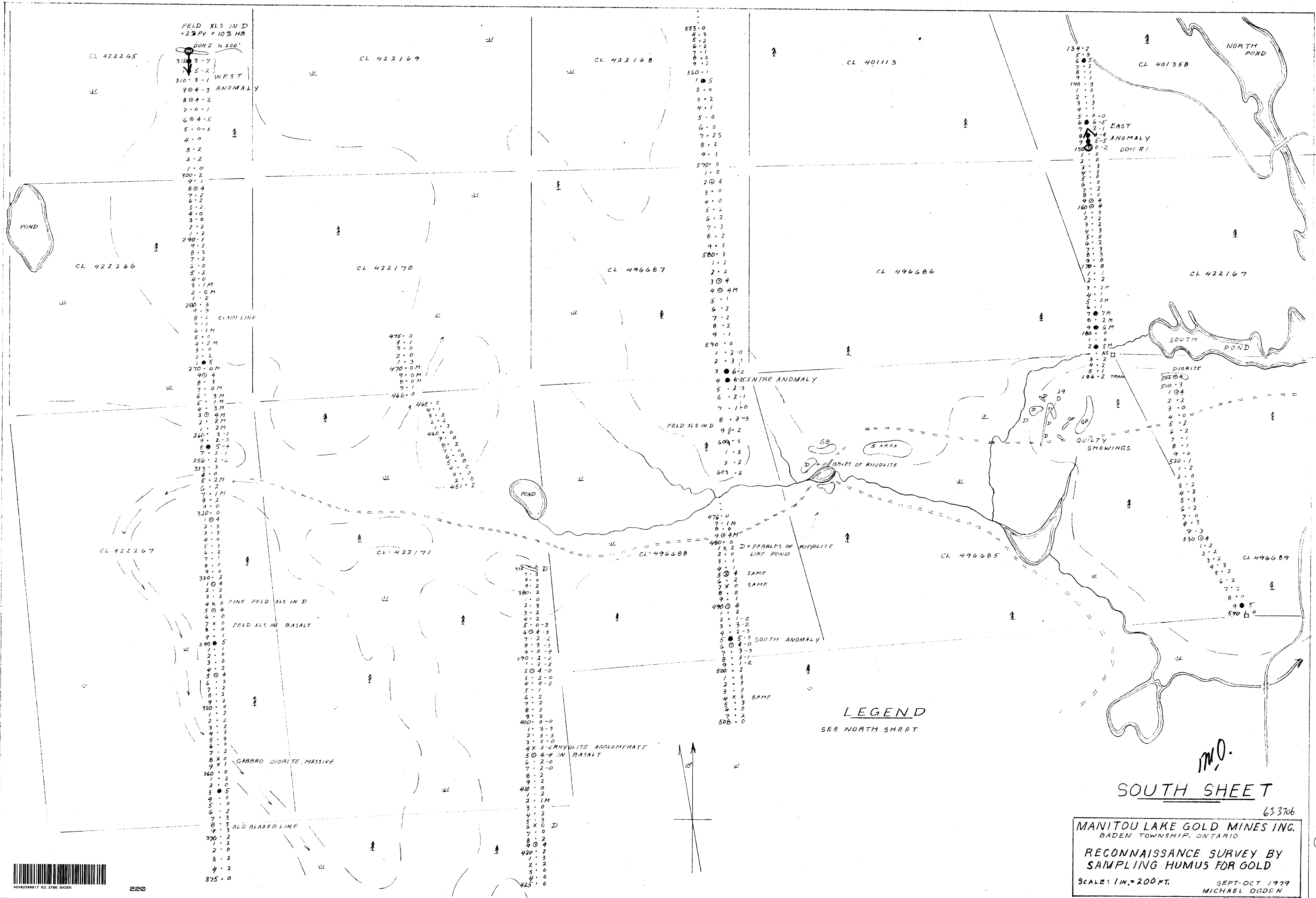
MANITOU LAKE GOLD MINES INC.
 BADEN TOWNSHIP, ONTARIO
 RECONNAISSANCE SURVEY BY
 SAMPLING HUMUS FOR GOLD
 SCALE 1 IN. = 200 FT. SEPT-OCT 79
 MICHAEL OGDEN

NORTH SHEET

LEGEND

- 25-3-2 SAMPLE NUMBER, LOCATION, ASSAY IN P.P.B. GOLD (THE FIRST DIGITS OF SAMPLE NUMBER OMITTED) (THE -2 MEANS IT WAS CHECKED, AND OCT APPX VS. 3P.M. INTIME) ASSAY AT THRESHOLD OF BEING ANOMALOUS
- ANOMALOUS ASSAY (NOTE THAT THE VALUES CHANGE WITH EACH LOT OF ANALYSES)
- S OR M SWAMP SAMPLE OR MOSS (NOT RELIABLE)
- NS NO SAMPLE
- ↑ GOOD BUSH
- ≡ LOW GROUND AND SWAMP, WET.
- SY SYENITE ROCK OUTCROP
- D DACITE "
- GB GABBRO "
- QP QUARTZ PORPHYRY





FELD XLS IN D
+2% PY +10% HB

DDH # 200'

WEST ANOMALY

312 3-7
15-2
310 3-1
904-3 ANOMALY
804-2
7-0-1
604-2
5-0-1
4-0
3-2
2-2
1-0
300-2
9-1
804
7-2
6-2
5-2
4-0
3-2
2-2
1-2
290-1
9-2
8-3
7-2
6-0
5-2
4-0
3-1M
2-0M
1-2
290-3
8-3

CL 422165
CL 422166
CL 422167
CL 422168
CL 422169

CLAIM LINE

8-2
7-2
6-1M
5-0
4-2M
3-0
2-2
1-5
270-0M
90-4
8-3
7-0M
6-3M
5-1M
4-3M
3-4M
2-2M
1-2M
260-3-1
8-5-4
7-2-1
256-2-2
313-3
4-0
5-2M
6-2M
7-1M
8-2
9-0
1-0
320-0
10-4
2-3
3-3
4-0
5-3
6-2
7-1
8-0
9-0
330-2
10-4
2-2
3-2
4-0
5-0
6-0
7-0
8-0
9-0
340-5
2-0
3-0
4-2
5-4
6-2
7-2
8-2
9-2
350-0
1-2
2-1
3-2
4-3
5-0
6-0
7-2
8-0
9-1
360-0
1-2
2-0
3-5
4-0
5-0
6-2
7-3
8-3
9-3
370-2
1-1
2-0
3-2
4-2
5-0
6-0
7-5
8-0
9-0
425-0

CL 422266
CL 422267
CL 422268
CL 422269

FINE FELD XLS IN D

FELD XLS IN BASALT

GABBRO DIORITE, MASSIVE

OLD BLAZED LINE

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475-0
4-1
3-0
2-0
1-3
470-0M
9-0M
8-0M
7-1
466-0

465-0
4-1
3-2
2-2
1-3
460-0
3-0
2-0
1-0
451-2

CL 422170
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553-0
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3-2
6-2
7-1
8-0
9-2
560-1
1-5
2-0
3-2
4-1
5-0
6-0
7-25
8-2
9-3
570-0
1-0
2-4
3-0
4-0
5-2
6-2
7-3
8-2
9-3
580-3
1-2
2-2
3-4
4-4M
5-1
6-2
7-2
8-2
9-1
590-0
1-2-0
2-3-3
3-6-2
4-6-2 CENTRE ANOMALY
5-2-3
6-2-1
7-1-0
8-3-3
9-2-2
604-3
1-3
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LEGEND
SEE NORTH SHEET

SOUTH SHEET

MANITOU LAKE GOLD MINES INC.
BADEN TOWNSHIP, ONTARIO
RECONNAISSANCE SURVEY BY
SAMPLING HUMUS FOR GOLD
SCALE: 1 IN. = 200 FT.
SEPT-OCT 1979
MICHAEL OGDEN

R.A.H. copy