

DIAMOND DRILLING



42A16SW0076 15 MOODY

010

TOWNSHIP: Moody

REPORT No. 1 15

WORK PERFORMED BY: Utah Mines Ltd.

<u>CLAIM No.</u>	<u>HOLE No.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
L 610471	JL-83-B	936	Mar/83	(1)

NOTES: (1) #117-83



HOLE NO. B.  
 CASING COLLAR ELEV.: 4' a.g.  
 COORDINATES: N. E.  
 INCLINATION: -55°

GROUND ELEV.:

BEARING: 0°

PROJECT: FIM'S LAKE  
 DATE STARTED: MARCH 16, 83  
 DATE FINISHED: MARCH 25, 83  
 TOTAL DEPTH: 986'

PAGE NO: 1A OF 12  
 REF. TO CLAIM CORNER:  
 SCALE: 1" = 10'  
 LOGGED BY: D. McEVOR

SECTION	ALTERATION			FRACTURING	MINERAL	GEOLOGY	COMMENTS: ADDITIONAL NOTES	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTI-MATED
							<p><u>277.5' - 295.5' CONT.</u></p> <ul style="list-style-type: none"> <li>numerous thin hematite rich bands    foliation &amp; minor diss. hem. throughout rock (oxidized)</li> <li>few thin gtz seams    fol., often ass. &amp; calcite or vuggy &amp; the calcite removed.</li> <li>weakly fractured, pred.    sub    to the foliation, &amp; chl. calcite fracture filling.</li> <li>distinct beds to 2-3" of frag rich vs frag poor rock - may be a graywacke</li> <li>from 277.5' - 284', v. vuggy soft, orange hematite bands to 25% of the rock, v. strongly schistose, strongly chloritized, sericitized, &amp; sphalerite to 1%, trace Py, as diss. diss. cubic blebs &amp; small elongate, v. frag. appearing blebs to 1/8"    fol., often in cubic, shaly, spha. rich 'bands' - other sph. blags have Py cores</li> <li>@ 279', 1/2" cherty siliceous argillite bed @ 70° to the cba.</li> <li>from 284' - 295.5', sulphides become 0.5%, pred. Py &amp; trace sph. - Py occurs as v. g. diss. min., often cubic, sph. ass. &amp; gtz-calc. seams</li> <li>from 287' - 290', very vuggy, &amp; large cavities to 1/2" (concreted calcite seams?)</li> <li>@ 289', 1/2" pinkish green silicified zone, (of sil. arg. interbed) to 40% of rock</li> <li>from 290' - 295.5', num. thin bands to 1/8"    fol. of gtz-calcite to 40% of rock</li> </ul> <p><u>295.5' - 298' MAGNETITE BEARING CHLORITE-CARBONATE 'SCHIST'</u></p> <ul style="list-style-type: none"> <li>rock consists of v. thinly bedded (av. 1/8", ranges 1/16" - 1/4") 'interbedded' bands of dk green v. soft chlorite &amp; grayish white calcite, &amp; a few thin dk black magnetite seams, (usually associated &amp; calcite, i.e. v. g. diss. mte in calcite seams, or massive mte bands) - overall comp. ≈ 45% chlorite, 35% calcite &amp; 10% magnetite (may be an altered int. volc. tuff or volcanoclastic rock)</li> <li>few carb bands are hem. rich, orange, sp. hard.</li> <li>wk. mod. slickensides along bed planes, sch. planes - fol. @ 70°</li> <li>few carb seams contain minor amounts gtz.</li> <li>sulphides to 2% (1.5% Py, 0.5% sph) occurring pred. as cubic blebs to 1/16" ass. &amp; carb bands - sph. usually occurs mantling Py &amp; a few thin sph. seams    fol.</li> <li>weakly fractured pred.    fol. &amp; chl. calcite trace fill.</li> </ul> <p><u>298' - 316' CHLORITIZED ANDESITE TUFF/VOLCANOCLASTIC EQUIVALENT.</u></p> <ul style="list-style-type: none"> <li>rock consists pred. of a v. g. dk green, v. strongly chloritized andesite, to andesite tuff (no distinct fragments, but v. well developed foliation that appears to be bedding - may be an ash tuff or volcanoclastic equivalent)</li> <li>foliation (bedding &amp; schistosity) @ 65° - 70° to the cba.</li> <li>numerous thin 'calcite' beds/seams from 1/8" to 1/4" &amp; 20% of (to 40% in places, lending pers. carbonized appearance to rock) - few carb seams discontinuous, v. fragment. appearing - few calcite seams contain minor gtz.</li> <li>few thin sericitic rich seams, often v. bright green, throughout rock,    to foliation.</li> <li>few minor soft soil deformation? type features - slumping? or intense small scale folding.</li> <li>weakly fractured, pred.    to fol. (few cutting faces), &amp; calcite, chlorite, minor blood red micaceous appearing min. (hem? - possibly smoozed sph.)</li> <li>calcite is light pink in places.</li> <li>from 298' - 306', thin calcite seams    to fol. to 1/4" to 40% of rock, &amp; minor v. g. diss. mte in few seams.</li> <li>from 300' - 300.5', num. sub-parallel 1/4" calcite seams to 30% rock</li> <li>from 306' - 315', v. hematite-limonite rich (oxidized) &amp; earthy soft orange bands of hem-lim to 20% rock, wkly vuggy in places, becomes more sericitic rich.</li> <li>from 315' - 316', v. strongly ser. chl. affected, &amp; numerous small (1/16") spherical to elongate 'frag shaped' gtz eyes - tuff frags? - clasts.</li> <li>SULPHIDE CONTENT: variable, from 298' - 306', to 0.5% Py, as v. g. diss. min. associated &amp; calcite seams, a few thin seams    fol., a few small scattered cubic blags.</li> <li>from 306' - 316', trace, pred. sphalerite as a few small cubic crystals ass. &amp; vuggy zones &amp; hem-lim bands.</li> </ul>								

ROSE NO. 8  
 CASING COLLAR ELEV.: 4' above ground GROUND ELEV.:  
 COORDINATES: N. E.  
 INCLINATION: -55° BEARING: 0°

PROJECT: YAMS LAKE  
 DATE STARTED: MARCH 16, 83  
 DATE FINISHED: MARCH 25, 83  
 TOTAL DEPTH: 936'

PAGE NO. 2 OF 12  
 REF. TO CLAIM CORNER:  
 SCALE: 1" = 10'  
 LOGGED BY: D. McEVOR

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE												
200'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>calcite seams to 30% locally sch/bd @ 65 to 70° calcite seams CHLORITIZED AND TUFF OR VEGETIC ERMIL</p> <p>hematite, limonite bands to 30%</p> <p>gls eyes - clasts.</p> <p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		0.5%	295'	100%	AR	298'	100%		
310'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		TRACE	306'	50%		306'	80%		
320'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			309'	30%		310'	90%		
330'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		0.25%	312'	50%		315'	60%		
340'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			318'	80%		321'	60%		
350'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			326'	100%		329'	100%		
360'	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		0.25%	336'	100%		339'	100%		
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			341'	100%		343'	100%		
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			346'	100%		348'	100%		
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		0.25%	349'	100%		350.5'	100%		
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			290'	100%		351.5'	100%		
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		TR				352.5'	70%		
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>		TR							
	STRONG	WEAK	NUMEROUS	MAFICS	Py	Py	<p>gls in sph. bearing v. sch. band and tuff intbed. calcite in schistose @ 65° small elongate unrounded, stretched gts.</p> <p>META-GABBROIC RK AND ANDESITE PORPHYRY and tuff interbeds</p> <p>calc-chl-talc seams</p>			356'	60%	V	357.5'			





WELL NO. 8  
 CASING COLLAR ELEV.: 4' above gr. GROUND ELEV.:  
 COORDINATES: N. E.  
 INCLINATION: -55° BEARING: 0°

PROJECT: JIM'S LAKE PAGE NO: 3 OF 12  
 DATE STARTED: MARCH 16.83 REF. TO CLAIM CORNER:  
 DATE FINISHED: MARCH 25.83 SCALE: 1" = 10'  
 TOTAL DEPTH: 936' LOGGED BY: D. McEVOY

SECTION	ALTERATION				FRACTURING	MINERAL GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE											
360'	SP WK	STA WK	NIL NIL	SP SP			chl-ser calc schist altered tuff interbed huff bed porphyry and tuff bed		0.25% TR 1%	359'		AQ	359.5'	100%	
370'	W WK	W WK	N NIL	W WK			and porphyry sch. chl alt groundmass PARAGENETIC AND-PLAG & TUFF INTERBEDS. small pling phenox. huff bed. silicification blabs locally ep alt.		0.28% 0.28% 0.28% 0.6%	369'	100%		369'	100%	
380'	W WK	W WK	B NIL	S SP			and tuff interbed dol. vn. dol. vn. lg. mg. spha. and. & af. pling phenox. dol. vns. wibly sch @ 65° to the cba		TR TR	376'	100%		375' 382' 383'	100%	
390'	W WK	N NIL	N NIL	S SP			v. sch. chl-ser. talc alt. porphyritic = small chl. calc. phenox. lg. mg. and. v. sch @ 70°		TR TR	386'	100%		386' 399'	100%	
400'	S WK	N NIL	N NIL	S SP			v. dark green, v. chl. calc. talc rich, v. sch. qz vn bio rich beds SER. SCH. (ARG.) bio rich - qz veining to 60% - becomes talc-chl rich		0.25%	399'	100%		399' 400' 409'	100%	
410'	M WK	V WK	N NIL	S SP			qz vn bio rich beds SER. SCH. (ARG.) bio rich - qz veining to 60% - becomes talc-chl rich		TR TR	408'	100%		408' 409' 416'	100%	
420'	V WK	N NIL	N NIL	S SP			qz vn Bio. chl. carb. sch. calcite seams thin beds - seams of chl - bio. calcite @ 55°		0.5%	416'	100%		416' 421'	100%	

359.5 - 409' CONT.  
 382 - 399 cont. @ 388.5', steep 70° hard large calc vns @ 45° to the cba & thin chl. alt. halos.  
 from 389.4 - 389.8', irreg qtz calcite 'blabs' @ 60° to the cba & num. thin 'red min' seams.  
 from 393 - 394', becomes v. schistose @ 65°, v. chl-ser. talc; altered, & numerous thin  
 calcite & qtz seams, num. thin 'red min' seams, sch. is wibly crenulated, appears  
 v. 'bedded', may be a thin tuff interbed.  
 sulphides - trace, a few thin Py blabs, minor vlg diss Py, Py & carb seams.  
 from 394 - 396', becomes v. porphyritic, light green to pling, rich groundmass & 30% small  
 (to 1/8") chloritized mafic min. blabs, phenox. (spherical to elongate 11 fol @ 55° cba.)  
 numerous thin calcite seams, wibly frac. @ random or. & calc. redmin like hill  
 numerous thin elongate v. small blabs of unknown white mg. trace lg diss Py.  
 @ 394.8', 1/4" qtz-talc vn @ 50° to the cba & 1" chl. alt halo  
 @ 395', 1" dark gray calcite 'blabs'.  
 from 396 - 396.5', v. strongly sch @ av or. of 60° to the cba but irreg, & deformation  
 features, chloritized and. tuff (wacke), qtz-carb vning @ 50° to the cba to 40%  
 of rock, pred. calcite, minor qtz & kyan. vuggy, trace vlg diss Py.  
 from 396.5 - 398', lg. mg. andesite & 50% subhedral-anhedral pling crystals &  
 50% chloritized mafic min.ystals, numerous thin chl-calc seams & blabs, numerous small  
 pink corroded garnets, 0.25% Py as lg diss min. & thin seams arg. & chl. calcite.  
 from 398 - 400', becomes v. schistose (bedded), @ variable orientations, ranging from  
 60° - 70° to the cba, v. chloritized, & 25% thin calcite seams 11 bd. fol  
 @ 398.3', 1" qtz & minor calc vn @ 80° to the cba  
 @ 399.3', 1/2" qtz-calc seam @ 55° to the cba & Py blabs to 1/8" @ 11ms.  
 @ 399.6', 1" qtz-calcite 'blabs'.  
 sulphides to 0.25%, & Py blabs ass. & qz veining, v. minor lg diss min.  
 from 400 - 409', becomes a dark bluish-green, vlg aph. v. soft, chl-talc-calcite  
 schist (sch. @ 55° cba), num. calc & qtz seams, 'blabs', to vlg diss Py.  
 (may be severely alt. part of overlying andesite or a separate more mafic  
 volc.).  
 404 - 411.5' SERICITE SCHIST (LIGHT GREEN, SERICITE RICH ARGILLITE)  
 v. thin bed. (av < 1/16" to 1/2") light green, v. sericite rich (to 60%) argillite (or alt. fol. volc. tuff),  
 bedding v. well developed @ 55° to the cba, v. soft, occasionally chlorite rich,  
 a few thin biotite rich beds  
 calcite to 30% of rock as numerous v. thin seams, beds 11 bd. @ 55° to the cba,  
 occasional thicker seams, blabs to 1/8" both 11 to & cross-cutting bedding  
 v. banded appearing, & thin yellowish green ser rich vs. dark green chlorite rich beds.  
 bedding @ irreg orientations in places - appears to be folded bed. in places.  
 a few carb seams, carbon minor qtz, rock becomes talc? rich in places  
 @ 404.8', 1" qz vn @ 55° to the cba, rimmed by minor calcite & yellow sericite  
 from 405.8 - 406', dk. brown, bio. rich bed & sharp contacts @ 55° to the cba, v. carb  
 rich, & 1% Py as thin elongate blabs 11 bd. & a few small cubic crystals, v. soft.  
 @ 406.5', 1/2" bio rich zone (poorly defined contacts)  
 @ 407.5', 1/4" qz vn @ 55° cba.  
 from 407 - 408.5', increasingly chl (+ minor talc?) rich, & numerous thin qtz-  
 calcite seams to 1/4" - irreg or., foliated, slumped;  
 from 408.5 - 409', light brown, bio. rich & large (to 1") fragments of schistose  
 chl-ser rich arg. (boundaried beds or slumped frags).  
 from 409 - 410', qtz (e. minor calcite) vning to 60% of rock, & bands to 3" @  
 av or. of 80° cba (although highly variable), surrounding rock v. schistose,  
 v. ser. chl. talc? altered. (sch 1/4" vn. orientations) v. vns  
 from 410 - 411.5', v. talc-chl rich, a few nutting pink-white calcite seams, a few  
 thin Py seams & Py filled fracs;  
 sulphides: trace. Py noted only in bio zones & from 410-411.  
 411.5 - 421' BIOTITE-CHLORITE-CARBONATE SCHIST (ALTERED INT VOLC TUFF OR EQUIVALENT  
 VOLCANOCLASTIC SED.)  
 vlg. v. thin bed. & strongly schistose @ well developed orientation of 55° to the cba, pred.  
 bio. chl. carb rich rock, light greenish brown, weak banded appearance & thin CONT.







CASING COLLAR ELEV.: 4' above gr. GROUND ELEV.:

DATE STARTED: MARCH 16.83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 25.83

SCALE: 1" = 10'

INCLINATION: -55° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D McIVOR

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTI-MATED	
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE													
420'	SIR	WK	NIL	SOI			<p><u>BIR-CAL-CARB-SCH</u></p> <p>458.6' - 460.5' CONT</p> <p>green to white carb-ser alt. rock</p> <p>shumped (folded) magnesian</p> <p>thin alternating chl-calcite beds - seams @ 55°</p> <p>thin alternating chl-calcite beds - seams @ 55°</p> <p>kninked fol.</p> <p>gray calc seam rimmed by rock.</p>	0.5%	418'	100%	AG	416'	100%	421'	100%		
430'	STRONG	MINOR	NIL	STRONG			<p><u>460.5' - 463' PORPHYRITIC RHYOLITE</u></p> <p>vtg. aphanitic, light yellowish green w/ky sericitized v. siliceous groundmass, ± 30-40% small (to 1/8") white feldspar, a few qtz, predominantly anhedral phenocrysts, exhibiting a weak preferred orientation (flow banding?) @ 55° to the cba.</p> <p>trace vlg diss Py</p> <p>moderately fractured @ preferred orientation // fol.; ± sericite, minor calcite frac. fill</p> <p>numerous v. small calcite blebs throughout rock in close association c feld. pheno's (may be an alteration) &amp; thin stringers // fol.</p> <p>contacts are sharp, concordant, @ 55° to the cba.</p>	19%	431'	100%		421'	100%		425'	100%	
440'	SEAMS TO	SEAMS TO	NIL	SEAMS TO			<p><u>SER-CARB-SCH</u></p> <p>ddl. vn ± 1% Po-cpy thin ser. calcite beds</p> <p>tuffaceous appearing carb &amp; silic. frags</p> <p>kninked bedding</p> <p>qtz-dol vn</p> <p>thin beds - bands of ser-chl-calcite @ 65°</p>	29%	441'	100%		435.5'	100%		441'	100%	
450'	SEAMS TO	SEAMS TO	NIL	SEAMS TO			<p><u>CHL-CARB-SER-SCH</u></p> <p>small qtz 'eyes' &amp; calcite frags</p> <p>chdly silica bed. vn.</p> <p>magnesian vns</p> <p>qtz-magnesian vn</p>	TR ACE	451'	100%		446.5'	100%		451'	100%	
460'	SEAMS TO	SEAMS TO	NIL	SEAMS TO			<p><u>SER-CARB-SCH</u></p> <p>num. yellow carb beds</p> <p>v. damogony appearing ± thin fol. calc. ser beds @ 55°</p> <p><u>SERICITE SCH.</u></p> <p>qtz-carb-sulphide fragments</p> <p><u>AND. TUFF</u></p>	1-2%	456'	100%		458.5'	100%		458.5'	100%	
470'	FR FILL	WEAK	NIL	SEAMS TO			<p><u>PAR. RHYOLITE</u></p> <p>vtg. aph. light yellowish white w/ky sericitized groundmass ± v. 40% small (1/16-1/8") anhedral to subhedral feldspar pheno's, a few qtz pheno's - pheno's exhibit a weak preferred orientation - alignment @ 65° to the cba</p> <p>w/ky fractured @ random orientations, ± minor chlorite, sericite, calcite fracture filling in places ± wk bleached alt. halos &amp; an apparent increase in pheno's density &amp; minor diss. Py</p> <p>a few small calcite blebs &amp; stringers throughout rock.</p> <p><u>SULPHIDE CONTENT:</u> trace, minor vlg diss Py blebs (amorphous &amp; cubic), increase slightly proximal to frags.</p> <p>concordant contacts @ 65° to the cba.</p>	0.5%	465'	100%		462.5'	100%		462.5'	100%	
480'	FR FILL	WEAK	NIL	SEAMS TO			<p><u>CHLORITE 'SCHIST'</u></p> <p><u>PAR. RHYOLITE</u></p> <p>vtg. aph. thin bedded &amp; schistose @ 65° to the cba) yellowish white predominantly sericitic groundmass, ± numerous v. tuffaceous appearing elongate qtz-carb-sulphide fragments to 1/4" (or 1/16") &amp; frags of yellowish white hard carb. (carb. ± qtz)</p> <p>numerous v. thin hard yellowish white carb. interbeds - seams to 1/32"</p> <p>w/ky frac. @ random orientations, ± calc. chl. minor orange limonite? frac fill.</p> <p>bed is w/ky srenulated, kninked in places.</p> <p>from 468' - 469', bright yellow carb frags &amp; thin interbeds to 20% of rock</p> <p>from 469' - 471', slightly darker green, w/ky chloritic, less frag rich.</p> <p>from 469.5' - 471', thin bands of vlg diss Py to 2% to the cba</p> <p>hard carb filled frac. ± minor Fe-oxide @ 0% to the cba</p> <p><u>OVERALL SULPH. CONTENT:</u> 1%, as diss. seams, cubic blebs &amp; min. in qtz frag.</p>	TR.	468'	100%		468.5'	100%		468.5'	100%	
490'	FR FILL	WEAK	NIL	SEAMS TO			<p><u>CHLORITE 'SCHIST'</u></p> <p><u>PAR. RHYOLITE</u></p> <p>light green to white, w/ky sericitized, v. siliceous groundmass (vtg. aph) ± 40% small (1/32-1/16") predominantly anhedral to subhedral feldspar pheno's, a few qtz pheno's, exhibiting a wk pref. orientation - alignment @ 65° to the cba</p> <p>wk scuffing chl-carb (hard, pink-white, magnesite?) filled frags.</p> <p>numerous small calcite blebs &amp; stringers throughout rock</p> <p>@ 474.3', 1/4" scuffing qtz vn @ 40° to the cba, ± diss. cubic &amp; amorphous</p>	0.5%	477'	100%		476'	100%		476'	100%	

CASING COLLAR ELEV.: 4' above gr. GROUND ELEV.:

DATE STARTED: MARCH 16, 83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 25, 83

SCALE: 1" = 10'

INCLINATION: -55° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D. McEVOR

SECTION	ALTERATION			FRACTURING	MINERAL	GEOLOGY	COMMENTS: ADDITIONAL NOTES	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTI-MATED
							<p>471'-476' CONT.</p> <ul style="list-style-type: none"> <li>Py blebs to 1/32" in vn. @ rims, &amp; extending into wall rock to 1" over 3".</li> <li>From 475'-476', wkly sch, &amp; por. txt. overprinted, strongly sericitized.</li> <li>&amp; 1/8" calcite filled frac @ 10° to the cba.</li> <li>SULPHIDE CONTENT: trace, vlg diss Py &amp; Py proximal to trace, vns.</li> <li>concordant contacts (upper: 60°, lower 65°).</li> </ul> <p>476'-484.5' SERICITE 'SCHIST' (ALTERED RHYOLITE TUFF)</p> <ul style="list-style-type: none"> <li>pred. vlg. light green, v. thinly bedded &amp; strongly schistose (@ av. or. of 65° to the cba, although weakly variable through unit) sericite rich (50-60%) altered felsic tuff.</li> <li>sericitic groundmass &amp; num. small (&lt; 1/8") v. luffaceous (elongate    to fol.) appearing frags of white fspar, qtz &amp; carb. (a few sulphide rich (Py) frags)</li> <li>overall frag content &amp; 20%, but highly variable.</li> <li>numerous thin carb 'beds'-seams    bed. sch, pred. hd. magnesite?, a few thin chl. seams.</li> <li>a few thin qtz (silica) beds-seams (to 10% from 477'-478')</li> <li>in places relatively hard, argillaceous appearing.</li> <li>some linked, crenulated bd sch. (from 480'-482')</li> <li>moderately frac. @ random orientations, &amp; chl. calcite, sericite frag. fill.</li> <li>from 477'-478.5', numerous thin (1/16") vlg Py rich beds &amp; abundant associated Fe-oxide (hem.-limonite), minor swelling Py frag fill, Py to 2%.</li> <li>from 476.5'-479.6', porphyritic thuyite interflow, aphanite, grayish white, v. siliceous, wkly sericitized groundmass &amp; 30% v. small (av. 1/16") white prep. feldspar phenox exhibiting wk alignment @ 70° to the cba, mod. shly fractured @ rnd. or., &amp; ser.-chl. minor calcite frag fill, numerous mottled appearing calcite blebs, tr. vlg diss Py.</li> <li>from 479.8'-482', darker, more chlorite rich.</li> <li>@ 482.7' 1/2" light brown dolomite vn (bed?) @ 90° to the cba (locally concordant).</li> <li>from 483'-484', light brownish-bage, v. hard, thinly bd. dolomite, bd. @ 70° to the cba, &amp; numerous thin calcite-magnesite seams &amp; luffaceous appearing frags.</li> <li>from 484'-484.5', numerous thin hd. frag carb (dol.) seams-beds to 30% rk.</li> <li>OVERALL SULPHIDE CONTENT: 0.5%, pred. Py, tr. Pb, as thin seams of diss. cubic &amp; amorphous blebs, minor min. in carb frags; minor frac fill.</li> </ul> <p>484.5'-489.5' PORPHYRITIC RHYOLITE</p> <ul style="list-style-type: none"> <li>vlg. aph. light green, wkly sericitized, v. siliceous rhyolitic groundmass, &amp; 30-35% predominantly anhedral (a few subhedral) phenocrysts of feldspar, minor qtz, to 1/4" av. 1/16"-1/8", &amp; wk alignment @ 60-65° to the cba - in places phenox are wkly carb altered? thin calcite rims on feld phenox.</li> <li>numerous thin calcite stringers, blebs, throughout spec.</li> <li>groundmass is v. waxy schistose @ 60-65° to the cba.</li> <li>@ 487' 1/16" calcite-chl. qtz filled frac @ 35° to the cba.</li> <li>from 487'-488', qtz-calcite-Py filled frac @ 10° to the cba &amp; strong silica alt. halo &amp; associated diss. Py blebs to 1/16" &amp; 1/8"</li> <li>from 488'-489.5': phenocrysts are strongly carbonate altered. (amygdalas?)</li> </ul> <p>489.5'-495.5' CHLORITE-SERICITE-CARBONATE 'SCHIST' (ALT. INT. VOLC TUFF OR CLASTIC EQUIVALENT.)</p> <ul style="list-style-type: none"> <li>rock comprised of alternating beds-bands to 2-3" of light gray, vlg. v. thinly bd &amp; strongly sch, appearing sericite rich rock &amp; darker greenish-gray chlorite-calcite rich rock.</li> <li>bd; sch, v. well developed @ 60° to the cba.</li> <li>both lithologies appear v. luffaceous (lapilli) in places, &amp; thin elongate 'frags' to 1/4" of carb &amp; sericite rich rock.</li> <li>numerous thin carb (pred. calcite, minor magnesite, dolomite) 'beds'-seams    fol. to 1/8" &amp; 30% of rock, occ. &amp; minor qtz.</li> <li>chl. rich beds contain minor vlg. diss. black bit.</li> <li>wkly fractured @ random orientations, &amp; pred. calcite frag fill.</li> <li>Py to 0.25% as small cubic &amp; amorph. blebs to 1/32" diss. throughout rk.</li> </ul>								

CASING COLLAR ELEV.: 4' a.g.

GROUND ELEV.:

DATE STARTED: MARCH 16. 83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 26. 83

SCALE: 1" = 10'

INCLINATION: -55° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D. McIVOR

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE RECY / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% RECY SAMP INT.	ESTI-MATED
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE												
480'	S	V					476.5'-508' CHLORITE-CARBONATE SCHIST (ALTERED ANDESITE)	0.5%	478'	100%	AG	480'				
	S	V					476.5'-508' CHLORITE-CARBONATE SCHIST (ALTERED ANDESITE) - lg, light green, v strongly schistose @ 65° to the cba, strongly altered andesite - strong carbonatization (of plag?) & ser-chl all of mafic min, in wk remnant crystalline - dol. vns - numerous thin, elongate, v. small 'stringers-blebs' of hard pink to orange to white mineral (may be stretched, altered garnets) to 5-10% of rock - numerous thin calcite seams & blebs to 1/2" throughout unit, pred. 11 sch, occ 2 minor qtz - a few yellowish 'white' plag: Kapor phenocrysts, anhedral to subhedral, to 1/4" - minor soft, submetallic, micaceous appearing 'redmin' as 2 calcite seams - SULPHIDE CONTENT: 0.5% Py, as small scattered cubic blebs to 1/16" - @ 496.5', a few 1" calcite blebs 11 fol. - @ 502.5', 1/2" calcite 'bleb' & 1/4" red, rounded garnet porphyroblast. - arbitrary contact & underlying more schistose, sericite rich unit.	0.5%	483'	100%		484.5'	100%			
	F	N	H				POB. RHYOLITE		486'	100%		488.5'	100%			
	S	S	N				silica all halos on trace & diss Py chl-calc & ser rich 'beds' - CHE-SER-CARB SCH. - calc. dol-mag. vns-blebs to 30% - carb 'frags'	0.25%		100%		493.5'	100%			
490'	S	S	N				508'-516.5' CHLORITE-CARBONATE-SERICITE 'SCHIST' (ALTERED INT. VOLC.-VOLC. TUFF) - rock comprised of a light green to gray, vlg, v. thinly bedded appearing (ca 1/16"), strongly schistose (10' & sch. @ 65° to the cba) sericite-chlorite-carbonate rich rock, composed of 40% carb, 30% chl & 30% sericite - pred. a ser-calcite sch & thin chl seams & elongate, v. luffaceous appearing 'frags' of chl, occ. v. 'frag' appearing calcite blebs. - a few thicker calcite, magnesite, seams 11 fol, to 1/4" - numerous v. small white to pinkish brown elongate blebs of altered garnet? - weakly fractured @ random orientations, & pred. calc. chl. frac fill. - may be v. minor amounts of talc in chl rich seams. - SULPHIDE CONTENT: 0.5% diss. Py cubes to 1/16", 11. vlg diss Py, Cpy. - @ 509.5', 1/2" v. hard white magnesite vns @ 50° to the cba - from 512.5'-514', v. thinly bedded, yellowish green sericite to 80% locally (20% carb) - from 514'-516', v. dk green, locally chlorite to 80% (20% carb, minor serp?) - from 516.5'-518', chl, mte, xstalt to 1/8" to 5% rock - from 518'-516.5', v. thinly bedded, ser-chl gndmass & v. luffaceous appearing, small elongate blebs 'frags' of qtz, calcite.		496'	100%		496.5'	100%			
500'	S	S	N				calcite veins strong sch. @ 65° CHE-CARB SCH. W garnet porphyroblast	0.5%		100%		502'	100%			
	S	S	N				magnesite vns sericite-calcite rich groundmass & chl 'frags' CHE-CARB-SER SCH. locally sericite to 80%	0.5%		100%		508'	100%			
510'	S	S	N				516.5'-521.5' CHLORITIZED, CARBONATIZED BASALT (KOMATIITE?) - lg, dark green, v soft, wky, moderately schistose, foliated, v. strongly carbonatized, chloritized mafic volc. (basalt) sch. @ 60° to the cba - calcite to 30-40% of rock (vlg diss-carbonatization & numerous thin irreg seams & blebs pred. 11-subh to sch, occ 2 minor qtz) - v. weak banded appearance in places, 2 chl rich vns calcite rich bands (v. crudg.) - weakly fractured @ random orientations, & chl, calcite, minor red Fe-oxide frac. filling - numerous v. small (ca 1/16") orange to white 'blebs' throughout rock - carb?, plag? - altered gnts? (size makes TD difficult) - v. dark green serp. colour in places - v. minor 'red min' associated & a few calcite seams - SULPHIDES: 0.5% Py, as small (to 1/16") scattered pred. cubic blebs (ataxamorph. blebs) - @ 518', 1/2" calcite vns @ 60° to the cba - @ 519.7', 1" calcite vns @ 55° to the cba, & strong 2" chl. alteration halo - @ 521.7', 1/2" qtz-calc. vns @ 90° to the cba. - @ 526.5', 1/2" calcite (& a few small qtz blebs) vns @ 50° to the cba - from 527.5'-528.5' luffaceous interbed, light green, thinly bed, strongly sch. (60% sch @ 60° to the cba) sericite-calcite rich groundmass, & 10% small blue qtz eyes, & 5% diss. black acicular lg min. (amphib?). - @ 531', 1" calcite, magnesite vns @ 65° to the cba - gradually becomes more sericite rich, arb. contact & underlying int. volc.		514'	100%		516.5'	100%			
520'	S	S	N				calcite vns wky sch. @ 60° qc vns CHLORITIZED, CARBONATIZED BASALT - luff. interbed	0.5%		100%		521'	100%			
	S	S	N				calcite, magnesite vns. qc varying to 60% - Py rich magnesite-calcite vns. - CARBONATIZED ANDESITE - strongly schistose @ 65°		526'	100%		526'	100%			
530'	N	N	N				521.5'-523.5' CARBONATIZED INT. VOLC. (ANDESITE) - pred a lg vlg wky schistose, light gray, v strongly carbonatized volcanic rock (int. maf.) - relatively soft schistosity @ 65° to the cba - numerous thin irreg. calcite & qtz-calcite blebs & seams @ random or throughout rock	1%		100%		531.5'	100%			
540'	N	N	N						536'	100%		536'	100%			

CASING COLLAR ELEV.: 4' above gr.

GROUND ELEV.:

DATE STARTED: MARCH 16. 83

REF. TO CLAIM CORNER:

COORDINATES:

N.

E.

DATE FINISHED: MARCH 25. 83

SCALE: 1" = 10'

INCLINATION: -55°

BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D.M. IVOR

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTI-MATED			
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE															
90'																			
550'	W E A K	N E A K	N I L	T H I N			<p><b>CARBONATIZED ANDESITE.</b></p> <p>rock is weakly to moderately sericitized in places.</p> <p>few small light green plagioclase phenocrysts to 1/8" throughout rock</p> <p>from 532'-532.5', qtz-calcite veining to 60% of rock, irreg. blebs &amp; vns to 1" @ wk.</p> <p>preferred or. @ 55° to the cba.</p> <p>from 532.6'-533.2', qtz veining to 60% of rock, pred. qtz &amp; minor calcite &amp; hd. brown carb. (dol.) as blebs, vns to 1" @ wk preferred or. @ 70° to the cba, trace vlg Py-Cpx @ rims, unid. black min (tourmaline?)</p> <p>@ 534.7', 1/2" diffuse appearing calcite seam @ 65° to the cba, &amp; 10% vlg diss Py</p> <p>@ 535', 1/4" diffuse calc. seam @ 65° to the cba, &amp; 10% vlg diss Py</p> <p>@ 536', 1/4" calc. vn @ 60°, &amp; 10% vlg diss Py</p> <p>from 536'-540', becomes v. strongly schistose @ 65° to the cba, v. sericite rich, tuffaceous appearing &amp; elongate blebs to 1/2", 1 fol. of carb.</p> <p>from 540'-543.5', becomes darker green, chlorite rich</p> <p>SULPHIDE CONTENT: variable; Hom 531.5'-536', 1% vlg diss Py throughout rock &amp; ass.</p> <p>calcite seams from 536'-543.5'; trace Py to ass. &amp; carb seams.</p>			532'	100%	Aq	536'	100%					
560'	P A T E R N A L	A L T E R A T I O N		S E A M S			<p><b>543.5' - 617' ANDESITE (Flow - SUB INTRUSIVE?)</b></p> <p>rock comprised predominantly of lg. mg. crystalline, dark green andesite to basalt, composed of ~ 50% mafics &amp; 50% plagioclase. appears v. gabbroic where coarser grained</p> <p>wk patchy chl. alt. of mafics in places (occ. sericite?). s; wk epidote all of plagioclase in clear places.</p> <p>v. weakly foliated (schistose?) as exhibited by alignment of innumerable v. small (&lt; 1/8") white to pink blebs of alt. corroded gnf?, fol. @ 65° to the cba.</p> <p>numerous thin calcite seams, blebs &amp; stringers to 10% of rock</p> <p>few large 'diffuse' appearing gray calcite 'blebs' to 1", usually &amp; tr. amounts Py</p> <p>v. 'tuffaceous' appearing in places &amp; elongate blebs of chl &amp; carb (stretched phenocrysts or amygdules?)</p> <p>wkly. light, fractured @ random orientations, &amp; chl. calc. minor 'redmin' fracture filling.</p> <p>few light gray epidote alt. mafic min. phenocrysts to 1/4", few subhedral, anhedral plagioclase to 1/4"</p> <p>@ 544.7', 1/2" calcite seam @ 45° to the cba, &amp; 5% vlg diss Py, minor B</p> <p>@ 547.7', 1/2" calcite seam @ 60° to the cba, &amp; 5% vlg diss Py</p> <p>@ 547', 2' zone of diffuse appearing calcite blebs &amp; seams to 1" @ wk preferred orientation of 35° to the cba, &amp; a few Py blebs to 1/8"</p> <p>@ 547.8', 1" calcite seam @ 20° to the cba, &amp; 5% vlg diss Py</p> <p>from 548.5'-549', numerous 1-2" diffuse calcite blebs &amp; 1% vlg diss Py</p> <p>@ 549.7', 1/2" calcite vn @ 30° to the cba &amp; 1% vlg diss Py @ rims.</p> <p>@ 550.2', 1/2" calcite vn @ 30° to the cba, &amp; 2% Py or vlg diss min. &amp; blebs to 1/32"</p> <p>@ 553', 1/4" calcite vn @ 45° to the cba &amp; 2% vlg diss Py</p> <p>from 554'-555.5', calcite (w minor qtz) veining to 90% of rock, &amp; 0.5% lg diss Py &amp; small (1/8") cubic blebs @ vn rims, strong chl. alt. @ rims.</p> <p>@ 557.5', 3" gray granular appearing calcite seam &amp; tr. lg diss Py</p> <p>from 563'-564', locally carb. rich, schistose zone (sch @ 60° to the cba), &amp; num. thin calcite seams to 1/2" &amp; 30% rock, tr. lg diss Py</p> <p>from 564'-574', becomes coarser grained, v. metabasaltic appearing, more porphyritic, &amp; numerous anhedral (almost 'rounded' appearing) chl. alt. mafic phenocrysts to 1/4", (round phenocrysts give appearance to rock in places)</p> <p>@ 565.5', numerous light green epidote? alt. mafic phenocrysts to 1/4", anhedral, semi-spherical.</p> <p>@ 570', 2" locally mineralized zone, &amp; 2% to as blebs to 1/16" &amp; vlg diss. min.</p> <p>@ 570.2', 1/2" qtz-carb (hard greenish-brown) blebs</p> <p>from 571'-573', numerous thin calcite seams wkly. brecciate rock, &amp; strong light grayish brown carbonization halo's into surrounding wall rock, strong bright green epidote all of plagioclase, @ 572', 1" qtz vn @ 90° to the cba, tr. lg diss Py</p> <p>from 573.3'-574', numerous thin qtz-calcite veins to 1/4" @ wk. preferred or. of 40° strong pervasive epidote alt. of host rock</p> <p>from 574'-576', numerous thin randomly oriented calcite seams &amp; filled tracs &amp; thin light brown carbonized alteration halos.</p> <p>@ 580', 1/4" vuggy calcite vn @ 35° to the cba &amp; 1% vlg diss. sph in vn &amp; @ rims.</p>			546'	100%		550'	100%					
570'	A F F E W	N I L		O F			<p>locally strongly sch. &amp; 30% calc. vns</p> <p><b>ANDESITE</b></p> <p>sp. alt. phenocrysts, lacynous, mg, metabasaltic appearing</p> <p>locally brecciated by calc. seams, strong sp. alt. of plagioclase</p>			566'	100%		563'	100%					
580'	P L A C E S			R O C K			<p>sp. bearing vuggy calc. vns</p> <p>calc. vn</p>			576'	100%		571'	100%					
590'							<p>locally v. strongly epidote alt.</p> <p>locally v. strongly sch. @ 70°</p>			586'	100%		574'	100%					
600'										596'	100%		580'	100%					
										606'	100%		601'	100%					

CONT.

CASING COLLAR ELEV.: 4' above ground GROUND ELEV.:

DATE STARTED: MARCH 16.82

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 25.83

SCALE: 1" = 10'

INCLINATION: -55° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D. McIVOR

SECTION	ALTERATION			FRACTURING	MINERAL	GEOLOGY	COMMENTS: ADDITIONAL NOTES	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTIMATED
							<p>593.5'-617' CONT.</p> <ul style="list-style-type: none"> <li>@ 582.6', 2" diffuse calcite seam @ 90° to the cba, 2% vlg diss Py, locally numerous thin calcite stringers &amp; light brown carb. alteration halos.</li> <li>from 581'-589', locally sulphides to 1%, pred. Py, trace Pb as disseminated blebs to 1/16" throughout rock &amp; thin seams associated &amp; calcite, minor frac. fill.</li> <li>from 589.5'-590.3', numerous thin calcite stringers &amp; seams &amp; carbonatized alt. halos, locally strongly chloritized.</li> <li>@ 590.8', 3" zone of intense, pervasive epidote alteration.</li> <li>from 594', becomes gradationally finer grained, lighter green, more carb rich. (to 15%)</li> <li>from 596'-601', locally strongly schistose @ 70° to the cba, v. strong chl. alt. of matrix, num. thin calcite seams to 25% of rock, @ 598.8', 1/2" qtz-calc vn @ 80° to the cba.</li> <li>@ 605', 2" zone &amp; numerous small (1/4") qtz-calcite blebs &amp; seams, &amp; thin brown carbonatized halos</li> <li>@ 608', a few thin 1/32" Py seams-filled frac @ 70° to the cba, locally a few 1/4" rhombohedral subhedral plag. phenocrysts.</li> <li>@ 610.8', a few 1/2" qtz blebs in calcite seams</li> <li>from 612'-617', rock becomes vlg, v. strongly carbonatized.</li> </ul> <p>OVERALL SULPHIDE CONTENT: variable,</p> <ul style="list-style-type: none"> <li>from 593.5'-556', 1%, pred. Py, tr. Pb, Cpy, as vlg min. ass. &amp; carb seams &amp; minor diss. min. throughout rk, minor frac. fill.</li> <li>from 556'-617', trace Py, v. minor Pb, sph. Cpy, predominantly ass. &amp; carb seams.</li> </ul> <p>617'-630.5' CHLORITE-CARBONATE-SERICITE 'SUNSET' (ALTERED MT. VOLL TUFF OR EQUIVALENT VOLCANOCLASTIC v. thinly fol. (av. 2' to 3'), schistose (v. well developed sch. bedding @ 60° to the cba) dark gray to green chl-carb-sericite rich rock, with a sericite-chlorite schistose groundmass, &amp; numerous thin (1/16") carb. (pred. calcite), 'beds'    fol. &amp; elongate-elliptical 'frags' - often &amp; minor silica - qtz.</p> <ul style="list-style-type: none"> <li>v. banded appearing in places &amp; thin alternating beds of yellowish green sericite rich vs. dark green chlorite rich rock</li> <li>bedding: schistosity is crenulated, kinked in places.</li> <li>weakly to moderately fractured, pred.    sub    foliation, &amp; calcite, chlorite fracture filling.</li> <li>a few thin qtz-calcite-magnetite vns    fol.</li> <li>a few small black biotite 'clofs',    fol.</li> <li>may be minor amounts of talc in places.</li> <li>@ 618.3', 1/2" cherty qtz (silica?) vn.-bed @ 60° to the cba, &amp; calcite rims &amp; 2% vlg diss. Py.</li> <li>from 618.5'-619.5', numerous dk gray qtz-silica elongate-elliptical frags. clasts to 1/2" &amp; thin seams    fol.</li> <li>@ 619.5', 2" sericite rich, v. schistose 'bed'</li> <li>from 620.5'-621', v. dark green (sep. colour) chlorite rich band, massive appearing, 'haa' rec. 1% vlg diss. Py, a few thin carb seams &amp; blebs @ 60° to the cba.</li> <li>@ 621', 2" reddish brown biotite rich zone - 'bed' - no distinct contacts</li> <li>from 621', becomes v. lullaceous/lumpy appearing, &amp; a v. thinly bd. schistose @ 60° cba) dk green chl-ser. groundmass &amp; thin white calcite, seams to 25% of rock, numerous thin elongate-elliptical calcite &amp; qtz 'frags'-clasts (to 5%)</li> <li>@ 625', 2" hard pinkish white carb. (magnesian?) vn &amp; minor calcite &amp; trace vlg diss sph.</li> <li>from 625'-626', kinked, crenulated bedding - schistosity</li> <li>from 626', elongate frags, to 30% of rock, 25% calcite, 5% cherty silica, to 1" long (may be boudinaged interbeds), matrix more sericite rich (to 40% &amp; 20% chl).</li> <li>@ 626.5', 1/2" light green sericite-calcite 'bed' &amp; trace vlg diss sph.</li> <li>from 626-630', numerous 1/16" Py 'frags'.</li> </ul> <p>OVERALL SULPHIDE CONTENT: variable, from 617'-625', p. 5%, pred. Py, tr. sph, as small scattered cubic blebs to 1/32", a few thin seams    fol., occasional Py 'frags' &amp; vlg diss. min. ass. &amp; carb seams.</p> <ul style="list-style-type: none"> <li>from 625'-630.5', 2% (to 5% in places i.e. 627.5'-629'), pred. Py, tr. sph, as thin seams ass. &amp; carb, occ. large cubic blebs to 1/8" &amp; elongate 'frags' to 1/16".</li> </ul>								



SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT.	ESTIMATED
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE												
600'	WEAK	WEAK	NIL	SEAMS	Py		<p>490.5' - 492.3' PORPHYRITIC DACITE (SUB-INTRUSIVE?)</p> <ul style="list-style-type: none"> <li>lg. crystalline, light beige to light green, v. 'granular' appearing dacite, composed pred. of v. small white feld. islets, w/ky sericitized, relatively soft, w/ky foliated (sch.: flow banding @ 85-90° to the cba)</li> <li>numerous small white anhedral to subhedral feldspar phenocrysts to 1/4" &amp; 5% of rock (av. size 1/16" - 1/8")</li> <li>numerous thin calcite seams &amp; blebs to 1/4" throughout rock (to 10%) - weakly carbonatized in places.</li> <li>few small disseminated fuchsite? - sericite blebs (trace)</li> <li>moderately fractured @ random orientations, ± calc. sericite, &amp; 'red min' fracture filling</li> <li>numerous, v. small (&lt;1/64") white to pink short elongate blebs of unknown min. throughout rock.</li> <li>@ 641.5' 1/2" calcite vein @ 85° to the cba, @ 642.6' 1/4" gft-calc 'bleb'</li> <li>@ 643' trace vfg diss reddish brown min. - possibly sph.</li> <li>from 647-647.5' calcite veining to 30% of rock, @ pred. or. of 90° to the cba, minor associated gft, locally a few feld. pheno's to 1/2"</li> <li>from 647.5-648' graywacke interbed.?</li> <li>from 648-649.8' 'red min' frag fill to 1%, v. sheared, sericite rich</li> <li>@ 648' 1" gft-calc vein @ 70° to the cba</li> <li>from 640.5'-642' Py chill margin, strongly carbonatized.</li> <li>SULPHIDE CONTENT: 1% vfg diss Py</li> </ul>			59%	100%	596'	601'	100%		
610'	PATCHY	PATCHY	NIL	TO	Py		<p>ANDRESITE</p> <ul style="list-style-type: none"> <li>strongly carbonatized.</li> </ul>				100%		606'		100%	
620'	STRONG	STRONG	NIL	SEAMS	Py		<p>chert bed</p> <ul style="list-style-type: none"> <li>gft 'frags' or 'clasts'</li> <li>chl. rich band to 1/2"</li> <li>gft-calc 'frags'</li> <li>CHL-CARB-SER 'SCH.</li> <li>magnasite, v. kinked sch.</li> <li>chert, calcite 'frags'</li> <li>sulphide 'frags'</li> </ul>		0.5%	100%			616'	617'	100%	
630'	STRONG	STRONG	NIL	SEAMS	Py		<p>647.3 - 652' GRAYWACKE?</p> <ul style="list-style-type: none"> <li>rock consists of a vfg. sph (argillaceous) dk gray, schistose @ 70° to the cba) chl-calcite-sericite rich matrix ± numerous small (&lt;1/32") pred. gft. clasts</li> <li>strong sch overprints a pebbled foliation (possibly bedding?) @ 20° to the cba</li> <li>shpny pervasive carbonatization, &amp; numerous thin calcite seams // sch.</li> <li>abund calcite filled cross-cutting fractures.</li> <li>1% vfg diss Py</li> </ul>			29%	100%		624'	626'	100%	
640'	STRONG	STRONG	NIL	SEAMS	Py		<p>652' - 653.5' CARBONATIZED PORPHYRITIC INT. VOLC.</p> <ul style="list-style-type: none"> <li>lg. crystalline (to granular appearing) light greenish-gray dacite to andesite, w/ky sch. @ 85° to the cba, weak perv. sericite a/c. chl. a/c. in a few places, w/ky perv. carbonatization</li> <li>abund small (to 1/8") anhedral to subhedral feldspar pheno's.</li> <li>sch. appears to overprint a 2nd foliation @ 20° to the cba (??)</li> <li>abund cutting calcite seams &amp; infilled trace.</li> <li>1% vfg diss Py.</li> </ul>		1%	100%		630.5'	632'	100%		
650'	STRONG	STRONG	NIL	SEAMS	Py		<p>653.5 - 662' CARBONATIZED CRYSTALLINE DACITE</p> <ul style="list-style-type: none"> <li>rock is lg. crystalline (to granular appearing in places) light green dacite, w/ky to moderately schistose @ av orientation of 70° to the cba (schistosity overprints a faint foliation @ 25° to the cba)</li> <li>composed of v. small (&lt;1/8") anhedral to subhedral white feldspar crystals set in a schistose, sericitized 'groundmass' (70% crystalline, 30% sericitized groundmass)</li> <li>mod. (to v. strong in places) pervasive carbonatization.</li> <li>in places appears very fuffaceous; ± elliptical, elongate (// to sch) 'frags' to 1/8" of predominantly calcite, minor gft. (may be stretched amygdaloids, or pyroclastic 'frags')</li> <li>abund small (to 1/8") anhedral to subhedral feldspar phenocrysts.</li> <li>numerous thin diffuse appearing light gray calcite ± sericite seams &amp; blebs throughout rock, pred. // to sch.</li> <li>w/ky fractured @ random orientations, ± predominantly calcite, minor chl. &amp; pink Ksp? frag fill.</li> <li>abund small light green fuchsite coloured sericite clots throughout rock.</li> <li>from 653.5' - 656', overprinted foliation @ 25° to the cba</li> <li>from 657.5' - 658.5', abundant 'red min' ± calc. &amp; frag. filling</li> <li>@ 659', 1" gft-calcite - sericite vein @ 85° to the cba, ± 0.5% lg diss Py.</li> <li>becomes vfg from 659'.</li> <li>@ 663' 1/2" calc. vein @ 90° to the cba</li> <li>from 662' - 663.8' vfg. v. sh. schistose (sch. varies 45°-70°), v. chlorite rich, ± 5% Py as blebs to 1/4" // sch &amp; min seams &amp; relatively hard, may be a green arg frag.</li> <li>OVERALL SULPH. CONTENT: 0.5% to 1% vfg diss min.</li> </ul>		0.5%	100%		636.5'	637'	100%		
660'	STRONG	STRONG	NIL	SEAMS	Py		<p>662' - 663' CARBONATIZED DACITE</p> <ul style="list-style-type: none"> <li>gft vein</li> </ul>		0.5%	100%		649.5'	652'	100%		
670'	STRONG	STRONG	NIL	SEAMS	Py		<p>653.5 - 656' CARBONATIZED DACITE</p> <ul style="list-style-type: none"> <li>overprinted fol. @ 20°</li> </ul>		1%	100%		652'	653.5'	100%		
680'	STRONG	STRONG	NIL	SEAMS	Py		<p>656' - 659' CARBONATIZED DACITE</p> <ul style="list-style-type: none"> <li>overprinted fol. @ 20°</li> </ul>		0.5%	100%		656'	658'	100%		





CASING COLLAR ELEV.: 4' above gr.

GROUND ELEV.:

DATE STARTED: MARCH 16, 83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 25, 83

SCALE: 1" = 10'

INCLINATION: -55°

BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D. M. IVOR

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTI-MATED
	CHLORITE	SERICITE	SULFIDATION	CARBONATE												
660	STR	MOD	NIL	STR			overprinted fol @ 20' cba CARBONATED DACITE calc. vein v. sch. chloritized thinly bd. hard gray ag. INTERBEDDED ARGILLITES becomes soft, chd ser. alt. beds thin ag. outbeds. pink calc. vein. ALTERED FELSIC TUFF chert-carb-sulphide frags graphite seams locally to 50% massive dolomite fuch. blebs CARBONATE ROCK dol. & thin chl-calc. ser-talc seams. locally strongly sch. carbonated. w/ky sch. @ 65° DACITE	681-683' DACITE pred. a f. crystalline (to granular appearing in places), light green to grayish green dacite, w/ky foliated schistose. @ 65° to the cba, mod. to strong perv. sericite alteration numerous thin 'diffuse' calcite seams to 10% of rock, often & minor associated sericite, chlorite, qtz, talc weak patchy pervasive carbonatization in places sericite v. bright light green in places, may be trace amounts fuchsite mod. fractured @ random orientations, & pred. calcite, minor chlorite, ser. py, red-min frac. fill few small white feldspar blebs elongate, 11 fol (fends full appearance in places) from 681-683', v. strongly sericitized, sch. @ 65° to the cba, bright light green, w/ky, mod. carbonated, locally numerous thin calcite seams contain v. thin 'red min.' @ 681.7' 1/4" calcite filled frag @ 20° to the cba, rimmed by py, H. sph. @ 682.2' 1/4" calcite seam - filled frag, rimmed by py seams to 1/8", & minor 'red-min.' @ 684.3' 1/2" calcite vein @ 60° to the cba. @ 690' 1/4" calcite - red min. filled frag @ 30° to the cba, locally minor diss red mineral (unid., soft, submetallic, blood red, may be smeared sph). from 691-696' becomes v. to sph. SULPHIDE CONTENT: trace py, sph; v.ly diss throughout rk & ass. & calcite seams & infilled fractures.	0.5%	658'	100%	Ag	658'	100%		
670	STRONG	STRONG	STRONG	STRONG			695-708' DACITE TO ANDESITE (TUFF?) pred. a v. light grayish green, crystalline, appearing dacite to andesite - v. banded appearing in places, & thin (1/16" to 1/8") alternating bands/beds of sericite rich vs carb rich vs chl rich rock - foliation @ 60° to the cba, elsewhere a less banded but equally altered carbonated, chl-ser rich rock) numerous (to 10%) thin calcite seams & stringers 11 foliation. w/ky to moderately fractured @ random orientations, & pred. calcite, minor chl & blood red micaceous to submetallic appearing mineral (often bronze - native Cu colour) in places appears weakly siccated by thin dark chl seams 11 fol. @ 60° to the cba @ 696.5' 1" qtz-calcite vein @ 60° to the cba, & a few chl seams & blebs, & 1% py as blebs to 1/16" - vn is schistose 11 fol. @ 698.6' 1/4" dark gray graphitic seam @ 90° to the cba, & 5% py as thin seams & v.ly diss min. from 699-700' numerous thin red-min. seams ass. & calcite. from 702-707.5' qc vein @ 65° to the cba, pred. v. hard, light green to beige dolomite & scuttling qtz-calcite seams, stringers brecciating dol., tr. by diss py & qtz-calc. seams @ 706.5' 3" thinly bd. graphitic zone, & thin graph (30%) - sericite-carb beds @ 60° to the cba, py to 5% as thin seams 11 fol. & diss. blebs ass. & calcite, a few thin magnetite seams. v. intensely carbonated from 707-708', OVERALL SULPHIDE CONTENT: 1% py, pred. v.ly diss min. ass. & carb blebs & seams. (if unid red min is sph → 0.5%)	5%	665'	80%		665'	100%			
680	STRONG	STRONG	STRONG	STRONG			708' CARBONATE ROCK (OR TOTALLY CARBONATED DACITE TUFF) pred. hard, beige crystalline carbonate (dolomite) rock, weakly foliated (ld & w/ky schistosity) @ 60° to the cba, numerous thin (to 1/2") v. schistose sericite rich seams 11 foliation numerous thin calcite seams to 1/4" both 11 & scuttling foliation, occasionally & minor amounts of gray smoky qtz. to 25% of rock in places appears to be a 'bedded dolomite', elsewhere resembles an altered dacite a few thin chlorite seams 11 fol. moderately fractured, pred. 11 sub H foliation, & calcite fracture filling from 710-710.5' qc vein @ 65° to the cba, pred. qtz & minor white & light green calcite numerous thin chl seams, blebs @ 55°, tr. v.ly diss sp. py in v. & @ 710.5' OVERALL SULPHIDE CONTENT: 1% py diss amorphous py blebs throughout rock.	3%	675'	100%	TRACE	675'	100%	2 Zn		
690	STRONG	STRONG	STRONG	STRONG			710.5' MIN. GRAPH. ARG. 50% carb frags in sch. chl-ser-talc matrix. SER-CAL-CARB 'SCH'	3%	681'	100%		681'	100%			
700	STRONG	STRONG	STRONG	STRONG			710.5' MIN. GRAPH. ARG. 50% carb frags in sch. chl-ser-talc matrix. SER-CAL-CARB 'SCH'	1%	685'	100%		685'	100%			
710	STRONG	STRONG	STRONG	STRONG			710.5' MIN. GRAPH. ARG. 50% carb frags in sch. chl-ser-talc matrix. SER-CAL-CARB 'SCH'	1%	685'	100%		685'	100%			
720	STRONG	STRONG	STRONG	STRONG			710.5' MIN. GRAPH. ARG. 50% carb frags in sch. chl-ser-talc matrix. SER-CAL-CARB 'SCH'	0.25%	685'	100%		685'	100%			

CASING COLLAR ELEV.: 4' above gr. GROUND ELEV.:

DATE STARTED: MARCH 16, 83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 26, 83

SCALE: 1" = 10'

INCLINATION: -65° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D. M. EVOR

SECTION	ALTERATION			FRACTURING	MINERAL	GEOLOGY	COMMENTS: ADDITIONAL NOTES	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTIMATED
							<p><u>710.5-712.8' DACITE LAPILLI TUFF (OR BRECCIATED DACITE)</u></p> <ul style="list-style-type: none"> <li>rock consist of thin, elongate grayish green, strongly sericitized, carbonatized vfg. sph. 'dacite' appearing blebs. 'frags' to 1/8" &amp; strong preferred orientation,    bedding, schistosity @ 75° to the cba. &amp; a 'matrix' 'groundmass' of thin, schistose chlorite-sericite seams, occasionally w/ky graphitic.</li> <li>foliation angle decreases towards 712.8', where 55° to the cba.</li> <li>increasingly graphitic from 712-712.8'</li> <li>numerous thin (to 1/4") calcite seams    foliation.</li> <li>Py to 3% as amorph &amp; cubic blebs to 1/8", occ. elongate,    fol., &amp; minor vfg. diss. min.</li> <li>@ 710', 1/8" calcite vn @ 35° to the cba, rimmed by 1/8" Py &amp; blood red min. (sph.) seams</li> <li>@ 710.5', numerous elongate 1/2" qtz blebs (brecciated vn?)</li> </ul> <p><u>712.8-715' MINERALIZED GRAPHITIC ARGILLITE</u></p> <ul style="list-style-type: none"> <li>v. thin bed. (to 1/16") @ irreg. orientations ranging 0-90° to 40° to the cba (v. slumped, deformed) jet black hard &amp; graphitic (50-60%) argillite</li> <li>numerous thin calcite 'inclusions' - seams    fol., to 15% of rock</li> <li>afew larger pink to white, often vuggy, calcite veins, pred.    fol., afew small qtz blebs, &amp; seams</li> <li>v. strong slickensides along bed planes - frac. surfaces, &amp; seams of graph. Py.</li> <li>SULPHIDE CONTENT: to 8%, pred. Py, tr. sph., as bands to 1/2"    fol., cubic &amp; amorphous blebs elongate    fol. to 1/4" &amp; ass. &amp; calc. &amp; v. minor vfg. diss. min.</li> <li>@ 712.9', 1/2" semi-massive Py band @ 40° to the cba.</li> <li>@ 713.7', 1/2" vuggy pink calcite seam &amp; 1/2" semi-massive Py band @ 60° to the cba.</li> <li>from 713.5-714', pure soft graph.</li> </ul> <p><u>715-726' SERICITE-CHLORITE-CARBONATE 'SCHIST' (DACITE LAPILLI TUFF OR VOLCANOELASTIC)</u></p> <ul style="list-style-type: none"> <li>thinly bedded, schistose, light gray to green, locally carbonate, altered dacite to andesite lapilli tuff or tlastic equivalent. - bed. sch. well developed @ 55° to the cba.</li> <li>comprised of a schistose sericite-chlorite-calcite rich 'matrix' &amp; 40-50% carbonate (pred. calcite, minor dolomite) seams - 'frags'    bed. to 1/2", matrix 90% ser., 40% calc., 20% chl. - v. lapilli tuff appearing</li> <li>numerous white calcite vns &amp; shinglers throughout rock, pred.    fol.</li> <li>abundant light yellowish-brown vfg. micaceous appearing mineral diss. through matrix (bio?)</li> <li>sericite &amp; bright green in places, may be trace amounts fuchsite.</li> <li>SULPHIDE CONTENT: 0.25% vfg. diss. Py.</li> <li>@ 715.2', 1/2" band @ 55° to the cba, of honey brown, soft min. - may be sph.</li> <li>from 721-726', becomes decreasingly 'frag' rich &amp; more a strongly schistose chl-ser-carb altered, daz-and., more chl. rich.</li> <li>@ 724', 1" qtz-carb bleb - 'frag'.</li> <li>arbitrary contact &amp; underlying less frag rich more chl. rich rock.</li> </ul> <p><u>726-732' CHLORITE-CARBONATE-SERICITE 'SCHIST' (CARBONATIZED INT. VOLC. TUFF.)</u></p> <ul style="list-style-type: none"> <li>pred. a vfg-sph grayish green, strongly schistose (&amp; bedded?) - foliation @ 55° to the cba)</li> <li>carbonatized andesitic appearing rock.</li> <li>weak chl &amp; sericite alteration, in places slightly banded appearing &amp; thin chl. rich vs. sericite rich bands</li> <li>numerous hard-bage dolomite &amp; white calcite seams - 'beds' to 1/2" parallel to foliation to 20% of rock.</li> <li>5% light golden brown micaceous appearing min. (bio?) as v. small dots elongate    fol. diss. throughout rock</li> <li>luffaceous appearing, &amp; numerous small elliptical-elongate (   to foliation) carb. blebs, occasionally &amp; vfg. diss. Py.</li> <li>sericite in places v. bright light green, may be trace amounts fuchsite.</li> <li>OVERALL SULPHIDE CONTENT: 0.25% Py. as vfg. diss. min. &amp; thin seams associated &amp; carb. seams.</li> <li>@ 726.4', 1/2" hard bage dolomite vein @ 45° to the cba.</li> <li>@ 726.7', 1/2" hard bage, dol. vn. @ 55° to the cba.</li> <li>@ 727.2', numerous elongate 1/2" dolomite 'blebs' &amp; scuffing calcite seams &amp; tr. vfg. diss. Py.</li> </ul>								

CONT.





CASING COLLAR ELEV.: 4' above gr. GROUND ELEV.:

DATE STARTED: MARCH 16, 83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 25, 83

SCALE: 1" = 10'

INCLINATION: -55° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D. McIVOR

SECTION	ALTERATION			FRACTURING	MINERAL	GEOLOGY	COMMENTS: ADDITIONAL NOTES	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTI-MATED
							<p><u>824.5-848' CONT.</u></p> <ul style="list-style-type: none"> <li>- show thin yellowish green sericite seams // sch. give banded appearance to rock in places.</li> <li>- appears to flaggy in places, &amp; show thin elongate blebs 'frags' of carb (calcite)</li> <li>- moderately fractured, pred. // sub-// foliation, pred. calcite frac fill.</li> <li>- calcite-magnesite seams w/ky brecciate rock in places.</li> <li>- from 837, becomes lighter green, sericitized (&amp; chl-carb alt.), numerous carb. seams become predominantly harder magnesite, becomes more bedded (@ 70° to the cba)</li> <li>- sulfaceous appearing</li> <li>- SULPHIDE CONTENT: 0.75%, pred. Py, tr. sp. as show scattered cubic blebs to 1/16" vlg diss min of min. ass. &amp; carb seams, tr. sph. in alcov carb seams.</li> <li>- @ 826.6', 1/4" hd white magnesite &amp; calcite v. @ 65° to the cba.</li> <li>- @ 828', numerous thin 1/8" magnesite-calcite seams @ 65° to the cba @ 19% vlg diss Py, minor sph &amp; mte.</li> <li>- @ 830', 1/2" qtz vein @ 65° to the cba, pred. qtz &amp; blebs magnesite, calcite, a few diss. Py blebs to 1/16"</li> <li>- @ 832', 2" pred. hard white to pink vuggy carb (magnesite?) &amp; minor qtz seams-blebs @ 65°</li> <li>- @ 832.5' 1" elliptical qtz-carb (pink, hard, vuggy) 'bleb'</li> <li>- @ 834.3' 1/4" vuggy pink hard calcite-magnesite carb vein (frac fill) @ 35° cba</li> <li>- @ 835', 3" qtz vein @ 65° to the cba, &amp; qtz, calcite &amp; hard pink vuggy carb, well zoned-banded, &amp; qtz cores-carb rims, folded-contorted, a few 1/16" Py seams.</li> <li>- @ 837', 1" qtz-magnesite vn. @ 40° to the cba, pinkish white, vuggy</li> <li>- from 837'-838', numerous 1/2-1" carb 'blebs' pred. hard milky magnesite, &amp; minor calcite, qtz, a few v small Py specks.</li> <li>- @ 840.5' 2" hard pinkish white carb. bleb.</li> <li>- @ 840.9' 1/2" qtz-magnesite (pink) bleb.</li> <li>- @ 841.5' 1" qtz vein (v. bd. appearance) @ 35° to the cba, @ 842' 1" qtz vn @ 35°.</li> <li>- @ 842.2' 1" qtz &amp; minor calcite vn @ 40° to the cba.</li> <li>- @ 842.3' 1" spherical qtz bleb.</li> <li>- from 843'-848', becomes lg, slightly granular appearing &amp; faint 'remnant complete' fol. (base of flow?), v strongly carbonatized, sheared appearing, locally calcite seams to 15% of rock.</li> </ul> <p><u>848'-856' CHLORITE-SERICITE-CARBONATE 'SCHIST' (ALTERED INT VOLC TUFF OR VOLCANOCLASTIC EQUIV.)</u></p> <ul style="list-style-type: none"> <li>- v. thinly bedded - strongly schistose (fol. varies 50°-90° to the cba, &amp; 70-75° kinked, crumpled in places) light to med. green, v. soft, chlorite-sericite-carbonate rich, rock v. lapilli full to agglomeratic appearing, &amp; thin elongate frags of carb &amp; qtz in schistose chl-ser rich groundmass-matrix. (overall comp @ 40% ser, 30% chl, 30% carb, &amp; minor calc.)</li> <li>- numerous calcite-magnesite blebs &amp; seams (occ. &amp; qtz) to 1/2" pred // sub // fol. to 20% of rock.</li> <li>- occasional 'beds' v. graywacke appearing, &amp; 30-40% v. small white (carb) blebs. frags-clasts in ser-chl groundmass.</li> <li>- minor, vlg diss black thin (not big) throughout rk.</li> <li>- v. intensely fractured to weakly brecciated in places, pred. // sub // fol., &amp; sericite, chl, calcite frac fill. (ser. v. green in places, may be tr. frach)</li> <li>- strongly overprinted second foliation @ 0° to the cba in places.</li> <li>- overall SULPHIDE CONTENT: 0.25%, pred. Py, tr. Cpy, sph. as vlg diss min. &amp; thin seams &amp; blebs ass. &amp; carbonate.</li> <li>- from 848'-849.8', qtz-carb blebs &amp; seams to 60% of rock, pred. hard beige to light pinkish green carb (magnesite-dolomite) &amp; a few qtz, calcite, blebs &amp; seams, @ w/ky preferred orientation // to schistosity @ 75° to the cba, &amp; tr. diss Cpy, Py &amp; black submetallic min. (may be blackjack sph.), locally host rock is v. strongly sericitized, carbonatized, sch. @ w/rg gr. around qtz veins, appears v. fragmental, may be brecciated vn.</li> <li>- from 849'-849.8', v. sericite rich (to 80%)</li> <li>- @ 848.8' a few 1/8" magnesite blebs 'frags' &amp; tr. diss Py, sph</li> <li>- @ 849.1' 2" band @ 70° to the cba, of hard milky carb (magnesite) blebs (brecciated vn) &amp; tr. diss Py, sph.</li> <li>- @ 849.3' thin hard carb (magnesite) seam, rimmed by lg submetallic black min.</li> <li>- @ 849.7' 1" magnesite bleb &amp; 0.5% vlg diss black min., @ 849.9' 2" qtz-magnesite vn @ 70°</li> <li>- from 849'-856', minor vlg diss black min. in seams // fol.</li> </ul> <p style="text-align: right;">CONT.</p>								

CASING COLLAR ELEV.: 4' above gr.

GROUND ELEV.:

DATE STARTED: MARCH 16.83

REF. TO CLAIM CORNER:

COORDINATES: N. E.

DATE FINISHED: MARCH 25.83

SCALE: 1" = 10'

INCLINATION: -55° BEARING: 0°

TOTAL DEPTH: 936'

LOGGED BY: D McIVOR.

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP INT.	ESTI-MATED
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE												
840'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>qtz-magnetite 'blebs' in calc. v. intensely carbonated. <u>ANDRESITE</u> faint remnant 'cumulate' type tet.</p> <p>840'-856' CONT.                      @ 850.3: 1/2" vuggy, pinkish white hard magnetite v. @ 55° to the cba, calcite &amp; talc rim vugs.                      @ 853: 1" v. calc. vns &amp; minor magnetite.                      @ 856: 1" calcite v. @ 55° to the cba.</p>	0.75%	846'	100%	AQ	840'	100%			
850'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>856'-868' BASALT (KOMATIITE?) (CARBONATIZED)                      v. strongly chloritized, moderately schistose, v. strongly carbonated dk. green basalt. Numerous thin calcite stringers, blebs &amp; seams pred. 1% to sch. to 10% of rock. Luffaceous appearing in places, &amp; small elongate blebs. 'frags' to 1/32" of carb. banded appearing in places, &amp; a few sericite-talc rich seams &amp; a few more intensely chl. alt. seams. sch. @ 70°                      mod. to strongly fractured pred. 1% sch., &amp; calcite, chlorite frac. fill.                      v. dk green, possibly w. superheated in places.                      @ 856: 1" qtz v. @ 70° to the cba                      @ 858: 1/4" carb. seams &amp; v. diss rad. min, possibly sph., @ 75° to the cba                      @ 858.5: 1/4" magnetite v. @ 80° to the cba &amp; 1% v. sph., 1% v. mte., locally to v. diss Cpy in host rock.                      SULPHIDE CONTENT: 0.5% Py, tr. Cpy, P. sph., as v. diss min. &amp; ass. &amp; carb. seams arbitrary content &amp; less schistose, less strongly carbonated basalt.</p>	0.25%	855'	100%		846'	100%			
860'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>863'-876' BASALT (KOMATIITE?)                      from 863-867: lg. v. dark green, w. to moderately chloritized, &amp; w. superheated; in places (distinctive bluish-green colour) moderate to strongly carbonated basalt, v. w. schistose @ 65° to the cba, numerous thin calcite seams pred. 1% sub. foliation to 5% of rock, 1% v. diss Py, tr. Cpy.                      from 867-876: becomes luffaceous appearing &amp; v. weakly developed fol. @ 65° cba, &amp; mod. schistosity @ 65-65° to the cba, lighter green, w. chloritized, strongly carbonated, luffaceous appearing &amp; small 'blebs' frags of plag, carb, qtz &amp; chl. v. soft.                      calcite &amp; minor magnetite seams &amp; blebs, pred. 1% fol. to 5% of rock moderate to strongly fractured, pred. 1% sub. fol., &amp; calc. chl. frac. fill carb. seams occasionally contain minor qtz, chl. talc blebs minor v. diss black, sub-metallic, min. in places, sulphides to 1%, pred. Py, tr. Cpy, sph. as v. diss min. &amp; blebs ass. &amp; carb. seams                      from 869.5-870: qtz-calcite-epidote veining to 6% of rock, &amp; 2% v. diss Py, vns w. w. brachiolate host rock, frags w. chloritized.                      from 874.5-875.5: numerous 1/4" calcite-magnetite vns @ 60° to the cba, &amp; 1% diss sph &amp; mte as blebs to 1/8"</p>	0.5%	866'	100%		856'	100%			
870'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>876'-912' BASALT (KOMATIITE?)                      pred. 1% mod. to v. dk green, lg. v. crystalline matrix (basalt-komatiite, appears almost as in places &amp; v. dk bluish green serpenitization, in a few localized zones) w. to moderately schistose @ av. or 60-65° to the cba                      patchy strong chl. alt. carbonatization, in a few places, occasional zones of strong epidote alt. (of plag.)                      numerous thin (2 1/16" to 1/4") carb (calcite, magnetite &amp; minor qtz) seams-stringers pred. 1% sch. to 5% of rock, occasional larger irreg. 'blebs' moderate to strongly fractured @ random orientations, &amp; pred. calcite, chlorite frac. fill, minor magnetite, talc.                      appears luffaceous in places, &amp; elongate (11 fol.) blebs to 1/4" of ep. alt. plag, carb. &amp; chl. may be phenocrysts, lamprophyres or 'foll' frags.                      from 876-880: w. sch. @ 60° to the cba, w. carbonated, locally 1% diss Py as carb &amp; amorph. blebs to 1/16"                      @ 876.8: 1" qtz-calcite 'bleb' @ 874.7: a few sph. filled fractures                      from 880-875.5 becomes slg. more strongly schistose &amp; banded appearing (fol. @ 65° to the cba) &amp; thin chl. rich v. carb rich bands, v. strongly carbonated, more 'luffaceous' appearing, &amp; small carb. 'blebs-frags' to 1/16" elongate 11 fol., carb vns-seams to 10% of rock, a few talc seams                      @ 882.7: 1/2" pink calcite-qtz v. @ 70° to the cba, &amp; tr. diss mte &amp; Py.</p>	1%	876'	100%		863'	100%			
880'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>becomes banded appearing, &amp; chl. rich v. carb rich bands qtz-calc v. &amp; tr. mte. Py                      w. sch @ 60°, locally w. carbonated                      sph. frac. fill                      becomes banded appearing, &amp; chl. rich v. carb rich bands qtz-calc v. &amp; tr. mte. Py                      BASALT (KOMATIITE?)                      calc. seams &amp; 1% mte.                      pink magnetite 'blebs'                      pink carb v. &amp; 2% Py                      v. intensely carbonated                      calc. mag. seams to 50% rock                      calc. v. &amp; 10% mte.</p>	1%	886'	100%		870'	100%			
890'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>becomes banded appearing, &amp; chl. rich v. carb rich bands qtz-calc v. &amp; tr. mte. Py                      BASALT (KOMATIITE?)                      calc. seams &amp; 1% mte.                      pink magnetite 'blebs'                      pink carb v. &amp; 2% Py                      v. intensely carbonated                      calc. mag. seams to 50% rock                      calc. v. &amp; 10% mte.</p>	0.25%	892'	100%		874'	100%			
900'	STRONG	STRONG	MODERATE	MODERATE	Py	Py	<p>becomes banded appearing, &amp; chl. rich v. carb rich bands qtz-calc v. &amp; tr. mte. Py                      BASALT (KOMATIITE?)                      calc. seams &amp; 1% mte.                      pink magnetite 'blebs'                      pink carb v. &amp; 2% Py                      v. intensely carbonated                      calc. mag. seams to 50% rock                      calc. v. &amp; 10% mte.</p>	0.25%	892'	100%		876'	100%			

HOLE NO. **3**  
 CASING COLLAR ELEV.: **4' ag**  
 COORDINATES: N. E.  
 INCLINATION: **-55°** BEARING: **0°**

PROJECT: **JIM'S LAKE**  
 DATE STARTED: **MARCH 16, 83**  
 DATE FINISHED: **MARCH 26, 83**  
 TOTAL DEPTH: **936'**

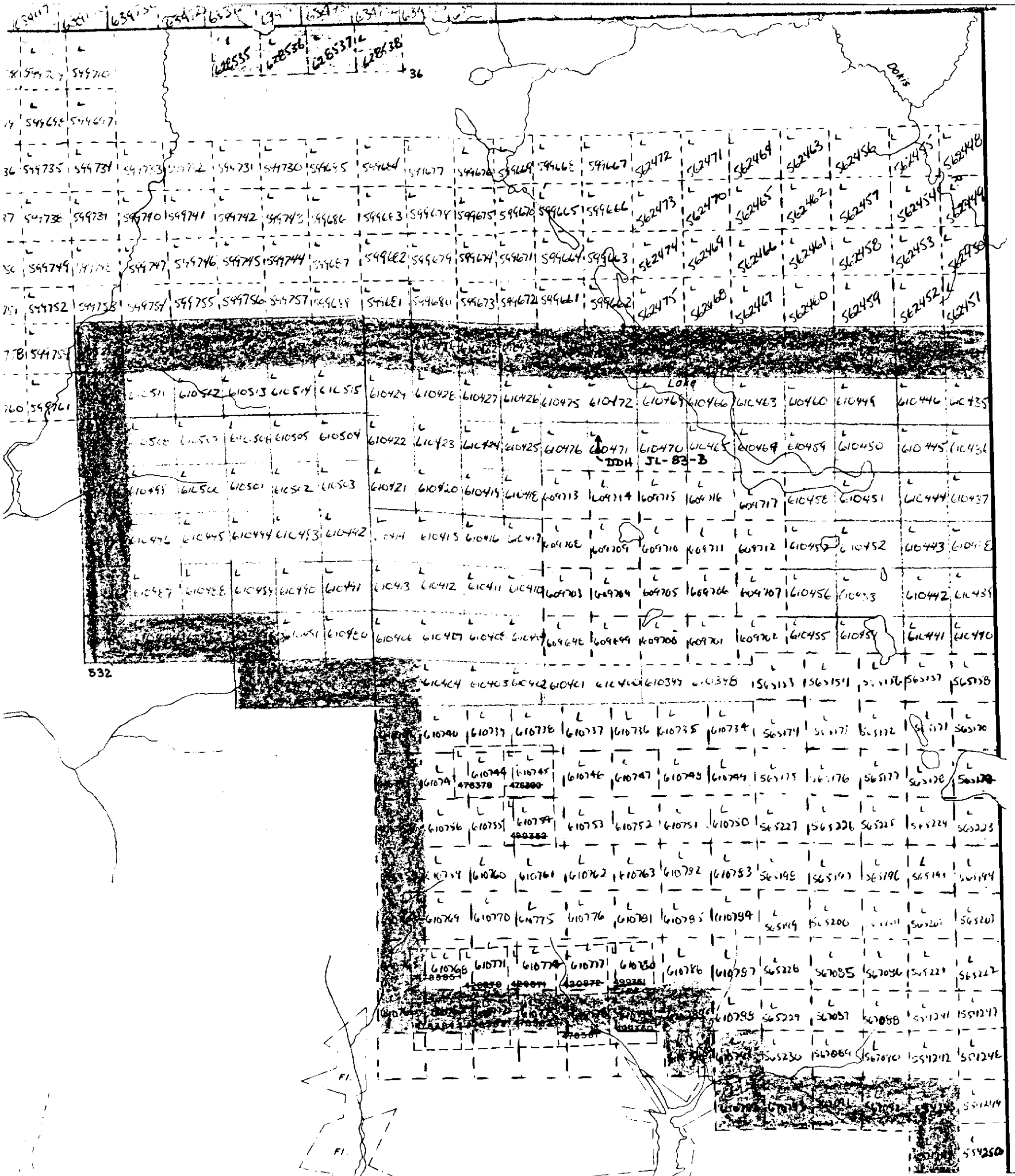
PAGE NO: **12** OF **12**  
 REF. TO CLAIM CORNER:  
 SCALE: **1" = 10'**  
 LOGGED BY: **D. McINOR**

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTI-MATED
	CHLORITE	SERICITE	SILICIFICATION	CARBONATE												
900'	PARALLEL	PARALLEL	PARALLEL	PARALLEL	STRONG			<p>calcite seams ± 1% Py            det. mag vns to 60%            ± 1% sph.</p> <p><b>BASALT (KONIAHITE)</b></p> <p>gls-dol. vns</p> <p>calcite seams to 30%</p> <p>magnesite vns ± 1%            mte. b. sph            magnesite vns            magnesite vns ± 1% sph            Cpy</p> <p><b>CARBONATIZED AND-BAS.</b></p> <p>wk schistosity @ 75°</p> <p>calcite-magnesite vns</p> <p><b>CARBONATIZED BASALT.</b>            calcite seams to 60%            magnetite-calcite vns</p>		850'		AR	875-5'	100%		
910'	PARALLEL	PARALLEL	PARALLEL	PARALLEL	STRONG		<p>887.8' 1/4" calcite seam @ 65° to the cba, ± 1% vty diss mte.            @ 890.5' 1/2" gls &amp; minor calcite vns @ 65° to the cba            @ 891.2' about 1/2" hard pinkish white magnesite blebs            from 892'-898'; numerous thin 1/2" zones of brecciated appearing rock    fol. ± small hard light green epidote altered fags in phl-carb groundmass.            @ 894.2' 1/2" hard pink carb vns @ 90° to the cba, ± 2% vty diss Py            @ 899.7' 1/2" pinkish orange calcite slab            @ 895.5' 1/4" carb vns &amp; sph cubes to 1/4" sulphides from 880'-895.5', 0.5% Py, tr. sph, vty diss min &amp; blebs, seams ass. ± carb.            from 895.5'-912', vty becomes less 'banded' appearing, only v. weakly schistose @ 70° to the cba, v. intensely carbonatized, lighter grayish green, carb stringers, seams to 15% rk            from 898.5'-899' calcite &amp; magnesite seams to 1/2" @ 70° to the cba to 50% rock, ± 0.5% vty diss Py host rock locally, i.g. v. soft, v. strongly chloritized.            @ 899.7' 1/2" calcite seam @ 65° to the cba ± 10% vty diss mte.            @ 901' 1" gls magnesite-calcite vns ± 1/4" chl. seams @ rims, tr. diss Py            @ 902' carb rich 2" zone, ± thin calcite seams to 60% rk, ± 1% Py as small blebs elong.    fol. to 1/8"            902.5'-903.5' gls rich zone, ± blebs, seams to 1/2" @ 55-70° to the cba to 50% of rk, pred. hard blage-pink-white carb. (dol. mag.) ± minor calcite, gls, ± 1% vty diss sph, minor mte, minor unid sub-metallic black min (specularite?) vns to well zoned, carb seams appears v. brecciated carb clasts in carb matrix.            from 907'-907.3' gls-hd base to pink carb seams &amp; blebs to 1" to 50% rock, @ 60° to cba, v. strong chl. aft. surrounding rocky tr. by diss Py.            @ 908' 1/2" dol. vns @ 70° cba            from 908'-909' thin, diffuse appearing calcite seams @ 70-90° to the cba to 30% rk, ± tr. Py, Cpy as blebs to 1/16"            @ 909.5' 3" milky white to beige magnesite vns ± minor gls, @ 60° to the cba, tr vty diss Py, wtkly brecciated host rock.            from 910'-912' carb (calc, pinkish white, vuggy to xstline magnesite) seams &amp; blebs to 30% rock, pred. or. 70° cba, Py to 0.5% as vty diss min.            sulphide content, from 895.5'-912', 0.25% Py, tr. Cpy, sph, associated pred. ± carb seams, v. minor vty diss min.</p>	0.25%	906'		909'	100%				
920'	PARALLEL	PARALLEL	PARALLEL	PARALLEL	STRONG		<p>912'-921' <b>CARBONATIZED ANDRESITE-BASALT.</b>            vty sph, dk green, v. strongly carbonatized, wk-moderately chloritized, wtkly sch. @ 75° to the cba and basalt. - diss. calcite to 30-40% rk.            numerous thin diffuse appearing calcite blebs &amp; seams, pred.    sub    sch. to 2-3% of rock, few thin harder magnesite seams            v. banded appearing in places, ± thin dk chl rich vs light calc. rich bands    sch.            minor talc in places,            quercus v. small, elongate    sch. light golden-brown unid min. blebs' diss throughout rock            most strongly fractured @ random orientations, ± calc, red iron oxide (hem-tim?) &amp; chl. fac fill            SULPHIDE CONTENT: trace, about small cubic Py blebs, minor vty diss min &amp; min ass. ± carb. seams. (Py, sph, Cpy)            @ 913.5' 1/4" magnesite, vns @ 60° to the cba ± 1% diss mte, tr. sph            @ 913.8' 1/2" magnesite vns @ 75° to the cba ± tr. by diss Py            @ 919.3' 1/4" magnesite, vns @ 90° to the cba ± vty diss Cpy, sph to 1%.            arbitrary contour ± underlying more schistose, banded appearing rock.</p> <p>927'-936' <b>CARBONATIZED BASALT.</b>            vty sph, dk green basalt, v. strongly schistose @ 55° to the cba, strongly chloritized, carbonatized, occ. talc rch,            banded appearance, ± light calcite rich vs dk. chl. calc. rich seams to 1/16"            numerous diffuse calcite seams, occ. hard magnesite seams, to 1/4"    sch. to 15% rk.</p>	T R A C E	916'		917'	100%				
930'	PARALLEL	PARALLEL	PARALLEL	PARALLEL	STRONG				1%	926'		922'	100%			
936'	PARALLEL	PARALLEL	PARALLEL	PARALLEL	STRONG					936'		936'	100%			

CONT.







# MOODY

DISTRICT OF  
COCHRANE

LARDER LAKE  
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

## LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS —
- IMPROVED ROADS —
- KING'S HIGHWAYS —
- RAILWAYS —
- POWER LINES —
- MARSH OR MUSKEG —
- MINES ✕
- CANCELLED Ⓢ

## NOTES

400' surface rights reservation along the shores of all lakes and rivers.

L.O. 8674 shown thus: covers land below contour 826' and 881'.

Subdivision of this township in lots and concessions was annulled May 29, 1963.

GALNA TP. M.480

9WT YD00M

MAR 25 1982



MOODY TWP. #117-83

UTAH MINES LTD.

