



31L145W0003 2.905 PARKMAN

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IRON CITY MINES LTD.  
REPORT ON DIAMOND DRILL HOLES  
AND  
ASSAYS  
NORTH GREEN LAKE IRON ZONES CL GRP.  
1966

J.905  
4

LOG OF IRON CITY M.I. DRILL HOLE NO. 8

Collar Co-Ords:- 6 SW, 6 NW  
 Lengths: Proposed 1000'  
           Actual Slope 750'  
 Started:- 13.6.66

Claim No.:- T 47602  
 Dip:- -45°  
 Strike:- 115°  
 Finished:- 26.7.66

0' - 35' Casing.

35' - 725'  
 = 690' gross. B.I.F., mostly dark grey, occas. dark brown or light grey - green, fairly sil., much like holes HH-1, HH-2 and HH-3. It contains lean and barren bands and horses of gneiss and Phy., as follows:-

- 50' - 51' = 1:0 Garn.-Bi.Gn., m.g.-black with pink garn.
- 76' - 79' = 3:0 " " " " " " " " " "
- 142' - 171' = 29:0 " " " " " " " " " "
- 200' - 205' = 5:0 " " " " " " " " " "
- 230.0' - 233.5' = 3.5' " " " " " " " " " "
- 354.5' - 398.0' = 43.5' Bi. Sch., black, f.g.
- 422' - 441' = 19:0 Bi. Garn. Gn.
- 451' - 464' = 13.0' Alt. fels. phy.Gn. greenish-grey with porphyroblasts.
- 486' - 564' = 78.0' Garn.-Bi. Gn., f.g.
- 666' - 683' = 17:0 Bi. Garn. Gn., cg. becoming fg.
- 699.0' - 709.5' = 10.5' Garn. Gn., c.g.
- TOTAL 222.5'

No Core - (ground up and lost):-

- 361' - 362'
- 368.5' - 370.0'
- 382' - 383'
- 707' - 708'
- 721.5' - 723.0'

@ 407.5' - 1" po. Occas. po & py elsewhere in slips and clusters.

SAMPLES

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>Est.Fe. &amp; Remarks</u>	<u>%sol.Fe.</u>
8-1	35'	58'	23'	10%	7.83
8-2	58'	82'	24'	15%	12.7
8-3	82'	112'	30'	15%	14.4
8-4	112'	142'	30'	20%	18.9
8-5	171'	200'	29'	20%	19.0
8-6	205'	230'	25'	15%	11.6
8-7	233.5'	259'	25.5'	10% only sl. mag.	9.76
8-8	259.0'	290.5'	31.5'	15% only sl. mag.	10.7
8-9	290.5'	322.0'	31.5'	15% only sl. mag.	12.0

249.5'

501 0311

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>Est. Fe. &amp; Remarks</u>	<u>%Sol. Fe.</u>
			249.5'		
8-10	322.0'	354.5'	32.5'	10%	9.11
8-11	398'	422'	24.0'	15%	14.7
8-12	441'	451'	10.0'	10%	9.86
8-13	464'	486'	22.0'	15%	13.4
8-14	564'	590'	26.0'	15%	12.0
8-15	590'	616'	26.0'	15%	11.9
8-16	616'	641'	25.0'	20%	16.8
8-17	641'	666'	25.0'	20%	18.9
8-18	683'	699'	16.0'	20%	15.9
8-19	709.5'	725.0'	15.5'	15%	13.2
	TOTAL I.F.		471.5'		
	less 4' horses		<u>4.0</u>		
			467.5'		

$\frac{467.5}{690.0} = 68\% \text{ I.F.}$   
and  
32% waste.

725' - 750' Garn. Gn., mg. dull pink dark grey.

750' End of hole, as hole was mudding & sanding badly.

NOTE: This hole was drilled to cross-section the Cook Zone along picket line 6 SW. The AXT hole was stopped as the drillers could barely turn the rods at the end and almost lost the hole, as hole V-3 was lost. The hole started in I.F. and probably finished still in I.F. (in a horse) so it has a true width of at least 750 ft. and a horiz. width of perhaps 1000 ft. at this section. Thus to date there would appear to be sufficient tonnage to feed a large concentrator, but the grade is on the low side. The next hole (No. 9) is to go vertically from this same set-up to give us an accurate cross-section of dips, etc. The whole core was assayed, with rejects saved for future tests. The balance of the core is stored near the collar. The core was logged by,

A. Hopkins.

*A. Hopkins*

LOG OF IRON CITY MINES LTD. D.D.H. #7.2

<u>COLLAR CO-ORDS</u>	<u>DIP</u>	<u>CLAIM NO.</u>	<u>STARTED</u>	<u>FINISHED</u>	<u>TEMP.</u>
6705'S 1080'W	-90°	T.56625	3 Apr.'66	24.5.66	28° F. at dawn
0' - 163'					Casing - o.b.
162.0' - 184.6'					22.6' B.I.F. - quite magn. est. 35% Fe. (sol.) i.e. 50% magn., 25% Q, 25% ferromag. silicates. Sample V-2-1: Crenulated irreg. massive slopes of black magn. f.g. <u>22.0% Fe., 2.32% Mn.</u>
184.6 - 323.0'					138.4': Garn.-Chlor - Bi Gn. (formerly a c.g. andes. or f.g. dior.) cut by occas. Q. & Pegma. str. Dark-grey green; cuts core at about 55°.
323.0' - 357.0'					34.0'. B.I.F. as above, but with more ferromag. sil. mins. 323.0' - 340.0': 17.0' Sample V-2-2 - Est. 25% Fe. <u>10.8% Fe.</u> 340.0' - 357.0': 17.0' V-2-3 - Est. 30% Fe. <u>30.9% Fe.</u>
357.0' - 371.0'					14.0'. Gn. as above, only contains more garnets.
371.0' - 376.5'					5.5'. B.I.F. <u>Sample #V-2-4</u> - Est. 30% Fe. <u>19.2% Fe., 1.84% Mn.</u>
376.5' - 430.5'					54.0'. dior. Gn., f.g., dark grey-green.
430.5' - 443.1'					12.6'. Garnet Gn.
443.1' - 488.5'					45.4' B.I.F. 443.1' - 466.0': 22.9' <u>Sample V-2-5 - 30.5% Fe., 2.66% Mn.</u> 466.0' - 488.5': 22.5' <u>Sample V-2-6 - 29.2% Fe., 2.72% Mn.</u> 1% red hema & much massive f.g. black magn. Est. 35% fe.
488.5' - 500.0'					11.5': Black fig. basic intrusive trap dyke.
500.0' - 511.0'					11.0': Garnet Gn.
511.0' - 530.0'					19.0': Dior. gn., f.g., dark grey.
530.0' - 670.0'					140.0': Gn., mainly Q.-epid., Hb.-Bi.-Chlor. Light grey-green to white. 25% Q., with some interbanded narrow sections of dior. gn.
at 580.5'					A 1" section of Bi-Mu sch. containing po. Dimethyl shows no nickel.
670.0' - 700.5'					Dior. Gn., f.g., dark grey, cut by some narrow pink pegma. str., except for:- 682.5' - 683.5': 1.0' Pink pegma. str. & blobs.

201 0361

- 692' - 693' Pink pegma dykelats cutting the dior. gn.
- 700.5' - 733.5' Gneiss:- Q-epid-Hb-Bi-Chlor, light grey-green to white, as above ("Meerschaum" appearance).
- 733.5' - 750.5' Dior. gn., f.g., dark grey-green, foliated with occas. small light pink garnet; cutting core @ 60°.
- 750.5' - 766.5' "Meerschaum" gn., soft, with much calc.
- 766.5' - 777.0' Dior. gn. as above, containing occas. small garns.
- 777' - 834' = 57.0' B.I.F. Estimated to contain 25% sol. Fe.

<u>Sample #</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>Estim.</u>	<u>% Fe.</u>	<u>% Mn</u>	<u>Combined</u>
V-2-7	777'	797'	20'	30%	25.9	2.51	28.41%
V-2-8	797'	817'	20'	20%	17.4	5.48	22.88%
V-2-9	817'	834'	<u>17'</u>	15%	11.6	1.42	13.02%
TOTAL			57'				

- 834' - 858' Dior. Gn., high in Bi, with some Mu.
- 858' - 924' Gran. gn., salmon-pink, with much Orthocl., Q, Mu, and some green epid.
- 887' - 890' B.Q.V., gneissic.
- 924' - 995' Bi-Hb Gn., interjected by gran. in places. The gneissosity cuts the core at about 80°.
- 995' - 1051' Gran. Gn. as above.
- 1051' End of Hole, where an acid test gives a core dip angle of 88°.

NOTE: This hole started in I.F. and cut a total of 174.5' of magnetic B.I.F. down as far as 834'. Thus 174.5' is I.F. having a weighted average assay of 21.4% sol. (magn.) iron, and the balance of 496.5' gangue or waste. This gives a ratio of 1 ore to 2.85 waste. The whole core, AXT size, of iron formation was sampled for assay, the balance remaining piled by the collar of the hole. Rejects of the assay sample were saved for concentrating tests. The drill was removed to hole No. V-3, a few hundred feet to the north. The core was logged and sampled by

*A. Hopkins*  
A. Hopkins, B.A.Sc.  
Consulting Geologist.

401 0363

LOG OF IRON CITY'S D.H.I. #10

Collar Co-Ord:-	Strike	Dip	Slope Length	HD. & VD.	Claim No.	Started	Finished
430°W 530°N	115°	-45°	515'	361'	T. 44085	10.8.66	20.8.66
0' - 6'	Casing						
6' - 41'	Limestone (L.S.) sil., dark grey, black & white, "salt & Pepper", with much f.g. Bi. almost normal to core.						
41' - 256'	B.I.F. very magnetic, very much banded like Augdome's Porcupine I.F. in places, except for:- 55.0' - 58.0' Horse of Bi - Garn. Gn. 70.5' - 75.0' ditto 112.5' - 122.0' ditto, but more Garn. than Bi. 175' - 197' ditto, but more Bi. than Garn. In many, if the minor slips the slickensides (oblique) show born colours, e.g. at 165' much cp. & born. at 174' ditto, also at 202' and 208'. Fo. at 203' to 205', 208', 227.5', 232.5', 238', 241', 242', 240.5' and 246'.						
256' - 285'	Pyrrhotized I.F. - all magnetic, the po is dissem.						
285' - 298'	B.I.F. as usual, with minor po.						
298' - 326'	Po. zone, some massive, some dissem., all magnetic.						
300' - 317'	Horse of ferromagnes. Silicates. (Hb, Aug. Bi. etc.)						
326' - 330'	Bi. Gn.						
330' - 342'	B.I.F., with well-dissem. po.						
342' - 357'	Basic rock, dark, dense, fg., containing dissem. po.						
357.0' - 381.5'	Bi. G. & B.I.F. intermixed, slightly magn.						
381.5' - 384.5'	= 3'. Bi. Gn.						
384.5' - 423.0'	= 38.5', Amph. Gn. I.F., eg. very magnetic.						
423' - 479'	Bi. Gn.						
479' - 503'	Sil L.S., White						
503' - 515'	Basic rock, black, fg., dense, sl. magn., blocky, hi in red hemat & lo in magnet. It burned out the bit and caused the drillers to cement the hole with little success.						
515'	End of hole.						

(cont'd)

2010813

Samples Cut by A. Hopkins

<u>Sample No.</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>Est. % Fe</u>	<u>Remarks</u>	<u>Actual Assay</u>
10 - 1	41'	66'	25'	25	Typical Cook Zone	19.0
10 - 2	66'	91'	25'	25	" " "	11.6
10 - 3	91'	112.5'	21.5'	20	" " "	18.3
10 - 4	122'	147'	25'	15	" " "	10.1
10 - 5	147'	175'	28'	20	" " "	13.2
10 - 6	197'	222'	25'	18	" " "	15.7
10 - 7	222'	256'	34'	15	" " "	11.8
10 - 8	256'	285'	29'	15	Much dissem. py. (Tr. only in Ni. Co. Pt. Au. Ag.)	19.5
10 - 9	258'	298'	13'	12.5	The usual B.I.F.	11.5
10 - 10	298'	326'	28'	15	50% py. but Tr. Ni., Co. Pt. Au. Ag. Cu.	16.0
10 - 11	330'	342'	12'	15	B.I.F. with some dissem. py.	15.4
10 - 12	342'	367'	15'	17.5	fg. black some dissem. py. Tr. Ni. Co. Pt. Ag. Au.	18.1
10 - 13	357'	381.5'	24.5'	10	Lo grade B.I.F.	10.1
10 - 14	384.5'	403.7'	19.2'	25	cg. amph. gn & magnetite	16.22% Fe.
10 - 15	403.7'	423.0'	19.3'	25	ditto	
			343.5'			

NOTE:-

Hole No. 10 is the start of the 2nd X-Sec'n. across the extreme N. end of the Cook Zone. It should be about 2000' long and comprise holes 10, 11, 12 and 13. The grade in this hole is disappointingly low, 15.2% sol. Fe., but the extent encouraging, i.e., 343.5' out of 423' or about 81% I.F., almost true width. The whole AXT. I.F. sec'ns. were sampled for assay, the bal. of the core being stored by the hole's collar. The core samples were assayed by the Ont. Dept. Mines.

The core was logged and sampled by

A. Hopkins, B.A. Sc.

201 0314

LOG OF HOLE CITY'S No. 170

Collar Co-Ordinate	Strike	Dip	Slope Length	H.D. & V.P.	Claim No.	Started	Finished
430°W 530°N	115°	-45°	515'	361'	T. 44085	10.6.66	29.8.66
0' - 6'	Casing						
6' - 41'	Limestone (LS.) sil., dark grey, black & white, "salt & Pepper", with much f.g. Bi. almost normal to core.						
41' - 256'	B.I.F. very magnetic, very much banded like Augdomo's Porcupine I.F. in places, except for:- 55.0' - 58.0' Horse of Bi - Garn. Gn. 70.5' - 75.0' ditto 112.5' - 122.0' ditto, but more Garn. than Bi. 175' - 197' ditto, but more Bi. than Garn. In many, if the minor slips the slickensides (oblique) show horn colours, e.g. at 165' much cp. & horn. at 174' ditto, also at 202' and 206'. Fo. at 203' to 205', 206', 227.5', 232.5', 238', 241', 242', 240.5' and 246'.						
256' - 285'	Pyrrhotized I.F. - all magnetic, the po is dissem.						
285' - 288'	B.I.F. as usual, with minor po.						
288' - 326'	Po. zone, some massive, some dissem., all magnetic.						
326' - 317'	Horse of ferromagnes. Silicates. (lib, Aug. Bi. etc.)						
326' - 330'	Bi. Gn.						
330' - 342'	B.I.F., with well-dissem. po.						
342' - 357'	Basic rock, dark, dense, fg., containing dissem. po.						
357.0' - 381.5'	Bi. G. & B.I.F. intermixed, slightly magn.						
381.5' - 384.5'	= 3'. Bi. Gn.						
384.5' - 423.0'	= 38.5', Amph. Gn. I.F., eg. very magnetic.						
423' - 479'	Bi. Gn.						
479' - 503'	Sil L.S., white						
503' - 515'	Basic rock, black, fg., dense, sl. magn., blocky, hi in red horn & lo in magnet. It burned out the bit and caused the drillers to cement the hole with little success.						
515'	End of hole.						

(cont'd)

before BI

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201 0371



Samples Cut by A. Hopkins

<u>Sample No.</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>Est. % Fe</u>	<u>Remarks</u>	<u>Actual Assay</u>
10 - 1	41'	66'	25'	25	Typical Cook Zone	19.0
10 - 2	66'	91'	25'	25	" " "	11.6
10 - 3	91'	112.5'	21.5'	20	" " "	18.3
10 - 4	122'	147'	25'	15	" " "	10.1
10 - 5	147'	175'	28'	20	" " "	13.2
10 - 6	177'	222'	25'	18	" " "	15.7
10 - 7	222'	256'	34'	15	" " "	11.8
10 - 8	256'	285'	29'	15	Much dissem. py. (Tr. only in Ni. Co. Pt. Au. Ag.)	19.5
10 - 9	258'	298'	13'	12.5	The usual B.I.F.	11.5
10 - 10	298'	326'	28'	15	50% py. but Tr. Ni., Co. Pt. Au. Ag. Cu.	16.0
10 - 11	330'	342'	12'	15	B.I.F. with some dissem. py.	15.4
10 - 12	342'	367'	15'	17.5	fg. black some dissem. py. Tr. Ni. Co. Pt. Ag. Au.	18.1
10 - 13	357'	381.5'	24.5'	10	Lo grade B.I.F.	10.1
10 - 14	381.5'	403.7'	19.2'	25	cg. amph. gn & magnetite	16.22% Fe.
10 - 15	403.7'	423.0'	19.3'	25	ditto	

343.5'

NOTE:-

Hole No. 10 is the start of the 2nd X-Sec'n. across the extreme N. end of the Cook Zone. It should be about 2000' long and comprise holes 10, 11, 12 and 13. The grade in this hole is disappointingly low, 15.2% sol. Fe., but the extent encouraging, i.e., 343.5' out of 423' or about 81% I.F., almost true width. The whole AXT. I.F. sec'ns. were sampled for assay, the bal. of the core being stored by the hole's collar. The core samples were assayed by the Ont. Dept. Mines.

The core was logged and sampled by

A. Hopkins, B.A. Sc.

ASSESSMENT WORK

Rec'd from M. h. Br.

For H. Lovel

SEP - 7 1972

Regional Geologist

before BA  
2905

201 0372

DEPARTMENT OF MINES  
LABORATORIES BRANCH

C 12473

CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ont.

<u>Sample No.</u>	<u>Soluble Iron (Fe)%</u>	<u>Manganese (Mn)%</u>
65-15-1	32.1	0.12
65-15-2	37.4	0.03
65-15-3	27.6	0.18
7-3	16.9	7.80
7-4	19.1	4.40
7-5	29.8	3.72
7-6	23.7	2.44
RA-2	18.2	0.02
RA-2A	43.3	0.09
RA-3	36.1	0.13
RA-4	29.8	0.08
RA-SE-5	28.4	0.13
H-H-2-2	25.2	1.65
H-H-2-3	23.2	1.34
H-H-2-4	20.1	1.42
H-H-2-5	16.9	0.87
H-H-2-6	9.00	0.52

Fees received for above \$ .....

Date: June 28 1966

(D. A. Moddle)

Provincial Assayer

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501-11-20  
9821



• CONTRACT LABORATORIES

# TECHNICAL SERVICE LABORATORIES

DIVISION OF BURGESS TECHNICAL ENTERPRISES LIMITED

355 KING ST. W., TORONTO 2B, ONT., CANADA

TELEPHONE: 362-4248 - AREA 416

TELEX: 0229302

CABLE ADDRESS - TECSERV TORONTO

## CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM Mr. P.W. Bishop  
555 Burnhamthorpe Road  
Etobicoke, 652, Ontario

REPORT NO.

M-0018

SAMPLE(S) OF DRILL CORE

71-4-4 from 44'9" to 45' - 3" Sample

	Sample	Sample	Sample		Sample	Sample	Sample
Antimony	-			Phosphorus	-		
Arsenic	-			Platinum	-		
Barium	.01%			Rhenium	X		
Beryllium (BeO)	-			Rhodium	X		
Bismuth	-			Rubidium	X		
Boron	-			Ruthenium	X		
Cadmium	-			Silver	<.1oz/t		
Cerium (CeO <sub>2</sub> )	-			Strontium	.01%		
Caesium	X			Tantalum (Ta <sub>2</sub> O <sub>5</sub> )	-		
Chromium	.02%			Tellurium	X		
Cobalt	.05%			Thallium	X		
Columbium (Cb <sub>2</sub> O <sub>5</sub> )	-			Thorium (ThO <sub>2</sub> )	-		
Copper	.05%			Tin	-		
Gallium	-			Titanium	.1%		
Germanium	-			Tungsten	-		
Gold	-			Uranium (U <sub>3</sub> O <sub>8</sub> )	-		
Hafnium	X			Vanadium	.01%		
Indium	-			Yttrium (Y <sub>2</sub> O <sub>3</sub> )	.005%		
Iridium	X			Zinc	-		
Lanthanum (La <sub>2</sub> O <sub>3</sub> )	-			Zirconium (ZrO <sub>2</sub> )	<.005%		
Lead	.005%			ROCK FORMING METALS			
Lithium (Li <sub>2</sub> O)	-			Aluminum (Al <sub>2</sub> O <sub>3</sub> )	5%		
Manganese	.5%			Calcium (CaO)	.2%		
Mercury	-			Iron (Fe)	H		
Molybdenum	.003%			Magnesium (MgO)	.5%		
Neodymium (Nd <sub>2</sub> O <sub>3</sub> )	-			Silica (SiO <sub>2</sub> )	H		
Nickel	.05%			Sodium (Na <sub>2</sub> O)	.2%		
Palladium	-			Potassium (K <sub>2</sub> O)	1%		

Figures are approximate:

CODE

H - High - 10 - 100% approx.  
M - Medium - 1 - 10% approx.  
L - Low - .1 - 1% approx.

- Not Detected - Elements looked for but not found  
X Not Looked For  
< Less Than

Samples, Pulps and Rejects discarded after two months

DATE Nov 15/71

SIGNED



BX

Branches at VANCOUVER, SMITHERS, MONCTON and SPOKANE, WASH.

2010346



- CHEMICAL RESEARCH AND ANALYSIS
- CONTRACT LABORATORIES

# TECHNICAL SERVICE LABORATORIES

DIVISION OF BURGNER TECHNICAL ENTERPRISES LIMITED

355 KING ST. W., TORONTO 2B, ONT., CANADA

TELEPHONE: 362-4248 - AREA 416

CABLE ADDRESS - TECSEV TORONTO

## CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Mr. P.W. Bishop  
555 Burnhamthorpe Road  
Etobicoke 652, Ontario

REPORT NO. M-0018
----------------------

SAMPLE(S) OF DRILL CORE *71-4-4 from 44' 9" to 45' — 3" Sample*

Nickel (Ni)% 0.084

Samples, Pulps and Rejects discarded after two months

DATE Nov 15/71

SIGNED 



BY

TORONTO, MONCTON, and SPOKANE, WASH

201 0347

# TECHNICAL SERVICE LABORATORIES

DIVISION OF BURGNER TECHNICAL ENTERPRISES LIMITED

355 KING ST. W., TORONTO 2B, ONT., CANADA

TELEPHONE: 362-4248 — AREA 416

TELEX: 0229302

CABLE ADDRESS — TECSERV TORONTO

## CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM

Mr. P.W. Bishop  
555 Burnhamthorpe Road  
Etobicoke Ontario

REPORT NO.

T-1629

SAMPLE(S) OF Drill Core

	Sample 70-1 36.5' - 40'	Sample	Sample		Sample 70-1	Sample	Sample
Antimony	-			Phosphorus	-		
Arsenic	-			Platinum	-		
Barium	.07%			Rhenium	X		
Beryllium (BeO)	.0004%			Rhodium	X		
Bismuth	-			Rubidium	X		
Boron	-			Ruthenium	X		
Cadmium	-			Silver	<.1oz/t		
Cerium (CeO <sub>2</sub> )	-			Strontium	-		
Caesium	X			Tantalum (Ta <sub>2</sub> O <sub>5</sub> )	-		
Chromium	.03%			Tellurium	X		
Cobalt	.02%			Thallium	X		
Columbium (Cb <sub>2</sub> O <sub>3</sub> )	-			Thorium (ThO <sub>2</sub> )	-		
Copper	.01%			Tin	-		
Gallium	<.001%			Titanium	.2%		
Germanium	-			Tungsten	-		
Gold	<.005oz/t			Uranium (U <sub>3</sub> O <sub>8</sub> )	-		
Hafnium	X			Vanadium	.02%		
Indium	-			Yttrium (Y <sub>2</sub> O <sub>3</sub> )	.007%		
Iridium	X			Zinc	-		
Lanthanum (La <sub>2</sub> O <sub>3</sub> )	-			Zirconium (ZrO <sub>2</sub> )	.02%		
Lead	.04%			ROCK FORMING METALS			
Lithium (Li <sub>2</sub> O)	-			Aluminum (Al <sub>2</sub> O <sub>3</sub> )	MH		
Manganese	1%			Calcium (CaO)	.2%		
Mercury	-			Iron (Fe)	H		
Molybdenum	<.002%			Magnesium (MgO)	2%		
Neodymium (Nd <sub>2</sub> O <sub>3</sub> )	-			Silica (SiO <sub>2</sub> )	H		
Nickel	.01%			Sodium (Na <sub>2</sub> O)	.1%		
Palladium	<.005oz/t			Potassium (K <sub>2</sub> O)	1%		

Figures are approximate:

CODE

M - High - 10 - 100% approx.  
 M - Medium - 1 - 10% approx.  
 L - Low - .1 - 1% approx.

- Not Detected - Elements looked for but not found  
 X Not Looked For  
 < Less Than

Samples, Pulp and Rejects discarded after two months

DATE Oct 22/71

SIGNED John E. Burgener



201 0348



DEPARTMENT OF MINES  
LABORATORIES BRANCH

A 7015

CERTIFICATE OF ANALYSIS

The following results have been obtained on samples submitted by:  
Al Hopkins, 810 Duplex Avenue, Toronto 12, Ont.

*Green Creek Zone, Iron City*

QUALITATIVE SPECTROGRAPHIC ANALYSIS

Sample # 2-1 - 255' - 260' = 5.0'

Antimony	-	Nickel *	-(Less than 0.01%)
Arsenic	-	Niobium	-
Beryllium	-	Silver	-
Bismuth	-	Tantalum	-
Cadmium	-	Tellurium	-
Cerium	-	Thorium	-
Chromium	T	Tin	-
Cobalt	-	Titanium *	T(less than 0.10%)
Copper	T	Tungsten	-
Germanium	-	Uranium	-
Lead	T-L(about 0.1%)	Vanadium	T
Lithium	-	Yttrium	-
Manganese	L-M	Zinc	-
Mercury	-	Zirconium	-
Molybdenum	-		

\* Quantitative assays for nickel and titanium not done in view of above.

Key to symbols:  
H - 10 to 100%  
MH - 5 to 15%  
M - 1 to 10%  
LM - 0.5 to 5.0%  
L - 0.1 to 1.0%  
TL - 0.05 to 0.50%  
T - 0.01 to 0.10%  
- - None detected or insignificant trace.

Fees received for above \$.....2..DOLLARS...Card. 141.

Date..... December 15 195 65

..... *D. A. Noddle* ..... (D. A. Noddle)  
Provincial Assayer

Except by special permission, reproduction of these results must include any qualifying remarks made by this department with reference to any sample.

2010315



ONTARIO

# DEPARTMENT OF MINES LABORATORIES BRANCH

A 7034

## CERTIFICATE OF ANALYSIS

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Ave., Toronto 12, Ontario

Green Creek Zone, Iron City.

### QUALITATIVE SPECTROGRAPHIC ANALYSIS

Sample #	2-3	# 205	# 2-3	# 2-5
Antimony	-	-	-	-
Arsenic	-	-	-	-
Beryllium	-	-	-	-
Bismuth	-	-	-	-
Cadmium	-	-	-	-
Cerium	-	-	-	-
Chromium	T	T	-	-
Cobalt	-	T	-	-
Copper	-	T	-	-
Germanium	-	-	-	-
Lead	-	T	-	-
Lithium	-	-	-	-
Manganese	T-L	L-M	-	-
Mercury	-	-	-	-
Molybdenum	-	-	-	-
Nickel	-	-	-	-
Niobium	-	-	-	-
Silver	-	-	-	-
Tantalum	-	-	-	-
Tellurium	-	-	-	-
Thorium	-	-	-	-
Tin	-	-	-	-
Titanium	-	-	L-M	T
Tungsten	-	-	-	-
Uranium	-	-	-	-
Vanadium	-	-	T	T
Yttrium	-	-	-	T
Zinc	-	-	-	-
Zirconium	-	-	T	-

	C-12131	Ti	P <sub>2</sub> O <sub>5</sub>	S
2-4	19.7	Tr	0.11	nil
2-5	34.3	Tr	0.04	"
2-6	30.7	Tr	0.64	"
2-7	30.4	Tr	0.04	0.06

Key to symbols:  
H - 10 to 100%  
MH - 5 to 15%  
M - 1 to 10%  
LM - 0.5 to 5.0%  
L - 0.1 to 1.0%  
TL - 0.05 to 0.50%  
T - 0.01 to 0.10%  
- - None detected or insignificant trace.

Fees received for above \$.....4...coupons, Card # 262.

Date..... January 5..... 1956

Provincial Assayer

(D. A. Moddle)

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2010316



ONTARIO

# DEPARTMENT OF MINES LABORATORIES BRANCH

A 7035

## CERTIFICATE OF ANALYSIS

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

*Green Creek Zone, Iron City*

### QUALITATIVE SPECTROGRAPHIC ANALYSIS

Sample #	2-6	# 2-7	# 2-6	# 2-7
Antimony	-	-	-	-
Arsenic	-	-	-	-
Beryllium	-	-	-	-
Bismuth	-	-	-	-
Cadmium	-	-	-	-
Cerium	-	-	-	-
Chromium	T	T	-	-
Cobalt	T	T	-	-
Copper	T	T	-	-
Germanium	-	-	-	-
Lead	T	T	-	-
Lithium	-	-	-	-
Manganese	L-M	L-M	-	-
Mercury	-	-	-	-
Molybdenum	-	-	-	-
Nickel	-	-	-	-
Niobium	-	-	-	-
Silver	-	-	-	-
Tantalum	-	-	-	-
Tellurium	-	-	-	-
Thorium	-	-	-	-
Tin	-	-	-	-
Titanium	-	-	T	T
Tungsten	-	-	-	-
Uranium	-	-	-	-
Vanadium	-	-	T	T
Yttrium	-	-	T	T
Zinc	-	-	-	-
Zirconium	-	-	-	-

Key to symbols:  
H - 10 to 100%  
MH - 5 to 15%  
M - 1 to 10%  
LM - 0.5 to 5.0%  
L - 0.1 to 1.0%  
TL - 0.05 to 0.50%  
T - 0.01 to 0.10%  
- - - None detected or insignificant trace.

Fees received for above \$.....4. coupons, Card # 262.

Date..... January 5 ..... 1956

..... *A. D. Moddle* ..... (D. A. Moddle)  
Provincial Assayer

Except by special permission, reproduction of these results must include any qualifying remarks made by this department with reference to any sample.

2010317





ONTARIO

# DEPARTMENT OF MINES

## LABORATORIES BRANCH

A 7358

### CERTIFICATE OF ANALYSIS

The following results have been obtained on samples submitted by:

Ashton Mining Co. Hopkins, 810 Duplex Avenue, Toronto 12, Ontario.

✓ QUALITATIVE SPECTROGRAPHIC ANALYSIS

Sample	#10-10		#10-10
Antimony	-	Nickel	T
Arsenic	-	Niobium	-
Beryllium	-	Silver	-
Bismuth	-	Tantalum	-
Cadmium	-	Tellurium	-
Cerium	-	Thorium	-
Chromium	T	Tin	-
Cobalt	T	Titanium	T-L
Copper	T	Tungsten	-
Germanium	-	Uranium	-
Lead	-	Vanadium	T
Lithium	T	Yttrium	T
Manganese	L-H	Zinc	-
Mercury	-	Zirconium	-
Molybdenum	T		

Key to symbols:  
H - 10 to 100%  
MH - 5 to 15%  
M - 1 to 10%  
LM - 0.5 to 5.0%  
L - 0.1 to 1.0%  
TL - 0.05 to 0.50%  
T - 0.01 to 0.10%  
- - None detected or insignificant trace.

Fees received for above \$.....

Date..... August 29, 1956

(D. A. Moddle)

Provincial Assayer

Except by special permission, reproduction of these results must include any qualifying remarks made by this department with reference to any sample.

2010318

vj



**DEPARTMENT OF MINES**  
LABORATORIES BRANCH

A 7448

**CERTIFICATE OF ANALYSIS**

*The following results have been obtained on samples submitted by:*

A. Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

**QUALITATIVE SPECTROGRAPHIC ANALYSIS**

Sample	#13-7	#13-7
Antimony	-	T
Arsenic	-	-
Beryllium	-	-
Bismuth	-	-
Cadmium	-	-
Cerium	-	-
Chromium	T	-
Cobalt	T	T
Copper	T	-
Germanium	-	-
Lead	T	T
Lithium	-	T
Manganese	L	-
Mercury	-	-
Molybdenum	T	-
Nickel	-	T
Niobium	-	-
Silver	-	-
Tantalum	-	-
Tellurium	-	-
Thorium	-	-
Tin	-	-
Titanium	-	T
Tungsten	-	-
Uranium	-	-
Vanadium	-	T
Yttrium	-	T
Zinc	-	-
Zirconium	-	-

**Fire Assay**

Platinum - None

Key to symbols:  
 H - 10 to 100%  
 MH - 5 to 15%  
 M - 1 to 10%  
 LM - 0.5 to 5.0%  
 L - 0.1 to 1.0%  
 TL - 0.05 to 0.50%  
 T - 0.01 to 0.10%  
 - - None detected or insignificant trace.

Fees received for above \$ Jan 26 1977 ✓

Date October 19, 1956

..... (D. A. Middle)  
Provincial Assayer

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2010319



ONTARIO

# DEPARTMENT OF MINES

LABORATORIES BRANCH

B 7581

## CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto, Ontario

	GOLD OZ PER TON	GOLD VALUE PER TON	SILVER OZ PER TON	PERCENTAGE OF			
Sample # 66-42	Trace		Trace	Copper	Nickel	Cobalt	Platinum
				Trace	Trace	Trace	None
Sample # 66-4	Trace		Trace	Trace	Trace	Trace	None
" # 3A-2	Trace						
" # 7-8	Trace						
" # 66-2-1	Trace						
" # 66-3-1	Trace						
" # 66-3-2	Trace						
"							

Fees received for above \$ 15 coupons, Cards 316 and 331. ✓

Date..... April 26 ..... 19 66 10 coupons owing. (D. A. Middle)

Provincial Assayer

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2070350 443









ONTARIO

# DEPARTMENT OF MINES LABORATORIES BRANCH

C 12104

## CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

Albert Hopkins, 810 Duplex Ave., Toronto 12, Ontario

*Green Creek Zone, Iron City.*

Sample # 2-1 ✓ -

Iron (soluble in 1:1 Hcl) - 9.1%

Phosphorus Pentoxide (P<sub>2</sub>O<sub>5</sub>) - 0.01%

Sulphur (S) - 0.21%

Fees received for above \$.....5. coupons, Nos. 654824-654827 and Card 141.

Date..... December 15..... 19 65.

..... *D. A. Noddle* (D. A. Noddle)  
Provincial Assayer

AC

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*2010324*







**DEPARTMENT OF MINES**  
LABORATORIES BRANCH

C 12321

**CERTIFICATE OF ASSAY**

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

Sample No	HCl Soluble Iron (Fe) + Mn = Combined
Sample 0 V-1-1 ✓ -	31.4% 2.01 33.45
" 0 V-1-2 ✓ -	31.7 2.57 34.27
" 0 V-1-3 ✓ -	29.8 1.19 30.99
" 0 V-1-4 ✓ -	30.6 1.38 31.98
" 0 V-1-11 ✓ -	29.7 3.43 33.13
" 0 V-1-12 ✓ -	23.8 3.56 27.36
" 0 V-1-13 ✓ -	20.7 5.44 26.14
" 0 V-1-14 ✓ -	10.2 1.38 11.58
Ave. = 26.0% + 2.6% = 28.6%	

Fees received for above \$..... 8 coupons, Card # 331

Date..... Apr. 20 ..... 19 66

Provincial Assayer (D. A. Fiddie)

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2010226

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ONTARIO

# DEPARTMENT OF MINES

LABORATORIES BRANCH

C 12329

## CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

Sample No.	Iron (Fe) (Sol. in HCl)	+	Manganese (Mn)	= Combined
<i>alloyed pt. of</i> V-1-2 (Apr. 4) ✓	23.97		2.127	26.02
V-1-3 ( " ) ✓	32.5		1.56	34.06
V-1-6 ( " ) ✓	14.9		3.28	18.18
V-1-7 ( " ) ✓	25.0		1.28	27.18
V-1-8 ( " ) ✓	22.8		2.32	25.12
V-1-9 ( " ) ✓	21.3		5.99	27.29
V-1-10 ( " ) ✓	23.7		3.74	27.44
V-1-11 ( " ) ✓	19.2		6.20	25.40
3A-1 ( " ) ✓	26.3		1.40	27.18
	<i>Aver. = 23.4%</i>	+	<i>3.11%</i>	<i>= 26.50%</i>
<i>Wahlk. surf.</i> W-1 ( " )	13.9		2.46	16.36
<i>Wahlk. surf.</i> W-2 ( " )	7.05		2.70	9.75
Sample No. 65-11-1 -				
Magnesium Oxide (MgO) = 1.51%				
<i>and is not magnesia, as suspected.</i>				

Fees received for above \$.....

Date.....19.....

April 26 66

Provincial Assayer

(D. A. Hoddle)

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201 0327

AT



**DEPARTMENT OF MINES**  
LABORATORIES BRANCH

C 12343

**CERTIFICATE OF ASSAY**

*The following results have been obtained on samples submitted by:*

**Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario**

<u>Sample No.</u>	<u>Soluble Iron (in HCl) (%)</u>	<u>Al</u>	<u>Combined</u>
V-2-1 ✓	22.0%	2.32	24.32
V-2-2 ✓	10.8	1.47	12.27
<i>Ill.</i> V-2-3 ✓	30.9	2.06	32.96
V-2-4 ✓	19.2	1.84	21.04
V-2-5 ✓	30.5	2.66	33.16
V-2-6 ✓	29.2	2.72	31.92
	<u>Aver. 23.8%</u>	<u>2.16%</u>	<u>25.95%</u>

Fees received for above \$.....

Date..... May 4 ..... 19 66

Provincial Assayer (D. A. Hoddle)

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201 0378

AG





DEPARTMENT OF MINES  
LABORATORIES BRANCH

C 12443

CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

<u>Sample No.</u>		<u>Manganese %</u>
V-1-1	-	2.01
-2	-	2.57
-3	-	1.19
-4	-	1.38
-11	-	3.43
-12	-	3.36
-13	-	5.49
V-1-4	-	1.38
-2-2	-	1.47
-2-1	-	2.32
-2-3	-	2.08
-2-4	-	1.84
-2-5	-	2.66
-2-6	-	2.72

Fees received for above \$.....

Date June 14 19 66

(D. A. Moddle)

Provincial Assayer

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**DEPARTMENT OF MINES**  
LABORATORIES BRANCH

C 12444

**CERTIFICATE OF ASSAY**

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

Sample #	Iron (Fe) (Soluble in HCl)	Manganese (Mn %)
Ralph 1	43.3%	Trace
# H-H-1-1	14.3	1.99
# H-H-1-2	20.6	2.21
# H-H-1-3	17.6	1.99
# H-H-1-4	14.0	1.31
# H-H-1-5	9.8	1.31
# H-H-1-6	10.9	0.90
# H-H-2-1	17.6	1.74
# V-2-9	11.6	1.43
# 7-1	14.1	1.22
# 7-2	16.4	5.00

Fees received for above \$.....

Date June 14 19 66

(D. A. Moddle)

Provincial Assayer

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201-1-1-1















ONTARIO

# DEPARTMENT OF MINES

LABORATORIES BRANCH

C 12795

## CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

A. Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

<u>Sample No.</u>	<u>Iron (Fe) Soluble in HCl</u>
11-23	3.11%
12-2/3 ✓	10.29
12-3 ✓	13.40
12-5 ✓	6.33
12-6 ✓	15.00
12-7 ✓	4.98
12-8 ✓	6.75
12-9 ✓	7.55
12-10 ✓	8.73
13-7 ✓	17.25
13-11 ✓	12.26
13-13 ✓	12.91
11-10-14 ✓	16.22
11-10-154-188	1.98
11-10-131-154	2.46
11-10-75-120	1.82
Hole 66-10-180-200	2.09

*Lugdome*

Fees received for above \$.....

Date..... October 19 19 66

Provincial Assayer (D. A. HODDLE)

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201 0338  
7/11

AP



ONTARIO

# DEPARTMENT OF MINES

LABORATORIES BRANCH

C 12838

## CERTIFICATE OF ASSAY

The following results have been obtained on samples submitted by:

Al Hopkins, 810 Duplex Avenue, Toronto 12, Ontario

<u>Sample No.</u>	<u>Iron (Fe) Soluble in Hcl</u>
11-20 ✓	8.26%
11-21 ✓	4.93
11-23 ✓	10.4
11-24 ✓	4.83
12-1A ✓	13.6
12-4 ✓	17.7
13-1 ✓	9.54
13-2 ✓	12.2
13-3 ✓	12.2
13-4 ✓	11.4
13-5 ✓	11.2
13-6 ✓	8.70
13-8 ✓	16.1
13-9 ✓	16.1
13-10 ✓	14.5

13-12 ✓ - Fees received for above \$ 15.1 .....

Date.....19 66  
November 8

Provincial Assayer (D. A. Huddle)

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AD

2010339

LABORATORY AND RESEARCH BRANCH  
 DEPARTMENT OF MINES  
 9th. FLOOR, WHITNEY BLOCK  
 QUEEN'S PARK  
 TORONTO 182, ONTARIO



REPORT NUMBER

c No 15155

LABORATORY REPORT

DATE Dec. 3, 1969

Telephone: 365-1337

ISSUED TO: A. E. Laudenslager, 555 Burnhamthorpe Rd, Etobicoke, Ontario

	<u>Sample No. 1S</u>	<u>Sample No. 2B</u>	<i>Coupons</i>	<i># equiv.</i>
<i>6</i> { Calcium Oxide (CaO) } <i>Coupons</i>	28.6%	28.1%	2	6
Manganese Oxide (MgO)	21.9%	20.7%		
<i>3</i> <sup>50</sup> Insoluble in HCl	2.26%	5.24%	1	2 <sup>50</sup>
<i>7</i> <sup>50</sup> Reflectance	87.8%	82.0%	$\frac{3}{6}$	7 <sup>50</sup>
<i>16</i> <sup>50</sup>	$\frac{6}{6}$			16

Note: The reflectance values shown are relative to a magnesium oxide standard of 98% reflectance.

Fees Received

12 Coupons Card No. 1665

*D. A. Moddle* (D. A. Moddle)  
 DIRECTOR

Except by special permit, these results must include any

201 0340

AR

LABORATORY AND RESEARCH BRANCH  
DEPARTMENT OF MINES AND NORTHERN AFFAIRS  
9TH FLOOR, WHITNEY BLOCK  
QUEEN'S PARK  
TORONTO 182, ONTARIO



REPORT NUMBER

c18161

LABORATORY REPORT

DATE Nov. 26/71

Telephone: 365-1337

ISSUED TO: E. Laudenslager, Jr., 555 Burnhamthorpe Rd., Etobicoke, Ontario

Footage		Sample Length	Sample No.	Iron(Fe)	Nickel (Ni)
From	To				
129.7	185	5'3"	71-2-1	29.2%	
185	190	5'	71-2-2	29.1	
190	193.6	3'7"	71-2-3	32.8	
260.5	270	9'6"	71-2-4	32.1	
270	275	5'	71-2-5	31.9	
275	280.8	5'10"	71-2-6	37.0	
230.5	241	4'6"	71-3-1	31.1	
12.5	17.5	5'	71-4-1	21.0	Trace
17.5	22.5	5'	71-4-2	18.0	Trace
27.5	32.4	4'10"	71-4-3	26.4	Trace
<del>44.7</del> 44.7	<del>46.5</del> 46.5	5'8"	71-4-5	24.5	Trace
65	70	5'	71-4-6	29.2	Trace
17.5	24	6'6"	71-5-1	20.8	Trace
24	30	6'	71-5-2	22.6	Trace
59.4	60	8"	71-5-3	38.4	Trace
86	90	4'	71-5-4	32.0	Trace
90	95	5'	71-5-5	32.4	Trace
75	100	5'	71-5-6	32.2	Trace
100	104.5	4'6"	71-5-7	30.3	Trace

Fees Received

18 Coupons, Card #2113

Inv. B5976

D.A. Moddle, P. Eng.  
DIRECTOR

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AS

201 0341



LABORATORY AND RESEARCH BRANCH  
 DEPARTMENT OF MINES AND NORTHERN AFFAIRS  
 9TH FLOOR, WHITNEY BLOCK  
 QUEEN'S PARK  
 TORONTO 182, ONTARIO

REPORT NUMBER

c16271

LABORATORY REPORT

DATE March 3, 1972

Telephone: 365-1337

ISSUED TO: Iron City Mines Ltd., 555 Burnhamthorpe Road, Etobicoke, Ontario

<u>Sample No.</u>	<u>Iron (Fe)</u>	<u>Sample No.</u>	<u>Iron (Fe)</u>
70-1-2	28.8%	71-2-15	24.0%
3	28.9	16	25.5
4	32.7	17	21.8
5	31.9	71-3-2	32.8
6	26.2	3	30.8
7	23.7	4	32.0
8	29.7	5	33.1
9	28.2	6	29.0
10	32.1	7	19.6
11	22.9	8	15.0
12	29.8	9	25.5
13	39.2	10	28.3
14	38.7	11	26.0
15	29.6	12	29.4
71-1-1	22.4	13	23.7
2	31.4	14	28.4
3	29.0	15	27.5
4	25.7	16	30.8
5	31.7	17	24.5
6	28.4	18	24.1
7	31.4	19	26.5
8	22.9	20	28.5
9	26.0	21	36.8
10	18.6	22	33.2
11	31.7	23	21.6
71-2-7	27.2	24	28.2
8	28.5	25	21.7
9	32.0	71-2-18	24.4
10	25.0	19	36.4
11	29.8	20	24.1
12	22.7	21	13.2
13	24.5	22	11.5
14	25.5		

Fees Received

continued.....

*A. E. Mearns*  
 DIRECTOR

Except by special permission, no part of these results must include any

201 0342

AT



Issued to: Iron City Mines Ltd., 555 Burnhamthorpe Rd., Etobicoke, Ontario

<u>Sample No.</u>	<u>Iron (Fe)</u>
71-4-7	23.6%
8	29.3
9	27.6
10	25.1
11	24.7
12	30.2
13	30.8
14	29.8
15	30.5
16	29.9
17	32.4
71-5-8	21.9
9	22.6
10	24.2
11	27.0
12	29.6
13	25.8
14	27.0

FEES RECEIVED

18 Coupons, Card #2145

Inv. B6022

*D.A. Moddle*  
.....(D.A. Moddle, P. Eng.)  
Director

201 0343

AU

# TECHNICAL SERVICE LABORATORIES

DIVISION OF BURSNER TECHNICAL ENTERPRISES LIMITED

355 KING ST. W., TORONTO 2B, ONT., CANADA

TELEPHONE: 862-4246 - AREA 416

Representing . . .

JARRELL-ASH COMPANY  
HILGER & WATTS LIMITED  
SADTLER RESEARCH  
ULTRA CARBON CORPORATION  
METALS RESEARCH LIMITED

## CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Mr. M. Murray,  
24 Donalbert Road,  
Islington, Ontario.

REPORT NO.  
T-03862

SAMPLE(S) OF DRILL CORE  
DDH #10

### SEMIQUANTITATIVE ESTIMATES

Copper (Cu)% . . . . . nil

Pulps and rejects are stored for 6 months, then discarded.

DATE August 22, 1966

SIGNED CSJ

C. S. JOYCE, D. Sc.  
Manager of Laboratories

VANCOUVER - TSL LABORATORIES LTD., 325 HOWE ST., VANCOUVER 1, B.C.

AV

201 0344

# TECHNICAL SERVICE LABORATORIES

DIVISION OF BURGNER TECHNICAL ENTERPRISES LIMITED

355 KING ST. W., TORONTO 2B, ONT., CANADA

TELEPHONE: 362-4248 - AREA 416

Representing . . .

JARRELL-ASH COMPANY  
HILGER & WATTS LIMITED  
SADTLER RESEARCH  
ULTRA CARBON CORPORATION  
METALS RESEARCH LIMITED

## CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM **Mr. M. Murray,**  
**24 Donalbert Road,**  
**Islington, Ontario.**

REPORT NO.  
**T-03890**

SAMPLE(S) OF **DRILL CORE**  
**DDH #10**

	Sample IC # 1	Sample	Sample	Sample IC # 1	Sample	Sample
Antimony	-			Phosphorus	-	
Arsenic	-			Platinum	-	
Barium	.01%			Rhenium	X	
Beryllium (BeO)	-			Rhodium	-	
Bismuth	-			Rubidium	X	
Boron	-			Ruthenium	-	
Cadmium	-			Silver	-	
Cerium (CeO <sub>2</sub> )	-			Strontium	-	
Caesium	X			Tantalum (Ta <sub>2</sub> O <sub>5</sub> )	-	
Chromium	.05%			Tellurium	-	
Cobalt	.005%			Thallium	-	
Columbium (Cb <sub>2</sub> O <sub>3</sub> )	-			Thorium (ThO <sub>2</sub> )	-	
Copper	.005%			Tin	-	
Gallium	-			Titanium	.05%	
Germanium	-			Tungsten	-	
Gold	-			Uranium (U <sub>2</sub> O <sub>3</sub> )	-	
Hafnium	-			Vanadium	-	
Indium	-			Yttrium (Y <sub>2</sub> O <sub>3</sub> )	-	
Iridium	-			Zinc	-	
Lanthanum (La <sub>2</sub> O <sub>3</sub> )	-			Zirconium (ZrO <sub>2</sub> )	.005%	
Lead	.002%			ROCK FORMING METALS		
Lithium (Li <sub>2</sub> O)	-			Aluminum (Al <sub>2</sub> O <sub>3</sub> )	10%	
Manganese	1%			Calcium (CaO)	1%	
Mercury	-			Iron (Fe)	5%	
Molybdenum	-			Magnesium (MgO)	3%	
Neodymium (Nd <sub>2</sub> O <sub>3</sub> )	-			Silica (SiO <sub>2</sub> )	H	
Nickel	.005%			Sodium (Na <sub>2</sub> O)	.5%	
Palladium	-			Potassium (K <sub>2</sub> O)	.5%	

Figures are approximate:

C O D E

H - High - 10 - 100% approx.  
MH - Medium High - 5 - 50% approx.  
M - Medium - 1 - 10% approx.

LM - Low Medium - .5 - 5% approx.  
L - Low - .1 - 1% approx.  
TL - Trace Low - .05 - .5% approx.  
T - Trace - .01 - .1% approx.

- : Not detected

Pulps and rejects are stored for 6 months, then discarded.

FT - Faint Trace - approx. less than .01%.  
PT - Possible Trace - Presence not certain.  
~~XXXXXXXXXX~~ - Elements looked for but not found.  
X - Not looked for

DATE August 25, 1966

SIGNED \_\_\_\_\_

C. S. JOYCE, B. S.  
Manager of Laboratories



501 0345

D.D.H. #	Claim #	Drilled on Claim #	Certificate of Assay #	Covering Samples Numbered	Invoice #	Amount Applicable	Covered by Receipt #
8	A	T 44085	C 12603	8-1 to 8-19 incl. (19 Samples)	B 4578	\$ 77.71	3502
10	A	44085	C 12657	10-1 to 10-4 incl., 10-7, 10-12 (6 Samples)	B 4612	18.00	A 48508
10	A	44085	C 12669	10-5, 10-6, 10-8 to 10-11 incl., 10-13 (7 Samples)	B 4618	49.00	A 48508
10	A	44085	C 12795	10-14	B 4676	4.58	08656
10	A	44085	T-03890	I.C. #1 Spectrographic Analysis	19993	15.00	I.C. CK #44
10	A	44085	T-03862	I.C. #1 1 metal semiquantitative estimate	19937	2.00	I.C. CK #44
10	A	44085	A-7358	10-10	B 4612	5.00	A 48508
10	A	44085	B-7799	10-10, 10-12	B 4612	43.00	A 48508
10	A	44085	B-7809	10-8	B 4618	2.50	A 48508
11	A	57411	C 12740	11-1 to 11-5 incl., 11 (101-103.5) (6 Samples)	B 4655	18.00	6 Coupons - Credit Inv. B 4701
11	A	57411	C 12769	11-6 to 11-19 incl. (14 Samples)	B 4664	60.34	08656
11	A	57411	C 12838	11-20, 11-21, 11-23, 11-24	B 4698	17.68	08656
12	A	57411	C 12769	12-1, 12-12	B 4664	8.12	08656
12	A	57411	C 12838	12-1A, 12-4	B 4698	8.84	08656
12	A	57411	C 12795	12-2, 12-3, 12-5 to 12-10 incl. (8 Samples)	B 4676	36.64	08656
13	A	57414	C 12838	13-1 to 13-4 incl., 13-8 to 13-10 incl., 13-12 (10 Samples)	B 4698	44.20	08656
13	A	57414	C 12795	13-7, 13-11, 13-13	B 4676	13.74	08656
13	A	57414	A 7448	13-7 Spectrographic & Fire Assay for Platinum	B 4677	12.50	A 48508
13	A	57414	B 7899	13-7			
HH-1	A	44085	C 12444	HH-1-1 to HH-1-6 incl. (6 Samples)	B 4516	48.00	3502
HH-2	A	44085	C 12444	HH-2-1	B 4516	8.00	3502
HH-2	A	44085	C 12473	HH-2-2 to HH-2-6 incl. (5 Samples)	B 4531	40.00	3502
HH-2	A	44085	C 12603	HH-2-6 to HH-2-8 incl.	B 4578	12.29	3502
70-1	A	57414	T 1629	70-1-1 Spectrographic Analysis	44371	15.00	I.C. CK #164
70-1	A	57414	C 16271	70-1-2 to 70-1-15 incl. (14 Samples) 14 Coupons	Assay Coupon File # 2145	42.00	
71-1	A	57414	C 16271	71-1-1 to 71-1-4 incl. (4 Samples) 4 Coupons	" # 2145	12.00	
71-1	A	57414	C 16271	71-1-5 to 71-1-11 incl. (7 Samples)	B 6022	21.00	A 44387
71-2	A	57414	C 16271	71-2-7 to 71-2-22 incl. (16 Samples)	B 6022	48.00	A 44387
Carried Forward						\$ 683.64	

D.D.H. #	Claim Group	Drilled on Claim #	Certificate of Assay #	Covering Samples Numbered	Invoice #	Amount Applicable	Covered by Receipt #
71-3	A	57414	C 16271	Brought Forward		\$ 683.14	
71-3	A	57414	C 16271	71-3-2 to 71-3-25 incl. (24 Samples)	B 6022	72.00	A 44387
71-4	A	57414	C 16271	71-4-7 to 71-4-17 incl. (11 Samples)	B 6022	33.00	A 44357
71-5	A	57414	C 16271	71-5-8 to 71-5-14 incl. (7 Samples)	B 6022	21.00	A 44387
71-2	A	57414	C 16161	71-2-1 to 71-2-6 incl. (6 Samples) 6 Coupons	Assay Coupons File # 2113	18.00	
71-3	A	57414	C 16161	71-3-1 1 Coupon	" 2113	3.00	
71-4	A	57414	C 16161	71-4-1 to 71-4-3 incl., 71-4-5, 71-4-6 5 Coupons	" 2113	15.00	
71-5	A	57414	C 16161	71-5-1 to 71-5-6 incl. (6 Samples) 6 Coupons	" 2113	18.00	
71-4	A	57414	C 16161	71-4-1 to 71-4-3 incl., 71-4-5, 71-4-6 (5 Samples)	B 5976	20.00	08628
71-5	A	57414	C 16161	71-5-1 to 71-5-7 incl. (7 Samples)	B 5976	28.00	08628
71-5	A	57414	C 16161	71-5-7	B 5976	3.00	08628
71-4	A	57414	M 0018	71-4-4 Spectrographic Analysis + Ni Assay	42847	19.50	IL CR # 169
Grab Samples	A	57425	C 15155	Samples # 15 & 2B 12 Coupons	Assay Coupons File # 1615	32.00	
Total for Group A						\$ 966.14	

\$966.14 ÷ 15 = 64.4 Days

1580 102

AY

# PARKMAN

THE TOWNSHIP  
OF

DISTRICT OF  
NIPISSING

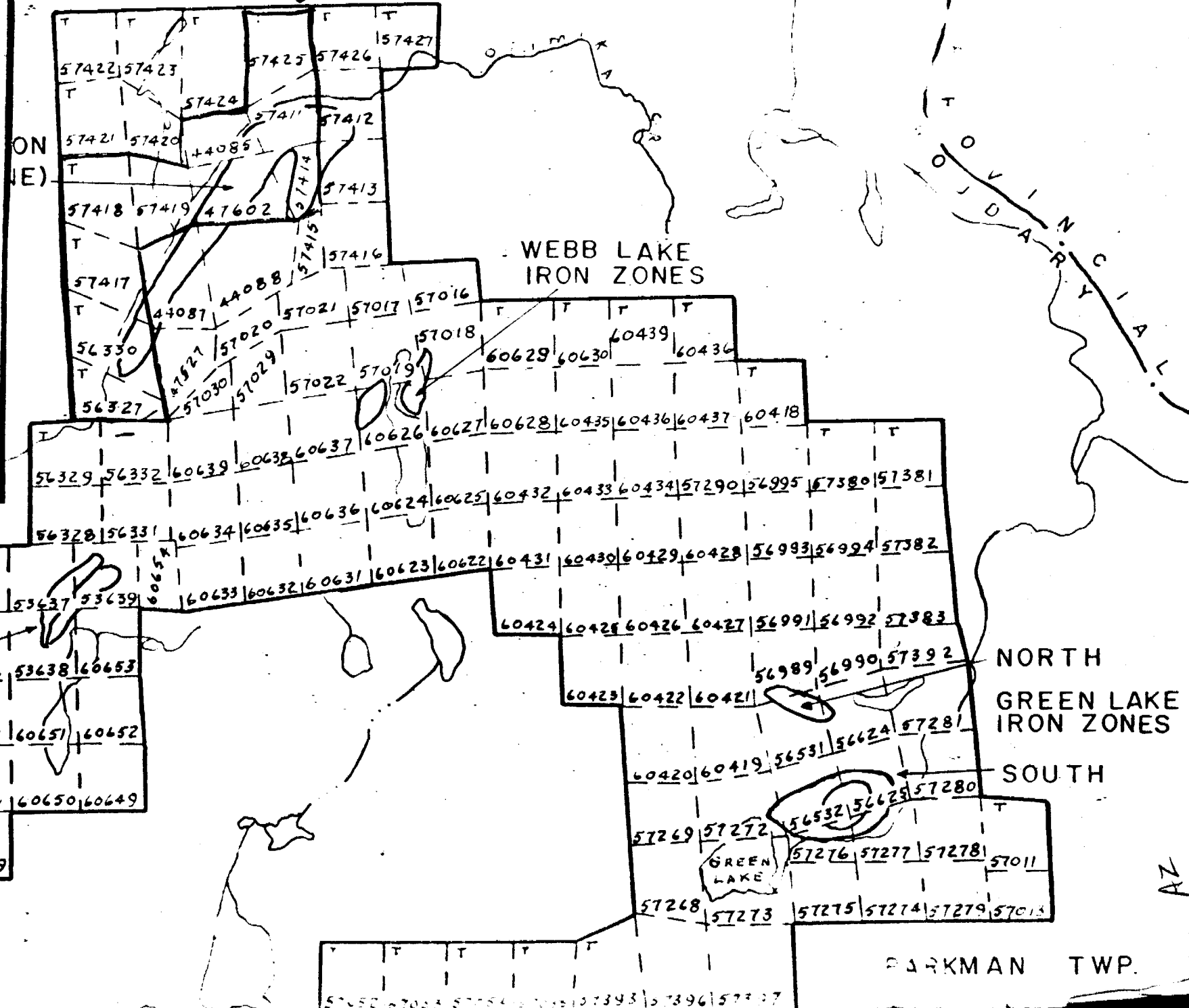
TIMISKAMING  
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

BISHOP IRON DEPOSIT  
(OTTER LAKE)

EMERALD LAKE  
MAGNETIC  
ANOMALY

Claim Group A



2010349

AZ

(E)

LOG OF IRON CITY MINES LTD. DDH. #11

Collar Co-Ords:-	275°N., 125°E.	Claim No.	- T. 57411
Slope Length	- 860'	HD and VD	- 602'
Dip	- -45°	Started	- 31 August 1966
Strike	- 92°	Finished	- 10 September 1966

- 0' - 5' Casing
- 5' - 30' = Bl. Gn., dark grey @ 90° angle to the core.
- 30' - 38' = 8'. Contact zone. Sil. black Gn. Consid. dissem cp., po, py. Sample No. 11-7. over 8'. Est. 10% Fe. Weakly magn. Assays 7.56% Fe.
- 38' - 55' = 17'. B.I.F., sil, banded, light grey, weakly magn. Sample No. 11-6. over 17'. Est. 15% Fe. Assays 14.20% Fe except for:-
- 55' - 56' = 1'. Granite Gn. with mottled pink, porphyroblasts.
- 56' - 80' = 24'. B.I.F., weakly magn. Est. 20% Fe. Sample No. 11-25. Actual Assay across 2.4' is % Fe.
- 80' - 105' = 25'. B.I.F. grey, crystalline, with some dissem. po. & cp. Est. 10% Fe. Sample No. 11-1. Actual Assay across 25' is 8.25% Fe.
- 101' - 103.5' = 2.5'. Sample No. 11-27. for copper. Assays Tr. Cu.
- 105' - 130' = 25'. B.I.F., as above, except for:- Sample No. 11-8. Est. 15% Fe. Actual Assay is 15.70% Fe across 25'.
- 130.0' - 147.5' = 17.5'. B.I.F., with some po. Est. 20% Fe. Sample No. 11-9 across 17.5'. Actual assay is 18.01% Fe.
- 147.5' - 152.5' = 5'. Bi. Garn. Gn.
- 152.5' - 166' = 13.5'. B.I.F. Est. 25% Fe. Actual Assay % Fe. Sample No. 11-26 assays % Fe. across 13.5'.
- 166' - 179.5' = 13.5'. Bi. Gn., grey, cutting core @ 90°.
- 179.5' - 204.0' = 24.5'. B.I.F. est. 20% Fe. Sample No. 11-10 across 24.5' assays 19.30% Fe.
- 204' - 228' = 24'. B.I.F. as above, est. 10% Fe. Sample No. 11-11. Assays 9.06%
- 228' - 253' = 25'. B.I.F. as above with some dissem. po. Est. 20% Fe. Sample No. 11-2. Assays 18.50% Fe.
- 253' - 260' = 7'. B.I.F. as above. Est. 22.5% Fe. Sample No. 11-12. assays 21.01%.
- 260' - 275' = 18'. Bi. Gn. with some fg. garn., dark-grey, fg.
- 278' - 303' = 25'. vfg. Bi. Mb. Gn., lite and dark-grey.
- 303' - 327.5' = 24.5'. B.I.F. as above, with dissem. po. except for:-  
 303' - 306' fg. gneissic dior-dyke.  
 311.0' - 313.5' ditto  
 323' - 324' ditto  
 325.5' - 326.0' ditto  
 This is all part of Sample No. 11-3. Est. 15% sol. Fe. Actual assay 11.80%.
- 327.5' - 351.5' = 24.0'. B.I.F. as above. Est. 12.5% Fe. Actual assay 10.08%. Sample No. 11-13. except for 328' - 332' which is vfg. Bi. Gn.
- 351.5' - 380.0' = 28.5'. B.I.F., lite grey, moderately magnetic. Sample No. 11-14. Est. 15% sol. Fe. Actual assay 12.44%.

cont'd

101 053

360' - 396'	vfg. black Bi-Hb-Garn. Gn.
396.0' - 437.5'	B.I.F. gray, Est. 15% Fe. <u>Sample No. 11-15.</u> Assays 13.72% except for a barren horse of Bi. Gn. from 406.5' - 412.5'.
437.5' - 461.5'	Bi-Garn. Gn., dark grey.
461.5' - 475.0'	= 13.5'. B.I.F. as above. Est. 10% Fe. <u>Sample No. 11-16.</u> Assays 7.93%.
475.0' - 490.5'	= 15.5'. vfg. Bi-Garn-Gn., lite grey.
490.5' - 521.5'	= 31'. B.I.F., lite-grey with consid. po & tr. cp. & born. in slips. Est. 15% Fe. <u>Sample No. 11-17.</u> Assays 14.36% are some flakes of cp. From 502' - 507' is a horse of Bi-Garn. Gn.
at 521.25'	
521.5' - 546.5'	= 25'. B.I.F. as above with some dissem. po. Est. 15% Fe. <u>Sample #11-4.</u> Actual Assay is 14.95% sol. Fe.
546.5' - 571.0'	= 24.5'. B.I.F. as above, with dissem. po thro'out. <u>Sample No. 11-5.</u> Est. 17.5%. Actual assay 16.78% sol. Fe.
571' - 592'	sil. taconite or jaspillite, vs. magn., but not iron ore.
592' - 594'	Bi-Garn. Gn.
594' - 600'	Black graphitic Gn.
600' - 605'	Qtzite or taconite, not worth assaying, too narrow and weak.
605' - 608'	Garn. Gn.
608' - 619'	Qtzite or taconite, as above.
619.0' - 644.5'	= 25.5'. B.I.F. est. 15%. <u>Sample No. 11-18.</u> Assays 13.99%. Has some born on slickensides and includes sev. narrow secs. of Garn. Gn.
644.5' - 670.0'	= 25.5'. Bi-Garn-Mag-Gn., magnetic, grey, banded. <u>Sample No. 11-19.</u> Est. 17.5%. Actual assay 15.22% sol. Fe.
670' - 678'	Garn. Gn., grey, mg.
678' - 711'	fg. dior. Gn. (Amph-Mag-Gn)
711.0' - 732.5'	= 21.5'. Amph-Mag-Gn., sl. magnetic I.F., amphibolite. <u>Sample No. 11-20.</u> Est. 15% sol. Fe. Actual assay is <u>13.6%</u>
732.5' - 742.5'	= 10'. fg. dior. Gn. as above.
742.5' - 753.0'	= 10.5'. Amph-Bi-Mag. Gn., magnetic I.F. with some horn. stain @ 743'. <u>Sample No. 11-21.</u> Est. 12.5%. Assays <u>4.93%</u>
753' - 759'	Bi. Gn.
759' - 767'	= 8' of B.I.F. containing some garns. Est. 15% sol. Fe. <u>Sample No. 11-22.</u> Actual assay is _____ sol. Fe.
767' - 789'	= 22' of fg. dior. Gn.
789.0' - 796.5'	Mu. Gn. (lite and schisty).
796.5' - 812.0'	Bi. Gn., black.
812' - 816'	fg. dior. Gn.
816' - 828'	= 12'. Amph-Bi-Mag. Gn., magnetic I.F. Est. 10% Fe. <u>Sample No. 11-23.</u> Actual assay is 3.11% Fe.
828' - 843'	Hb Xg.-Bi. Gn.
843' - 858'	= 15'. Amphib-Bi.-Magn. Gn., magnetic I.F. Est. 15% Fe. <u>Sample No. 11-24.</u> Actual assay is <u>4.83%</u> sol. Fe.
858' - 860'	Bi. Gn.
860'	End of hole.

NOTE: This hole got stuck at this pt. and was abandoned. Probably I.F. extends deeper. This hole is the second of four holes comprising cross-section A-B



across the North Block of the North Half of the Cook Zone. (holes 10, 11, 12 and 13). Again, the Iron Formation is disappointingly low (14.9% sol. Fe.) but its width encouraging (541'). This hole is 66% I.F. or 1 part I.F. to 0.5 parts waste. Combining the two holes on this cross-section to date, the average grade is 15% with a total width of 884.5' I.F. of a total width of 1375' rock or 64.2% I.F. The whole AXT core iron formation sections were taken for samples, the balance of the core being left by the hole's collar. Assaying was done by Ont. Dept. Mines and all rejects were saved for future concentration tests. The drill swung vert. and drilled hole 12 from same set-up.

The core was logged and sampled by

A. Hopkins, B.A.Sc.,  
Consulting Mining Engineer.

201 0375

## LOG OF IRON CITY MINES LTD. DDH. #12

Collar Co-Ords: - 275°N., 125°E.  
 Slope Length - 601'  
 Dip - -90°

Claim No. - T. 57411  
 Started - 11 Sept. 1966  
 Finished - 21 Sept. 1966

0' - 7'	Casing
7' - 67'	Mu.-Bi. Gn., lite grey, cutting the core at about 45°, slightly magnetic, but not enough to sample ("protore") for assay. There is a crossbedding effect, i.e. 1/4" dark grey magnetic bands are parallel to the core, despite the lite grey schist being at 45° to core.
67' - 85'	60.5' - 64.5' is more magnetic than the rest. 18'. <u>Sample No. 12-1.</u> B.I.F. mildly magnetic, Est. 12.5% Fe. dark grey. Actual assay 11.74% sol. Fe. No. 12-1A. gave 13.6%.
85.0' - 91.5'	Bi. Gn., grey.
91.5' - 93.5'	"Protore", sl. magnetic BIF., but not enough to sample.
93.5' - 111.0'	Dior. Phy. Gn., dark grey, Mg.
111' - 112'	fg. dior. gn.
112' - 137'	25'. <u>Sample No. 12-2.</u> B.I.F. dark grey, est. 12.5% Fe. Actual assay 10.29% sol. Fe.
137' - 162'	25'. <u>Sample No. 12-3.</u> B.I.F. est. 15%. Actual Assay 13.40%.
162.0' - 185.5'	23.5'. <u>Sample No. 12-4.</u> B.I.F. Est. 20% Fe. Actual Assay 12.7%.
185.5' - 194.5'	Andes. Sch.
194.5' - 202.5'	Protore B.I.F., too lean and narrow to sample.
202.5' - 218.0'	Bi. Gn.
218.0' - 226.5'	8.5'. I.F. Amphib. Bi. Gn., but too narrow to sample.
226.5' - 258.0'	fg. dior. Gn., dark grey.
258.0' - 260.5'	B.I.F., but too narrow to sample.
260.5' - 267.0'	Bi. Gn.
267' - 291'	25'. <u>Sample No. 12-5.</u> B.I.F. Est. 10% Fe. Assays 6.33%.
291.0' - 315.5'	24.5'. <u>Sample No. 12-6.</u> B.I.F. Est. 17% Fe. Assays 15.00%.
315.5' - 336.0'	Bi. Gn. except for 323.5 - 324.5' which is B.I.F.
336' - 351'	15'. <u>Sample No. 12-7.</u> B.I.F. hi in Bi. Est. 10% Fe. Assays 4.98%.
351' - 373.5'	Bi. Gn.
373.5' - 377.5'	I.F.-Amph.-Bi. Gn., too narrow to sample.
377.5' - 403.5'	Mu.-Bi. Gn.
403.5' - 428.5'	25'. <u>Sample No. 12-8.</u> B.I.F. Est. 10% Fe. Assay 6.75.
428.5' - 439.0'	Andes. Sch.
439' - 464'	Bi. Gn.
464.0' - 483.5'	Andes. Sch.
483.5' - 486.0'	I.F. Amph.-Bi. Gn., too narrow to sample.
486.0' - 506.5'	Bi.-Amph.-Mu. Gn.
506.5' - 516.5'	10'. <u>Sample No. 12-9.</u> I.F. Amphib-Bi. Gn. Est. 10% Fe. Actual assay is 7.55% sol. Fe.
516.5' - 523.0'	Dior. Gn.
523' - 524'	B.Q.V.
524.0' - 529.5'	Mu. Gn., lite grey.
529.5' - 530.5'	Bi. Gn., black.
530.5' - 531.5'	Dior. Gn.
531.5' - 539.5'	I.F. Amph.-Bi. Gn., weakly magn., too narrow to sample.
539.5' - 545.0'	Dior. Gn.

cont'd

201 0376

BV

545.0' - 548.5' I.F. Amph.-Bi. Gn. Est. 10%. Too narrow to sample.  
548.5' - 557.0' Dior. Gn.  
557' - 559' More I.F. as above.  
559.0' - 574.5' Dior. Gn.  
574.5' - 592.5' = 18'. I.F. Amph.-Bi. Gn. Est. 10% Fe. Sample No. 12-10.  
Actual Assay is 8.73% sol. Fe.  
592.5' - 599.0' Dior. Gn.  
599' - 601' Bi. Gn.  
601' End of Hole.

NOTE:-

As drill rods stuck here in mud, the writer gave the drillers permission to abandon the hole for fear all the rods were lost. The drill was then moved ahead (East) 680' to 45° hole #13 to complete this cross-section A-B.

As can be seen on drawing No. 66-5, this vert. hole No. 12 is located on a barren bay or infold of Mu.-Bi.-Gn., and would not be expected to cut too much I.F.

Actually it intersected 209' of I.F. averaging 10.85% sol. Fe. out of a total of 601'. This gives 34.7% I.F. or 1 part of I.F. to 2 parts of waste. If the hole could have proceeded deeper, no doubt more I. F. would have been intersected.

The AXT whole I.F. core sections were sampled and assayed by the Ont. Dept. Mines. The balance or waste sections remain stored at the hole's collar.

The core was logged and sampled by,

A. Hopkins, B.A. Sc.,  
Consulting Mining Engineer.

201 6377

EE

LOG OF IRON CITY MINES LTD. DDH. #13

Collar Co-Ords:- 252°N., 807°E.  
Slope Length - 656'  
Dip - 45°  
Strike - 78°

V.D. & H.D. - 459'  
Claim No. - T. 571.11  
Started - 25 Sept. 1966  
Finished - 9 Oct. 1966

0' - 10'

Casing

10' - 470.5'

460.5'. I.F. i.e. magnetite - rich Amph.-Bi. Gn., mildly magnetic, fg.-cg., dark grey to black, cutting core @ about 75°. Contains much dissem. po & py., and tr. hema & cp., consid. silica in places. The best mineralized section was sample No. 13-7, which was assayed for gold and silver and a spectrographic analysis made. If it assayed anything economically, then all the others should be similarly tested. If not, forget the silicification and sulf. mineralization.

Sample #	From	To	Width	Est.	% Fe. Assay	Remarks
13 - 1	10'	34.5'	24.5'	10%	8.90	
13 - 2	34.5'	59.5'	25'	15	12.92	
13 - 3	59.5'	84.0'	24.5'	24.5	11.42	
13 - 4	84'	109'	25'	15	14.58	
13 - 5	109'	134'	25'	15	11.2	
13 - 6	134'	159'	25'	17.5	8.79	Contains some po.
13 - 7	159.0'	184.5'	25.5'	20	17.95	(25%?) much po., tr. cp. Gave tr. Au., tr. Ag., Tr. Cr., tr. Co., tr. Cu., Tr. Pb., Low in Mn., tr. Mo., tr. Ni., tr. Ti., Tr. Va. & tr. Yt.
13 - 8	184.5'	209.0'	24.5'	20	16.1	(25%?) much po., tr. cp.
13 - 9	209'	234'	25'	20	16.1	ditto
13 - 10	216.0'	216.5'	0.5'	- A Q.		Veinlet cutting core @ 75°.
13 - 11	234.0'	257.5'	23.5'	20	14.5	Much po., tr. cp.
13 - 12	257.5'	283.0'	25.5'	15	12.26	20% ? po.
13 - 13	283'	308'	25'	15	15.1	15% po.
13 - 14	308.0'	332.5'	24.5'	15	12.91	10% po.
13 - 15	332.5'	367.0'	34.5'	10		
13 - 16	367.0'	401.5'	34.5'	12.5		
13 - 17	401.5'	436.0'	34.5'	15.0		
13 - 17	436.0'	470.5'	34.5'	17.5		
TOTAL	10.0'	470.5'	460.5'			

470.5' - 656' Amphib. Gn., hi in Bi., gneissosity @ 80° to core,  
185.5' non-magn., dark grey, fg., assumed footwall.  
656' End of hole.

BT

201 0378

NOTE:-

The writer had expected the iron formation to continue to approximately 653' down this hole. Instead it stopped at 470.5' or 182.5' short. This is probably due to the assumed surface F.W. contact of the I. F. being further west than pictured on drawing No. 66-5 and the dip averaging about  $40^{\circ}$  instead of  $45^{\circ}$  as previously assumed.

Again, the I. F. widths are excellent, but the grade perilously low. The total I. F. width in this hole is a continuous 460.5' or 99% of the total I. F. section, with only minor widths of waste horses.

This hole completes cross-section A-B through the North Block of the North Half of the Cook Zone. (see Vertical Cross Section drawing No. 66-18). The whole AXT. I.F. core sections were sampled for assay by the Ont. Dept. Mines, the balance (waste) of the core being left stored by the hole's collar. The core was logged and sampled by,

---

A. Hopkins, B.A. Sc.  
Consulting Mining Engineer.

EE

201 0379

LOG OF D.D.H. # III-1

Iron City Mines Limited - Cook Zone

<u>Collar</u> <u>Co-Ordina</u>	<u>Dip</u>	<u>Strike</u>	<u>Depth</u>	<u>Claim No.</u>	<u>Started</u>	<u>Finished</u>
393°W, 561°N	-	-90°	102'	T 44085	<u>1 May 66</u>	<u>15 May 66</u>

0' - 39.9' Limestone (LS.), silicified, dark-grey, with a salt & pepper appearance. The foliations cut the core at about 45°.

39.9' - 102.0' B.I.F., magnetic, f.g. dark grey, with occas. haema, masses, and g.n. bands up to 2 feet wide, and some small red garnets.

73' - 77' No core here only black mud, which was washed away and lost.

102' End of hole (still in B.I.F.)

Sampled for assay:-

<u>Hole No.</u>	<u>from</u>	<u>to</u>	<u>width</u>	<u>Est. Fe.</u>	<u>+ Zn</u>	<u>Total</u>	<u>Remarks</u>
III-1-1	39.9'	48.0'	8.1'	12.3	1.99	16.29	est. 20% Fe.
III-1-2	48'	60'	12'	20.6	2.21	22.81	est. 21% Fe.
III-1-3	60'	72'	12'	17.6	1.99	19.59	est. 22% Fe.
III-1-4	72'	84'	12'	14.0	1.33	15.33	est. 23% Fe.
III-1-5	84'	93'	9'	9.8	1.31	11.11	est. 22% Fe.
III-1-6	93'	102'	9'	10.9	0.90	11.80	est. 20% Fe.

NOTE:

The whole core was sampled for assay. Assay rejects are being retained for future checks and concentration tests. The balance of the core is stored at Hardie's campsite at Brandy's Field on the North bank of Opimika Creek on claim No. T 57427. The hole was drilled with a Winkie drill giving EXT core. The core was logged by

*A. Hopkins*  
A. Hopkins, B.A.Sc.  
Consulting Geologist.

LOG OF IRON CITY'S DDH. # HH-2

<u>Collar</u>	<u>ords.</u>	<u>Dip</u>	<u>Depth</u>	<u>Claim No.</u>	<u>Started</u>	<u>Finished</u>
30°N.	566°W	-90°	101'	T.44085	<u>21.5.66</u>	<u>24.5.66</u>

0' - 61' B.I.F., magnetic, fg., dark grey, with occas. hema masses & masses & Gn. bands up to 2' wide, containing small red garnets. The foliation cuts the drill core at about 45°. Samples cut:-

<u>Sample No.</u>	<u>from</u>	<u>to</u>	<u>width</u>	<u>Est. % Fe.</u>	<u>Actual Assay</u>		
					<u>Fe</u>	<u>Mn.</u>	<u>Combined</u>
HH. 2-1	0'	3'	3'	20%	17.6	1.74	19.34
HH. 2-2	3'	15'	12'	25%	25.2	1.65	26.85
HH. 2-3	15'	27'	12'	22.5%	23.2	1.34	24.54
HH. 2-4	27'	44'	14'	20	20.1	1.42	21.52
HH. 2-5	44'	61'	17'	17.5%	16.9	0.87	17.77
HH. 2-6	61'	73'	12'	10	9.0	0.52	9.52
HH. 2-7	73'	85'	12'	10	3.75		3.75
HH. 2-8	85'	101'	16'	10	9.97		9.97
HH. 2-6					6.97		6.97

61' - 85' Gneiss (Garn. - Bi. - Hb - magnetite) sl. magnetic. a lean I.F.

85' - 101' Gneiss (Bi. - Hb.) cg., dark grey, "salt & pepper". non magnetic.

101' End of hole.

NOTE:-

This standard EKT - size core was sampled whole (not split), and the iron sections assayed by the Ont. Dept. Mines. The bal. of the core is stored at the campsite at Brandy's Field. The core was logged by

*A. Hopkins*  
A. Hopkins, B.A.Sc.

D.D.H. #	Claim Group	Drilled on Claim #	Certificate of Assay #	Covering Samples Numbered	Invoice #	Amount Applicable	Covered by Receipt #
2	B	T 57276	C 12104	2-1	5 Coupons	654824-654827 + Card 141	12.00
2	B	57276	A 7015	2-1 Spectrographic	2 Coupons	Card 141	5.00
2	B	57276	C 12131	2-4, 2-5, 2-6, 2-7 (4 Samples)	38 Coupons	Cards 260, 261 + 264	60.00
2	B	57276	A 7034	2-3, 2-5 Spectrographic	4 Coupons	Card 262	10.00
2	B	57276	A 7035	2-6, 2-7 Spectrographic	4 Coupons	Card 262	10.00
2	B	57276	C 12101	2-2	1 Coupon	654823	3.00
3 A	B	57276	C 12329	3 A-1		B 4473	8.00
3 A	B	57276	C 12329	3 A-1	Grinding charge	B 4477	1.66
3 A	B	57276	B 7581	3 A-2		B 4473	2.50
7	B	56531	C 12444	7-1, 7-2		B 4516	16.00
7	B	56531	C 12473	7-3, 7-4, 7-5, 7-6 (4 Samples)		B 4531	32.00
V-1	B	56625	C 12321	V-1-1 to V-1-4 incl., V-1-11 to V-1-14 incl. (8 Samples)		8 Coupons Card 331	24.00
V-1	B	56625	C 12443	V-1-1 to V-1-4 incl., V-1-11 to V-1-14 incl. (8 Samples)		B 4516	40.00
V-1	B	56625	C 12329	V-1-2 (second part), V-1-5 to V-1-10 incl., V-1-15 (8 Samples)		B 4473	64.00
V-1	B	56625	C 12329	V-1-2 (second part), V-1-5 to V-1-10 incl., V-1-15 Grinding Chg		B 4477	13.28
V-2	B	56625	C 12343	V-2-1 to V-2-6 incl. (6 Samples)		B 4477	18.00
V-2	B	56625	C 12343	V-2-1 to V-2-6 incl. Grinding Charge		B 4477	9.00
V-2	B	56625	C 12443	V-2-1 to V-2-6 incl. (6 Samples)		B 4516	30.00
V-2	B	56625	C 12412	V-2-7, V-2-8		B 4502	16.00
V-2	B	56625	C 12444	V-2-9		B 4516	8.00
						\$ 382.44	

from schedule of fees

$$*382.44 \div 15 = 25.5 \text{ days}$$

2010353  
B/A



THE TOWNSHIP  
OF  
**PARKMAN**

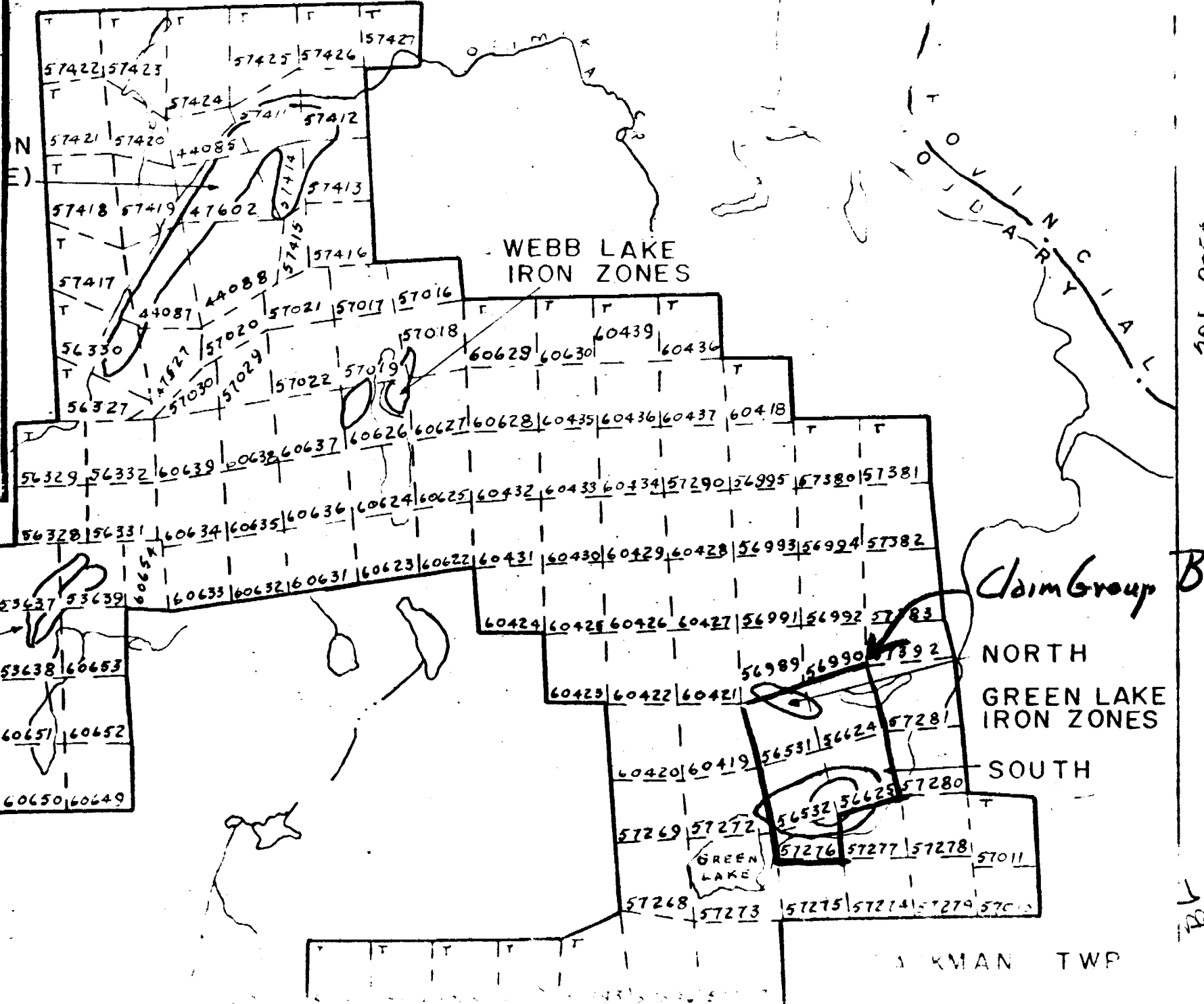
DISTRICT OF  
NIPISSING

TIMISKAMING  
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

BISHOP IRON DEPOSIT  
(OTTER LAKE)

EMERALD LAKE  
MAGNETIC  
ANALY



201 0352

18

LOG OF IRON CITY N.L. D.D.H. #2

Collar Co-Ords: 64'S. 2105'W. Claim No. T.57276 Strike 55° Dip -45°N. Proposed Length 1500' Actual Length 962'

Hole Started: 30 November 1965 H.D. 673.4'  
 Hole Finished: ~~8 January 1966~~ V.D. 673.4'

- 0' - 132.0' Casing (sandy clay, sand, gravel, quicksand, boulders).
- 132.0' - 152.8' Garnetiferous gabbro gneiss. Dark, basic, slightly magn. med. coarse gr. Iron-rich, with foliation at 75° to the core. It also contains much Hb. and some Py and Bi and plag. It is cut by grey f.g. narrow altered folsite str. Specimen sample of the whole core from 135' to 140' gave: (Sample No. 2-1) Iron (soluble in 1:1 HCl) 9.1%; Phosphorus Pentoxide 0.01%; Sulphur 0.21%; Chromium 0.01%-0.10%; Copper 0.01%-0.10%; Lead about 0.17 Manganese 0.5%-5.0%; Nickel, less than 0.01%; Titanium, less than 0.10%.
- 152.8'-170.0' Bi-Hb gn.-some garnet, f.g., non-magn.
- 170.0'-173.8' Garnet of gabbro-gn, as above, with more py. & Q. C.G.
- 173.8'-235.4' Basic greenstone schist, probably basalt, f.g., dark grey-green.
- 235.4'-236.6' Garnetif. gn.
- 236.6'-242.0' Basalt, coarser-grained than above.
- 242.0'-262.7' Alternating bands (up to 1' wide) of dense f.g., black magn. rock and c.g. grey-green basalt. More magn. & homogen. than Sample #2-1. It contains mostly Hb and Mag. Sample #2-2 from 255'-260' gave 17.80% sol. iron.
- 261.4'-262.0' Black magn. sand or sludge.
- 262.7'-270.0' Basalt Sch. f.g.
- 270.0'-285.0' Lamp dyke, f.g., alt.
- 285.0'-287.0' Breccia.
- 287.0'-322.5' Garnetif-syen - or dior-gn. Dk. rose and black, becoming coarser-gr. in centre.
- 322.5'-438.0' Dense dark basic basalt-gn., m.g., non-magn., becoming finer-grained with depth.
- 438.0'-572.0' Diorite - v.f.g., probably Keewatin, dark grey, salt & pepper, non-magn.
- 572.0'-576.6' Syen. - fresh injection into the dior. Contains some pink ortho-phenos. up to 1/2". Coarsest at 573.5'.

201 0364

- 576.6'-642.0' Gn. or Dior(?) v.f.g., dense black igneous rock, composed mostly of Hb.Bi, & Aug., non-magn. Could be called a Hb-Bi-Gn. If it were not for the absence of plag., it could be called a.v.f. g. dior. Cut by the odd narrow pegma. or micropeg. or folsite dyke, e.g. at 605.0'. It is more gneissic between 629' and 642feet.
- 642'-692' Biotite-graph. sch. or gn. Contains a soft black but sparkling sub-metallic grey-silver mineral that is not moly. (probably graph.) Non-magn. Sample #2-3 from 642.0'-642.4' gave: Mn: 0.05%-0.50%; Cr. 0.01%-0.10%; Ti. 0.5%-5.0%; V. 0.01%-0.10%; Zr. 0.01%-0.10%.
- 692.0'-697.2' Soft unconsol. fault gouge, black, f.g., graph.
- 697.2'-700.0' Bi-graph. consol. gn.
- 700.0'-800.0' Magn. B.I.F. Starts off low grade and very typ. banded, becoming denser, more massive, and more magn. with depth, contains some small garnets.
- |               |                   | <u>Ma</u> | <u>Ti.</u>                        |
|---------------|-------------------|-----------|-----------------------------------|
| 700.0'-725.0' | #2-4. % sol. iron |           |                                   |
| 725.0'-750.0' | #2-5. % sol. iron | 0.5-5.0%; | Pulps & rejects saved 0.01%-0.10% |
| 750.0'-775.0' | #2-6. % " " "     |           | 0.01%-0.1%                        |
| 775.0'-800.0' | #2-7. % " " "     |           | 0.01%-0.1%                        |
- 800.0'-811.0' Mag. B.I.F. as above, cutting core obliquely.
- 811.0'-820.5' Gn. as above.
- 820.5'-825.5' Magn. B.I.F. cutting core obliquely.
- 825.5'-962.0' Dior., f.g. as above.
- 962.0' End of hole. Dip tests were requested at 500' and at bottom of this hole, but were apparently overlooked.

It was decided that the hole was undercutting the magn.anom. which must dip N. about 60°, and that a flat hole drilled from Green Creek further east about 800' thru the centre of the anomaly would have better results, so this hole was abandoned here, and the drill moved downstream to set up #3.

Core stored at Opimika Camp, except for that sampled, whose rejects and pulps have been saved in storage by Ont. Dept. of Mines, for possible future mill tests or checking.

Core logged by:

Albert Hopkins, B.A.Sc.

*A. Hopkins*

LOG OF HOLE #2 (after New Year's, 1966)

Recommended night shift Tuesday, January 4, 1966.

800'-811' Mag. IF.  
811'-820.5' Gneiss  
820.5-825.5' Mag. IF.  
825.5-962.0' Diorite.

962.0' End of hole, on Saturday, January 8, 1966.

A. Hopkins, B.A.Sc.

201 0366

LOG OF IRON CITY M.I. D.D.H. #3-A  
GREEN CREEK

Collar Co-Ords: 7075'S  
1710'W

Strike: 22°  
Dip: -58°N

Proposed Length: 1000'  
Actual Length: 862'

Started: 18-1-66 H.D. 457'  
Finished: 30-1-66 V.D. 736'

Claim Number: T.57278

This 323' was on claim No. T.56625.  
 This 539' was on claim No. T.57278.

0' - 142' 142' - 161'  161' - 190' (29') 190' - 216' (26') 216' - 282' 282' - 285' 285' - 305' 305' - 307' 307' - 520' 520' - 528'  528' - 604' 604' - 631'  631' - 653' 653' - 667' 667' - 690' 690' - 720'  720' - 759'  759' - 781.5' 781.5' - 796' 796' - 799' 799' - 825' 825' - 862' 862'	<p>Casing. This hole is 75' ahead of abandoned Hole #3. B.I.F. - magnetic. Cuts core at about 5'. Interbedded with Bi. gn. Est. 22% Fe. Sample #3A-1 across 19' = 26.3% Fe plus 1.48 mn.</p> <p>Bi orthogn. Probably this is the Green Creek F.W. Black, interbedded or interbanded with pegmas, Bi. sch., and aplite dykelets. (Typical Grenville formations.)</p> <p>Meerschum-coloured carb-Q-Bi-Chlor. sch. interbanded with pegmas and Bi. Gn. (Type "2M")</p> <p>Dior. Gn., fig., very dark grey.</p> <p>Breccia (Q. &amp; f.g. dior. gn.)</p> <p>Dior, f.g., very dark.</p> <p>Chlor. Sch., light green.</p> <p>Dior, f.g., very dark, homogen.</p> <p>(Sample #3A-2 across 8' for Au.) Tr. Av. Barren-looking Q. breccia.</p> <p>Bi-Hb. (lava?) sch. Med.-(occas. light-green.</p> <p>Meerschum coloured Q-calc. band, containing some streaks of dark-coloured Bi-Hb-Chlor. Sch.</p> <p>Hb-Bi Gn.</p> <p>"Meerschum" as above.</p> <p>F.g. dior. or m.g. andes., dark grey in colour (Type "5")</p> <p>"Meerschum", interbanded with chlor-Hb.-Bi.Sch. and some Q. str. and brecc. (Type "2M")</p> <p>F.g. Dior. as above, cut by gran. pegma. dykelets (5 and 11) and Q. str.</p> <p>"2M"</p> <p>"5" and "11"</p> <p>"2m"</p> <p>Bi. Gn. ("1")</p> <p>"2m"</p> <p>End of hole.</p>
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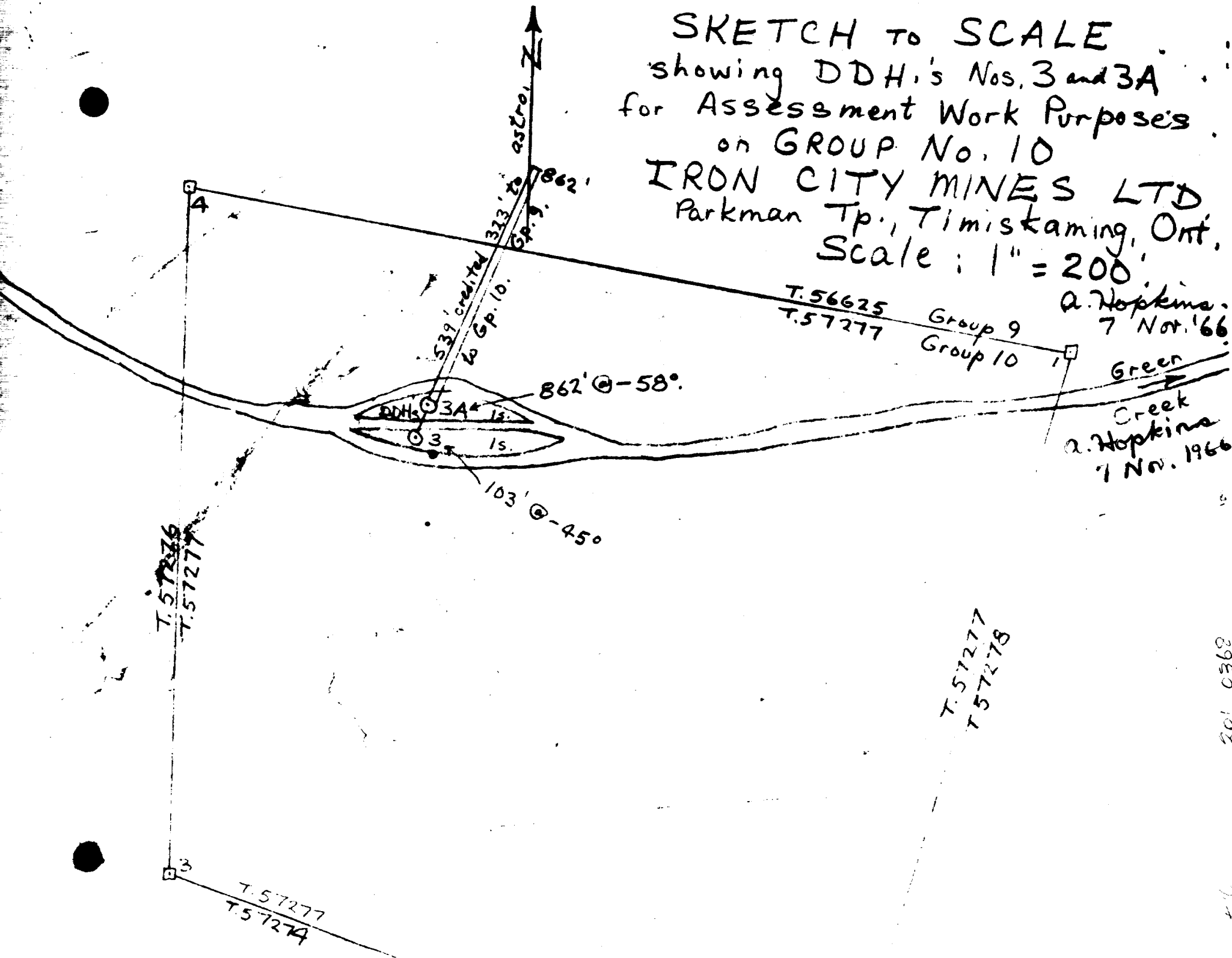
**NOTE:** Hole #3 @ -45° was abandoned in oh. at 103'. The rig was then moved ahead 75' along the same strike (22°) to the collar set-up of this hole (3-A), and this time we were successful in reaching bedrock from an island in Green Creek at 142' @ -58°. However the hole was steeper than we really wanted it, and it remained under the main iron formation which dips away from it. The core is AIT size and is stored at Barnett's Opimika Camp in Parkman Township on Troutbait Lake. Whole core samples were taken of the Iron Formation. Core was logged by A. Hopkins, B.A.Sc.

*A. Hopkins*

201 0367

BT

SKETCH TO SCALE  
 showing DDH's Nos. 3 and 3A  
 for Assessment Work Purposes  
 on GROUP No. 10  
 IRON CITY MINES LTD  
 Parkman Tp., Timiskaming, Ont.  
 Scale: 1" = 200'



201 0362  
 40

LOG OF IRON CITY'S DDH. #7

Collar	Co-Ords:-	Strike	Dip	Slope Length	Claim No.	Started	Finished
4575'S.	90°E	205°	-45°	836'	T.56531	20.5.66	10.6.66.

H.D. and V.D. = 585'

0' - 5' Casing.  
 5' - 208.5' Granite Gneiss (Gran. Gn.), grey to salmon pink, fg. containing much Mu. Gneissosity is from 70° to 80° to the core direction except for:-  
 169.5' - 174.2' Haematite & rust, red & massive, cavy, blocky, & non-mag.  
 189.0' - 189.5' " " " " "  
 204.0' - 204.1' " " " " "  
 208.5' - 208.6' " " " " "  
 208.6' - 217.0' Slate or hornfels, black, vfg.  
 217.0' - 261.5' = 44.5' of B.I.F. magn., grey, starting off low grade, perhaps 15% Fe increasing to an est. 30% with depth. It contains the occas. hema. seam, cutting the core at an angle of 60°.

Sample	from	to	width	Est. Fe %	Actual Assays.		
					Fe	Mn	Combined
#7-1	217'	235'	18'	15%	14.1	1.22	15.32
#7-2	235'	253'	18'	17.5%	16.4	5.08	21.48
#7-3	253.0'	261.5'	8.5	20%	16.9	7.80	24.7

261.5' - 274.0' Bi-Hb. Gn., dark grey, foliated  
 274' - 288' B.I.F. as above, est. 22.5% sol. Fe. (Magn.)  
 Sample #7-4 from 274' to 288' - 14', assayed 19.1% Fe, 4.4% Mn = combined 23.5%  
 288' - 308' Bi. Gn.  
 308.0' - 316.5' Qtzite, impure, light grey.  
 316.5' - 325.0' Bi. Gn.  
 325' - 366' = 41' B.I.F. magn., as above, estim. 25% sol. Fe.

Sample	from	to	width	Actual Assays		
				Fe	Mn	Combined
#7-5	325.0'	345.5'	20.5'	29.8	3.72	33.52%
#7-6	345.5'	366.0'	20.5'	23.7	2.44	26.14%

366' - 387' Bi. Gn. with some sl. magn'ism. Carbonaceous, f.g., dark grey material  
 287' - 397' Qtzite as above.  
 397' - 405' fg. Bi. Gn. & Greywacke (GW) interbedded, dark grey,  
 405.0' - 445.5' Qtzite, very impure, cuts core at 75° angle.  
 445.5' - 460.0' fg. interbedded Bi. Gn. & Gw., dark grey.  
 460' - 463' Qtzite as above.  
 463.0' - 476.5' Gw.  
 476.5 - 493.0' Qtzite as above.  
 493' - 510' Alt. bands of Gw. & Qtzite.  
 510' - 532' Qtzite, almost white & pure.  
 532' - 535' Gw.  
 535.0' - 543.5' Qtzite, pure.  
 543.5' - 550.0' Bi. Gn., fg., dark-grey.  
 at 550.0' 1" red hema.  
 550' - 552' Talc schist, a green-white carb.  
 552.0' - 556.5' fg. Bi. Gn.  
 556.5' - 558.0' Qtzite  
 558' - 578' fg. Bi. Gn.

201 0369

578' - 590'	Qtzite, white, pure.
590' - 603'	Qtzite, grey, impure.
603' - 660'	Arkose & impure Qtzite, sl. rosy, interbedded.
660' - 664'	Anorthosite Gn.
664' - 686'	Qtzite, grey, very impure.
686.0' - 687.5'	Qtzite, pure.
687.5' - 719.0'	Qtzite, v. impure, grey, interbedded with Gw.
719' - 721'	Sch. (chlor - hb. - calc. - Bi.)
721' - 730'	Bi. Gn., dark, foliated, fg., cutting core @ 75°
730' - 786'	Andes. Sch. cut by many pink calc. strcs., with much Bi. & lesser Hb. light grey, cuts core @ 75°
786' - 826'	Dior. Gn. as above, dark grey, vfg., cutting core @ 75°
826' - 832'	Breccia of Bi. Gn., Q., & pink pegma.
832' - 836'	Hb. Gn. & some Bi. Q., & pegma., vfg., light grey & pink
836'	End of hole, cuts rock foliation @ 85°

NOTE:-

This hole was designed to intersect the NE flank of the Green Lake folded B.I.F. being collared on the only outcrop in the vicinity. Although the grade was fair (averaging about 23% combined Fe & Mn., the total I.F. width was disappointing low @ about 100' out of 150' total under the 35<sup>k</sup> gamma mag. readings. Whole A core assayed. Bal. stored at collar. Core logged & sampled by

A. Hopkins.

*A. Hopkins.*



## LOG OF IRON CITY MINES LTD. D.D.H. #1

COLLAR CO-ORDS: 683, 13W.

CLAIM NO. 7. 56825

PROPOSED LENGTH: 870'

STARTED: 16 March 1966

ACTUAL LENGTH: 996'

FINISHED: 1 April 1966

DIP: -90°  
STRIKE: —

0' - 137.0' Casing. A 3" casing pipe was forced down with a 300# hammer. Black Alberta mud was on hand, but was not required.

137.0' - 174.5'  
(37.5') Banded Iron Formation (B.I.F.) cutting core at about 30°. Not very siliceous, but contains many bands of Biotite and Garnet Gneiss (Bi & Garn. Gn.) Soluble iron (Sol.Fe.) content is estimated (est.) at 22%.

174.5' - 198.0'  
(23.5') Barren Diorite gneiss (dior.gn.) or spher. gabbro schist (sch.)

198.0' - 262.0'  
(64') B.I.F. Contains some haematite and garnet (haem. & garn.). Est. 20% Fe.

262.0' - 303.0'  
(41') Bi-Hb gn., black, barren. Contains some pagna. & py.

303.0' - 366.0'  
(63') I.F., but it appears to be a replacement of lava or limestone by fig. magnetite (magn.), green in colour. Est. 20% Fe.

366.0' - 381.0'  
(15') Bi-gn. - dark grey to black.

381.0' - 403.0'  
(22') I.F. as in 303'-366'. A low-grade f.g. lava type - est. 20% Fe.

403.0' - 427.0'  
(24') Bi-garn. gn.

427.0' - 440.0'  
(13') Chlorite lava sch. - light green.

440.0' - 442.0'  
(2') Felsite or lamprophyre (lamp.) dyke, altered (alt.) with some bull quartz.

442.0' - 459.0'  
(17') I.F. Green and black lava and Bi. type. Est. 20% Fe.

459.0' - 484.0' I.F. Massive, black, f.g., est. 30% Fe.

484.0' - 672.0' 150.0' Dior. Gn., f.g., high in Bi. & Mn. Dark grey-green to black. Some red hematite stain at 540.0'.

672.0' - 703.0' 31.0' B.I.F. Est. 25% Sol. Fe.

703.0' - 722.0' 19.0' Andes. sch., rich in Bi.

722.0' - 752.5' 30.5' B.I.F. Est. 20% Fe.

752.5' - 799.5' 27.0' Mu-Bi-Sch.

799.5' - 807.0' 27.5' Gran. Gn. pink.

201 6359

807 - 817.0' 10.0' Gran. Gn. & Mu. lit. par-lit.  
 817.0' - 821.0' 4.0' Ground up Mu-Bi Sch.  
 821.0' - 996.0' 49.0' Gran. Gn. salmon-pink.  
 996.0' END OF HOLE. Acid dip test here reads: -89°

HOLE V-1 SAMPLES CUT FOR ASSAY

<u>FROM</u>	<u>TO</u>	<u>WIDTH</u>	<u>SAMPLE #</u>	<u>% SOL FE</u>	<u>% Mn</u>	<u>COMBINED %</u>
137.0'	155.0'	18.0'	V-1-1	31.4	2.01	33.45
155.0'	174.5'	19.5'	V-1-2	31.7	2.57	34.27
198.0'	212.5'	14.5'	V-1-3	29.8	1.19	30.99
212.5'	237.0'	24.5'	V-1-4	30.6	1.38	31.98
237.0'	262.0'	25.0'	V-1-5	32.5	1.58	34.08
303.0'	311.5'	8.5'	V-1-7	25.9	1.28	27.18
311.5'	336.5'	25.0'	V-1-8	22.8	2.32	25.12
336.5'	366.0'	29.5'	V-1-9	21.3	5.99	27.29
381.0'	403.0'	22.0'	V-1-11	29.7	3.43	33.13
442.0'	459.0'	17.0'	V-1-6	14.9	3.28	18.18
459.0'	484.0'	25.0'	V-1-10	23.7	3.74	27.44
672.5'	687.5'	15.5'	V-1-12	23.8	3.36	27.16
687.5'	703.0'	15.5'	V-1-13	20.7	5.49	26.19
722.0'	740.0'	18.0'	V-1-14	19.2	6.20	25.40
740.0'	752.5'	12.5'	V-1-15	10.2	1.38	11.58

TOTAL B.I.F. Arith. Aver. = 24.55 ± 3.01% = 27.56%  
 Cut in this hole 290.0' averaging 27.56% combined

RECAP OF THIS HOLE V-1

<u>FROM</u>	<u>TO</u>		<u>WIDTH</u>	<u>% COMBINED</u>	<u>WIDTH X %</u>
137.0'	174.5'	ore	37.5'	33.86	1270
174.5'	198.0'	waste	23.5'		
198.0'	262.0'	ore	64.0'	32.35	2070
262.0'	303.0'	waste	41.0'		
303.0'	366.0'	ore	63.0'	26.53	1670
366.0'	381.0'	waste	15.0'		
381.0'	403.0'	ore	22.0'	33.13	730
403.0'	442.0'	waste	39.0'		
442.0'	484.0'	ore	42.0'	22.81	617
484.0'	672.0'	waste	188.0'		
672.0'	703.0'	ore	31.0'	26.67	827
703.0'	722.0'	waste	19.0'		
722.0'	752.5'	ore	30.5'	18.49	565
752.5'	870.0'	waste	<u>117.5'</u>		
			290.0'		7749

.. weighted average of ore sections =  $\frac{7749}{290.0}$  = 26.7% combined

BT

2010260

*Albert Hopkins*  
 Albert Hopkins, B.A.Sc.

On Plan



2.905

Checked

In File

File No.

157550

ONTARIO  
**RIGHTS**  
Mining Leas  
The Mining A



31L14SW0003 2.905 PARKMAN

900

(21 year lease under Section 100a)

**RIGHTS**  
Mining Lease No. **102042**

Lessee **IRON CITY MINES LIMITED, with its  
head office in the Municipality of  
Metropolitan Toronto, in the County  
of York**

Rec'd Rental Paid \$ **32.65** Annual Rental \$ **4.00** Cash No. **9631**  
Aug. 18, 1967.

Rent to commence **May 1, 1969.**

Accts. Br. **The mines, ores, minerals and mining rights in, upon and under  
All that certain parcel or tract of land**

in the **Township of Parkman**  
in the ~~County~~ **XXXXXX** district of **Nipissing**  
being **Mining Claim T. 44085**, composed of land and land  
under the waters of part of **Opimika Creek** within the limits  
of the said mining claim, situate in the said Township of  
**Parkman**, as shown on Plan of Survey by **D. J. Macdonell**,  
**Ontario Land Surveyor**, dated **October 8, 1966**, of record  
in the **Office of Land Titles at North Bay as Plan NR 1573.**



containing **32.650** Acres, more or less

LEASE DATED **14th** DAY OF **May** 19**69.**

Lease to **Master of Titles, North Bay, Ontario.**

Lease letter to Lessee: **555 Burnhamthorpe Road, Etobicoke 652, Ontario.**

(See over for reservations)  
**DISTRICT FORESTER, North Bay.**

CA

201 0380

RESERVATIONS

XXXXXXXXXX

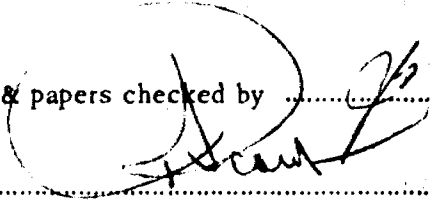
10 percent of surface for roads (102 1)

Surface rights over roads (102 2)

Refining clause (106)

Surface mining within 150 feet of highway (41)

Surface rights over (41)

Application & papers checked by  .....

Approved .....

CB

201 0381

On Plan  
**In File**



ONTARIO

**Rights**  
Mining/Lease

The Mining Act

(21 year lease under Section 100a)

File No.

**157550**

2-8-68  
Checked  
PC

**RIGHTS**  
Mining/Lease No. **102579**

Lessee **IRON CITY MINES LIMITED, with its head office in the Borough of Etobicoke, in the Municipality of Metropolitan Toronto,**

9631 \$158.44  
Aug. 18/67  
Cash No. 17256 \$ 80.48  
Oct. 2/68

Rec'd Rental Paid \$ **238.92**

Annual Rental \$ **23.89**

Cash No. 17256 \$ 80.48  
Oct. 2/68

Rent to commence **August 1st, 1971.**

Accts. Br. **the mines, ores, minerals and mining rights in, upon and under All that certain parcel or tract of land**

in the **Township of Parkman**

in the ~~town~~ or district of **Nipissing**

being

**FIRSTLY:** The mines, ores, minerals and mining rights in, upon and under Mining Claim T. 44087, composed of land and land under the waters of part of Opimika Creek lying within the limits of the said mining claim, situate in the said Township of Parkman, containing 52.941 acres, more or less, as shown on Plan of Survey by D. J. Macdonell, Ontario Land Surveyor, dated October 8, 1966, of record in the Office of Land Titles at North Bay as NR 1574.

**SECONDLY:** The mines, ores, minerals and mining rights in, upon and under Mining Claim T. 44088, situate in the said Township of Parkman, containing 74.69 acres, more or less, as shown on Plan of Survey by D. J. Macdonell, Ontario Land Surveyor, dated October 8, 1966, of record in the Office of Land Titles at North Bay as NR 1575.

**THIRDLY:** The mines, ores, minerals and mining rights in, upon and under Mining Claim T. 47602, composed of land and land under the waters of part of Opimika Creek lying within the limits of the said mining claim, situate in the said Township of Parkman, containing 51.832 acres, more or less, as shown on Plan of Survey by D. J. Macdonell, Ontario Land Surveyor, dated October 8, 1966, of record in the Office of Land Titles at North Bay as NR 1577.

containing **179.463** Acres, more or less

DEPT. OF MINES

MARKED

ON PLANS

LEASE DATED **12th** DAY OF **August** 19 **71.**

Lease to **Master of Titles, North Bay, Ontario.**

Lease letter to **Lessee: 555 Burnhamthorpe Road, Etobicoke, Ontario.**

/pc

(See over for reservations)

201 039 11

RESERVATIONS

~~-----  
All trees (107)~~

~~-----  
10 per cent of surface for roads (102-1)~~

~~-----  
Surface rights over roads (102-2)~~

Refining clause (106)

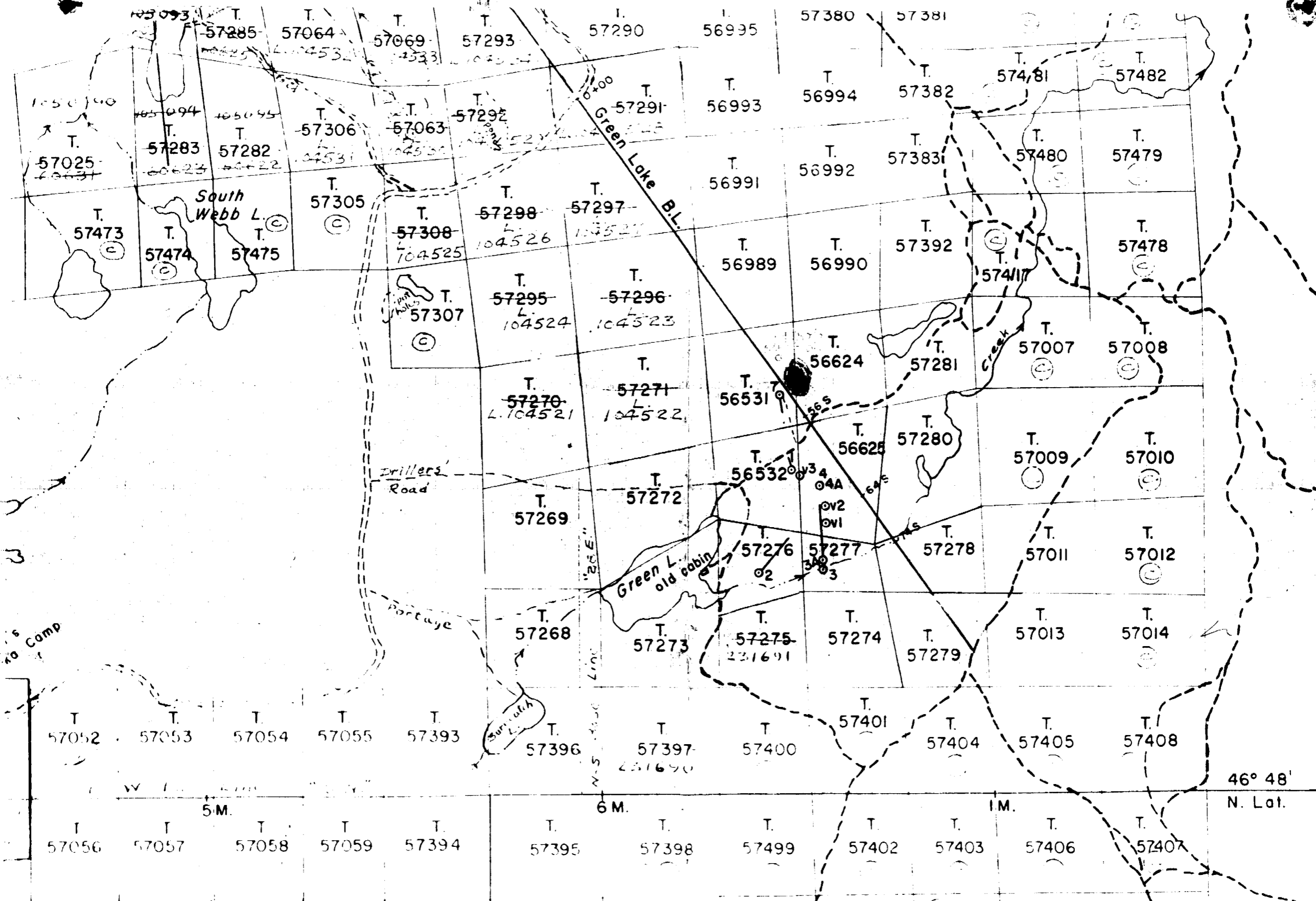
Surface mining within 150 feet of highway (41)

~~-----  
Sand and gravel (71)~~

Application & papers checked by ..... 

Approved ..... 

201 0383



CF

201 0591