

DIAMOND DRILLING

TOWNSHIP: MARY JANE LAKE

13) REPORT NO: 10

WORK PERFORMED FOR: Mingold Resources Inc.

RECORDED HOLDER: Same as Above [xx] : Other []

Claim No.	Hole No.	Footage	<u>Date</u>	Note
TB 990165	1	392'	Nov/88	(1)
	2	426'	Nov/88	(1)
	3	308'	Nov/88	(1)
TB 990161	4 A	88'	Nov/88	(1)
	4	400'	Nov/88	(1)
	5	538'	Nov/88	(1)
	6	2152'		

Mr. Over

APPENDIX III

DRILL DATA - LOGS, ASSAYS, SECTIONS

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE

APR 3 1989

RECEIVED

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 1

Date: November 14, 1988

Page 1 of 4

CO-ORDINATES: 92+00W

84+00N

CLAIM NO.: TB 990165

LOGGED BY: Brian Nelson

HOLE SURVEYS (CORRECTED)

COLLAR ELEV.:

CORE SIZE: 30

DRILLED BY: Morthwest Geophysics

DEPTH DIP DIRECTION

AZIMUTH: 1120

DATE STARTED: Nov. 11, 1988

SECTION: Off Section

3471 -400 (Acid)

ANGLE: -480

COMPLETED: Nov. 13, 1988

DEPTH: 392.0 Ft.

REMARKS:

O.B. - overburden L.C. - lost core N.A. - not sampled

DE	PTH	ROCK TYPE	DESCRIPTION			8 &	4PLE	···	1	ASSAYS	
FROM	70	ROCK TIPE	DESCRIPTION	W	o.	PROM	10	WIDT	l Au pp	Ы	
0.0	15.5	Overburden	Sand, mud, & Boulders	0.	В.	0.0	15.5	15.	3		
15.5	68.0	Diabase	Grey, fine grained to finer medium grained, massive to locally weakly foliated (sheared) \$60 to \$0° to CA	N.	. A .	15.5		1	<5/<5	/\$5	
			-overall duits ward, borbultitic, overall 204	•		17.0		1			
			2 mm to 2-3 cm beige to white anhedral quartz-feldspar cluster (crystals); generally the		.A.	20.0 37.0)) 9/<5/		
:			larger the crystals the greater the concentration, up to 50% large ghosty remnant crystals.			VI AND					
	<u>.</u>		-moderate to strongly magnetic, 10% to locally 20% small mm scale magnetite crystals disseminated throughout, trace fine grained disseminated pyrite			WOOF	SMEN OFFICE	I FILE	SYEY		
			plus narrow mm scale pyrite veinlets -minor 3mm to 2 to 3 cm scale quarts veining, minor bleby to narrow stringery pyrite associated with QVs, veining erratic a various angles to core angle	l .		AP	R 3	1989			
			Comment: may not be diabase, instead altered contact zone of gabbro.		Ц	REC	EIV	E D	Π		
68.0	71.4	Sheared Diabase	-Grey, fine grained, hard with a mottled weakly sheared appearance -Shearing @ 70° to core axis and defined by parallel alignment of flattened quarts-feldspar crystals within plane of shearing -minor 2 to 5 mm scale white quarts veining predominantly sub-parallel to shearing -weakly sheared equivalent to preceding unit	601	L03	68.0	71.4	3.	140/1	45/172	
71.4	73.4	Quartz Veining	-50% erratic grey-white quarts-veining and 50% very	601	104	71.4	72.1	. 0.	2596/	2536	
		verning	fine grained dark grey host. 71.4 - 72.1 Quarts vein - white-grey refractured quarts containing 10% 1-3 mm scale erratic stringery mgt rich inclusions, minor yellowy Fe Co3 ? staining and 1% medium grained bleby pyrite - upper and lower contacts @ 45° to core axis	601	105	72.1	73.6	1.9	724/8	12/936	
73.4	77.8	Diabase	Grey, fine grained, hard, massive and locally porphyritic	60	106	73.6	77.8	4.	95/10	7 89	

PROJECT: UNDERSILL

DRILL HOLE NO. UND-1

Date: Movember 14/88

RAMPI.E DEPTH ARBAYR ROCK TYPE DESCRIPTION ŦΩ No. PROM WIDTH Au ppb FROM ቸጠ 77.8 77.8 81.2 Ouartz 60107 81.2 3.6 908/904/901 White-grey erratic brecciated vein containing 30 to Vein 40% very erratic grey to black magnetite rich inclusions (veinlike) - minor disseminated med, grained pyrite (1-2% pyrite) - irregular upper and lower contacts Does not appear as one vein but more of a stockwork of quartz veining 81.2 100.0 60108 3.3 135/161/157 Diabase Dark greeny-grev, very fine grained, hard, massive 81.2 84.5 with a local weak porphyritic texture 84.5 60109 90.5 6.0 9/9/11 - local ghosty white 3mm to 3 cm ameboid spots 60110 90.5 95.5 5.0 5/<5/< (different from quartz-feldspar crystal's spots) weak to moderate magnetite 60111 95.5 100.0 **<5** 4.5 - rare 1 to 3 mm stringer pyrite - <5% erratic grev 3 mm to 2 cm wide quartz veins - contact at 90.5 not very convincing (gradational) - appears to be just another phase of diabase 90.5 - 100.0 quartz-feldspar porphyritic texture dominant with 35% 1 to 5 mm scale anhedral quartz-feldspar clusters - at 98.1 - mini fault offsets veinlet by 2 to 3 mm (vein 90° to core axis, fault parallel to core axis) 100.0 126.4 Gabbro-60112 100.0 105.0 5.0 <5 Grev to greeny grey, medium grained to fine grained. Diabase? hard and massive with a pseudo-blotchy texture N. A. 105.0 124.9 19.9 - locally clustered with mm scale anhedral feldspar 60113 124.9 126.4 1.5 **<5** crystals -strongly magnetic (10% to 20% fine grained mm scale magnetite crystals - quartz rich - 30 to 40% interstial quartz - trace to 1% fine grained disseminated pyrite Comment: possibly classified as a Quartz Gabbro 117.8 - 119.8 fine grained phase of unit 124.1 - 124.6 mini shear 8600 to core axis. narrow zone contains om scale irregular grey quarts vein with minor associated bleby pyrite 126.4 131.4 Contact - Grey, fine grained hard and weakly sheared at 70 to 126.4 <5 60114 131.4 5.0 Zone 80° to core axise N. A. 131.4 187.1 55.7 (Sheared - strongly magnetic Gabbro-- minor 2 to 5 mm scale quarts veining, minor bleby Diabase) pyrite associated with veining sharp upper and lower contacts \$ 600 to core axis 131.4 187.1 Quartz Greeny-grey, medium grained to finer medium grained, Gabbro predominantly massive, locally porphyritic (Diabase)? - porphyritic sections contains up to 20% 1 to 5 mm chalky white quartz-feldspar clusters - quartz rich, up to 50% interstrial (matrix) quartz

PROJECT: UNDERSILL

DRILL HOLE NO. UMD-1

Date: Nov. 14, 1988
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DEP	PTH	ROCK TYPE	DESCRIPTION			(PLE			assays	
FROM	TO	NOCK TIPE	DBOCKIFIION	No.	PROM	70	WIDTH	Au ppb		
			- 15% tiny <mm &="" -local="" as="" component<="" crystals="" epidote="" magnetite="" matrix="" narrow="" scale="" td="" veining=""><td>60115</td><td>187.1</td><td>190.3</td><td>3.2</td><td><5</td><td></td><td></td></mm>	60115	187.1	190.3	3.2	<5		
			140.4 - 141.5 mini-shear zone, weak to medium sheared fabric 8 70° to core axis	60116	190.3	195.5	5.2	<5		! I
			At 145.5 1.5 cm wide quartz-epidote and minor	60117	195.5	200.5	5.0	<5		I
			1	60118	200.5	205.0	4.5	<5		
				60119	205.0	207.0	2.0	<5		1
187.1	223.5	Quartz Gabbro	Greeny-grey, fine grained to medium grained, hard, massive, lacking porphyritic texture	60120	207.0	211.0	4.0	<5		
			- overall grain size decreases while epidotization	60121	211.0	215.0	4.0	<5		1
			increases downhole through unit - moderately magnetic	60122	215.0	220.0	5.0	12		I
			- trace fine grained disseminated pyrite	60123	220.0	223.0	3.5	6		
			187.1 to 206.0 greeny-grey medium grained massive quartz gabbro cut by 5 to 8% erratic 5 mm to 10 cm wide quartz-feldspar (+ carbonate?) veining containing minor fine grained disseminated pyrite 206.0 to 223.0 grey to epidote-green bleached, fine grained to finer medium grained and very hard; light green epidote bleached zones on a 10-30 cm scale - 5% irregular 1 to 3 cm scale quartz-feldspar veining and blotching - appears to be finer grained, epidotized and more silicified equivalent of (187.1 - 206.0)							
223.5	228.6	Silicified Gabbro	grey medium grained, massive and very hard - very slight reddish tinge (hematite stain?) - 2 to 3% fine grained pyrite disseminated throughout - moderate to weakly magnetic	60124	223.5	228.6	5.1	33		
228.6	235.5	Breccia	Hedium grained sub-angular leuco-gabbro fragments	60125	228.6	232.0	3.4	147		i
		Zone	suspended in a grey siliceous cement - overall 50% fragments, 50% inter-fragment silia - fragments exhibit weak hematitic staining and are moderately magnetic - 3 to 5% fine grained disseminated to bleby pyrite plus minor mm scale stringer pyrite - contact at 235.3 marked by 3 cm wide white quartz vein sub parallel to core axis.	60126	232.0	235.5	3.5	191		
235.5	267.5	Altered	Greeny-grey, medium grained, massive and very hard	60127	235.5	240.0	4.5	29		i
	l	(Spotted) Quartz	with a distinctive mafic spotted texture - contains 40% 1 to 3 mm sub-angular chloritic	60128	240.0	241.0	1.0	48	[i
		Gabbro	crystals (spots), intensity and size of chloritic	60129	241.0	246.0	5.0	51		1
			spots decreases downhole through unit - locally moderately magnetic	60130	246.0			28		

PROJECT: UNDERSILL

DRILL HOLE NO. UND-1

Date: Nov. 14, 1988

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		10107	,

DEP	TH				SAF	(PLE			RESER	
FROM	TO	ROCK TYPE	DESCRIPTION	No.	PROM	TO	WIDTH	Au ppb		
			- minor bleby pyrrhotite	60131	251.0	256.0	5.0	23		
			sharp contact at 267.5 @ 50° to core axis 240.5 40% large 2 to 2 cm pyrrhotite blebs and	60132	256.0	261.0	5.0	49		
ľ			minor pyrite	60133	261.0	266.0	5.0	73		
267.5	324.5	Quartz	Grey to slightly greenish, medium grained, massive	60134	266.0	267.5	1.5	179		
		Gabbro	and hard	60135	267.5		3.0	13	j j	
			- locally moderately magnetic - trace, very fine grained disseminated pyrite	N. A.	270.5		45.5			
1	'		- 30 to 40% 1 to 2 mm scale amphibolite crystals set in a fine grained quartz feldspar ground mass	60136	316.0		3.0			
			- 10% tiny, 2mm scale glassy tabular crystals (quartz?) or colourless amphibole	N. A.	319.0	336.7	17.7			:
324.5	336.7	Diabase Dyke	Grey, fine grained, massive and hard - locally containing sub-rounded to irregular coarse grained quartz-feldspar amphibole spots on a 5 mm to 3 cm scale - locally weakly magnetic - trace fine grained disseminated pyrite Sharp but somewhat irregular contact at 324.5 @ 70° to 80° to core axis Hore of a gradational contact at 336.7							
336.7		Quartz		60137	336.7	341.7	5.0	5		
	B.O.H.	Gabbro	- moderately magnetic - trace disseminated fine grained pyrite	N. A.	341.7	354.0	12.3			
		,	336 7 to 386 0 1 to 8 foot continue containing up	60138	354.0		2.0	<5		
			to 20% goldy coloured mica (biotite) At 354.6 1 cm wide light grey felsic dykelet cutting gabbro at 75° to core axis	N. A.	356.0	392.0	36.0			
1 1										
		:								

PROJECT: UNDERSILL

DRILL HOLE NO. UND-2

Date: Nov. 22, 1988

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CO-ORDINATES: 88+00W

CLAIM NO.: TB 990165

LOGGED BY: Brian Nelson

HOLE SURVEYS (CORRECTED)

COLLAR ELEV.:

74+25N

CORE SIZE:

DRILLED BY: Northwest Geophysics

DEPTH DIP DIRECTION

DATE STARTED: Nov. 13, 1988

AZIMUTH: 3520

SECTION: 88+00W

316 ft - 490

DEPTH: 426 ft.

ANGLE: -500

COMPLETED: Nov. 16, 1988

OB overburden

REMARKS: First hole on setup lost - casing shifted in OB (length 110')

N.A.- not sampled

	PTH	ROCK TYPE	DESCRIPTION			MPLE			ASSAYS	
FROM	TO			No.	FROM			Au ppb	ļ	ļ
0.0	100.0	Overburden		O. B.	0.0		100.0			
100.0	185.0	Sediment	right to dark grey, line grained, hard and well bedded	N. A.		136.0		1		ŀ
		(Argillite)	Alternate very fine grained dark grey argillite and finer medium grained lighter grey clastic beds,	60139	'	137.0				
			bedding thickness quite variable from a 0.25" to 10ft	N. A.		153.0				
			scale, generally the finer grained beds are thinner Bedding at 50° to core axis	60140		_		_		
			Trace local disseminated pyrite	N. A.		180.0	1			1
			Very minor mm to cm scale quartz veining At 136.8 -cm scale quartz vein sub-parallel to core axis, minor associated blebs to stringer pyrite Core blocky and broken Note: Boxes 1 and 2 dumped	60141	180.0	185.0	5.0	<5		
185.0	209.5	Pseudo-	Grey, fine grained to medium grained, hard, locally	60142	185.0	188.0	3.0	<5		
		Brecciated Sediment	well bedded. Bedding attitude quite variable from 50° to core axis to sub-parallel to core axis (less competent argillite rotated or smeared towards plane of core axis)	60143	188.0	191.0	3.0	<5		
ARIO GEOL SSESSM OF	OGICAL SU ENT FILE FICE	RVEY S	Zone intruded by 5% erratic mm to locally cm scale grey white quartz veining, lighter grey silicified appearance associated with quartz veining Minor disseminated to bleby pyrite throughout Upper and lower contacts quite sharp at 30° to 45° to core axis					·		
APR	3 1989	42	191.5 to 197.5 medium grained mass sediment bed contains a sheared argillite bed at	60144	1		_	•		
, , , , ,			194.0, bed sheared at 10 to 15° to	60145	1	1		S		
RECE	IVE	b	core axis 200.0 to 200.5 5% mm scale threads of pyrite	60146	1					
REU			200.5 to 203.7 3 to locally 10% bleby pyrite in	60147	1			l		
	ĺ		breccia, silicified quartz injection zone		1	ł i	2.3	!	ļ	
200 -		•		60149						
209.5	218.0	Inter- mediate	Grey, fine grained, massive and hard - weakly magnetic	60150			-	<5]	
		Dyke	 1% 1-3 mm scale stringer to bleby fine grained to medium fine grained pyrite 	60151	214.0	218.0	4.0	<5		
ŀ			<pre>- very minor erratic quartz-carbonate ? veining - can't put finer on exact contacts - definitely no</pre>					1		
			good intrusive contacts. Possibly either a massive sediment bed carrying minor magnetite	į						
L	<u> </u>	ļ	or silicified fine grained gabbro dyke.		L		<u> </u>	L	<u> </u>	<u> </u>

PROJECT: UNDERSILL

DRILL HOLE NO. UND- 2

Date: Nov. 22, 1988

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DEI	PTH	DOOK TUDE	ND COD TOWY AN	T	SAM	IPLE			ASSAYS	
FROM	TO	ROCK TYPE	DESCRIPTION	No.	FROM	TO	WIDTH	Au ppb		
218.0	225.3	Altered Sediment	Pseudo brecciated-quartz-carbonate injected zone Grey, heterogeneous and bleached, remnant mm to cm scale bedding sub-parallel to 25° to core axis Overall 20% erratic, 3 mm to 1 cm scale white quartz carbonate veining and blotching	60152 60153		1	3.0 4.3	1 1		:
225.3	236.2	Contact Zone	Minor <1% mm scale stringer to fine grained disseminated pyrite Contact at 225.3 marked by blocky broken core Fine grained mafic (gabbro) dykes containing inclusions of or intruding bleached silicified sediment (same as section 218.0 - 225.3) Contact at 225.3 marked by broken core Sharp intrusive contact at 236.2 @ 55° to core axis	60154	225.3	231.0	5.7	<5		
	:		225.3- 231.0 Mafic Dyke Greeny-grey, fine grained massive and hard, locally speckled with 15% mm scale mafic crystals; weakly magnetic, trace mm scale veiny pyrite; Broken core at 231.0 can't get attitude of contact 231.0 - 236.2 Predominantly bleached sediment containing 6" and 1' wide mafic dykes contacts at 80° to core axis	60155 60156				1 1		
236.2	426.0 E.O.H.	Gabbro	Greeny-grey, medium grained to coarse grained, massive, homogeneous containing 25 to 30% black amphibole crystals - weak to moderately magnetic - minor local 2 to 6" scale very coarse grained leuco gabbroic zones - appear veinlike recrystalization the result of quartz-feldspar injection - lack of sulphide mineralization - gradational grain size coarsening in first 30 ft of unit downhole, chill of gabbroic intrusion	60157 N. A. 60158 N. A. 60159 N. A. 60160 N. A.	240.2 236.0 266.0	236.0 266.0 279.0	22.8 3.0 13.0 4.0 17.6 2.7	<5 <5 <5		
			236.2 to 241.0 - blocky broken core 300.6 to 303.3 silicified zone or intermediate dyke; grey, medium grained, hard and massive containing 10% flattened mafic clots and 20% mm to cm scale feldspathic blotches; trace fine grained disseminated pyrite; contacts weakly sheared and broken	60161 N. A. 60162 N. A. 60163 N. A. 60164 N. A.	323.0 326.0 338.0 341.0 363.0 366.0	326.0 338.0 341.0 363.0	3.0 12.0 3.0 22.0 3.0 10.0	5 <5 7		
				60165 N. A. 60166	403.0 406.0	406.0 423.0	3.0 17.0	11		

PROJECT: UNDERSILL

DRILL HOLE NO. UND-3

Date: December

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CO-ORDINATES: 80+00W

CLAIM NO.: TB 990165

LOGGED BY: Brian Nelson

HOLE SURVEYS (CORRECTED)

COLLAR ELEV.: 0.0

72+00N

CORE SIZE: BQ

DRILLED BY: Northwest Geophysics

DIP DIRECTION DEPTH

AZIMUTH: 3520

DATE STARTED: Nov. 16/88

SECTION: 80+00W

308' -450

ANGLE: -500

COMPLETED: Nov. 18/88

DEPTH: 308 ft.

REMARKS:

DEP	TH	DOGU BUDD	i	DRAGD TOM TON	Γ		SAM	PLE		l	ASSAYS	
FROH	TO	ROCK TYPE		DESCRIPTION	No		PROH	TO	WIDTH	Au ppb		
0.0	29.5	Overburden		· · · · · · · · · · · · · · · · · · ·	٥.	В.	0.0	29.5	29.5			
29.5	201.5	Clastic Sediment	medium grained, sections - locally bedde - shearing (lik- axis - overall 5% wh veining sub-p- erratic cross - moderate to l	y greenish grey, fine grained to finer generally hard with local altered soft d § 50° to core axis ely at bedding contacts) § 45° to core ite stringer quartz and minor carbonate arallel to bedding - foliation and 25% cutting stringers ocally strong sericite mini shear in sediment and quartz injection; 3% disseminated fine grained to medium grained pyrite	н.		29.5					
ļ			27 5 40 20 4		ł	- 1					1	
1			37.5 to 38.4	Quartz vein - 2 to 3 cm wide white guartz and minor carbonate vein	601		37.5	38.4		· ·	1	
ľ		ì		irregularly trending sub-parallel to	601	- 1	38.4	41.4			1	
Ì				core axis; trace disseminated pyrite	N.	A ·	41.4	58.2	16.8			
			58.2 to 60.7	Sericite-chlorite mini shear contain-	601	.70	58.2	60.7	2.5	1125		
				ing 10% mm to cm scale quartz veining predominantly parallel to shearing @ 55 to 60° to core axis; minor disseminated pyrite	601	71	60.7	67.2	6.5	5		
			67.2 to 69.7	Sericite-chlorite altered zone; minor irregular quartz veining; 3% coarse grained disseminated bleby pyrite	601	72	67.2	69.7	2.5	31		
			71.6 to 73.5	Sericite-chlorite altered zone; minor	601	73	69.7	73.5	3.8	20	 	
				1 to 3 mm scale white quartz veins;	601	.74	73.5	78.0	4.5	10		
			İ	shearing at 40° to core axis; 5% coarse grained bleby pyrite	601		78.0	84.0		1		
		}	93.4 to 94.5	40% semi-concordant to crosscutting	601	[84.0	88.0		[-		
i				3mm to 3 cm wide white quartz and	601		88.0	92.5				
}		1		minor carbonate veining; 3% fine grained disseminated pyrite	601		92.5	95.0				
		!		drained disseminated barite	1001	. / 0	92.5	35. U	1 2.3	21	1	

MINGOLD RESCURCES INC.

PROJECT: UNDERSILL

DRILL HOLE NO. UND-3

Date: December

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DEPTH	ROCK TYPE		DESCRIPTION			PLE			ASSAYS	
FROM T	O ROCK TIPE		DESCRIPTION	No.	PROM	TO	WIDTH	yn bbp		
		96.7 to 98.3	Well banded (bedded?) section, 25% 5mm to cm scale siliceous bands or	60179 60180	95.0 96.7	96.7 98.3	1.7	<5 <5		
	1		concordant quartz veins; banding 6 450	1	1					
			to core axis; minor crosscutting white quartz veins on a 3 to 5 mm scale; trace disseminated medium grained pyrite	60181	98.3	104.0	5.7	<5		
1	1	104 0 111 5	••	60182	104.0	108.0	4.0	<5		
		104.0 - 111.5	20% 1 to 5 mm scale white quartz veining predominantly 045° to 50° to	60183	108.0	111.5	3.5	(5		
			core axis is sericitic sediment; minor erratic splotchy quartz veining;	60184	111.5	116.0	4.6	<5		
			2 to 3% medium grained disseminated pyrite	60185	116.0	121.0	5.0	5		
		111.5 - 150.0	altered clastic sediment, moderate	N.A.	121.0	138.5	2.8			
			sericite; 2-3% 1 mm to 1 cm scale	60186	138.5	140.5	2.0	13	,	
		i !	greyish white quartz veining; 1% medium grained disseminated pyrite	N. A.	140.5	150.0	9.5			
		150.0 - 153.0	5% 2 to 5 mm scale erratic white quartz veining; 1% disseminated pyrite	60187	150.0	153.0	3.0	<5		
		153.0 - 157.5	intensely altered sediment; very strong sericite; 15% erratic mm to 3 cm scale white quartz veining, <1% disseminated medium grained pyrite	60188	153.0	157.5	4.5	<5		
		157.5 - 160.0	30% 1 to 5 mm scale white erratic quartz veining; trace disseminated pyrite	60189	157.5	160.0	2.5	5		
	<u> </u>	163.0 - 196.5	10 to 15% very erratic mm to cm scale	60190	160.0	163.0	3.0	5		
			white quartz veining; trace to 1% medium grained disseminated pyrite;	60191	163.0	167.0	4.0	5		
			weakly foliated # 550 to core axis	60192	167.0	171.0	4.0	<5		
1	1	•	188.5 - 189.5 blocky broken core	N. A.	171.0	182.3	11.3		ŀ	
			195.5 - 196.5 15% erratic mm scale quartz veining	60193	182.3	184.8	2.5	<5		
	:	196.5 - 201.5	sheared to brecciated sediment;	N. A.	184.8	192.5	7.7			
İ			gradation from moderately altered	60194	192.5	196.5	4.0	9	1	
			(sericitic sediment) to sheared brecciated-quartz injected sediment; outer limit of fault contact; 5% erratic quartz veining; trace	60195	196.5	201.5	5.0	9		
			disseminated pyrite; no sharp contacts starting to get appearance of light honey brown mineral as mm stringers							
201.5 22	20.0 Brecciated		ined to medium grained, hard to soft	60196	201.5	205.5	4.0	20		
	Shear Zone		ogeneous from sub-rounded to angular scale relict grey sediment fragments	60197	205.5	210.5	5.0	37		
		suspended in a	sericitic matrix to intensely sheared	60198	210.5	215.5	5.0	16		
}			ng flattened sediment fragments in W ratio = 4:1) - shearing at 50° to	60199	215.5	220.0	4.5	20		

1988

PROJECT: UNDERSILL

DRILL HOLE NO. UND-3

Date: December

1988

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	PTH	ROCK TYPE	DESCRIPTION			IPL E			ASSAYS	
PROM	TO	KOCK 11PE	VACCRIFIIOR	No.	PROM	70	WIDTH	Au ppb		
			<pre>- very minor quartz veining 1 to 2% - trace disseminated fine grained pyrite, patchy local silicification Both upper and lower contacts gradational over 1 to 2 ft. 201.5 - 202.2 30 to 40% soft honey brown mineral (sericite)?</pre>		1					
220.0	240.7	Pault Zone	Sheared fault breccia, grey to greeny grey and heterogeneous, very soft and crumbly, local very narrow 4 to 6" sub-zones that are hard (weakly siliceous); overall - angular to flattened (sheared) hard grey relict sediment fragments suspended in a very soft matrix; matrix of sericite +/- carbonate minor local mm scale stringers to light green mineral; trace disseminated pyrite; local very blocky broken sections; shearing at 40 to 55° to core axis 220.0 - 225.0 blocky, broken, very crumbly core 223.0 - 223.5 blocky crumbly section	60200 60220 60202 60203	225.0 230.0	•••	5.0 5.0	17		
240.7	308.3 E.O.H.	Sediment	Grey to greeny grey fine grained to finer medium grained and generally hard clastic sediment containing numerous narrow 6" to 3' wide brecciated to sheared quartz +/- carbonate flooded sub-zones. Overall <5% narrow 1 to 5 mm scale white quartz veining; trace disseminated fine grained to medium grained pyrite; lack of any sediment features or bedding contact.							
			240.7 to 254.7 fine grained hard grey sediment 5% 1 to 5 mm scale erratic grey white quartz veining; core quite blocky and broken; local shearing = 30% to core axis	N. A.	240.7	254.7	14.0			
			254.7 - 256.3 Quartz injected brecciated shear zone 30% erratic quartz veining; crumply like main flat zone up hole; undefined contacts	60204	254.7	256.3	1.6	68		
]			256.3 - 264.0 blocky broken core	N. A.	256.3	288.0	31.7			
			grey fine grained to finer medium grained sediment; <5% 1 to 5 mm scale erratic white quartz veining; trace disseminated pyrite 275.0 - 0.3 ft section of quartz injected shear, associated sheared sericite and chlorite * 20° to core axis							

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 3

Date: December 7, 1388

Page 4 of 4

	PTH	ROCK TYPE		DESCRIPTION			(PLB			ASSAYS	
PROM	TO	NOOK ITEE			No.	PROM		WIDTH	Au ppb		
;			288.0 - 289.5	Quartz carbonate injected mini shear mini shear-breccia zone; 15 - 20% stockwork white quartz veining; <5% yellow (carb?); sharp upper and lower contacts at 35° to core axis	60205				13		
;			290.8 - 291.3	40 - 50% quartz and yellow carb? veining over section; veining at * 600 to core axis	N. A.	289.5	293.5	4.0			
		•		moderate quartz-carbonate flooding	60206	293.5	296.0	2.5	7		
				m wide white quartz vein cuts sediments 80° to core axis	N. A.	296.0	303.3	7.3			
			At 296.5 3 t str	o 4 cm wide sericite mini shear, ong shearing at 20° to core axis							
			mm dis	i shear at 20° to core axis off-sets scale white quartz veins with 2 cm placement; trace very fine grained seminated pyrite associated with shear	60207	303.3	308.3	5.0	5		
	308.0	End of Hole									
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PROJECT: UNDERSILL

DRILL HOLE NO. UND - 4A

Date: February 20, 1989

Page: 1 of 2

CO-ORDINATES: 62+43W

CLAIM NO.: TB 990161

LOGGED BY: Brian Nelson

HOLE SURVEYS (CORRECTED)

58+00N COLLAR ELEV.: 0.0

CORE SIZE: BQ

DRILLED BY: Northwest Geophysics

DEPTH DIP DIRECTION

AZIMUTH: 1420

DATE STARTED: Nov. 22/88

SECTION: Off Section

ANGLE: -510

COMPLETED: Nov. 22/88

DEPTH: 88 ft.

REMARKS: Hole not completed, either casing or drill shifted

DEP	TH	ROCK TYPE	DESCRIPTION				4PLB		T		ASSAYS	
FROM	TO	RUCK TIPE	DEGCELETION	N	0.	PROM	70	WI	DTH	Au ppb		
0.00	11.00	Overburden		ο.	В.	0.0	11.	0 1	1.0			
11.00	12.00	Magnetite Hematitic Chert Iron Formation	Banded magnetite - hematitic chert on a 0.5 cm scale -core blocky and broken (drill induced)	N.	λ.	11.0	28.	0	1			
12.00	25.80	Clastic Sediment	Grey to greeny-grey, generally finer medium grained with local fine grained sericite and chlorite sheared zones - local mini shears at 0 to 30° to core axis - minor 1 mm to 0.5 cm irregular white quartz-carbonate veining at \$60° to core axis - overall trace fine grained disseminated pyrite, locally up to 5% pyrite over 5 to 10 cm Sharp contact at 25.80 \$ 30° to core axis									
25.80	40.00	Magnetite Hematitic Chert Iron Formation	specular hematite Overall 60% magnetite beds, 30% hematite-chert beds and 10% stockwork specular hematite veining Very minor 1 to 2mm scale white carbonate veining Lack of sulphide mineralization	N.	277 A.	28.0 31.0	Į.		3.0 9.0	<5		
			29.30 to 30.30 - clastic sediment-bed # 40° to core axis									
40.00	50.90	Clastic Sediment	to brecciated and hard Approximately half unit massive and half brecciated		278 A.	40.0 46.0		1	6.0 4.9	5		
ASSES	SMENT I	89	Upper and lower contacts brecciated along with a central 2 to 3' wide brecciated section Brecciated sections contain 30 to 50% 2 mm to 1 cm scale grey angular to sub-rounded siliceous fragments set in strongly chlorite +/- sericite cement - minor 1 to 2% erratic white 1 to 5mm scale quartz veinlets and blotches - trace to 1% fine grained disseminated pyrite - brecciated upper and lower contacts									

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 4A

Date: Pebruary 20, 1989

Page 2 of 2

DEP		ROCK TYPE	DESCRIPTION			iple			ASSAYS	
ROM	TO	NUCK IZFB	PBUVILI IVII	No.	PROM	70	WIDTH	Au ppb		
50.90	56.50	Brecciated Quartz Veining	White to grey brecciated quartz veining in dark green stockwork chlorite; 50% quartz vein, 50% chlorite - minor white carbonate inclusions in quartz - lack of sulphide mineralization	60279 60280	50.9 52.9	52.9 56.5	2.0 3.6	<5 <5		·
			50.90 to 52.90 - 75% quartz vein, 25% chlorite 52.90 to 55.50 - brecciated inter-vein sediment - chloritic 55.55 to 56.50 - 50% quartz vein, 50% chloritic							
56.50	66.00	Brecciated -Pseudo Brecciated Sediment	Grey to greeny grey, brecciated to pseudo brecciated and soft - strong chlorite - 1% fine grained disseminated pyrite - local minor 2 cm x 0.5 cm quartz lozenges	60281	56.5	62.2	5.7	5		
			62.20 to 63.20 - very strong chlorite	60282	62.2	63.2	1.0	<5		•
			- 5% fine grained disseminated to bleby pyrite 63.20 to 66.00 - blocky-broken, chloritic core	и. А.	63.2	73.0	9.8			
66.00	88.00	Clastic Sediment	Grey to greeny-grey, finer - medium grained to fine grained and quite soft - 5% very erratic white 1 mm to 1 cm scale quartz-carbonate veining - 1% fine grained to medium grained disseminated pyrite - moderate sericite	60283	73.0	78.0	5.0	<5		
		•	•				•	•		

Rastern District

PROJECT: UNDERSILL

DRILL HOLE NO. UND-4

Date: February 17, 1989

Page

1 of 4

CO-ORDINATES: 62+73W

CLAIM NO.: TB 990161

LOGGED BY: Brian Nelson

HOLE SURVEYS (CORRECTED)

58+23N

CORE SIZE: BQ

DRILLED BY: Northwest Geophysics

DEPTH DIP DIRECTION

COLLAR ELEV.: +9.0 ft

148 ft -420

AZIMUTH: 1420

DATE STARTED: Nov. 23, 1988

SECTION: Off Section

308 ft -360

ANGLE: -480

COMPLETED: Nov. 26, 1988

DEPTH: 400.0 ft.

REMARKS: Drilling EW and NS VLF anomalies as well as chert-magnetic iron formation

DEP	PTH	ROCK TYPE	DESCRIPTION	SAMPLE			YKSSK			
PROM	TO	ROCK TIPE	UBSCRIPTION	No.	FROM	70	WIDTH	Au ppb		
0.00	3.20	Chert- Hagnetite Iron Formation	Black to grey, hard finely bedded chert magnetite iron formation plus interbedded clastic sediment - 1 to 5 mm scale beds folded (contorted) with bedding at 30° to core axis - locally pitted due to near surface weathering - major component is fine grained magnetite - somewhat sheared contact at 3.2 & 30° to core axis	O. B. N. A.	0.00 3.20	3.2 20.0	- `			
3.20	15.10	Clastic Sediment	Grey, finer medium grained, moderately soft containing 5% erratic 1 to 3mm scale white quartz-carbonate veinlets - moderate sericite - local concentrations up to 5% of tiny magnetite crystals - sharp contact at 15.10 @ 45° to core axis							
15.10	42.80	Magnetite Hematitic Chert Iron Pormation	Alternating black to grey mm to cm scale magnetite rich and cherty beds, local sections (gradually increasing downhole through unit) containing up to 50% red 2mm to 1 cm wide hematitic chert beds crosscutting specular hematite veins on a 1 to 3 mm scale associated with the red hematitic chert. Beds appear to be sheared (rotated) towards the core axis plane, locally beds weakly folded to broken. Bedding predominantly at * 40° to core axis - 5% mm to cm scale quartz-carbonate veining, veining erratic and predominantly crosscutting - minor interbedded clastic sediments and argillite on 4° to 1.5 ft. scale - lack of sulphide mineralization - sharp contact at 42.8 @ 45° to core axis	60253 N. A.	20.0 23.0		I			
42.80	70.50	Clastic Sediment	Greeny-grey, fine grained and moderately hard 50% tiny blue to white quartz grains suspended in a very fine grained light green ground mass 5% very erratic 1 to 5mm scale white quartz-carbonate veining weakly magnetic 1 to 2% very fine grained disseminated pyrite sharp contact at 70.5 @ 50° to core axis cm scale magnetite lozenges floating in medium grained sediment near 70.5 contact	60254 N. A.			İ			

MINGOLD RESOURCES INC.

PROJECT: UNDERSILL

DRILL HOLE NO. UND-4

Date: February 17, 1989

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DEF	PTH	ROCK TYPE	ADAGRIPATAN		SAN	PLE			ASSAYS	
PROM	TO	ROCK TIPE	DESCRIPTION	No.	FROM	70	WIDTH	Au ppb		
70.50	89.30	Magnetite Hematite Chert Iron Formation	Very similar to section 15.1 to 42.8 - quartz-carbonate veining is less common and mainly confined to within 3 to 4 ft of the uphole contact - 1 to 3mm scale specular hematite veinlets crosscut	60255 N. A. 60256	70.5 73.0 82.0	73.0 82.0 85.0	2.5 9.0 3.0	<5 <5		
		Formation	bedding sub-parallel to 90° to core axis - bedding contacts at 30 to 50° to core axis 87.50 to 88.00 - 50% banded-blotchy white quartz- carbonate veining	N. A.	85.0	106.0	21.0	(3		
89.30	118.40	Clastic Sediment	Very similar to section 42.80 to 70.50 - grey, fine medium grained and weakly magnetic - 5% erratic 2mm to 1 cm scale quartz-carbonate veining - trace to 1% very fine grained disseminated pyrite - sharp contact at 89.3 @ 50° to core axis - broken core marks 118.4 contact	60257 N. A.	106.0 111.0	111.0 123.0		<5		
118.40	178.60	Magnetite Hematitic	Very similar to sections 15.10 to 42.80 and 70.50 to 89.30					į		
		Chert Iron Formation	specular hematite content than previous sections	60258 N. A.	123.0 126.0	126.0 135.0				
			- beds also more contorted, folded and brecciated - 5% concordant and crosscutting mm to cm white to grey quartz and quartz-carbonate veining	60159		138.0	3.0	<5		
			- bedding quite variable from 30 to 60° to core axis	N. A.	138.0	162.0				·
			144.80 to 145.90 - clastic sediment bed containing 40% 5 mm to 2 cm scale quartz	60260	162.0	166.0				
			veining	N. A.	166.0	173.6				
			165.20 to 165.70 - interbedded clastic sediment - sharp upper and low contacts # 45° to core axis	60261	173.6	178.6	5.0	₹5		
178.60		Clastic	Interbedded finer, medium grained clastic sediment	60262	178.6	181.6	3.0	<5		
	№. 0.H.	Sediment	and minor very fine grained argillite - quite massive and hard - overall minor 1 to 2% erratic white to grey 1 to 5mm scale quartz veining - trace to 1% fine grained to medium grained disseminated pyrite	H. A.	181.6	202.5	20.9			
			- sharp contact at 178.6 @ 30° to core axis							
			180.60 to 181.60 - argillite, finely bedded on a 1 to 3mm scale - sharp upper and low contacts at 20° to core axis							
			181.60 to 187.00 - blocky broken core - strong chlorite +/- sericite			:			i	
			203.20 to 204.70 - brecciated-pseudo brecciated argillite; greeny-grey soft with diffuse contacts; questionable breccia; trace disseminated medium grained pyrite	60263	202.5	205.5	3.0	<5		

MINGOLD RESOURCES INC.

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 4

Date: February 17, 1989

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DEP	PTH	ROCK TYPE		DESCRIPTION		448	PLE			ASSAYS	
PROM	TO	ROCK TIPE		DESCRIPTION	No.	PROH	TO	WIDTH	Au ppb		
				argillite, fine grained, local weak vuggy texture -5% erratic mm scale white quartz-	60264 N. A.	205.5 210.5	210.5 217.0	5.0 6.5			:
				carbonate veinlets -minor cm scale quartz veinlets @ 60 to 80° to core axis -contact at 210.2 @60° to core axis							
			· •	-finer medium grained to medium grained clastic sediment -1% medium grained disseminated pyrite	60265 N. A.	217.0 220.0					
				-argillite, soft, very fine grained -strong sericite +/- chlorite -very sharp contact at 227.70 @ 30° to core axis 5mm splash of chalcopyrite	60266	236.1	237.6	1.5	< 5		
				•	N. A.	237.6	255.0		` `		
			232.30 CO 201.00	-medium grained clastic sediment containing local 2" to 3' wide very					ا ہر ا		
				fine grained micaceous(ser +/- chl)		255.0	258.0		<5		
1				argillite (or possibly sheared bed- ding contacts) at *50° to core axis	60267	258.0	261.0		< 5		
				-overall 5% erratic 2mm to 2 cm scale white quartz veining -1% medium grained disseminated pyrite -local mini faults offset quartz veins by up to 1 cm -local vuggy quartz-carbonate veining	N. A.	261.0	273.0	12.0			
			At 260.80 -	2 to 3mm wide pyrite stringer parallels bedding contacts @ 45° to core axis							
			273.00 to 276.50	-minor local vuggy quartz-carbonate	60269	273.0	276.5	3.5	<5		
				veining on a lmm to 2 cm scale -trace disseminated pyrite	N. A.	276.5	287.0	11.5	ļ		
	•		t	-3cm wide quartz carbonate veining	60270	287.0	287.7	0.7	<5		
				-contains 25% coarse grained disseminated pyrite	N. A.	287.7	295.0	7.3			
			295.20 to 296.50	-50% sheared argillite containing	60271	295.0	297.0	2.0	<5		
				3mm to cm scale white quartz- veining parallel to shearing @ 45° to core axis -disseminated to bleby pyrite associated with quartz veining	N. A.	297.0	326.5	29.5			
			At 327.70	-0.5 cm wide white quartz vein @65° to core axis, contains 40 to 50% coarse grained bleby pyrite	60272 N. A.	326.5 331.5		1			

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 4

Date: February 17, 1989

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DEPTH	ROCK TYPE	DESCRIPTION			(PLE			ASSAYS	
PROM '	TO ROCK TYPE	DESCRIPTION	No.	FROM	70	WIDTH	Au ppb		
		vein occurs at bedding contact between finer medium grained clastic sediment and very fine grained argillite (sericite and chlorite) clastic-clastic sheared bedding contacts				•			
		At 330.80- 60% coarse grained 0.5 cm scale pyrite blebs and cubes over 2 cm in massive chlorite +/- sericite	60273 N. A.	346.0 350.0	350.0 364.0	4.0 14.0	<5		
		At 357.80-2 cm wide white quartz vein 361.20 to 362.20- massive chlorite	60274	364.0	368.0	4.0	<5	ĺ	
		375.00 to 400.00- blocky broken core -looks drill induced - (fault rock?) -minor 2mm to 2 cm scale quartz- carbonate veining -overall trace to 1% medium grained disseminated pyrite -locally up to 5% disseminated pyrite	60275 N. A.	384.0 388.0	388.0 397.0		<5		
		over 5 to 10 cm 397.00 to 397.30-4 cm wide quartz-carbonate vein parallels core axis, brecciated 1-2 cm scale chloritic fragments form downhole contact zone							
		397.30 to 400.00-fault (intrusive) breccia -heterogeneous zone, mixture brecciated fragments & sediment -breccia consists of fine grained 2 mm to 1 cm scale angular chloritic fragments set in fine grained sericite and carbonate cement -lack of sulphides	60276	397.0	400.0	3.0	10		

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 5

Date: February 27, 1989

Page 1 of 8

CO-ORDINATES: 60+00W

CLAIM NO.: TB 990161

LOGGED BY: Brain Nelson

HOLE SURVEYS (CORRECTED)
DEPTH DIP DIRECTION

COLLAR ELEV.: 56+50N

CORE SIZE: BQ

DRILLED BY: Northwest Geophysics

DEPTH DIP DIRECTION 538 ft -310

CODDAR SEEV.. U.U

DATE STARTED: Nov. 19/88

SECTION: Off Section

AZIMUTH: 1420 ANGLE: -480

COMPLETED: Nov. 22/88

DEPTH: 538.0 ft.

REMARKS: Drilling NNE trending VLF anomaly and chert-magnetite iron formation.

DEP	TH	BOOK WADE	OCK TYPE DESCRIPTION		SAM	PLE		ASSAYS		
FROM	TO	ROCK TIPE	DESCRIPTION	No.	FROM	TO	WIDTH	Au ppb		
0.00	49.00	Overburden		O.B.	0.0	49.0	49.0			
49.00	181.20	Sediment	Interbedded medium grained clastic sediment and sericitic argillite Grey, fine grained to medium grained predominantly hard with local narrow soft sericitic zones (shears) narrow shears on a 10 to 20 cm scale with shearing at 25 to 30° to core axis rare bedding contacts between fine grained and medium grained (quartz grain rich) beds overall 1 to 3% 1 mm to 2 cm scale white erratic quartz veining overall trace to 1% fine grained to medium grained disseminated pyrite 49.0 to 129.7 - predominantly medium grained clastic sediment interbedded with narrow sericitic argillite	N.A.	49.0	76.0	27.0			
AS	SESSME OFFI		<pre>ht 56.5 - sharp contact between uphole medium</pre>							
	APR E C E	3 1989 IVED	62.0 to 62.7 - mini shear in fine grained sediment - shearing @ 25 to 30° to core axis - strong sericite and minor mm scale quartz veining parallel to shearing - 1% disseminated fine grained pyrite							
			At 73.6 - 1 cm wide white quartz vein cuts fine grained sediment @ 45° to core axis							
			minor blue-grey quarte-veining	60208 N. A.		80.0 99.8		•		
			At 79.6 - 2 cm wide quartz vein @ 70° to core axis							

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 5

Date: February 27, 1989

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DEPTH ROCK TYPE DESCRIPTION SAMPLE								ASSAYS				
FROM	TO	RUCK TIPE	· · · · · · · · · · · · · · · · · · ·	DESCRIPTION	No.	FROM	TO	WIDTH	Au ppb			
				Sharp bedding contact between fine grained and medium grained sediment, contact @ 45 to 50° to core axis hint of fining uphole (Younging to north)		/						
			86.7 to 87.5 -	massive fine grained sericite (argillite bed?) trace disseminated pyrite								
•			=	sheared argillite? bed strong sericite and chlorite minor 0.5 cm scale white quartz veining parallel to shearing @ 35° to core axis 1% medium grained disseminated pyrite associated with quartz vein	60209	99.8	104.3	4.5	<5			
			104.3 to 105.1 -	quartz vein	60210	104.3	105.1	0.8	<5			
l			-	 white quartz containing 10% veining sediment inclusions 	60211	105.1	108.0	1	<5 -			
j			-	trace fine grained disseminated	N. A.	108.0	116.0	8.0				
1			_	pyrite sharp contacts at 40 to 45° to core	60212	116.0	120.0	4.0	6			
				axis	N. A.	120.0	130.7	10.7				
į			129.7 to 135.7 -	Argillite - very fine grained, soft	60213	130.7	135.7	5.0	<5			
				and grey, strong sericite - <1% 2 to 3mm scale white quartz veins @ 60° to core axis - 1% medium grained disseminated pyrite	N. A.	135.7	145.1	9.4				
			-	 Interbedded Argillite - clastic sediment on a 1 to 3 ft scale sharp bedding contacts at 45 - 50° to core axis trace to 1% fine grained to medium grained disseminated pyrite 								
		-	142.2 to 148.1 -		60214	145.1	148.1	3.0	<5			
			=	- strong sericite - locally banded @ 40° to core axis - medium grained to coarse grained bleby to cubic pyrite within 6" of downhole contact - sharp contact at 148.1 @ 45° to core axis	N. A.	148.1	158.5	10.4				
ļ			148.1 to 178.1 -	Interbedded clastic sediment and	60215	158.5	161.5	3.0	5			
				argillite - bedding on a 6" to 3' scale	N. A.	161.5	176.0	14.5				
				. www.lllita hade wall falisted due to	60216	176.0	179.0	3.0	7			
			-	planar alignment of sericite crystals - bedding contacts and foliation at 45° to core axis	N. A.	179.0	181.2	2.2				

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 5

Date: February 27, 1989

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DEP		ROCK TYPE	DESCRIPTION			4PLE	VIII.	ASSAYS		
FROM	10	NOON LIEB	NARAWIE 11AM	No.	FROM	TO	WIDTH	Au ppb		
			178.1 to 180.6 - clastic sediment bed (excellent example of medium grained sediment) - 50% mm scale quartz grains set in a fine grained moderately sericitic ground mass - displays a gradational fining? uphole through unit (tops to north?) - very sharp upper and lower contacts at 50° to core axis				•			
181.20	186.30	Iron Formation	Black to grey, fine grained hard and very well bedded on a 5 mm to 2 cm scale, alternate very fine grained magnetite beds and fine grained to finer medium grained grey cherty to clastic sediment beds, 60% magnetite beds, 40% clastic or cherty sediment beds - bedding & 45° to core axis - minor 1 to 3 mm scale white concordant quartz veining - trace very fine grained disseminated pyrite		181.2	186.3	5.1	<5		
186.30	193.10	Clastic	Greeny-grey, finer medium grained and moderately hard	60218	186.3	189.3	3.0	5		
		Sediment	- contains a couple of 5 mm to 3 cm wide magnetite beds, bedding contacts @ 50° to core axis - minor 1 to 3mm scale erratic white quartz veining - trace fine grained disseminated pyrite - sharp contact at 193.1 @ 45° to core axis	N. A.		195.5	6.2			
193.10	201.50	Iron Formation	Black to grey, fine grained, hard and well bedded Iron Formation interbedded with 6" to 1' scale clastic sediment beds (85% brecciated iron formation, 15% clastic sediment beds) sharp bedding contacts @ 45 to 50° to core axis overall 50 to 70% very fine grained magnetic 2% erratic 1 to 5 mm scale white quartz veining trace disseminated fine grained pyrite							
			193.1 to 194.1 - very finely bedded iron formation, bedding on a 1 to 2 mm scale # 50° to core axis							
			194.1 to 195.2 - clastic sediment plus 10% weakly contorted magnetite beds - contact at 195.2 @ 50° to core axis							
:	i i		195.2 to 198.1 - well bedded iron formation on a mm to cm scale, alternate magnetite rich and chert? or clastic sediment beds	60219 N. A.			1	<5		
			- sharp bedding contact at 50° to core axis; 1 - 2% erratic white 1 to 2 mm scale quartz-carbonate veinlets - mini-faulting sub-parallel to 45° to core axis offsets bedding on a mm to cm scale; trace disseminated pyrite							

PROJECT: UNDERSILL

DRILL HOLE NO. UND - 5

Date: February 27, 1989

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DEI	PTH	DOGY #1100	DECONTRACTOR	SAMPLE			ASSAYS			
FROM	TO	ROCK TYPE	DESCRIPTION	No.	FROM	TO	WIDTH	Au ppb		
			198.1 to 201.5 - contorted-brecciated mixture of magnetite iron formation and clastic sediment, 3 - 5% white quartz-carbonate veining at 20° to coreaxis; mini-faulting noted - bedding rotated towards coreaxis bedding at * 30° to coreaxis							
201.50	206.30	Clastic Sediment	Greeny-grey, fine grained, quite hard containing 10 to 15% mm to cm scale contorted black magnetite beds, trace disseminated pyrite - very minor white mm scale quartz-carbonate veining - gradational contact at 201.5 - sharp contact at 206.3 @ 50° to core axis	60220	203.5	207.5	4.0	<5		
206.30	211.30	Iron Formation	Interbedded magnetite iron formation and clastic sediment 75% magnetite iron formation, 25% clastic sediment beds. Bedding contacts at 50 to 60° to core axis; magnetite iron formation finely bedded on a 1 to 2 mm scale. Unit contains a 6" wide bed and 1.5 ft wide bed of clastic sediment; overall trace fine grained disseminated pyrite; 2 to 3% erratic 1 to 3 mm scale quartz-carbonate veining; local red hematitic beds; contact at 211.3 @ 55° to core axis							
			At 208.0 - 3 cm wide quartz vein associated with magnetite-clastic bed contact, minor disseminated pyrite	60221 60222	207.5 208.5		1			
211.30	273.30	Interbedded Magnetite Iron Formation and Clastic Sediment	Predominantly ≈ 80%, greeny grey clastic sediment - argillite interbedded with 20% individual black 1 to 5" scale magnetite sections - sharp bedding contact from 50 to 65° to core axis - overall magnetite lean section - magnetite sections composed of mm scale beds - local mini faulting sub-parallel to core axis - minor (1%) mm to cm scale white to grey erratic quartz veining - trace fine grained disseminated pyrite	N. A.	211.3	264.0	53.0			
			233.8 to 235.5 - interbedded argillite and mm to cm scale black fine grained magnetite beds - 60% argillite, 40% magnetite - bedding @ 450 to core axis 235.5 to 242.9 - medium grained clastic sediment - very minor bedded magnetite - minor erratic 1 mm to 1 cm scale grey-white quartz veining 242.9 to 246.4 - bedded magnetite rich section - bedding @ 40-600 to core axis - locally mini-folding (contorting) of beds; overall 40% magnetite, 60% sediment; trace disseminated medium grained cubic pyrite							

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DRILL HOLE NO. UND - 5

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DEPTH	ROCK TY	DESCRIPTION		4KB	PLE			ASSAYS	
FROM	TO RUCK TH		No.	FROM	TO	WIDTH	Au ppb		
		243.5 - 243.8 - 30% 2 to 3 mm scale quartz-carb veining parallel to bedding @ 600 to core axis							
		246.4 to 254.0 - Finer medium grained clastic sediment; very minor mm to cm scale erratic quartz-carbonate veining - trace to 1% fine grained disseminate pyrite; sharp contact at 254.0 @ 45° to core axis							
		254.0 to 256.2 - argillite, strong sericite - 2 cm wide magnetite bed at 254.0 contact			:		, '		
		256.2 to 259.5 - clastic sediment bed - trace fine grained disseminated pyrite							
		259.5 to 273.2 - interbedded magnetite rich and argillite beds on a mm to a 20 cm scale - bedding contacts at 40 to 55° to							
		core axis - 3% very erratic white quartz- carbonate veining - locally 1 to 3mm stringer pyrite associated with veining							
		At 264.5 - 1 to 2 mm scale specular hematite beds, mm scale disseminated pyrite beds hosted by magnetite beds	60223 60224	264.0 266.0		1			
		At 272.0 - mm spec of chalcopyrite	60225	267.5	273.2	5.7	<5		
273.2 3	300.2 Vuggy Argillite	Vuggy mini-faulted argillite - vuggy sections on a 1 to 5 ft scale - overall 3% white to grey folded, faulted erratic	60226	273.2					ě
		grey quartz, 5% 1 to 3 cm scale coarse grained white quartz-carbonate veining - veining sub-parallel to 45° to core axis At 275.0 - coarse grained vuggy quartz-carbonate vein trends sub-parallel	N. A.	277.5	380.0	2.5			
		(15°) to core axis 277.5 to 280.8 -3% 1 to 3mm erratic quartz-carbonate veining						1	
ŀ		280.8 to 281.6 -vuggy section	60227	280.8	284.8	4.0	<5		
		281.6 to 294.3 -fine grained sediment containing 2 to 3% mm to 3 cm scale erratic quartz carbonate veining	И. А.	284.8	294.3	9.3			
		292.0 to 294.3 -blocky broken core 294.3 to 300.3 -vuggy section -10 to 15% erratic 1mm to 3 cm scale coarse grained vuggy quartz- carbonate veining						:	ı.
		Comment: This vuggy section likely fault induced, possibly VLF conductor			J				

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DEPTH		500W 5W55	DESCRIPTION		1A8	SAMPLE		ASSAYS			
PROM	TO	ROCK TYPE	DESCRIPTION	No.	PROM	TO	WIDTH	Au ppb			
300.3	305.2	Magnetite Hematite Iron Formation	Alternate black to dark grey magnetic beds and red hematitic chert beds - bedding on a 3mm to 10cm scale at 40° to core axis - locally bedding folded and sub-parallel to core axis - hematitic chert beds tend to be boudinaged and broken - 3% erratic 1 to 3mm scale white quartz-carbonate veinlets - trace pyrite - At 300.3 contact core broken Sharp contact at 305.2 @ 50° to core axis	60229	300.3	305.2	4.9	<5			
305.2	309.4	Argillite	Greeny - grey, very fine grained soft moderately foliated @ 55° to core axis - strong sericite and chlorite - local minor pyrite 305.0 to 308.0 - 10% 2mm x 2 cm pyrite lenses (boudinaged veins) parallel to foliation 308.0 to 308.7 - banded magnetic-hematitic chert iron formation - sharp contact at 309.4 @ 55° to core axis	60230 N. A.	305.2 308.0			1			
309.4	335.0	Clastic Sediment	Greeny grey, finer medium grained and hard locally containing 3" to 1 'scale bedded magnetite iron formation - very minor 2 mm to 5 mm quartz carbonate veining at 30° to 80° to core axis - sharp contact at 335.0 @ 45° to core axis 318.4 to 319.3 - magnetite iron formation and fine grained specular hematite - bedding on a 1 to 2 mm scale at 55° to core axis 323.2 to 324.0 - magnetite iron formation containing one 3 to 5mm wide quartz (chert) hematite vein (bed?) parallel to bedding @ 55° to core axis 325.0 to 326.0 - interbedded magnetite iron formation and clastic sediment, minor								
335.00	364.10	Magnetite Hematite Chert Iron Formation	boudinaged hematitic-chert beds Black to grey to red, fine grained, hard and well banded (bedded) at 30 to 40° to core axis; overall 80% magnetite beds and 20% hematitic chert bedsbedding generally on a 1 to 5 cm scale; hematitic chert beds tend to be broken (boudinaged) and locally contorted, fine grained specularite associated with hematitic bedsbedding at low angle to core axis (30° or less) result of shearing and rotating toward plane of core								

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ASMALD

60243 432.0 433.3

1.3

238

DEPTH		ROCK TYPE	DESCRIPTION			(PL E		ASSAYS			
ROM	TO	KOOK TIPE	- DBDOKIF 110H	No.	FROM	TO	WIDTH	Au ppb			
			axis (tectonic induced bedding orientation) -very minor interbedding of clastic sediment -sharp contact at 364.1 \$40° to core axis	60231 N. A.	339.0 342.5			<5			
			349.5 to 351.5 - 20% very erratic to blotchy white 1 to 3 cm scale carbonate veining	60232 N. A.	349.5 351.5			<5			
364.1	372.6	Clastic	Greeny-grey, finer medium grained and hard containing			364.0		<5			
304.2	372.0	Sediment	1 66 9 mm to 9 mm month amounts annually annually applicable	N. A.		392.0					
372.6	405.6	Magnetite Hematite Chert Iron Formation	Bedded magnetite - hematitic chert on 3 mm to 2 cm scale; strong bedding and foliation fabric @ 50° to core axis; very similar to section 335.0 to 364.1 - minor interbedded clastic sediment on a 2 to 4" scale; sharp contact at 405.6 @ 55° to core axis								
			386.8 to 387.3 - brecciated iron formation	60234	392.0	397.0	5.0	<5			
ŀ			- 20% very erratic stockwork white carbonate veining	60235	397.0	402.0	5.0	<5			
			392.5 to 404.0 - 3 to 5% 2mm to 1 cm scale white quartz veining parallel to bedding at 50° to core axis; trace medium grained disseminated pyrite	60236	402.0	405.6	3.6	<5			
405.6		Sheared	Grey, finer medium grained, hard and well banded to	60237	405.6	410.6	5.0	<5			
1	E.O.H.	Clastic Sediment	sheared @ 55 to 60° to core axis - distinct light to dark grey banding on a 5 mm to 1 cm	60238	410.6	415.4	4.8	17			
		Bediment	scale; light grey bands predominantly siliceous - minor erratic to concordant white quartz veining - overall 1% medium grained disseminated pyrite to	60239	415.4	420.0	4.6	6			
				60240	420.0	425.0	5.0	<5	i l		
			disseminated pyrite trains parallel to shearing - locally up to 5% disseminated pyrite over 10 cm sections	60241	425.0	428.0	3.0	36			
			At 427.8 - very irregular 2 to 3 cm scale white carbonate vein								
			428.0 to 432.0 - mm scale contorted bedding at low angle to core axis; 5 to 10%	60242	428.0	432.0	4.0	270			

erratic blue-grey quartz veining - 2 to 3% fine grained to medium grained disseminated pyrite

blueish grey
- 5% irregular inclusions of sediment
- trace pyrite

432.0 to 433.3 - quartz vein - white to locally

- broken contacts

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DEPTH				<u>T</u>	BAN	(PLE			ASSAYS	
FROM	TO	ROCK TYPE	DESCRIPTION	No.	FROH		WIDTH	Au ppb		
***************************************			433.6 to 434.6 - quartz vein - grey to purpleish - 20% inclusions of sediment host - trace disseminated pyrite - irregular contacts							
			463.1 to 463.5 - quartz vein - bluey grey - sheared? vein, black banded	60248 N. A.	463.0 463.5			1644		
			crystals aligned sub-parallel to core axis - sharp upper and lower contacts at	60249	492.5	494.5	2.0	8		
			50° to core axis	N. A.	1			:		
			492.5 to 494.5 - 5% 2mm to 2 cm bluey grey quartz veining, trace pyrite	60250 N. A.	506.0 508.0			5		
			520.9 to 521.2 - quartz vein, white, 20% wispy	60251	520.9	522.4	1.5	85		
1			inclusions of host - sharp contacts at 60° to core axis	60252	522.4	527.4	5.0	<5		
		-	• • • • • • • • • • • • • • • • • • • •	N. A.	527.4	538.0	10.6			
			R. M.							

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drilling

Land Survey

Diamond or other core

within 30 days of recording.

core, number and angles of holes.

Signed core log showing; footage, diameter of

Name and address of Ontario land surveyer.

Ministry of Northern Development and Mines

Report of Work DOCUMENT No. W8904.



together with dates when drilling/stripping

Nil

Work Sketch (as above) in duplicate

NII

done.

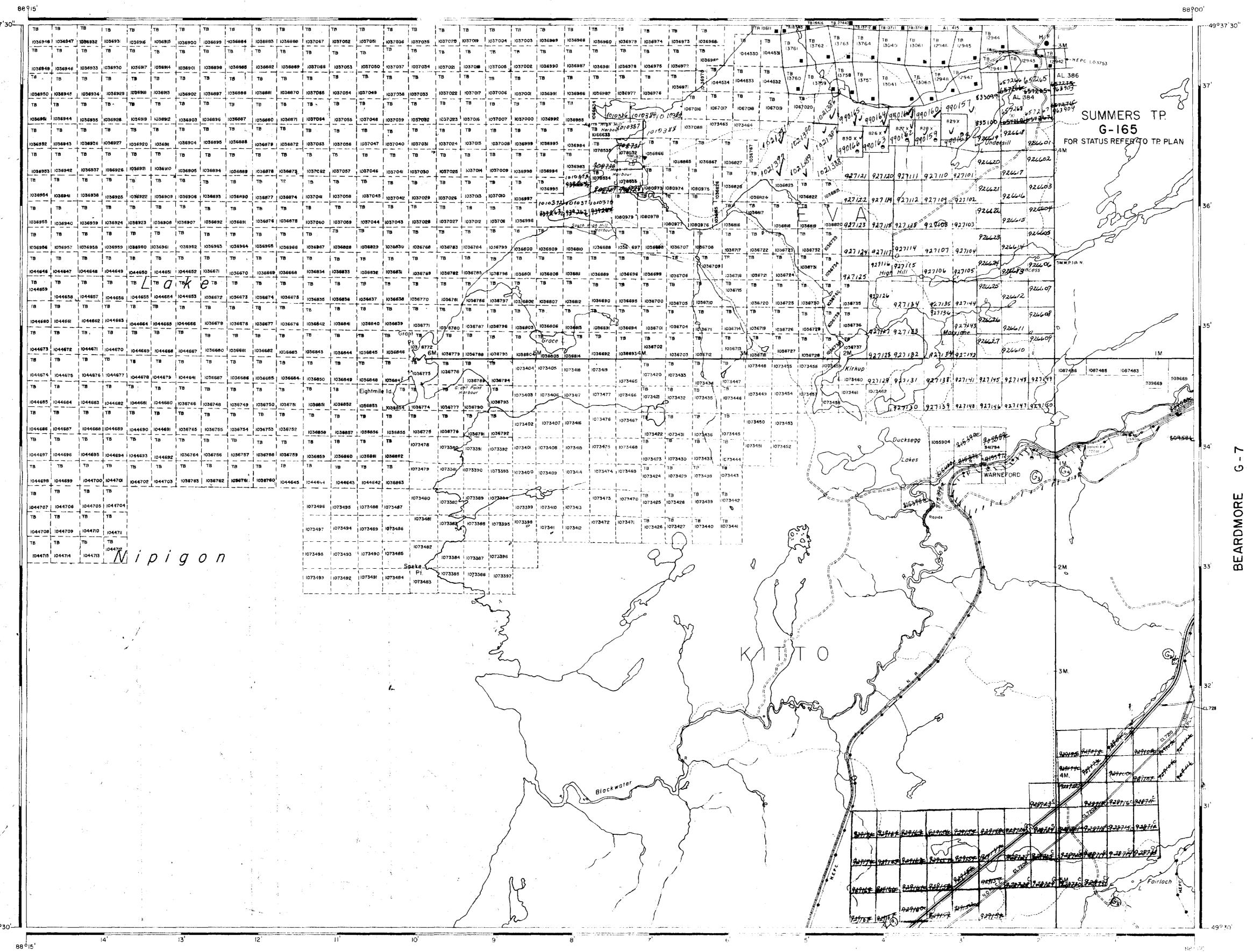
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stal Address of Recorded Holder

MINGOLD RESOURCES INC.

T 4617

MINGOLD RESOUR	CES THE						1 40	1/		
Box 28, Toron	o Dominio	on Centre, '	Toronto,	Onta	rio M5K 1B	8				
Summary of Work Perform										
Total Work Days Cr. claimed		ning Claim	Work	N	lining Claim	Work	Min	ing Claim	Work	
2064	Prefix	Number	- · · -	refix	Number	Days Cr.	Prefix	Number	Days Cr.	
for Performance of the follow work. (Check one only)		990157	 	тв	990165	121.4	ТВ	1021392	121.4	
Manual Work		990158	121,4		990166 '	121.4				
Shaft Sinking Drifting o	_	990159	121.4		1021386	121.4				
other Lateral Work. Compressed Air, other		990160	121.4		1021387	121.4				
Power driven or mechanical equip.		990161	121.4		1021388	121.4				
Power Stripping		990162	121.4		1021389	121.4	\$ 62. _			
Diamond or other Core drilling	_	990163	121.4		1021390	121.4				
Land Survey		-990164	121.4		1021391	121.4	4.24			
All the work was performed o	n Mining Claim(s): 990161	and 9901	65		3	3			
Required Information eg:	type of equip	ment, Names, A	ddresses, etc.	(See	Table Below)	7	•			
<u> </u>										
Diamond Drilling	•	•	·			16	5			
Contractor: Nor	thwest Ge	ophysics, I	Box 3263,	Thu	nder Bay, Or	ntario	1P7B 5E	8	•	
Dri	lled 5 ho	les totalli	ing 2064	feet	from Nov.	1/88	o Nov.	26/88		
Ass	essment C	redit Reque	ested = 2	064	Davs 🕝	· Hanna barren				
		•				ONTARIO ASSE	GFOLOGIC SSMENT	AL SURVEY		
Core stored at J	ellicoe G	eneral Stor	re, Jelli	coe,	Ontario	, , OOL	OFFICE			
* Work As 18990161 - 18990165	signme	ent.				A	PR 3 1	989		
18990161 -	1269	-273/				RE	CEIV	ED		
1B 990/65.	1247 -	2753	1							
	•		'	1	Date of Report		Redorded H	older or Agent (S	Signature)	
					March 2	3,1989	- Jan	- Wish		
Certification Verifying Rep	ort of Work						<u> </u>			
I hereby certify that I have or witnessed same during ar						ork annexe	d hereto, hav	ving performed t	he work	
Name and Postal Address of Po		halt Crass	nt Thur	lor	Ray Ontonia	פלפ	57/			
Brian Nelson, 935 Cobalt Crescent, Thunder Bay, Ontario P7B 5Z4 Date Certified Certified by (Signature)										
able of Information/Atta	nhmante Pac.	ired by the Mi-	ing Recorder		Morry 9;	1,1989	B1-	- Nels-		
Type of Work		fic information pe		Oth	ner Information (Co	mmon to 2	or more type	s) Attachi	ments	
Manual Work	0,5001	s pe		+==						
Shaft Sinking, Drifting or other Lateral Work Names and addresses of men who performed manual work/operated equipment, together are required to show										
Compressed air, other power driven or mechanical equip.	Type of equip	ment			th dates and hours o			the location extent of w relation to	n and Jork in the	
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording. Names and addresses of owner or operator together with dates when drilling/stripping									



PIJITAWABIK BAY & KILKENNY TWP G-111



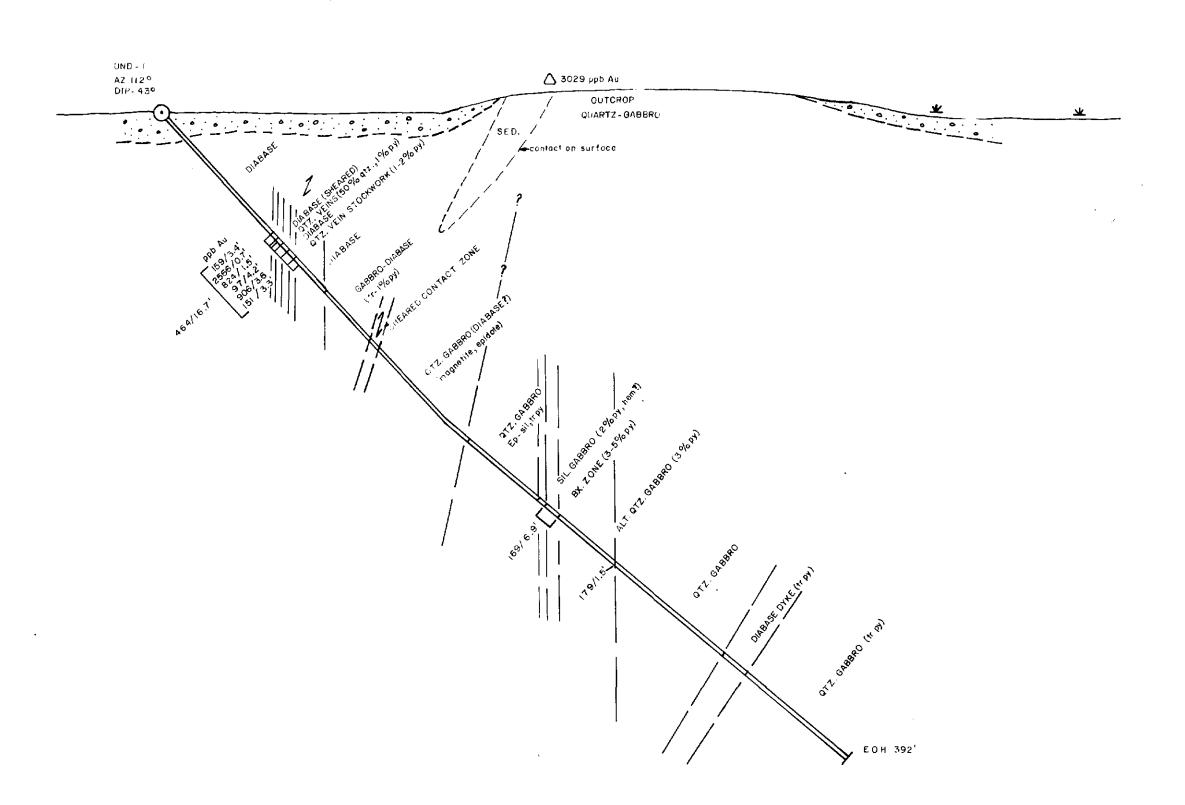
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PARCEL BOUNDARY NON-PERENNIAL STREAM FLOODING OR FLOODING RIGHTS SUBDIVISION ORIGINAL SHORELINE MARSH OR MUSKEG DISPOSITION OF CROWN LANDS " SURFACE RIGHTS ONLY MINING RIGHTS ONLY ORDER-IN-COUNCIL RESERVATION CANCELLED SAND & GRAVEL SCALE: | INCH = 40 CHAINS MARYJANE LAKE M.N.R. ADMINISTRATIVE DISTRICT NIPIGON MINING DIVISION THUNDER BAY LAND TITLES / REGISTRY DIVISION THUNDER BAY

LEGEND

OTHER ROADS





MINGOLD RESOURCES INC.

EASTERN DISTRICT

UNDERSILL PROJECT

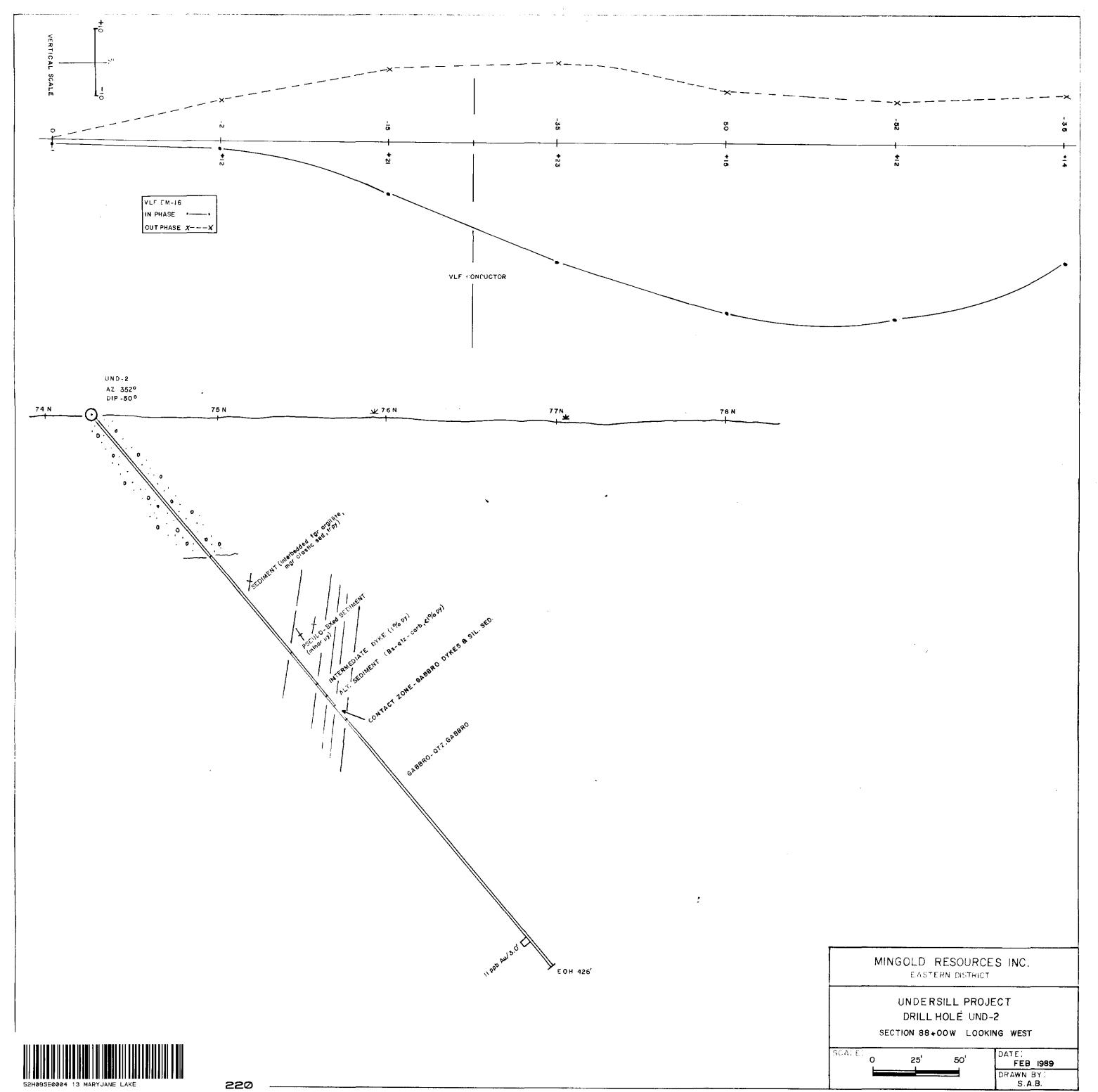
DRILL HOLE UND- I

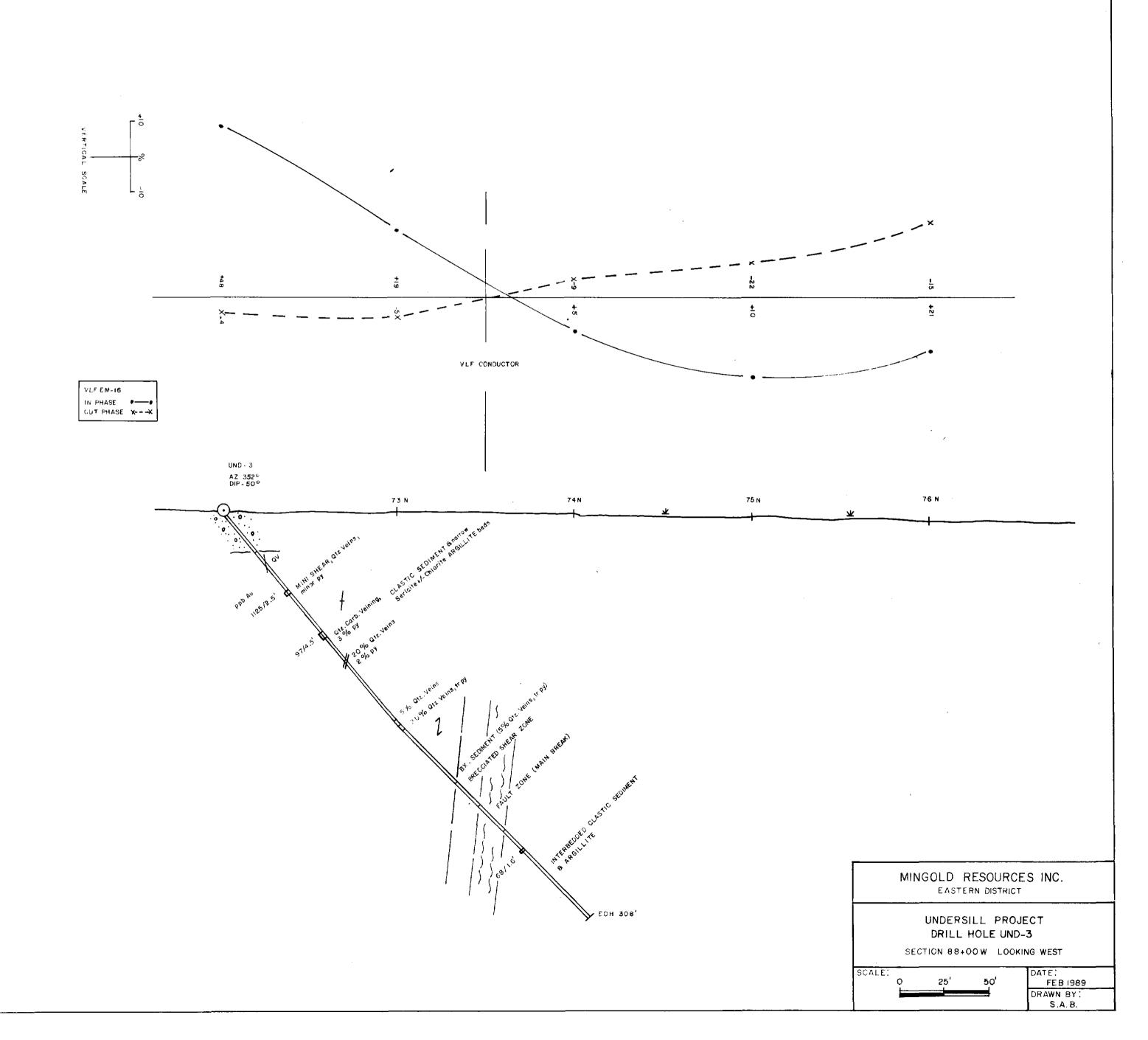
OFF SECTION LOOKING NNE
(92+00W, 84+00N)

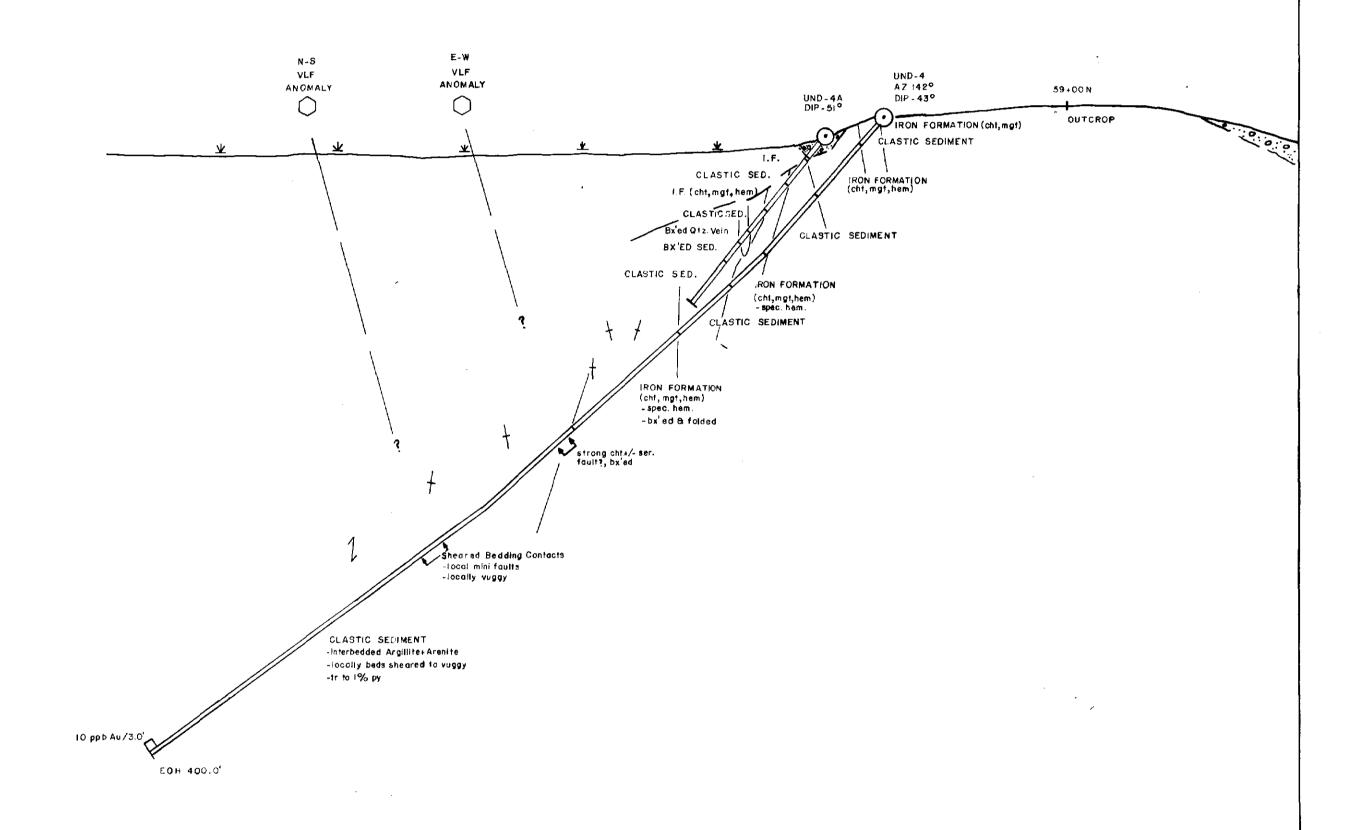
SCALE:

0 25' 50

DATE: FER 1989 DRAWN BY: S.A.B.







MINGOLD RESOURCES INC. EASTERN DISTRICT

UNDERSILL PROJECT

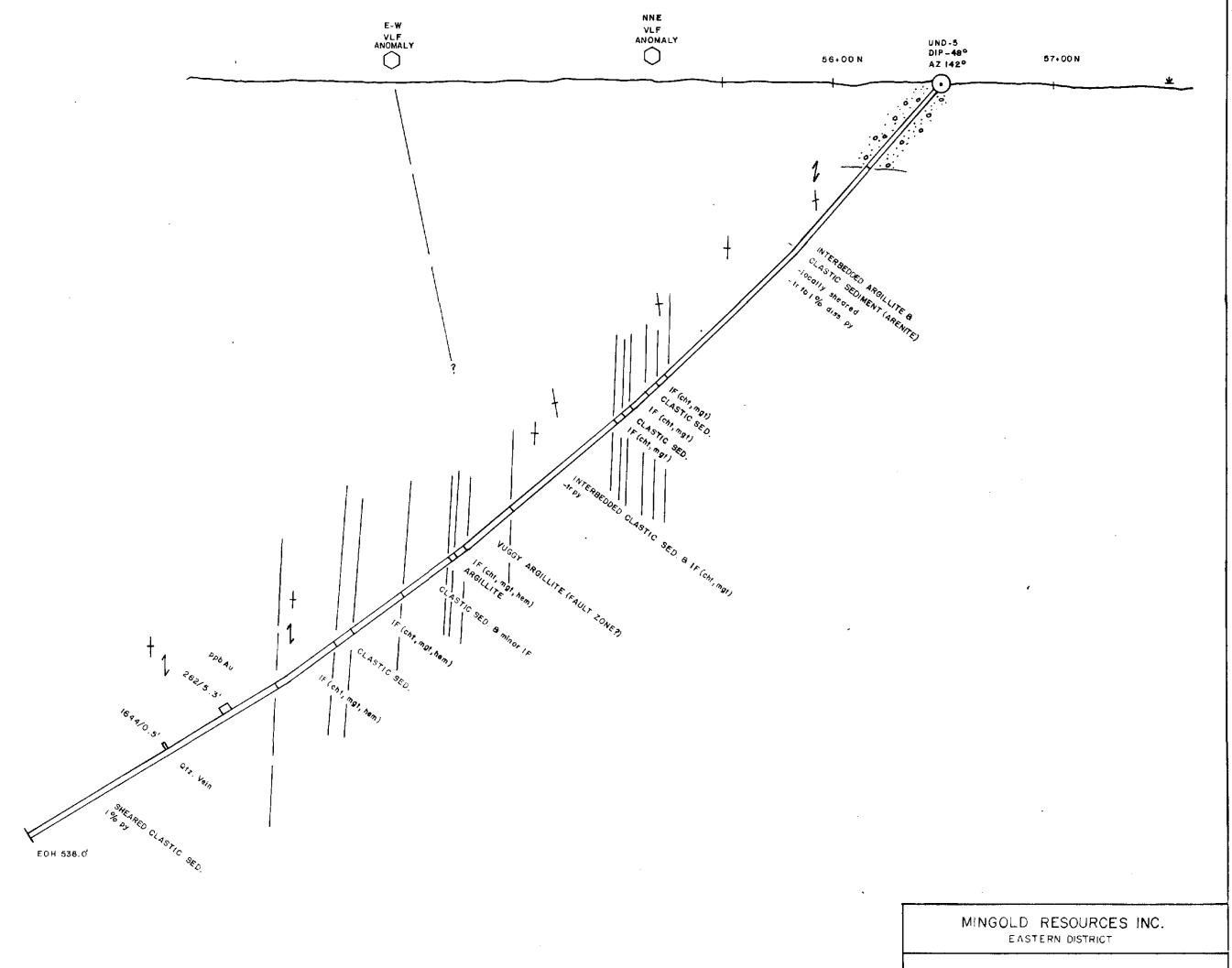
DRILL HOLES: UND-4 (OFF SECTION - 62+73 W)

UND-4A(30'E of SECTION)

LOOKING WSW

SCALE:

DATE: FEB 1989 DRAWN BY: S.A.B.



UNDERSILL PROJECT
DRILL HOLE UND-5

OFF SECTION - 60+ OOW LOOKING WSW

SCALE: 0 25' 50' DATE: FEB 1989 DRAWN BY: S.A.B,