

REPORT ON A

GEOLOGICAL SURVEY

OF THE

MCFARLANE LAKE GRID,

BRODER TOWNSHIP,

FOR

MIDAS MINERALS INCORPORATED

NTS 41-I/7

SUDBURY MINING DIVISION

RECEIVED

MOV 4 1988

MINING LANDS SECTION

Field Work: August, 1988

J.W. Cant

Toronto, Ontario



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1. SUMMARY

During the summer of 1988 the writer was retained by Midas
Minerals Inc. of Toronto to supervise a drilling program on Midas's
McFarlane Lake property and to geologically map the grid which
covers most of the property. The drill program has been described in
an earlier report (Cant 1988); this report describes the geology of
the grid area.

The primary target of this program was a 45 x 15 metre silicified zone within quartzite of the Mississagi Formation. The original holders of the property, Marslen Investments Ltd., excavated a large bedrock pit over the silica zone in order to evaluate its potential as a source of silica flux for the mining industry. In the course of their work they discovered sulphide mineralization with associated gold values of up to 1 ounce per ton in selected samples. The values obtained were very erratic and restricted in extent but the property was optioned by Midas in 1987 and plans were made to test the quartz pod at depth with a small drilling program.

Concurrently with the drilling program, geological mapping was carried out over most of the McFarlane Lake grid (previously cut for vlf-em and magnetometer surveys and approximately 14.5 kilometres in extent) at a line spacing of 100 metres. The area mapped comprises Mississagi quartzites and argillites which are intruded by a 300 meter wide mafic sill. Three areas of silicification were sampled as were numerous quartz veins. A total of 35 rock samples were

collected and assayed for gold. A gold assay of 36.696 ppm was obtained from a quartz-pyrite-arsenopyrite vein on the north wall of the South Pit; little sulphide mineralization was seen away from the main showing at the south Pit, the maximum gold value obtained elsewhere is 0.615 ppm.

In view of the negative results obtained in the drilling and in the mapping program no further work is recommended for this property.

2. INTRODUCTION

This report describes a geological mapping program carried out during the month of August 1988 by the writer for Midas Minerals

Inc. The work was carried out on Midas's McFarlane Lake property by the writer in his capacity as consulting geologist reporting to Mr. Karl Skobe, president of Midas Minerals Inc.

Approximately seven mineral claims were covered using a 100 metre line spacing and results were plotted at a map scale of 1:2500. All of the claims covered are under option to Midas Minerals Inc. from Marslen Investments Limited, of Sudbury Ontario.

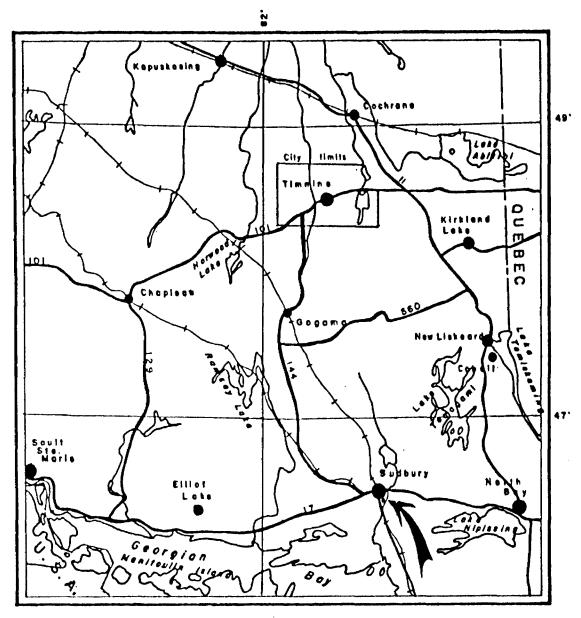


Figure 1

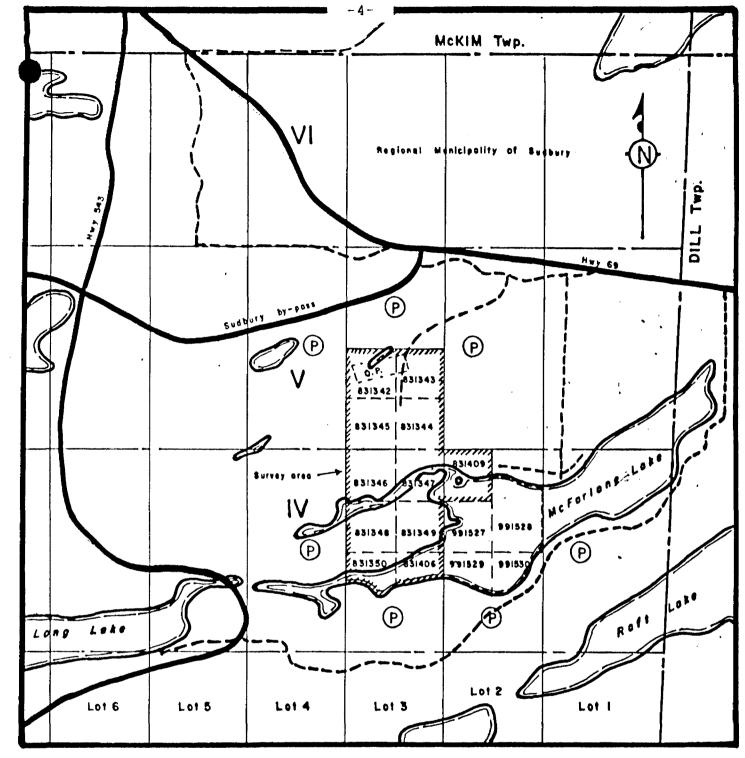
KEY MAP

MIDAS CREEK MINERALS INC.

BRODER TOWNSHIP PROPERTY

ONTARIO





CLAIM MAP

Figure 2

McFarlane Lake Property

MIDAS CREEK MINERALS INC.

BRODER Township District of SUDBURY SUDBURY Mining Division ONTARIO

Scale 1:31,680 1000 metres

3. PROPERTY DESCRIPTION

Midas Minerals's McFarlane Lake gold property consists of 15 unpatented mining claims covering approximately 243 hectares within the northeast quarter of Broder Township, District of Sudbury, Sudbury Mining Division, Ontario. Broder Township lies entirely within the Regional Municipality of Sudbury.

The work described in this report was carried out on the following seven claims:

CLAIM #
-----S 831342
S 831344
S 831345
S 831346
S 831347
S 831409

4. GEOGRAPHY

Location: Midas Minerals's McFarlane Lake property contains geographical co-ordinates: Latitude 46 degrees 25 minutes North, Longitude 080 degrees 59 minutes West, and lies on the southern outskirts of the city of Sudbury, Ontario.

Access: When approaching the property from the south along
Highway 69, turn left at the traffic lights opposite the Brockdan
Motor Hotel. Quickly turn to the right to follow a winding
residential road (Goodview Road) for approximately 1 kilometre; turn

left onto a gravel road barred by a gate. A key can be obtained from the office of Ethier Sand and Gravel Ltd. which is located a short distance away, near the intersection of Highway 69 and the Southwest Bypass. Follow the gravel road for about 1 kilometre to reach the centre of the McFarlane Lake grid.

Topography: The grid area is located on a broad northeast trending outcrop ridge with an average elevation of 297m (975 ft. ASL). Numerous swamp-filled gullies run parallel to the trend of the bedrock; several prominent fault-controlled gullies cut across it. On the southern part of the grid a 300 metre wide diabase sill forms a second, parallel, ridge; farther south lies McFarlane Lake.

Vegetation: The rocky ridges on this property are generally barren of all but scrub; intervening valleys contain birch, maple, oak and pine woodlands or swamps.

Infrastructure: This property is located within one of Ontario's most productive mining camps.

5. PREVIOUS WORK

Geological mapping of most of Broder Township including the McFarlane Lake area was done by Grant et al (1962) and was published by the Ontario Department of Mines as Geological Report No.9 (scale: 1 inch to 1/2 mile).

The original claims on this property were staked by Marslen Investments Ltd. as a source of high purity silica flux for the

mining industry. In the course of stripping and trenching the area now known as the South Pit, Marslen found sulphide mineralization which proved to also carry significant gold values.

In April of 1986 Marslen drilled six diamond drill holes in an area northeast of the South Pit area in order to delineate a zone of silicification and quartz veining within the Mississagi quartzites (Ludwig 1986). Although primarily intended to evaluate silica purity, core samples were also assayed for gold; two holes carried gold values of up to 0.02 opt (686 ppm).

On 29 August 1986 J.W. Londry from the Timmins office of Noranda Exploration Ltd. visited the property and collected 11 rock samples from the mineralized area of the South Pit (Appendix II, Londry 1986).

On 29 June 1987 Marslen optioned the fifteen claim group which makes up the present McFarlane Lake property to Midas Minerals Inc. of Toronto.

Late in 1987 Minroc Management Ltd carried out, on behalf of Midas Minerals, a program of line cutting and vlf-em and magnetometer surveys over most of the property. In addition, Minroc collected chip samples from the North and South Pits and had them analysed for gold, silver, copper and nickel. Data pertaining to this sampling program was not previously reported and is therefore attached to this report as Appendix III (Kilbourne 1987).

During the period June to August 1988, AAA Enterprises of Sudbury carried out an eight hole (276 metres or 906 feet) diamond

drilling program for Midas, under the supervision of the writer.

This program was intended to test the silicified zone under the South Pit; a report for assessment purposes has been prepared and submitted (Cant 1988).

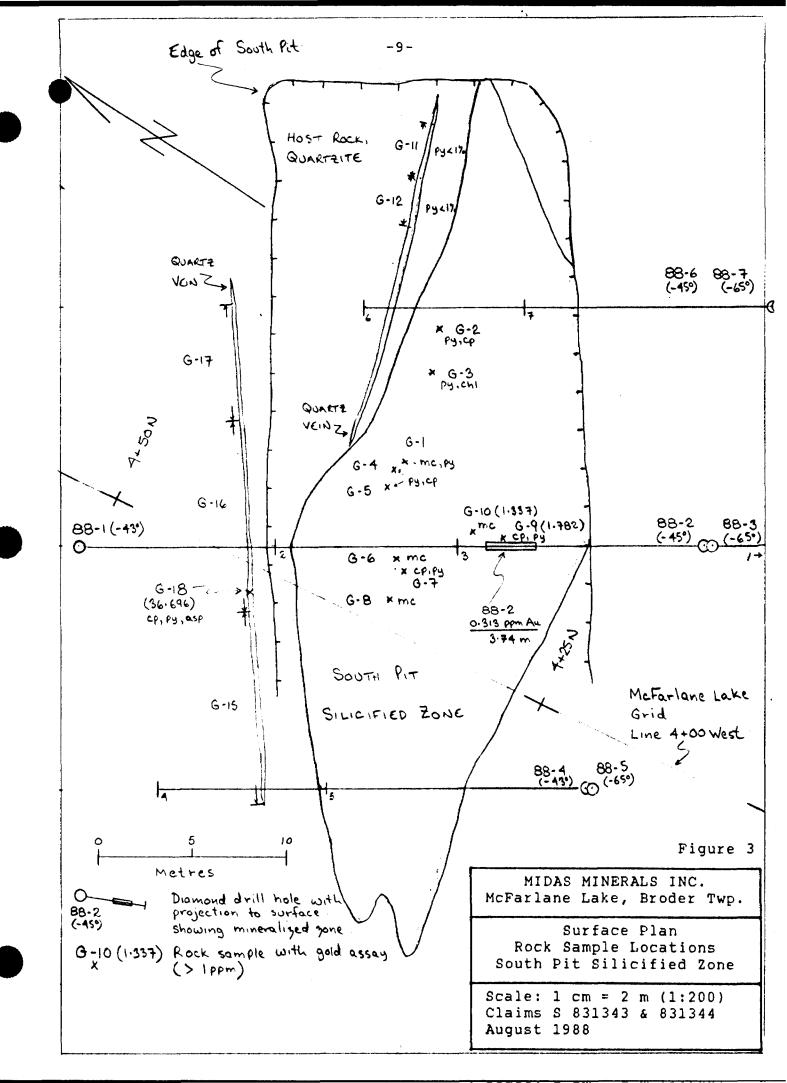
6. REGIONAL GEOLOGY

The McFarlane Lake property is located within a belt of clastic sedimentary rocks of the Huronian Supergroup which lies between the Sudbury Irruptive to the northwest and the Grenville Front to the southeast. These rocks form part of the Southern Province of the Canadian Shield and are middle Precambrian in age. They were subsequently intruded by large northeast trending bodies of Nipissing Diabase (2150 Ma).

The best local examples of gold mineralization occurring within the Mississagi Quartzites adjacent to Nipissing Diabase intrusions are the Long Lake Mine (Past Producer) which is located 19 kilometres to the southwest and the Red Rock Prospect in Scadding Township, about 36 kilometres to the northeast.

7. GRID GEOLOGY

The McFarlane Lake grid is underlain by quartzite +/- argillite and greywacke of the Mississagi Formation which is, to the south, intruded by a 300 metre wide sill of the Nipissing Diabase.



BIDIP	1.	SUMMARY	ΛP	DOOR	CAMBLE	1141
TABLE	1:	SUBBAKI	U	KUUK	SARYLL	DATA

er i	NOTES	EAST			P LITH	ENCL	S	X	С	Au (ppm)	Pt (ppm)	Pd (ppm)	Ag (ppm)	Cu (ppm)	As (ppm)
1	1	-390	438	1	٧s	iq	6	0	0	0.075	0.085	0.019	82.0	149	10
2	1	-390	438	1	Vqcs	2 q	3	0	0	0.118	0.037	0.011	22.0	112	9
3	1	-390	438	1	Pcs	1q/l	2	0	0	0.027	<0.030	<0.010	9.2	48	11
4	1	-390	438	1	Ps	I q	3	0	0	0.052	0.054	(0.010	4.8	265	12
5	1	-390	438	1	Ps	1 q	3	0	0	0.007	0.032	<0.010	4.8	80	7
6	1	-390	438	1	Vs/Ps	I q	6	0	0	0.028	0.050	0.012	11.6	123	<1
7	1	-390	438	1	Vs/Ps	2 g	4	0	0	0.047	<0.030	<0.010	1.4	6432	29
8	1	-390	438	1	Vqs	2 g	3	0	0	0.375	0.051	<0.010	8.8	656	19
9	1	-390	438	1	٧s	2 q	4	0	0	1.782	0.032	<0.010	3.2	4848	22
10	1	-390	438	1	٧s	Zg	6	0	0	1.337	0.100	0.010	6.4	286	3
11	2	-390	438	1	Vg	1	2	0	0	0.094	<0.030	<0.010	<1.0	25	61
12	2	-390	438	1	Vq	1	2	0	0	0.019	0.049	0.012	<1.0	9	57
13	3	-733	142	1	Vq	2g/1	1	0	0	0.292	<0.030	(0.010	5.2	13	10
14	3	-754	134	1	Vq	2q/1	1	0	0	0.018	0.033	<0.010	(1.0	49	6
15	4	-754	139	1	Vq	1	1	0	0	0.181	0.031	<0.010	<1.0	20	89
16	4	-754	139	1	Vq	1	2	0	0	0.229	<0.030	<0.010	<1.0	9	105
17	4	-754	139	1	Vq	1	1	0	0	0.017	0.038	<0.010	<1.0	4	22
18	4	-754	139	1	Vqs	1	4	0	0	36.696	0.037	<0.010	3.6	338	9568
19	5	-400	85	1	3a	3	2	1	1	0.615	0.042	0.013	1.6	36	131
20	5	-490	155	2	Vq	3	1	1	1	0.011					
21	5	-480	160	2	2 q	1	1	1	1	0.011					
22	5	-479	100		Vq	3	1		1	0.032		Checks	λu	Pt	Pd
23	5	-400	-168		3a	3	2		1	0.017		XMF-8G-10	0.930	0.052	0.018
24	5	-400	-270			1 b	2	2	0	0.008		XMF-8G-19		0.031	0.011
25	5	-400	-325		Vq	1	1		1	0.009		XMF-8G-30	<0.005		
26	5	-600	-425			1	1	1	1	0.008		XMF-8G-35	0.040		
27	5	-700	-75			1		1		<0.005	Notes				
28	5	-768	-30		Vq	3	1	1		<0.005			om with	in the	South Pit.
29	5	-772	-35			3		ì		<0.005		•			vithin S. Pit
30	5	-800	-588			1	1	1		<0.005					460m SW of S.
31	5	-100	25		3a	3		1		<0.005					of S. Pit.
32	5	-300	- 25			3		1		(0.005					s parts of grid
33	5	Đ	-175			1		1		<0.005		stly quar			• ,
34	5	400	-10			1	1		1	<0.005					90m SW of S. Pi
35	6	-478	393		-	1	1		1	0.053		•			

Explanation:

- Sample Number = MP-8G-SER#.
- BAST, NORTH = McFarlane Lake Grid, co-ordinates in metres.
- TYP = Sample Type: O=unspecified, 1=outcrop, 2=rubble(ocp?), 3=float.
- LITH, ENCL = Sample Lithology and Enclosing Rock Type (3=gabbro, 3a=felsic segregations, 1=quartzite, 1b=+sericite V=vein, Z=zone, F=fault, fracture, shear, q=quartz, s=sulphide, k=carbonate, c=chlorite).
- S, M, C = Sulphide, Magnetic(mag + po) and Carbonate content.
 - O=not checked, 1=not seen, 2=trace(<1%), 3=weak(1-5%), 4=moderate(5-15%), 5=strong(15-50%), 6=very strong(>50%).

The main showing on the property and the target of the drilling program is a pod of silica which lies within a northeast-southwest trending zone of silicification in the Mississagi quartzites. Gold values have been reported associated with sulphides in the core of the quartz pod; the 1988 drilling program was an attempt to determine the extent of the pod and of the mineralization within it.

Lithology:

The northern and southern parts of the grid are underlain by clastic metasedimentary rocks of the Mississagi Formation. These rocks are usually well-bedded and range in composition from quartzite to greywacke depending upon argillaceous content.

Composition otherwise is guite uniform.

The central part of the grid is underlain by a 300 metre thick fine to medium grained gabbro sill composed of Nipissing Diabase. Felsic segregations forming small granitic dikes have been found near the margins of this unit.

Structure:

Structural measurements of bedding, jointing, shearing and quartz veining were made approximately every 100 metres.

Bedding tends towards a strike direction of 055 degrees; much of the variation around this direction appears to be due to trough cross-bedding (stratigraphic tops to the north). Beds to the north of the sill are vertical to north-dipping; beds to the south of the dike are vertical to south-dipping; this suggests a tightly folded

anticlinal structure into which the sill has intruded along the axial plane.

Two sets of joints are prominent in these rocks. One set is confined to the gabbro sill and has an orientation (055 degrees) parallel to the contacts of the sill and to bedding. The other set is found in all rocks in the grid area and has a uniform azimuth of 145 degrees.

Shearing or faulting is rare on this grid. A small fault near 5+00 West, 3+00 North runs approximately 145 degrees. At 4+00 West, 2+50 South a small shear zone in an argillaceous bed runs 055 degrees. No significant mineralization is associated with either.

Quartz veins and felsic segregations are common in the grid area and are equally controlled by the two predominant jointing directions. Sulphidic mineralization is rare in any veining on the grid.

An outcrop containing a diatreme-like breccia was found at 1+50 East, 0+00 North. The brecciated zone is approximately 10 metres in extent and is composed of rounded to subangular fragments ranging in size from 0.5 centimetres to one metre. The fragments are supported by a finely comminuted (<1mm) matrix. No mineralization or alteration was found to be associated with this zone which appears to be a local manifestation of the Sudbury Breccia.

Mineralization and Alteration:

The primary target of exploration on the McFarlane Lake property has been the silicified zone in the South Pit. Within the

core of this pod nearly massive aggregates of nodular marcasite have been found in close association with fine fracture fillings of up to 10% combined pyrite + chalcopyrite. The mineralization is closely confined to the core area. A total of ten rock samples were collected from the silicified zone and were analysed for gold, platinum, palladium, silver copper and arsenic. The gold assays correlate very weakly with sulphide content; the best association appears to be with copper values. The highest gold assay obtained during this program from the quartz pod is 1.782 ppm (copper = 4848 ppm, arsenic = 22 ppm). Neither platinum nor palladium exceed 0.1 ppm; silver does seem to correlate with sulphide content (mainly marcasite) (maximum = 82.0 ppm). These values are generally in agreement with sampling by Londry (1986, Appendix II), Davidson (1987) and Kilbourne (1987, Appendix III). Londry does however mention a 34.50 g/tonne (1.006 ounce per ton) assay obtained from a 12 foot north-south chip sample of rubble and frost heave on the floor of the South Pit. The writer has been unable to corroborate this result.

Numerous quartz veins are found adjacent to the silicified zone and have been sampled especially where they contain sulphides. A grab sample obtained from one such quartz vein with 15% combined sulphides (chalcopyrite, pyrite and arsenopyrite) has yielded assays of 36.696 ppm gold, 3.6 ppm silver, 338 ppm copper and 9568 ppm arsenic.

A second silicified zone lies approximately 460 metres

southwest of the South Pit. It is a 30 x 3 metre, roughly concordant body. No sulphide mineralization was seen; the best gold assay obtained is 0.292 ppm with 5.2 ppm silver, 13 ppm copper and 10 ppm arsenic.

Various quartz veins and felsic segregations have been sampled away from the main silicified zones. One sample from a weakly mineralized (<1% py+cp) felsic vein within the gabbroic intrusive at 4+00 West, 1+00 North carries assays of 0.615 ppm gold, 1.6 ppm silver, 36 ppm copper and 131 ppm arsenic. No other assays have exceeded 0.040 ppm gold

8. DISCUSSION OF RESULTS

Thus far the most encouraging results from this property are gold assays of up to 36.696 ppm (1.070 opt) all of which have been obtained from the South Pit silicified zone. The high, erratic values from surface sampling have not been repeated in drill core. The best results from the 1988 diamond drilling program yielded a small mineralized zone in the centre of the pod (0.313 ppm gold over 3.74 metres, Cant 1988) but no gold assay exceeded 0.550 ppm.

The silicified zones lie along a discontinuous belt approximately 700 metres long, subparallel to and 100 to 200 metres north of the mafic sill. They are as follows:

Grid Location	Description	Max Au(ppm)
7+50W, 1+40N	30x3m qtz pod, no sulphides	0.292
4+80W, 3+90N	5m silicified zone, no sulphides	0.053
4+00W, 4+30N	45x15m qtz pod, mc+py+cp+asp	36.696
2+30W, 6+00N	120x10m qv zone, ?	0.686

The best gold assay which is not associated with a silicified zone (0.615 ppm) was obtained from a small felsic dike intruding the gabbro at 4+00W,0+85N. Its orientation is parallel to the 145 degree joint direction and it contains minor sulphides (py,cp <1%)

No significant correlations could be found between between geology (in particular lithology and structure) and geophysics (Tittley 1988). The major cross-cutting vlf-em conductor (anomaly G) is subparallel to the predominant jointing direction (130 and 145 degrees respectively). Although it passes 35 metres north of the South Pit silicified zone there is no evidence that it influences silicification and/or mineralization. Other conductors are subparallel to bedding and two of the strongest (anomalies B and C) appear to be due to a swamp and pond respectively. No bedrock cause could be found on line 6+00W for a prominent magnetic low from 4+25 to 6+75N; this anomaly may be due to operator error.

9. CONCLUSIONS

- No gold showings (>1 ppm) of measurable width exist within any of the areas sampled.
- No significant platinum or palladium values are to be found in association with the silicified zone or with adjacent quartz veins.
- Anomalous (>0.5 ppm) gold assays have at least two distinct modes of occurrence on this grid.
 - 1) up to 1.782 ppm gold associated with high copper and low arsenic and found in the silicified zone in the South Pit.
 - 2) up to 36.696 ppm gold associated with low to moderate copper and high arsenic and found in the concordant quartz veins adjacent to the South Pit.

This conclusion is corroborated by drill core assays (Cant 1988).

- A discontinuous zone of silicification contains all the silicified zones examined in this study and also includes the zone drilled off by Marslen Investments in 1986 (Ludwig 1986). The overall length of this zone is 700 metres at an azimuth of 050 degrees (subparallel to bedding).

10. RECOMMENDATIONS

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The South Pit silicified zone has been sampled in detail on surface and at depth.

Other occurrences of silicification along the 700 metre zone have been sampled.

Most of the grid area has been surveyed geophysically (vlf-em and magnetometer) and mapped geologically; whenever favourable rocks have been found they have been sampled and assayed for gold.

In the light of negative results obtained from the above surveys no further work is recommended for this property.

J. W. CANT

FELLOW

SSOCIATION

Respectfully submitted

James W. Cant, FGAC

Consulting Geologist

28 October 1988

11. REFERENCES

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- CANT, J.W. 1988. Report on 1988 Diamond Drilling Program carried out on the McFarlane Lake Grid, Broder Township, Sudbury Mining Division, Ontario; private report for Midas Minerals Inc.

12. STATEMENT OF QUALIFICATIONS

- I, JAMES W. CANT hereby certify that:
- I am a consulting geologist resident at 272 Wolverleigh Blvd., Toronto in the Province of Ontario.
- I am a graduate of McGill University with a B.Sc. (1968) in physics and mathematics. During the period 1969-70 I took post-graduate courses in geology and geophysics at Memorial University of Newfoundland. I have practiced my profession continuously in Canada, Australia and the United States since 1970
- I am a Fellow of the Geological Association of Canada and have been a member of that organization and the Canadian Institute of Mining and Metallurgy since 1970.
- 4) I have no interest in the claims or securities of Midas Minerals Inc. nor do I expect to receive any.
- 5) This report is based upon fieldwork carried out by me on the McFarlane Lake grid during August, 1988
- f) I hereby grant to Midas Minerals Incorporated permission to use my name and this report in whole or in context in their dealings with the Toronto Stock Exchange, the Ontario Securities Commission and other regulatory bodies of Canada.

James W. Cant, FGAC

28 October 1988

APPENDIX I

SAMPLING PROCEDURES AND ANALYTICAL TECHNIQUES

Sampling Procedures:

- Grab samples are collected from bedrock or local float. Features deemed to be favourable indicators for gold mineralization are as follows: mineralization (arsenopyrite, pyrite, marcasite, chalcopyrite etc.), alteration (silicification, sericitization, carbonatization etc.), tectonization (fracturing, veining, brecciation etc.). In addition, representative samples may be taken in order to determine background values for various lithologies.
- All samples collected were assayed for gold. Some samples were also analysed for platinum, palladium, silver, copper and arsenic.
- The bagged samples are sent by Greyhound bus to the Kirkland Lake lab of Accurassay Laboratories Ltd.

Analytical Techniques:

- Upon receipt at the lab the entire sample is passed through a jaw crusher and reduced to 1/4 inch fragments.
- All of the 1/4 inch material is further reduced to -10 mesh in a cone crusher.
- A representative split of 250 to 300 grams is taken from the -10 mesh material using a Jones Riffle. The remaining coarse fraction is held in storage as reject material.
- The split is pulverized to -200 mesh using a ring and puck pulverizer.
- The -200 mesh pulp is homogenized and two subsamples are taken. One assay-ton (29.17 grams) is taken for gold (and Pt/Pd if required) assay and approximately 20 grams is taken for arsenic, silver and copper analysis; the remaining pulp is held in storage.
- The assay-ton subsample is fused in a furnace with suitable fluxes to obtain a precious metal button which is then dissolved in aqua regia. The solution is aspirated into an atomic absorption spectrometer and the gold assay is determined with a precision and sensitivity of 0.005 ppm. Platinum and palladium detection limits vary but are typically 0.030 and 0.010 ppm respectively.
- The 20 gram subsample is geochemically analysed using conventional acid digestion for silver and copper and hydride generation for arsenic followed atomic absorption spectrometry.
- Other elements may be analysed by either AAS or specific techniques from additional splits from the pulp. Check assays for gold are best done on fresh splits from the -10 mesh reject material.

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355	Wanda	line of 354 rust whit of sulphilodon	frat	Believe	.140						
356	ways	ling 355 similar \$ 355 sulphill some	Sol Kasois	E-W Belin	000	<u> </u>					
357		ait halls		Graß	V	,					
358		of miner sulphiets = 190		Bray	.066						
59	1 -	recis 270% marcaite		Gras	.144						
60		with 3-53 mare pytop dong	trock	Groo	:013						
61	who	3 rust don fracture NV Su	(m	Carl.	.001						
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72 1	of self	sample ~ 1/4 Mile below show in or	reamolo	nnd	100.						
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-

Company:NORANDA EXPL.CO.LTD.

Project:101

Attention: J.LONDRY

File:62-367

Date: SEPT 8/86

Type:ROCK ASSA

We hereby certify the following results for samples submitted.

Sample Number 353 354 355 356 357 358 359 360	CU %	ZN %	AG G/TONNE	AG OZ/TON	AU G/TONNE *34.50 6.05 4.80 .21 .40 2.25 4.95	AU DZ/TON 1.006 0.176 0.140 0.006 0.012 0.066 0.144 0.013
361					.01	0.001
362					.08	0.002
**************************************					1.82	0.053

.02 0.001

*THIS SAMPLE SHOULD BE METALLIC GOLD ASSAYED.

Spf 11/80 101-F3-13

Certified by

MIN-EN LABORATORIES LTD.

MINROC MANAGEMENT LIMITED

Mining and Geological Consultants 199 BAY STREET, SUITE 606, TORONTO, ONTARIO M5J 1L4 (416) 361-1139

December 15, 1987

OT:

Dave Davidson

FROM:

Mike Kilbourne

SUBJECT: Status of Midas Creek Projects

McFarlane Lake Property

Results were received on November 30 regarding the chip sampling program on Midas Creeks' McFarlane Lake Property located near Highway 69, Sudbury, Ontario. Chip sampling was concentrated across the "quartz pod" where concentrations of pyrite, marcasite and chalcopyrite were encountered. The best assay over 2.5 feet reported 0.15 oz. Au per ton over 2.5 feet. Minor copper assays were also reported within this sample area, as well as one interval assaying 0.12 oz. Ag per ton (see attached map).

Other chip sampling was concentrated on the eastern wall of the pit within a silicified sandstone hosting minor sulphides along fracture slips. These samples assayed low Au content, except where a thin quartz vein was encountered, reporting 0.022 oz. Au per ton across the sample interval of 4.0 feet.

Samples 306-334 inclusive, were obtained from the eastern wall of the northern pit blasted earlier by Inco Ltd.

Again, minor sulphide on fracture slips within a silicified sandstone were sampled, with all samples assaying nil to trace Au content.

The results of my sampling program seem lower than previously reported by Noranda in your report on the McFarlane Lake Property. I couldn't find any evidence at the assessment office where Noranda completed their sampling program.

Four more grab samples were taken following a luncheon held in Sudbury on November 19, before I mobilized into the Frechette These samples were concentrated within the Township Property. quartz pod and consisted of high concentrations of sulphides. These were taken to ascertain any association between sulphide rich accumulations and gold content.

Detailed mapping was also carried out over the washed off and blasted areas surrounding the quartz pod (see attached map). you can see, both ends of the quartz pod appear to pinch out rather quickly with only minor evidence that the quartz pod may December 15, 1987 Status of Midas Creek Projects Page 2

continue at this dimension along strike. However, measuring the angle of the sloping sides of quartz pod, being $22^{\rm O}$ and $28_{\rm O}$ on either side would suggest that the quartz pod would have far greater dimensions and volume the deeper one would go.

Bedding and cross bedding measurements were also taken to try and ascertain if there was some sort of bedding control on the geological position of the quartz pod. From the thin widths of cross beds and the trend of the quartz pod within the sandstone, it seems that the quartz has been injected along the main direction of the bedding planes and not the cross bed planes. This preliminary interpretation may aid the future location of similar quartz injections.

At the time of the chip sampling program and detailed mapping of the main quartz pod, no linecutting or geophysical surveys had been completed. As of today, however, both of these surveys have been completed and the results from the geophysical survey is expected shortly.

I talked to Al Holmeburg of Sudbury on December 11, and he conveyed to me that there is a diamond drill presently available for \$16/foot to complete a small drill program on the property. Due to budget constraints, the drill program would consist of about 1,000 feet. The Midas associates in Sudbury are quite anxious to drill the property as soon as possible. However, I feel that you would have a more appropriate insight, Dave, into the location of three or four short holes to test the dimensions and mineralization of the quartz pod, previous reported results or other areas of silicification that you may know of.

NIL 309 & Sample #'s Gold assays NIL 310 03/ton NIL 311 NIL 312 TRACE 313 NIL 314 NIL 315 NIL 316 NIL 317 NIL 318 NIL 319 TRACE 320 TRACE 321 PITT NORTHERN NIL 322 TRACE 323 No spe 324 NO SOL 325 NIL 326 NIL 327 NIL 328 NIL 329 NIL 330 NIL 331 NIL 332 NIL 333 0.002 334

MIDA'S CREEK MINERALS

MCFARLANE LAKE PROPERTY

CHIP SAMPLING PROGRAM



A CONTRACTOR OF THE PROPERTY O

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30-NOV-87

REPORT 2906

REF.FILE 30198-N5

NIL

0.002

332 333

334

SAMPLE	AU-1AT OZ/T	NI X	CU %	AG-1AT OZ
2 82	,NIL	NIL	' NIL	NIL
283	NIL	NIL	NIL	NIL
284	NIL	NIL	NIL	NIL
285	NIL	NIL	NIL	NIL
286	NIL	· NIL	· NIL	NIL
287	NIL	NIL	NIL	TRACE
288 '	NIL	NIL	NIL	NIL
289	0.022	NIL	NIL	TRACE
290 291	0.002	NIL	0.01 NIL	NIL
27 li ii	TRACE	. NIL	N.L.	HIL
292	NIL	NIL	NIL	NIL
293	TRACE	NIL	NIL	NIL
294	0.001	NIL	NIL	NIL
295	NIL	NIL	NIL	NIL
296	NIL	NIL	NIL	NIL
297	0.009	NIL	NIL	NIL
298	0.018	0.02	0.06	0.12
299	0.081	0.03	0.59	TRACE
300	0.150	0,03	2.07	NIL
301	0.025	0.02	0.45	TRACE
302	0.010	0,02	0.36	TRACE
303	NIL	NIL	NIL	NIL
304	·NIL	NIL	NIL	NIL
305	TRACE	NIL	0.01	NIL
306	TRACE	NIL	0.01	NIL
307	NIL	NIL	NIL	NIL
308	NIL	NIL	NIL	NIL
309	NIL	NIL	0.01	NIL
310	NIL	NIL	NIL	NIL
311	NIL	NIL	NIL	NIL
- 1				
312	NIL	NIL	NIL	NIL
313	TRACE	NIL	0.01	NIL
314	NIL	NIL	NIL	NIL
315	NIL	NIL	NIL	NIL
316'"	NIL	้ พ่ไ	NIL	NIL
317	NIL	NIL	0.01	NIL
318	NIL.	NIL	NIL	NIL
319	NIL	NIL	NIL	NIL
320	TRACE	NIL	NIL	NIL
321	TRACE	NIL	NIL	NIL
322	NIL	NIL	NIL	NIL
323	TRACE	NIL	NIL	NIL
72/	SMP MISS	SMP MISS	SMP MISS	SMP MIS
324 , 325	SMP MISS	SMP MISS	SMP MISS	SMP MIS
325 3 26	SMP MISS	NIL	MP MISS	SMP MIS
			· -	
327	NIL '	NIL	NIL	NIL
328 ¹	NIL	NIL .	NIL	NIL
329	NIL	, NIL	NIL	NIL
330	NIL	NIL	NIL	NIL
331	NIL	NIL	NIL	NIL

XRAL	15-JAN-8	8	REPORT	3490
SAMPLE	AU-1AT OZ/T	cu X	AG-1AT OZ/T	
336 337 338 339	0.001 0.001 NIL 0.120	0.06 0.10 0.01 0.01	NIL TRACE NIL TRACE	

SAMPLE AU-1AT OZ/T NI % CU % AG-1AT OZ/T NIL NIL NIL

NIL

NIL

NIL

NIL

NIL

NIL

NIL



CERTIFICATE OF ANALYSIS

REPORT

2906

TO: MINROC MANAGEMENT LIMITED

ATTN: MIKE KILBOURNE'

199 BAY STREET, SUITE 606

TORONTO, ONTARIO

M5J 1L4

CUSTOMER No.

637

DATE SUBMITTED

6-Nov-87

REF. FILE 30198-N5

Total Pages 2

51 S.CORES

Section 1. H. B. C. G. G. C. C.

METHOD DETECTION LIMIT
AU-1AT OZ/TON FA 0.001
NI % XRF 0.01
CU % XRF 0.01
AG-1AT OZ/TON FA 0.1

X-RAY ASSAY LABORATORIES LIMITEI

CERTIFIED BY.

DATE 30-NOV-87

PAGE 1 OF 2

	1			
SAMPL'E	AU-1AT OZ/T	N1 %	CU %	AG-1AT OZ/T
282	NIL	NIL	' NIL	NIL
283	NIL	NIL	NIL	NIL
284	NIL	NIL	NIL	NIL
285	NIL	NIL	NIL	NIL
286	·NIL	· NIL	- NIL	NIL
287	NIL	NIL	NIL	TRACE
2881	NIL	NIL	, NIL	NIL
289	0.022	NIL	NIL	TRACE
290	0.002	NIL	0.01	NIL
291, ,,	, TRACE	, NIL	NIL	NIL
292	NIL	NIL	NIL	NIL
293	TRACE	NIL	NIL	NIL
294	0.001	NIL	NIL	NIL
295	NIL	NIL	NIL	NIL
296	NIL	NIL	NIL	NIL
297	0.009	NIL	- NIL	NIL
298	0.018	0.02	0.06	0.12
299	0.081	0.03	0.59	TRACE
300	0.150	0,03	0.07	NIL
301	. 0.025 ,	0.02	0.45	TRACE
302	0.010	0,02	0.36	TRACE
303	NIL	NIL	NIL	NIL
304	NIL	NIL	NIL	NIL
305	TRACE	NIL	0.01	NIL
306	TRACE	NIL	0.01	NIL
307	NIL	NIL	NIL	NIL
308	NIL	NIL	NIL	NIL
309	NIL	NIL	0.01	NIL
310	.' NIL	NIL	NIL	NIL
311	NIL	NIL	NIL	NIL
312 ,	NIL	NIL	NIL	NIL
313	TRACE	NIL	0.01	NIL
314	NIL	NIL	NIL	NIL
315	NIL	NIL	NIL	NIL
316	" NIL "	" NÏL	NIL	NIL
317	NIL	NIL	0.01	NIL
318	NIL.	. NIL	NIL	NIL
319	NIL	NIL	NIL	NIL
320	TRACE	NIL	NIL	NIL
321	TRACE	NIL	NIL	NIL
322	NIL	NIL	NIL	NIL
323	TRACE	NIL	NIL	NIL
324 ,	SMP MISS	SMP MISS	SMP MISS	SMP MISS
325	SMP MISS	SMP MISS	SMP MISS	SMP MISS
326	NIL	NIL	· NIL	NIL
327	NIL	NIL	NIL	NIL
328 ¹	NIL	NIL	NIL	NIL
329	NIL	NIL	NIL	NIL
330	NIL	NIL	NIL	NIL
331	NIL	NIL	NIL	NIL

SMP.MISS. - SAMPLE WAS NOT RECEIVED AT XRAL



30-NOV-87

REPORT 2906

REF.FILE 30198-N5

PAGE 2 OF

,	AU-1AT OZ/T		-	:U %	AG-1AT OZ/I
332		 NIL		NIL	NIL
333	NIL	NIL		NIL	NIL
334	0.002	NIL		NIL	NIL



CERTIFICATE OF ANALYSIS

REPORT

3490

TO: MINROC MANAGEMENT LIMITED

ATTN: MIKE KILBOURNE

199 BAY STREET, SUITE 606

TORONTO, ONTARIO

M5J 1L4

CUSTOMER No. 637

DATE SUBMITTED

4-Dec-87

REF. FILE 30639-Q3

Total Pages 1

4 ROCKS Proj. MM-061

CU %

DETECTION LIMIT METHOD AU-1AT OZ/TON FA 0.001 XRF 0.01 AG-1AT OZ/TON FA 0.01

DATE 15-JAN-88

X-RAY ASSAY LABORATORIES LIMITE

CERTIFIED BY



15 - JAN - 88

REPORT 3490

REF. FILE 30639-Q3

PAGE 1 OF

SAMPLE	AU-1AT OZ/T	cu %	AG-1AT OZ/T
336	0.001	0.06	NIL
337	0.001	0.10	TRACE
338	NIL	0.01	NIL
339	0.120	0.01	TRACE

-		•	(
335				
330	•			
325 425 725 828			المالم .	
323 323 323 321			NORTHERN	
918 818			Ž.	
218 918 518 +18				" = 10
11E 21E 21E 11E 01E				
304				

Ministry of Northern Development and Mines

Report of Work

(Geophysical, Geological, Geochemical and Expendit W88





900

	A1200) —	Minii						
Type of Survey						Township	^		
Claim Holder		S P	t. 1	1	7 9	0 0		s Licence No.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
A	on o								
1503-	330 BAY STX	LEET,	TORON				M5H 2	-	
Survey Company	- \a Ga			Date o	Survey 80.	(from & to)	88.80	otal Miles of lin	e Cut
Name and Address of Author (c	of Geo-Technical report)	Т	· · · · · · · · · · · · · · · · · ·	Dāy	Mo.	Yr. Day	Mo. Yr.		
	WOLVERLEIGH		, TORO	NTO .	ONTA	RIO.	M4C 1	S 4	
Credits Requested per Each (Claim in Columns at r		Mining C	laims Trav	versed (erical sequer		
Special Provisions	Geophysical	Days per Claim	Prefix	fining Claim		Expend. Days Cr.	Prefix	ning Claim Number	Expend. Days Cr.
For first survey:	- Electromagnetic		S	8313			7,000	140111061	
Enter 40 days, (This includes line cutting)	Magnetamata		50000 M			 	127 1375		
,	- Magnetometer	ļ		8313	43		1		
For each additional survey:	- Radiometric			8313	44				
using the same grid: Enter 20 days (for each)	- Other			8313	45				
Litter 20 days (for each)	Geological	20		8313				**************************************	
	Geochemical	20	4.3				-		. -
Man Days	Geochemical			8313					
•	Geophysical	Days per Claim		8313	3 48				
Complete reverse side and enter total(s) here	- Electromagnetic			8313	3 50				
	B. # Manustometer						1.4	• •	ļ
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A A	- Radiometric								
OCT - 8	1988 er								
	Geological								
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Airborne Credits	acasto that	Days per	F	E C	E I	Y_E_D		TO SEE THE SEE SEE SEE SEE SEE SEE SEE	
		Claim		_ ^ C. N	\ Y p= =;			Control of the design of the late of the	
Note: Special provisions	Electromagnetic			OEF	15	IARR			-
credits do not apply to Airborne Surveys.	Magnetometer			M.		P.M			-
to timborno bartoys.	Darlia		7	8,9,10,1	1,12, 1	1213141516			.
Funandia	Radiometric	<u></u>			K S				
Expenditures (excludes pow Type of Work Performed	er stripping)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					or in annual or section of the section of	
,,,									
Performed on Claim(s)			16.7			1			
				}					
Calculation of Expenditure Day	s Credits								
Total Expenditures	•	Total s Credits					100		
\$	÷ [15] = [L			<u> </u>	7	r	
ι σ	<u> </u>						claims cov	ber of mining ered by this	9
Instructions Total Days Credits may be a	pportioned at the claim I	nolder's					report of v	vork.	
choice. Enter number of day in columns at right.			Lovar Day	For Offices Cr. Date F		Inly	INVIDATE TO THE OTHER	ta)/disc	
in columns at right.			Recorded		1.3	188.	11.0	lle W	
Date Re	corcled flolder or Agent	Simature)	180			as necoraea	eisaucu ou	ector	
13 SEPT 1988	Mulan	ال							
Certification Verifying Repo	ort of Work								
I hereby certify that I have a or witnessed same during and		_			Report	of Work anne	exed hereto, h	aving performed	I the work
Name and Postal Address of Per		and the all		3 (106)					
J.W. CANT,		LEIGH	BLND	TORO	NTO	ONTA	ARIO .	M4C 1	54
		:: :::::::		Date (Cartified		Cortifically	(Signature)	*
				13) SE	PT 1988	2 / / C	<u>Can</u>	لا
1362 (85/12)									



Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

December 9, 1988

ONTARIO GEOLOGICAL BURVEY ASSESSMENT FILES OFFICE

DEC 12 1988

RECEIVED

Mining Lands Section 3rd floor, 880 Bay Street Toronto, Ontario M5S 1Z8

Telephone: (416) 965-4888

Your file: W8807-200 Our file: 2.11790

Mining Recorder
Ministry of Northern Development and Mines
Bag 3000
200 Brady Street, 6th floor
Sudbury, Ontario
P3A 5W2

Dear Sir:

Re: Notice of Intent dated November 18, 1988 - Geological Survey submitted on Mining Claims S 831342 et al in Broder Township

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely.

W.R. Cowan

Provincial Manager, Mining Lands

Mines & Minerals Division

RM. RM:p1

Enclosure

cc: Mr. G.H. Ferguson
Mining and Lands Commissioner
Toronto, Ontario

Midas Minerals Inc. Suite 1503 330 Bay Street Toronto, Ontario M5H 2S8 Resident Geologist Sudbury, Ontario

Mr. J.W. Cant 272 Wolverleigh Blvd. Toronto, Ontario M4C 1S4



Technical Assessment Work Credits

2.11790

Date

November 22, 1988 Mining Recorder's Report of Work No. W8807-200

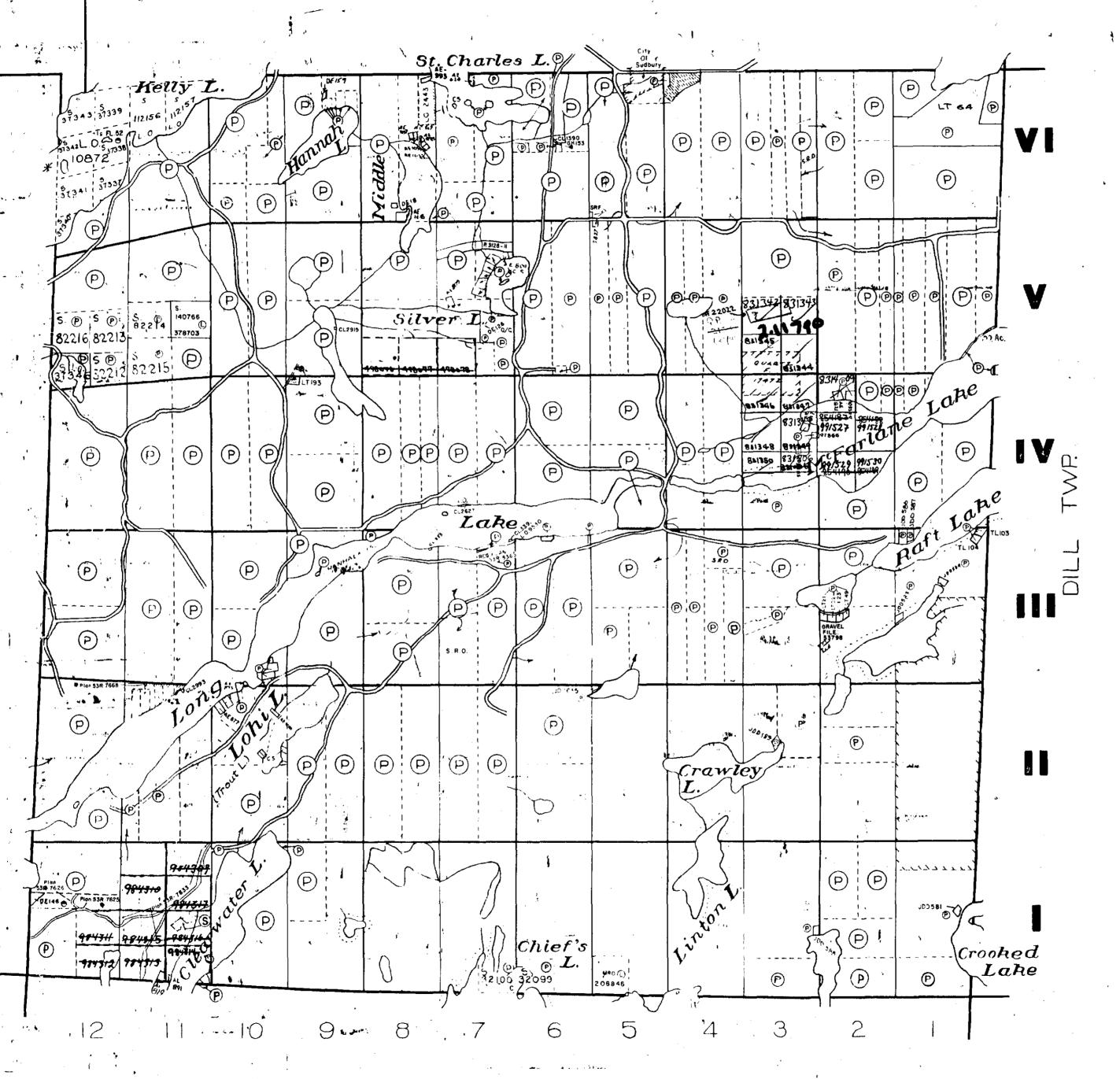
	Minerals Inc.
Fownship or Area Broder	Township
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	
Magnetometer days	S 831342 to 347 inclusive
Radiometric days	\$
Induced polarization days	S
Other days	i e
Section 77 (19) See "Mining Claims Assessed" column	
Geologicaldays	5
Geochemical days	\$
Man days Airborne	
Special provision Ground	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
pecial credits under section 77 (16) for the following	ng mining claims
5 days Geologic	al 10 days Geological
\$ 831348	S 831409
o credits have been allowed for the following mining	og claime
■ not sufficiently covered by the survey	insufficient technical data filed
S 831350	

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

· the following of .

Please Note:

Assay certificates were added to this file Aug/89 from OMEP submitted # OMB7-8-L-217.





200

THE TOWNSHIP

BRODER

DISTRICT of SUDBURY SUDBURY MINING DIVISION

SCALE: I INCH TO 40 CHAINS

LEGEND'.	
PATENTED" LAND	'
CROWN LAND SALE	٠.
LICENSE OF OCCUPATIONL.O	,
LOCATED LAND Loc	٠.
IMPROVED ROAD	
ROAD	:
PATENTED FOR S.R.O.	

NOTES

Reserve to the Dept. of National Defence for

FILE 95029 8 145729

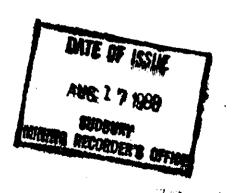
400' Surface Rights Reservation around all Lakes and Rivers.

AREA	SHOWN	THUS:	THERE	ANNEXED	TO
THE M	ITY OF	CHARIE	√		

QPNo 21252 Part of Lot & Come IVIV 1 . C. t. 1 Min in Chine S. 821342 +

Secreta, (See Partector Lind Call).

ORDER NO. W-25/87 NE, SEC. 36, R.S.O. 1980 SEE LAND ROLL

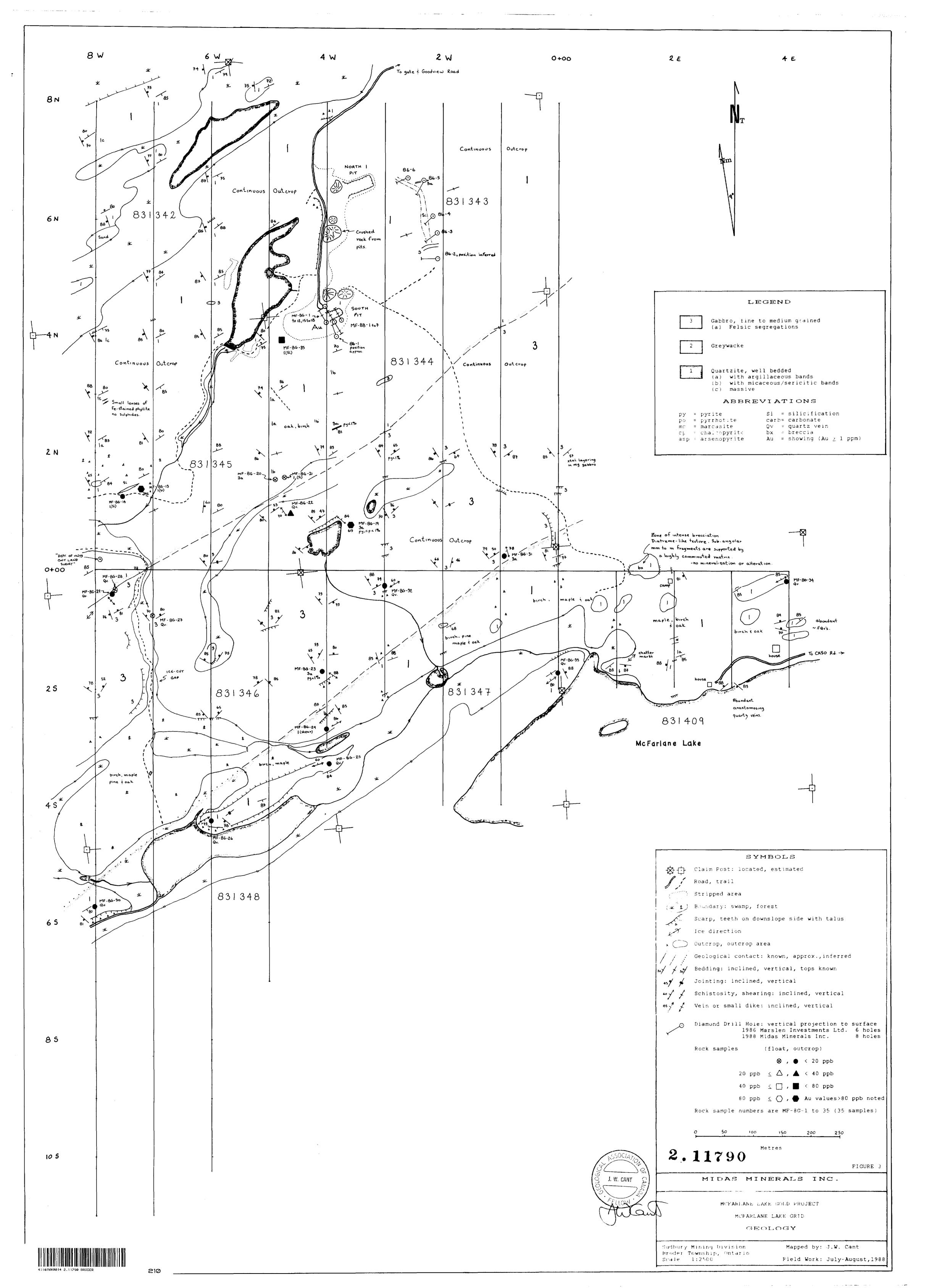


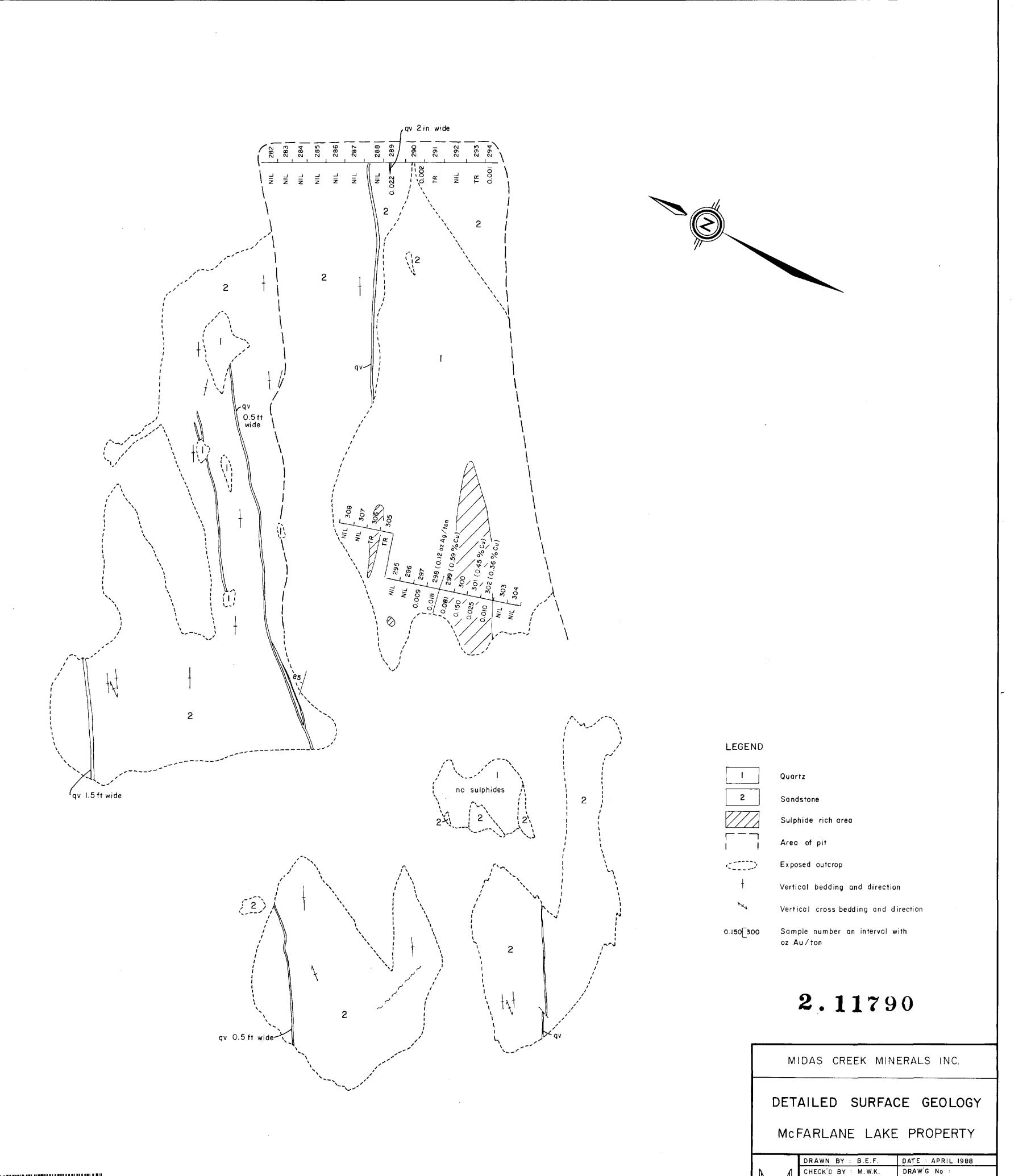
M.682

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH





SCALE : I"= IO"

MINROC MANAGEMENT LIMITED