

010

#### Diamond Drilling

Township: OF BOSTON

Report No: 29

Work performed by: MARSHALL BOSTON IRON MINES

Claim Nº	Hole Nº	Footage	Date	Note
L 56468	5	205'	JAN/72	(1)
	6	521'	JAN/72	(1)
	7	217†	JAN/72	(1)
	8	400'	JAN/72	(1)
	9	241'	FEB/72	(1)
	10	354'	FEB/72	(1)
	11	300'	JAN/72	(1)

Notes: (1) 242/72

NAME OF	PROPERTY!	iarshall Bost	ton Iron Mir	nes Limited	
HOLE NO.	72 - 5	LENGTH_	205 <b>'</b>		
CATION	South Gr	LENGTH _ id L.23+45E,	55' North		
LATITUDE .		DEPARTUR	E		
ELEVATION		AZIMUTH .	0°	DIP40°	
	Jan. 6/72	FINISHED			

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
ollar	-40°				
205'	-42°				

HOLE NO. 72-5 SHEET NO. 1

LOGGED BY P.Huxhold

1 5 0	OTAGE	B C C B L D T L C H	H		SAMP	LE			•	5 5 A '	Y S	
FRO	ом то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	75	x	OZ/TON	OZ/TON	
0'	12'2	Casing										
12'	2" 21'	Diorite - dark green, fine grained olivine-hornblende rich rock; olivine = 50%, hornblende = 40%										
12'	2" 18 <b>'</b>	Disseminated euhedral pyrite crystals (up to 0.1" diam. = 1 - 2 %	)									
21'	26'	<pre>Gradational contact (contact volcanic) - dark green-bla aphanitic rock, tuffaceous, feldspar-qtz. = 1%</pre>	ck									
26'	66'10	Basic volcanic - dark green, fine-grained olivine rich flow with dessiminated pyrite and magnetite crystals and pyrite blebs.	i e									
39 ' '	7" 39'10' 44'11'	Feldspathic stringer ) = 30° to C.A. Feldspathic stringers)										
45'	66'10	Increase in magnetite dissemination to about 5% average										
661	10'73' 6	Tuffaceous basic volcanic - olivine phenocryst (5-8%) and biotite (20%) plates in olivine, hornblende, pyroxene, biotite groundmass.										
69'	9" 68'10 1" 69' 2 9" 70'10	Feldspathic stringer, 35° to C.A. Feldspathic stringer, 35° to C.A. Feldspathic stringer, 30° to C.A.									्रिक्ट <b>े</b>	
73'6	5 <b>"</b> 77' 8'	Basic volcanic - dark green fine-grained rock with disseminated pyrite blebs and euhedral crystals (0.05*)-4-6% and finely disseminated magnetite -l-	2%									
77 38	86'10'	Syenite dyke - fine grained (0.01 in.) pink-dark green crystalline rock in which potash feldspar = 60% ar ferro-magnesiums = 40%									A	23 P. S.

NAME OF PROPERTY Marshall Boston Iron Mines Limited HOLE NO. 72 - 5 SHEET NO. 2

SHEET NO. FOOTAGE SAMPLE ASSAYS DESCRIPTION FOOTAGE 5ULPH FROM OZ TON OZ TON FROM 78'10" 79'8" Diabase dyke with disseminated pyrite (1%) Basic Volcanic - fine grained dark green crystalline 86'10" 205' rock with tuffaccous zones, banded phases and zones of changing grain size. Olivine-pyroxene phase; fibrous acicular pyroxene 86'10" 89'4" needles (up to 0.5" long) in dark grain groundmass, aplitic texture, disseminated pyrite 1 - 2% Tuffaceous zone - contact 90° to C.A., no sulphide 89 4 92 4 4 mineralization. 92 4 4 98 8 8 8 Basic, dark green fine-grained aphanitic zone with disseminated pyrite (1 - 2%) blebs and euhedral crystals and magnetite, finely disseminated (5%). 98'6 Feldspathic dyke with finely-disseminated pyrite 1%. 981 41 983 84 2054 Contact volcanic zone - altered, exhibiting banding, schistosity, some evidence of epidotization, chloritization with disseminated pyrite cubes and blebs 0.5 - 3%. 124' 139' Feldspathic stringers | 126'9" | 126'1 | Pyrite blebs - 5% 118'10"118'11" Quartz vein -20° to C.A. 434'9" 205' Decrease to amt. disseminated pyrite (less 1%) 202'34 202'4" Pyrite, 10 - 15% END OF HOLE 205

NAME OF PROPERTY	Marshall Boston Iron Mines Limited
ATION South	6 LENGTH 521' Grid. L8E, 1+50S
	DEPARTURE
ELEVATION	AZIMUTH 0° DIP -40°N
STARTED Jan. 10/	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
Colla	-40	°N			
521'	-40	°N			

HOLE NO. 72-6 SHEET NO. 1

1	ELEVATI Starte	Jan.	AZIMUTH 0° DIP -40°N  10/72 FINISHED Jan.13/72	士					LOGGE	D BY	P. Hux	khold	<del></del>
	FOO'	TAGE	D.E.S.C.D.L.D.T.L.O.N			SAMP	LE			,	4 5 5 A Y	/ S	
	FROM	то	DESCRIPTION	NO.	SUL PH IDES	FROM	FOOTAGE TO	TOTAL	76	F	oz/ton	oz/ton	
	0 8' 2'	8 2 2 8 1 2 2 1 8 1 1 1 1 1 1 1 1 1 1 1	Casing Fine-grained aplitic rock - dacite. Dark grey rock										
1168	01.01	121 2	exhibiting banding of alternating felsic and mafic minerals.										
. W. 6		13' 3' 12' 4'	Disseminated pyrite - up to 1% Disseminated pyrrhotite - up to 1%										
-		13' 3'											
	16' 7'	16'9	Chlorite - epidote - hornblende band.		-								
	16'11'	16'12	Pyrite disseminated; 5 - 7%	1					1				
	22'8"	22 11	Gradational contact							į			
	22'11'	28' 5	Felsite dyke (garnet-nepheline-syenite) - euhedral to subeuhedral (garnet) in aqua-marine ma	tri	,		:						
	2815*	146'8	Dacite - dark grey aphanitic rock with buff coloured curvilinear banding, with disseminated pyrite, pyrrhotite and sphalerite, tuffaceous in places										
		29 4	Olivine dyke, 30° to C.A.		1							اسمر	COFECULA
3	32 * 8 "	33'0"	Felsite dyke.				}	1	j		]	15	
SE LIMI	32*2"	33'0" 32'3"	Pyrite, pyrrhotite blebs and euhedral crystals 10 - 15%.									(8) A. C	La In
LANGRIDGE												O'NO'L	
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NAME OF PROPERTY Marshall Boston Iron Mines Limited
HOLE NO. 72 - 6
SHEET NO. 2

FOOT	AGE				SAMPL	E				ASSAY	S		
FROM	to	DESCRIPTION	NO.	SULPH	FROM	FOOTAGE TO	TOTAL	Zň	Ni.	0 P 10 N	Cu <sup>TON</sup>	Aq	F
4'10'	45'2"	Felsite dyke (syenite); 20° to C.A.	27	1023	52'6"	57 <b>¹</b> 6		0.02		1 20	<u> </u>	0.03	1
2'6"	57'6"	Sample (sphalerite)		]									
0'0"	95'0"	Very fine-grained dacite, sphalerite staining	<b>2</b> 8		80	85	5 <b>'</b>	0.01		Tr		Nil	
			<b>2</b> 9		85	90	5 ¹	0.03		.01		.03	
			30		90	95	5 <b>'</b>	0.02		None		.01	
01'4	1	Felsite dyke											
28 <b>'</b> 1	i	-	_	}							<b>!</b>		
28'9	133'9"	Sphalerite staining	31		128'9	133'9	5 <b>'</b>	.01		None		Nil	
46'8	151'	Medium-grained zone dacitic rock; disseminated pyrite, pyrrhotite			ļ								
51'	182'	Fine-grained dacitic rock										:	
82'	207 ¹	Graphitic zone, black, fine-grained soft rock, slightly magnetic with disseminated pyrite, chalcopyrite, galena, sphalerite	32 34 35		1	190' 195' <b>200'</b>	7巻* 5 * 5 *	.47 .23 .20	1	.01 .01		.02	
2810	267 <sup>3</sup> " 228 <sup>2</sup> "	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -											
38*8		Pyrrhotite stringers											
39'0		Pyrrhotite stringers											
41'1		•				ł							
19'8	25015"	Quartzite dyke, disseminated pyrite.											
5 <b>2'</b> 3'		Dacite - porphyry (micaceous) biotite, pyroxene phenocrysts in dacitic matrix, dark green, medium to fine-grained rock, with pyrrhotite stringers and pyrite disseminations 1 - 2%										- 17 (14 m) - 17 (14 m) - 18 (14 m)	
66 7 5		Pyrite bleb - 0.5" in length		!									
67'3	273'1"	Syenite: contact 10° to C.A.; green-rose coloured rock schistose in places, biotite, hornblende, feldspar disseminated pyrite 1 - 2% pyrrhotite stringers								A DO THE BOTH THE PARTY OF THE		M	

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NAME OF PROPERTY Marshall Boston Iron Mines Limited

HOLE NO. 72 - 6

SHEET NO. 3

FOOTAGE ASSAYS DESCRIPTION FOOTAGE ~ SULPH OZ TON OZ TON FROM TOTAL 127311 | 372191 Dacite - dark green fine-grained hard rock with siliceous phases and with disseminated pyrite. 274 4 1 274 5 1 Felsite dyke 281'1" Pyrrhotite blebs. 313'4" 314'4 Felsitic zone. ...'**3**33<sup>1</sup>3"| 349<sup>1</sup>6| Mafic (graphitic appearance) zone, black aphanitic roct. 354 Sphalerite stain in quartz - feldspathic fragments. 36314" 36315 Pyrrhotite stringers - 5% 3501 361' Disseminated magnetite blebs - 1% |367'6"| 368'9| Dacite - porphyry - felsitic phase. 372 9 4 378 4 4 Biotite - hornblende rich gabbroic rock, biotite hornblende phenocrysts in green matrix, no sulphide mineralization. 407 378 4 407 Altered zone (soapstone) - soap dark green zone, fine grained - disseminated pyrite blebs. 4071 424'6" Aphanitic, black phase - dacitic composition, soft, disseminated pyrite blebs (to 1%), magnetite 1%. 424 6 521 Dacite - gabbroic rock, dark green, fine-grained in places, tuffaceous, graphitic, porphyritic, disseminated pyrite 0.3% 461' 463'10" Syenite dyke - vuggy, disseminated pyrite and chalcopyrite crystals 1%. 465'10"467' Syenite - porphyry dyke - disseminated pyrite - 0.5%, specular hematite blebs. Syenite dyke, disseminated pyrite /0.5% 471 471'3

NAME OF PROPERTY Marshall Boston Iron Mines Limited

HOLE NO. 72 - 6

SHEET NO.\_\_\_

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F00	TAGE				SAMPL	E				ASSAY	5	
FROM	to	DESCRIPTION	NO.	SULPH	FROM	FOOTAGE TO	TOTAL	-,	٠.	OZ TON	OZ TON	
473161	477'3"	Hematitic zone - massive specular hematite blebs in	37	1013	473'6		31/21	Fe 2.7	Ni			
		rhyolitic rock.			17,5 0		32					
	1	Feldspar-olivine banding; hematite stringers.										
482 <b>'7'</b>	1 1	Felsitic dyke.										
485 <b>'</b> 8'	487	Pyrite - massive - 10%										
506'2'	506'3"	Pyrite stringer - 1" wide										
511'9'	513'5"	Porphyritic phase (dacite).	36		51219	514'	213"		.01			
513*5	<b>5</b> 21'	Dacite - as before.	36		212.9	514	2 3 "		.01			
		END OF HOLE										
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NAME OF	PROPERTY	Marshall-Boston Iron Mines Limited	
HE NO.	_ 72 - 7	LENGTH 217'	
		'S; South Grid	_
LATITUDE		DEPARTURE	_
ELEVATION	l	AZIMUTH O° DIP -40°N	
STARTED _	Jan. 20, 1	972 FINISHED Jan. 22, 1972	

	FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
d	ollar 215'	-40°				
	213					

HOLE NO. 72-7 SHEET NO. 1

REMARKS Hole prematurely stopped at 217' after one cementing attempt due to the blocky nature of the peridotite.

	20, 1972 FINISHED Jan, 22, 1972								P. Hu		
TAGE	DESCRIPTION			SAMF	LΕ				1 5 5 A 1	, 2	
то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	7%	₹,	OZ/TON	OZ/TON	
22'	Casing										
8615	siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite										
36'8	" Olivine dyke; 36'4" - 60° to C.A. 36'8" - 30° to C.A. Minor stringers of pyrite.										
125*0	" Quartz-feldspar porphyry; dioritic composition, dark grey-green hard rock with biotite, quartz, feldspar, minor hornblende phenocrysts in dioritic groundmass. Disseminated pyrite cubes and blebs approx. 1 - 2%. Minor chalcopyrite disseminations.										
	100' - 106'2" Magnetite blebs (pseudomorphic), disseminated 2 - 3%				! ! !						
129 6	Biotite-hornblende gneiss intrusions with finely disseminated pyrite (1 - 2%); contact rt. angle to C. Minor disseminated chalcopyrite.	Α.							,	Are Same	· · · · · · · · · · · · · · · · · · ·
134'1	"Rhyolite; buff-grey, aphanitic, hard, banded (0.25" diamwith very finely disseminated pyrite (/1%).	. )									<u></u>
	129'6" - contact 40° to C.A. 134'1" - contact 90° to C.A.									To the second	IA.
	22' 86'5 36'8 125'0	Casing  86'5" Dacite; dark grey-black aphanitic, hard rock with siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite staining around some of the pyrite; the phenocrysts in the porphyritic zone appear to be hornblende.  36'8" Olivine dyke; 36'4" - 60° to C.A.  36'8" - 30° to C.A.  Minor stringers of pyrite.  125'C" Quartz-feldspar porphyry; dioritic composition, dark grey-green hard rock with biotite, quartz, feldspar, minor hornblende phenocrysts in dioritic groundmass.  Disseminated pyrite cubes and blebs approx. 1 - 2%.  Minor chalcopyrite disseminations.  100' - 106'2" Magnetite blebs (pseudomorphic), disseminated 2 - 3%  129'c" Biotite-hornblende gneiss intrusions with finely disseminated pyrite (1 - 2%); contact rt. angle to C. Minor disseminated chalcopyrite.  134'l" Rhyolite; buff-grey, aphanitic, hard, banded (0.25" diar with very finely disseminated pyrite (/1%).  129'6" - contact 40° to C.A.	Casing  86'5" Dacite; dark grey-black aphanitic, hard rock with siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite staining around some of the pyrite; the phenocrysts in the porphyritic zone appear to be hornblende.  36'8" Olivine dyke; 36'4" - 60° to C.A.  Minor stringers of pyrite.  125'0" Quartz-feldspar porphyry; dioritic composition, dark grey-green hard rock with biotite, quartz, feldspar, minor hornblende phenocrysts in dioritic groundmass. Disseminated pyrite cubes and blebs approx. 1 - 2%.  Minor chalcopyrite disseminations.  100' - 106'2" Magnetite blebs (pseudomorphic), disseminated 2 - 3%  129'c" Biotite-hornblende gneiss intrusions with finely disseminated pyrite (1 - 2%); contact rt. angle to C.A. Minor disseminated chalcopyrite.  134'l" Rhyolite; buff-grey, aphanitic, hard, banded (0.25" diam.) with very finely disseminated pyrite (/1%).  129'6" - contact 40° to C.A.	Casing  86's Dacite; dark grey-black aphanitic, hard rock with siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite staining around some of the pyrite; the phenocrysts in the porphyritic zone appear to be hornblende.  36's Olivine dyke; 36'4" - 60° to C.A.  36'8" - 30° to C.A.  Minor stringers of pyrite.  125'd Quartz-feldspar porphyry; dioritic composition, dark grey-green hard rock with biotite, quartz, feldspar, minor hornblende phenocrysts in dioritic groundmass.  Disseminated pyrite cubes and blebs approx. 1 - 2%.  Minor chalcopyrite disseminations.  100' - 106'2" Magnetite blebs (pseudomorphic), disseminated 2 - 3%  Biotite-hornblende gneiss intrusions with finely disseminated pyrite (1 - 2%); contact rt. angle to C.A.  Minor disseminated chalcopyrite.  134'l Rhyolite; buff-grey, aphanitic, hard, banded (0.25" diar.) with very finely disseminated pyrite (/1%).  129'6" - contact 40° to C.A.	Casing  86'5" Dacite; dark grey-black aphanitic, hard rock with siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite staining around some of the pyrite; the phenocrysts in the porphyritic zone appear to be hornblende.  36'8" Olivine dyke; 36'4" - 60° to C.A.  36'8" - 30° to C.A.  Minor stringers of pyrite.  125'0" Quartz-feldspar porphyry; dioritic composition, dark grey-green hard rock with biotite, quartz, feldspar, minor hornblende phenocrysts in dioritic groundmass. Disseminated pyrite cubes and blebs approx. 1 - 2%.  Minor chalcopyrite disseminations.  100' - 106'2" Magnetite blebs (pseudomorphic), disseminated 2 - 3%  Biotite-hornblende gneiss intrusions with finely disseminated pyrite (1 - 2%); contact rt. angle to C. A. Minor disseminated chalcopyrite.  134'1" Rhyolite; buff-grey, aphanitic, hard, banded (0.25" diam.) with very finely disseminated pyrite (/1%).  129'6" - contact 40° to C.A.	To    PESCRIPTION   No. SUPEN   FROM TO	TO    TO   NO.   SOUTH   FROM   TO   TOTAL	To  22' Casing  86'5" Dacite; dark grey-black aphanitic, hard rock with siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite staining around some of the pyrite; the phenocrysts in the porphyritic zone appear to be hornblende.  36'8" Olivine dyke; 36'4" - 60° to C.A.  36'8" - 30° to C.A.  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SUPPL   FROM   TO   TOTAL   TOTAL	To  22' Casing  86'5" Dacite; dark grey-black aphanitic, hard rock with siliceous zones, porphyritic in places, some banding disseminated pyrite crystals & blebs, 1 - 2%; minor disseminated chalcopyrite, minor sphalerite staining around some of the pyrite; the phenocrysts in the porphyritic zone appear to be hornblende.  36'8" Olivine dyke; 36'4" - 60° to C.A.  Minor stringers of pyrite.  125'C" Quartz-feldspar porphyry; dioritic composition, dark grey-green hard rock with biotite, quartz, feldspar, minor hornblende phenocrysts in dioritic groundmass. Disseminated pyrite cubes and blebs approx. 1 - 2%.  Minor chalcopyrite disseminations.  100' - 106'2" Magnetite blebs (pseudomorphic), disseminated 2 - 3%  Biotite-hornblende gneiss intrusions with finely disseminated pyrite (1 - 2%); contact rt. angle to C Minor disseminated chalcopyrite.  134'1" Rhyolitc; buff-grey, aphanitic, hard, banded (0.25" diam.) with very finely disseminated pyrite (/1%).  129'6" - contact 40° to C.A.

NAME OF PROPERTY Marshall-Boston Iron Mines Limited
HOLE NO 72 - 7 SHEET NO 2

	SAMPLE FOOTAGE							ASSAYS	6	
DESCRIPTION	ΝО.	SULPH IDES	FROM	FOOTAGE TO	TOTAL	٠,		OZ TON	OZ TON	
Dacite: buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (/1%), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.										
Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.			•							
Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (/1%).										-
Peridotite, altered, soft (soapstone), greasy dark- green; disseminated pyrite, slightly graphitic.										
END OF HOLE										
										N. I. I. I.
									A. L. C.	LUA
	some buff grey bandings, finely disseminated pyrite (\$\langle 1\beta\$), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (\$\langle 1\beta\$).  Peridotite, altered, soft (soapstone), greasy dark-green; disseminated pyrite, slightly graphitic.	Dacite; buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (/1%), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (/1%).  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Dacite; buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (\$\sigmu 10\), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (\$\subseteq 1\%).  Peridotite, altered, soft (soapstone), greasy dark-green; disseminated pyrite, slightly graphitic.	Dacite; buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (/1%), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (/1%).  Peridotite, altered, soft (soapstone), greasy darkgreen; disseminated pyrite, slightly graphitic.	Dacite; buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (/1%), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (/1%).  Peridotite, altered, soft (soapstone), greasy darkgreen; disseminated pyrite, slightly graphitic.	Dacite; buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (/1%), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry:quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (/1%).  Peridotite, altered, soft (soapstone), greasy dark-green; disseminated pyrite, slightly graphitic.	Dacite; buff grey-green-black, aphanitic, hard with some buff grey bandings, finely disseminated pyrite (/1%), slightly magnetic, siliceous zones, non-magnetic zones, porphyritic in places with felsic phenocrysts in dacitic groundmass.  Pyrite blebs and stringers (5%) and chalcopyrite blebs (0.2%) in calcareous zone.  Quartz-feldspar porphyry; quartz, feldspar phenocrysts (minor hornblende phenocrysts), finely disseminated pyrite (/1%).  Peridotite, altered, soft (soapstone), greasy dark-green; disseminated pyrite, slightly graphitic.

NAME OF	PROPERTY Mars	hall Boston Iron Mine	s Li	mited
	72 - 8 L2W, 300's;			
LOCATION	L2W, 300'S;	South Grid		
LATITUDE		DEPARTURE		
ELEVATION		AZIMUTH0°	DIP	-40°N
STARTED _	Jan.16,1972	_ FINISHED Jan. 18, 1972		

	FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
C	llar	-40°	7			
	217'	-40°	7			
	400'	-40°	N			
		_				

HOLE NO. 72-8 SHEET NO. 1

LOGGED BY P. Huxhold

	F001	TAGE				SAMP	LE				ASSAY	/ S	
ĺ	FROM	то	DESCRIPTION	NO.	SUL PH-	FROM	FOOTAGE TO	TOTAL	%	%	oz/ton	oz/ton	
1168	0 10 <b>'</b>	10' 23'3'	Casing  Dacite; buff grey - dark green, fine-grained, banded with felsic mineralization, banding usually curvilinear, carbonaceous in places, disseminated pyrite (/0.05%).										
EM. 6	23'3'	31*4											
	31'4'	36'7	Gradation to rhyolite.										
	3617!	41'	Rhyolite; light red-green, indurated, porphyritic in places, quartz, feldspar stringers.		:								
	41'	49'	Dacite porphyry: banded, altered, carbonaceous in places, felsic phenocrysts in dark green matrix, disseminated pyrite \( \arrow 0.05\%. \)										
	491	54'2	Rhyolite; as before.										
	54'2'	1 <b>62'</b> 9	Dacite; buff grey - dark green, fine-grained, banded, porphyritic in places with hornblende phenocrysts, disseminated pyrite blebs and cubes (/0.5%).			:					,		
E LIMITED,			92'1" - 92'3" Massive pyrite 30% 98'6" - 100' Ankerite dykes. 118'6" - 119' Pyrite blebs 5%									15 A.	nofess No
LANGRIDGE			•									1000	Car ONT

NAME OF PROPERTY Marshall Boston Iron Mines Limited
HOLE NO. 72 - 8 SHEET NO. 2

F001	TAGE				SAMPL	E			-	ASSAY	S	
FROM	то	DESCRIPTION	NO.	SULPH		FOOTAGE		1 7	7.	OZ/TON	OZ/TON	
162'9"		Syenite-porphyry; felsic phenocrysts in syenitic groundmass, disseminated pyrite 0.1%.		IDES	FROM	10	TOTAL					
181'	218'6"	Dacite-porphyry; as before								] [		
218 <b>'</b> 6'	22618"	Quartzite with feldspathic and felsitic intrusions, disseminated pyrite approx. 1%.			<u>.</u>							
226 <b>'</b> 8'	299	Dacite; silica rich, buff-grey-green, banded, aphaniti disseminated pyrite 0.05%.	ļ,				; ; ;					
		Feldspar dykes: 246 6 to 246 11 248 6 to 249 8 252 9 to 253 3 254 2 to 254 4 4										
		269' to 269'2" Pyrite blebs 5% 292'6" to 294'2" Pyrrhotite stringers 1 - 2%										
29 <b>9'</b>	304 4 "	Diabase dyke - disseminated graphite (0.5%), minor bio	ite.	•				İ				
304 4 '	312'5"	Andesite: lightly banded, cherty cleavage, disseminate pyrite, pyrrhotite, hemaniferous in places, dark-green-gray, feldspathic zones.	d.									
312'5'	337'	Dacite; banded in places, felsite dykes, minor dissem- inated pyrite, pyrrhotite.										
337 <b>'</b>	340'	Gabbro; disseminated pyrite, pyrrhotite stringers.	1								}	
340'	34818"	Diabase dyke; disseminated pyrite blebs & cubes, 1 - 2	%.									
348 <b>'</b> 8'	400'	Gabbro altering into a biotite-hornblende gneiss, with quartz-feldspar dykes, disseminated pyrite, chalcopyrite, pyrrhotite \( \alpha 0.5 \%. \)									,	Service Control
		395' - 400' Graphitic zone, diabasic composition, disseminated pyrite (0.5%)										H
		END OF HOLE				ĺ	-				1	

### Diamond Drill Record

NAME OF	PROPERTY	Marsh	hall Boston Iron Mines Limited
			LENGTH 241
ECCATION			
ELEVATION			AZIMUTH O DIP -40°
STARTED	Jan. 25,	1972	Jan. 26, 1972

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
ollar	-40°	И			
200'	-45°	И			

HOLE NO. 72-9 SHEET NO. 1

LOGGED BY P. Huxhold

F	0 О Т	AGE	DESCRIPTION			SAMF	_		<u> </u>		4 5 5 A	Y 5	
FR	ОМ	то		NO.	SUL PH-	FROM	FOOTAGE TO	TOTAL	%	冤	OZ/TON	oz/ton	
1		12 69	Dacite: buff grey - dark grey, aphaneritic, hard, finely banded, porphyritic in places, ferromagnesium phenocrysts (0.05"), finely disseminated magnetite 1 - 3%, gneissic appearance, tuffaceous zones. Chalcopyrite, pyrite blebs in places.  Minor feldspathic intrusions in places.  Minor calcareous intrusions.  Minor sildceous intrusions.  Minor banded-iron stringers towards contact with B-iron formation  53'5" - 10" pyrite stringers 5 - 7%, 150° to C.A.  6" Banded-iron formation (approx.20%); bands of massive magnetite range in widths from 0.05" to 1.5" and cut core axis at 0° to 110°, magnetite bands vary in diameter; wavy appearance separated by dacite, cut by minor feldspathic, chloride-epidote stringers	69 70 71 72		70' 80' 90' 100'	80' 90' 100' 106'	10' 10' 10' 6'	Fe 21.16 21.18 24.07 18.27		Nil		
10		' 164'	minor chalco & pyrite blebs in places, disseminated magnetic.  6" Dacite; as above, porphyritic, feldspar phenocrysts (0.01") in buff-grey - dark gray groundmass, siliceous zones; minor disseminated chalco blebs, slightly magnetic, minor quartz stringers (chloride)  " Dacite - porphyry - epidote, feldspatic dyke intrusions pyrite blebs & cubes in dykes, 1 - 2%	Í								ACC. STORY	E OF CH

NAME OF PROPERTY	Marshall Boston Iron Mines Limited	FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP
E NO	LENGTH					
OCATION					<b>!</b>	
ATITUDE	DEPARTURE					
LEVATION	AZIMUTH DIP					
TARTED	FINISHED	<u> </u>		<u>t                                      </u>	<u></u>	
FOOTAGE					5 A M	PLE

HOLE NO. 72-9 SHEET NO. 2

LOGGED BY P. Huxhold

FOO	TAGE				5 A M P	LE			,	SSA'	7 5	
FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	<i>%</i>	oz/ton	oz/ton	
164'6	241'	Basalt; dark grey, hard, aphaneritic (finer grained than previous rock); minor quartz dykes (0.5" diam.) with chalcopyrite blebs (0.2%), slightly magnetic, grades into a hornblende-biotite gneiss. Few minor pyrite stringers.										
		END OF HOLE										
				·								
										**************************************		1 \
											a	4

NAME OF		<u>Marshall</u> Bosto		ies Limi	ited	
E NO.	72 <b>- 1</b> 0	LENGTH	354			
LOCATION	13 + 90 N.	L4E				
LATITUDE		DEPARTURE				
ELEVATION		AZIMUTH	185°	סוף	-40°S	
CTARTER	Feb.3, 1972	F. Fe	b.5.1972			

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
3541	35°				

HOLE NO. 72 - 10 SHEET NO. 1

REMARKS

To test a known inon zone

LOGGED BY N, Brewster

F	00	r A G E	D.F.C.O.D.I.D.T.I.O.V			SAMP	LE			<b>A</b>	SSA	/ S	
F	ROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	75	35	oz/ton	OZ/TON	
0	-	11'	Casing										
11	[*	23'4"	Basalt: rock is dark green in colour; the rock has undergone metamorphism to the chlorite stage. Chlorite phenocrysts 3% contained in a matrix of chlorite minerals.										
23	3'4"	25†	grey mafic volcanic; fine grained, minerals $\underline{/}$ 1 mm contact at 52° to C.A.										-
25	5'	45'	Basalt: heavily altered to dark green black chlorite										
45	57	50'	Mixed Zone: containing patches of magnetite, basalt and cherty material. The iron appears to occur both with the basalt and as banded iron formation.										
		48'5"	pyrite (euhedral to anhedral) banded with magnetite 44° to C.A.										
50	)*	61'6"	Basalt: light to dark green black colour. The rock has been predominately altered to chlorite.  Minor pyroxenes / 5%  Gram size 1 - 2 mm									19 ( 19 (	130 100 100 100 100 100 100 100 100 100
LANGKIUGE LIMITED													1 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NAME OF PROPERTY <u>Marshall Boston Iron Mines Limited</u>
HOLE NO. 72 - 10 SHEET NO. 2

		HOLE	NO				SHEET	٧٥			
FOOTAG	A			SAMPL	.E		Fe		ASSAY:	S	
FROM	DESCRIPTION	70.	SULPH IDES	FROM	FOOTAGE TO	TOTAL		-	OZ/TON	OZ/TON	
61'6" 70	'5" Trachyte: nepheline identifiable										
7015 75	Preccia Zone: This zone contains the following— magnetite fragments 15% grey volcanic fragments 20% trachyte fragments 45% pyrite 5% - 10% The voids between fragments have been filled with talc minerals.	59		70'	80'	10'	17.6	5			
75' 12	Lean Iron Formation: bands of magnetite separated by bands of non-magnetic grey white cherty materi	al 60		80	90	10	30.	14			
	There is some development of iron bearing garnets between magnetite bands - iron approximately 40 chert approximately 50%, subhedral to anhedral garnets approximately 10%	61		90	100	10	22.	77			
32'5"	banding 20° to C.A.										
37'9"	banding 40° to C.A.	62		100	110	10	17.	54		:	
14'	banding 200 to C.A.									i	
131,10	banding 16° to C.A.	63		110	120	10	27.	04			
103'9" 10											سيدي الآياي الارتاج
107'9" 1.0	Basalt interjections									84.6187.87	

NAME OF PROPERTY Marshall Boston Iron Mines Limited

HOLE NO. 72 - 10 SHEET NO.

FOOTAGE SAMPLE ASSAYS DESCRIPTION SULPH FOOTAGE OZ/TON OZ/TON TO FROM 167'7" Lean Iron Formation: Similar to that described above 130' 125 1201 10' 27.22 Magnetic bands 1/8 - 1.5" thick 139'8" 51° to C.A. banding 1301 1401 101 29.23 42° to C.A. 141'6" banding 148'5" 40° to C.A. banding 1501 1401 29.86 150' small fold in core 20° to C.A. app. 25° to C.A. 156'1" banding 45° to C.A. 30.28 150<sup>t</sup> 160 101 156'1" 156'3" numerous closed fractures occur that terminate 160' 167'7" 30.54 at the magnetite 71711 167'7" 200' Basalt: green volcanic with grey white phenocrysts that that vary in size from 1 - 2 mm to 1 cm. Approximately 5% of the rock mass is chloritized. Talc minerals occur on slip planes at 44° to C.A. Chlorite Schist: derived from a basaltic tuff 2001 239'5" 239'5" 250' Lean Iron Zone: banded magnetite 40% 10% garnets 1 - 2% pyrite bands / 1% minor carbonate cement 40 - 50% cherty material 2501 292 Chlorite Schist:

## · Diamond Drill Record

NAME OF PROPERTY Marshall Boston Iron Mines Limited
HOLE NO. 72-10 SHEET NO. 4

FOOTAGE				SAMPL	.E	٠			ASSAY	S	
FROM TO	DESCRIPTION	112	~ SULPH		FOOTAGE		1 .		07/700	OZ/TON	
TO		٧٥.	IDES	FROM	TO	TOTAL	1 :	-	02/104	02/10#	<del></del> -
292 <b>'</b> 330	Andesitic Rock: light grey to grey black intermediate volcanic tuff anhedral to subhedral feldspar phenocrysts (2-5 mm) occur in the aphanitic (/ 1 mm) flaky matrix. Chlorite minerals (alteration product) are present in the matrix. bedding 120% to C.A. granitic filling s occur along fractures. talc also present on shears										
325 * 5 * 326 *	Broken core, probable fault.										
330'6'336'	" Basalt: green colour; heavily altered to chlorite which is the main constituent										
336'4'353'	l" Similar to above 292-330										
	END OF HOLE										
·											

NAME OF	PROPERTY	Marshall Bos	ton Iron Mines	s Limite	ed
		LENGTH	300'	Boston	Townshi
LOCATION	1 + 00N,	L 10 + 00W			
LATITUDE		DEPARTU	RE		
ELEVATION		AZIMUTH	180 <sup>0</sup>	DIP -4	ION
	Jan. 29, 19		Jan -31 -1972		

DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
	DIP	DIP AZIMUTH	DIP AZIMUTH FOOTAGE	DIP AZIMUTH FOOTAGE DIP

HOLE NO. 72 - 11 SHEET NO. 1

LOGGED BY N. Brewster

	F 0 0 1	AGE	DESCRIPTION			SAMP	LE			,	ASSAY	<b>7</b>	
ſ	FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	36	%	OZ/TON	oz/ton	
	0	7'10"	Casing										
	7'10"	40'	Rhyolitic rock: Hard, dense, aphanitic (/l mm) purple-grey to grey-white siliceous rock.										
	1213"	13'	Minor quartz vei <b>nlet</b> s										
١٤	37 <b>'</b> 4" 38 <b>'</b> 7"	37'6" 39'1"	) Basalt: Green colour, minerals include pyroxenes, epidote, ) olivine and calcic plagioclases. All contacts at 35° to C.A.										
	40'	43'4"	Intermediate zone: Consisting of alternating portions of previously described rock types.  Pyrite occurs as smears on fractures at 60° to C.A. and in basaltic rocks 1 - 2%.			·							
	43'4"	50'10"	Basalt: Dark green-black colour, the rock has been metamorphosed to the chloritic stage and is consequently soft. Appears to have been a tuff (clasts visible).  Talc on slips 60° to C.A.										
	50'10"	65'	Alteration zone: The rock varies in colour from lime green through to apple green. Carbonate minerals occur in fracture planes as veinlets and as fillings in brecciated stale also occurs on fracture planes.	ectio	ns.							(E)	NOTES:
		54'	Blocky rock possible fault.									161877 V	.هر.
LANGUIDGE CIMILED	60 <b>'</b>	65'	The rock is somewhat siliceous and epidotized.										Lli

NAME OF PROPERTY Marshall Boston Iron Mines Limited
72 - 11

F00	TAGE					SAMPL	Ε			_	ASSAY	s	
FROM	το		DESCRIPTION	NO.	SULPH		FOOTAGE	T	- ;	-	OZ/TON	OZ/TON	
65¹	75'	Basalt:	Dark green colour, metamorphosed to chlorite facie		IDE5	FROM	10	TOTAL	Fe.	Cu			
			Scattered pyrite blebs and minor talc mineralization	8									
75 <b>'</b>	85'	Mixed n	ock type containing siliceous fragments in a green basaltic matrix. Pyrite blebs are scattered throughout, 1/2%	74		75!	85'	10'	15 -75	· 0.	p2		
	76'5"		Chalcopyrite					-					
	79'8"		Chalcopyrite										
			Minor amounts of iron occur through this section.  Magnetite coarse.										
35'	98'8"	Hard ba	nded rock (bands 52° to C.A.), colour varies from spotted brown—white to green. The rock is a fine-grained (1 mm grain size) siliceous sediment consisting predominantly of feldspar and quartz.			,							
-			No iron present in this section.	- 75		97'	100'	.31	18.27	•			l
98'8"	150'	Banded	iron formation: Iron bands occur at $60^{\circ}$ and $29^{\circ}$ to Pyrite blebs present.	•		100'	110'	10'	25.65			·	
			Iron rich sections are interjected by barren basalt at the following locations:							-			
00'6"	100'10"		Olivine basalt										
06'9" [[7'8"	l07'2"		Olivine basalt Olivine basalt	42		110'	120'	10'	21.23				·
27'2"	129'7"		Basalt	43		120'	130'	10'	24.34				
130 <b>'</b> 141'8''	130'8"		Olivine basalt Basalt	44 45		130'	140'	10'	32.09			7	
141 0	142 5					140'	150'	10'	27.8				
												<u>.</u>	1
													ik
													/ w.

NAME OF PROPERTY Marshall Boston Iron Mines Limited
HOLE NO. 72 - 11 SHEET NO. 3

F00	TAGE				SAMPL	E			A!	SSAYS	;	
FROM	TO	DESCRIPTION	No.	~ SULPH		FOOTAGE		1.	5 0:	7/70	OZ/TON	
FRUM			NO.	IDES	FROM	TO	TOTAL	Fe	- 101	1/ ION	02/10M	
150¹	200'	Banded iron formation:	46		150	160	10*	30.92				
150'	เ56'	Garnets occur through this section .										
	178'8"	Magnetite bands 42° to C.A.	47		160	170	10*	30.70				
179'	180'7"	Barren basalt interjection $32^{\circ}$ to C.A. cuts off iron band Mica rich.	48		170	180	10"	27.87				
184'5"	184'10"	Garnets occur through this section .	49		180	190	10'	23.42				
186'10"	190'	Barren basalt interjection (mica chlorite-biotite rich)						,				
1961	196'8"	77 15 17 17 15 15 17	50		190	200	10†	30.36				
	197	Iron bands highly contorted into small drag fold, the curved axis is 118 to C.A.										
	197'2"	Iron bands 70° to C.A.									j	
2001	250'	Banded iron formation:										
202'5"	203'2"	Barren basalt				:						
207'8"	1 1	Barren basalt	51		200	210	101	29.07		1		ļ
211'4"	211'7.5"	Barren basalt						]		1		
212'2.5	213'2"	Barren basalt	52		210	220	101	30.68				
225'3"	225'6.5	Quartz vein										
	227'3"	Magnetite bands 52° to C.A.	<b>5</b> 3		220	230	IO'	35.46			200	3 = 5.83
232'4"	232'6"	Garnet zone									(\$\)	ZINI
	233'1"	Garnets									187	 المجار
235'l"	236'4"	Barren basalt	54		230	240	10'	30.38			2 E C IS	7 / X
240'5.5	240'10"	Barren basalt								[	Cab	Jel?
	242'11"	Magnetite bands 160° to C.A.		1				1		1	1	

NAME OF PROPERTY Marshall Boston Iron Mines Limited
72 - 11
4

F00	TAGE				SAMPL	E				ASSAY	s
FROM	то	DESCRIPTION	NO.	SULPH	FROM	FOOTAGE TO	TOTAL	- 2	76	OZ/TON	OZ/TON
		(Banded iron formation) cont'd.		,525			10172	Fe.			
45'4.5	245'8	5 Barren basalt	<b>5</b> 5		240	250	10'	28.67	<b>,</b>		
250'	270'9"	Banded iron formation:	56		250	260	101	32.6	5		
270'9"	272'6"	Scattered pyrite, euhedral crystals 1%	57		260	271	11'	25.69	•		
	300'6"	-									
		Dasaic. Gaille girosi.									
		END OF HOLE									
							·				
		,					•				
							,				
•											. 41 ( <del>) 1</del> 5 5 5
		•									
										1876	/ Л. С ја, з
										(SECTION)	
											C.C.