Diamond Drilling

Township Moody **Report NO** 18

Work performed by: Utah Mines Ltd.

Claim NO	Hole NO	Footage	Date	Note
L 610467	JL-84-A	615	Apr/84	(1)
L 609717	JL-84-ML1	700	Apr/84	(1)

Notes: (1) #202-84

HOLE NO. TL-84-A | PROJECT: TIM'S LAKE | PAGE NO: 1 OF 7

CASING COLLAR ELEV.: 4' above ground | GROUND ELEV.: | DATE STARTED: APRIL 12. 84 | REF. TO CLAIM CORNER:

COORDINATES: 300' @ 160° FROM LAW. BISON (UTAH GRID #1) N. E. | DATE FINISHED: APRIL 15. 84 | SCALE: 1" = 10'

INCLINATION: -50° BEARING: 340° | TOTAL DEPTH: 615' | LOGGED BY: D. McIVOR

COMMENTS: - NO PLASTIC CASING -

DIP TESTS, CORRECTED: @ 300': -50°
@ 616': -44°

AVE CORE REC'Y / HOLE 99.84 %

DESCRIPTIVE GEOLOGY
(SEE ATTACHED TYPED NOTES)

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
240'	WEAK ALT AFEW BEDS	WEAK TO MODERATE ALT. AFEW BEDS	A FEW THIN ALT BEDS				0-240' OVERBURDEN thinly bedded (@ 70°) interbedded graywacke & argillite carb rich ag interbed. locally some graphitic frac. fill		240'		BQ			
						py	qtz-calc vn // bd.	TRACE		100%				
250'						py	qtz-calc vn.		251'					
							INTERMEDIATE (VOLCANIC DERIVED) INTERBEDDED METASEDIMENTS (GRAYWACKE - ARGILLITE)	to		100%		256'		
						cb	calcite vn		256'					
						ser py	thin silica-carb alt. bands afew thin graphitic seams						100%	
260'						py		0.25%				260'		
							calcite vns			100%				
						cb	calc vn		266'			266'		
						cb py	calc vn						100%	
270'						py	calc vn			100%		270'		
							calc vns		276'					
280'	STR		STR	WK. SIL.		py	CHLORITIZED ANDESITIC AGGLOMERATE OR BRECCIATED ALTERED WACKE	1%		100%		280.5' 282'	100%	
	MOD.		MOD			py	AGGLOMERATIC ANDESITE OR SLUMPED EQUIVALENT METASEDIMENTS	0.25%	286'					
290'	MODERATE	MODERATE	MODERATE				CRYSTALLINE INTERMEDIATE ROCK qc vn	0.25%		100%				
						py			296'					
300'									To 301'	100%	V			

HOLE NO. JL-84-A | PROJECT: JIM'S LAKE | PAGE NO: 2 OF 7

CASING COLLAR ELEV.: 4' above gr | GROUND ELEV.: | DATE STARTED: APRIL 12. 84 | REF. TO CLAIM CORNER:

COORDINATES: 300' @ 160° FROM LAW. BASELINE N. | E. | DATE FINISHED: APRIL 15. 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 340° | TOTAL DEPTH: 615' | LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
300'	MOD.	MOD.	MOD.		X	Py		CRYSTALLINE INTERMEDIATE ROCK	0.25%		100%	BQ	303.5'		
													304.5'	100%	
						Po		vfg rel siliceous siltstone to arg. well dev. bedding @ 65°-70° to ca		306'					
310'		PATCHY WEAK ALT.	PATCHY WEAK ALT.			Py		calc vn locally wkly brecciated by chl-carb-graph seams					308'		
													310.5'	100%	
								INTERBEDDED ARGILLITES-SILTSTONES	0.5%		100%				
						Py		- calc-ser vn		316'					
320'						Po							321'		
						Py		- numerous light green ser alt beds/patches & 1-2% vfg diss Po-Py-Cpy			100%			100%	
									2%	326'			326'		
													328'	100%	
330'	PATCHY MOD ALT	PATCHY MOD ALT	PATCHY MOD. TO VERY STRONG ALT.			Py		brecciated zone (slumped)			100%			100%	
						Po		- qtz-calc vning - chl-graph interbeds					335'		
						Py		- calc vn	0.25%	336'			337.5'	100%	
340'								- ser-chl bands to 30% of rock			100%				
								INTERBEDDED ALTERED 'INTERMEDIATE' (VOLCANIC DERIVED) METASEDIMENTS (ARGILLITE-SILTSTONE)					344'		
								- slumped & chl-ser alt frags set in chl-carb-graph matrix					346'	100%	
						Py				346'					
350'						Po							351'		
								locally very vuggy & hem-carb filled fracs			100%			100%	
									0.25%	356'			356'		
360'						Py		- magnesite vning		To 366'	100%	V	359' To 364'	100%	

HOLE NO. JL-84-A
CASING COLLAR ELEV.: 4' above ground GROUND ELEV.:
COORDINATES: 300' @ 160° FROM LGW. 0+50N N. E.
INCLINATION: -50° BEARING: 340°

PROJECT: JIM'S LAKE
DATE STARTED: APRIL 12, 84
DATE FINISHED: APRIL 15, 84
TOTAL DEPTH: 615'

PAGE NO: 3 OF 7
REF. TO CLAIM CORNER:
SCALE: 1"=10'
LOGGED BY:: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY
360'	PATCHY MOD. ALT.	PATCHY MOD. ALT.	PATCHY MOD. TO STR. ALT			Py		magnesite veining qtz calc mag vn brecciated qtz-mag-calc vn INTERBEDDED, ALTERED 'INTERMEDIATE' (VOLCANIC DERIVED) METASEDIMENTS (ARGILLITE-SILTSTONE)
370'						Py		appears xlline (recrystallized)
380'	FEW STRONGLY ALT ZONES	MODERATE TO STRONG	WEAK TO MOD DOL. ALT.			Py		calc vn. calc vn chloritized shear zone SERICITIZED DACITE TUFF OR EQUIVALENT EPICLASTIC METAGRAYWACKE calcite vnng in chloritized zone chl-Py beds/seams num qtz-calc-tour-Py filled fract & strong dolomitic alt halos strongly dolomitized
400'			INTENSE DOL. ALT.	FEW THIN SILICA SEAMS		Py		few thin graphitic interbeds to 10% of rock mass. Py bed slumped brecciated appearing massive Py bed PYRITIC CARBONACEOUS THINLY BEDDED CARBONATE ROCK (SLUMPED-BRECCIATED) intensely carbonatized graywacke interbed pred. thinly bedded dol.
420'								

AVE CORE REC'Y / HOLE

% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
			BQ	359'		
		100%		364'	100%	
0.25%	366'			366'	100%	
		100%				
0.25%	376'					
		100%		380'		
1%	386'			385.5'	100%	
		100%		390'	100%	
	396'			394.5'	100%	
15%				396.5'	100%	
		90%		400.5'	100%	
	406'			405'	80%	
35%				410'		
		100%		415'	100%	
	416'					
	To 421'	100%		419.5'	100%	
85%				425'	100%	

HOLE NO. TL-84-A | PROJECT: TIM'S LAKE | PAGE NO: 4 OF 7

CASING COLLAR ELEV.: 4' above gr. | GROUND ELEV.: | DATE STARTED: APRIL 12, 84 | REF. TO CLAIM CORNER:

COORDINATES: 300' @ 160° FROM N. L4W, B150N | E. | DATE FINISHED: APRIL 15, 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 340° | TOTAL DEPTH: 615' | LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
420'			FEW THIN SEAMS					- massive Py (25% nodular, 60% bedded) in slump breccia. cavity fol. @ 70° to c.a				BQ	419.5'		
								- few thin graphitic seams			100%		425'	100%	
								BRECCIATED (SLUMPED) MASSIVE SULPHIDES	85%	426'					
430'											100%		430'	100%	
								- thinly bedded graphitic argillite					435'	100%	
								- massive brecciated Py bed	15%	436'			436'	100%	
								- severe slumping in places	86%		100%		438'	100%	
440'								MINERALIZED GRAPHITIC ARGILLITE		440'					
											100%		443'	100%	
								- numerous thin calcite, occ. qtz seams to 15%		446'					
									15%		100%		448'	100%	
450'										451'					
													453'	100%	
											100%		456.5'	100%	
		SERICITE ALTERED	STRONG					- few thin fuchsite blebs						100%	
460'								MINERALIZED, WEAKLY CARBONACEOUS, THINLY BEDDED CARBONATE RICH ARGILLACEOUS METASEDIMENT	15%	461'			461'		
								- v. ser rich interbed					462.5'	100%	
								- calc vn							
								- dk gray, wkly carbonaceous.	1%				465.5'	100%	
	STRONG PATCHY	MODERATE PATCHY	STRONG PATCHY			Po		- appears silica (recrystallized) & small acicular white tepars? to 30%			100%				
470'								- calcite vning.	0.25%	471'					
						Po			to						
								INTERMEDIATE (VOLCANIC DERIVED) METASEDIMENT	0.5%						
						Py					100%				
480'										To 482'					

HOLE NO. JL-84-A
CASING COLLAR ELEV.: 4' above gr. GROUND ELEV.:
COORDINATES: 300' @ 160° FROM N. E.
L4W, B160N
INCLINATION: -50° BEARING: 340°

PROJECT: JIM'S LAKE
DATE STARTED: APRIL 12, 84
DATE FINISHED: APRIL 15, 84
TOTAL DEPTH: 615'

PAGE NO: 5 OF 7
REF. TO CLAIM CORNER:
SCALE: 1" = 10'
LOGGED BY: D. McEVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY
480'	STRONG PATCHY ALTERATION	MODERATE PATCHY ALTERATION	STRONG PATCHY ALTERATION			Po	INTERMEDIATE (VOLCANIC DERIVED) METASEDIMENT
490'							
500'						Po	
510'						Py	
520'						Po	
530'						Po	
540'							

COMMENTS:

AVE CORE REC'Y / HOLE

DESCRIPTIVE GEOLOGY

% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTIMATED
	482'	100%	BQ	482'		
0.25% to 0.5%		100%		487'	100%	
	492'			490'		
		100%		492'	100%	
	502'					
0.25% to 0.5%		100%		507'		
	512'			512'	100%	
		100%		515'		
	522'			517'	100%	
0.25% to 0.5%		100%		519'	100%	
	533'					
	To 545'	100%				

HOLE NO. JL-84-A | PROJECT: JIM'S LAKE | PAGE NO: 6 OF 7

CASING COLLAR ELEV.: 4' above gr. | GROUND ELEV.: | DATE STARTED: APRIL 12. 84 | REF. TO CLAIM CORNER:

COORDINATES: 300' @ 160° FROM L4W, 8+50N | N. | E. | DATE FINISHED: APRIL 16. 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 340° | TOTAL DEPTH: 615' | LOGGED BY: D. McIVOR

ALTERATION | FRACTURING | MINERAL | GEOLOGY | COMMENTS: | AVE CORE REC'Y / HOLE | % SULPHIDES | DRILLING INTERVAL | % CORE RECOVERED | CORE SIZE | SAMPLE INTERVAL | % REC'Y. SAMP. INT. | ESTIMATED

SECTION | CHLORITE | SERICITE | CARBONATE | OTHER

DESCRIPTIVE GEOLOGY

540'
550'
560'
570'
580'
590'
600'

STRONG PATCHY ALTERATION

MODERATE PATCHY ALTERATION

STRONG PATCHY ALTERATION

Po

Py

INTERMEDIATE (VOLCANIC DERIVED) METASEDIMENT

0.25% to 0.5%

543' 553' 563' 574' 585' 595' To 615'

100%

BQ

542' 544' 567' 574' 591' 599'

100%

HOLE NO. JL-84-A

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

COORDINATES: 300' @ 160° FROM LAKE. BASE N. E.

INCLINATION: -50° BEARING: 340°

PROJECT: JIM'S LAKE

DATE STARTED: APRIL 12. 84

DATE FINISHED: APRIL 15. 84

TOTAL DEPTH: 615'

REF. TO CLAIM CORNER:

SCALE: 1" = 10'

LOGGED BY: D. McEVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY
600'	SLIGHT PERVASIVE ALT.	MODERATE PERVASIVE ALT.	SLIGHT PERVASIVE ALT.		/	.	
610'					/	.	
615'					/	Po	

COMMENTS:

AVE CORE REC'Y / HOLE

DESCRIPTIVE GEOLOGY

INTERMEDIATE (VOLC. DERIVED) METASEDIMENT

HOLE ENDS @ 615'
42 SAMPLES SPLIT FOR ASSAY.
D. McIVOR. MAY 31. 84

% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
0.25% to 0.5%	605'	100%	BQ			
	615'	100%				

JL - 84 - A

0 - 240' -Overburden

240 - 280.5' 'Intermediate' (Volcanic derived) Interbedded Meta-Sediments (Graywacke - Argillites)

-Rock vairies in composition and appearance, with thinly bedded(average 4 to 5", from 1/4" to 2 to 3') Interbedded intermediate metasediments, comprised predominantly of 1) light green, relatively soft, moderately sericitized (chloritized in places) fg to vfg very granular (dirty) appearing graywacke, with 10 to 20% small(1/64") white feldspar, a few qtz, chlorite, frags/clasts, occasionally coarser, more frag rich, resembles a dacite to andesite tuff but very clastic-dirty wacke appearing, bd very well developed at 70° to ca .
-appears ' mottled'in places to brecciated in places, with slightly darker irregular blebs and bands parallel to bd, could be clasts but very irregular indistinct contacts with matrix, these units interbd, with grad contacts with (2) dark grey, vfg similar type wacke not as ser rich, often v carb rich with 20% vfg diss calcite, maybe v weakly carbonaceous.
3) a few gray carb rich possibly weakly carb arg interbd.

-pred 60% green wacke, 35% grwk, 5% arg.
-bd v well developed at 70°, with some evidence of slumping in places.
-rock is moderately fractured, pred calcite fracture filling, minor chl, ser,Py-Po and graphitic fracture filling in places.
-a few calcite vn in to 1" usually parallel sub parallel to bedding.
-light green wacke also very carb rich in places, with 10 to 15% vfg diss calcite.
-light gray wacke beds appear crystalline in places with small (1/64") elongate white lath shaped crystals - possibly recrystallized, to 20 to 30% in places, lending fibrous appearance to rock, (possibly low grade metamorphic mineral)
-gray blebs in bands parallel bd often v carb rich, slightly harder, more siliceous, resembles autobrecciation or agglomerate, with blebs/bands elongate parallel to bd.
-rock appears slightly schistos, sheared, parallel bedding with some elongate grains.
-overall sulphide content, trace to .025% Py-Po, v minor Cpy, usually associated with calcite vn in seams, minor fracture filling, and minor vfg diss mineralization.

-at 243.5', 2" gray v carb rich arg bd, locally minor graphite fracture filling.
-at 247.5', 3" pred calcite minor qtz vn/bd parallel bd at 70°, with trace Py in cross cutting fractures, locally host is v carb rich, with 20 to 30% small crystalline feldspar?.
-at 250.5', 3" bd appearing calcite minor qtz vn at 70° to ca around which host is very modelled appearing with dark gray carb rich sediment, with 10 to 15% fibrous white acircular mineral with green sericitized wacke blebs elongate parallel bd to 1/2" (v agg appearing but cld be v altered)
-at 251.5', 1/2" cherty qtz and calcite vn cross cuts bd at 65° to ca
-at 256.5', 2" dark gray calcite vn at 55° to ca with 1% vfg diss Py-Po, locally from 256 to 256.5', v mottled appearing with dark gray more siliceous carb rich blebs and bands (looks like alteration as opposed to cross cutting seams)
-around 258', numerous thin 1/16" to 1/4" harder silica carb rich bands parallel bd (alteration)
-from 258 to 258.5', rock v sericite altered w a few thin graphitic seams/beds w 1% Py-Po
-from 261 to 261.5', 1/2" fg granular calcite vn weakly brecciates rock at 20° w 1% vfg diss Po-Py, locally from 259 to 261', v agg appearing w 1/2 to 1" elongate light green wacke blebs/frag.
264.5', at 65° to ca, a few 1/2 calcite vn parallel bd w trace diss Po-Py-Cpy
-at 266.5', 1" calcite vn at 70° to ca
-at 266.6', 1" zone w 10% soft dark brown corroded garnet to 1/32" and 2% diss Po
-from 268.5 to 269', calcite vn at 70° to ca
-at 269', 3" zone w 10% small (1/32") dark reddish brown soft corroded garnets w 2% diss Py-Po, locally v agg appearing.
-from 270 to 273', locally v crystalline appearing w smal fibrous agg of ascicular white mineral (fspar? low grade metamorphic mineral), locally gray carb rich weakly carb wacke
-at 272.7', 1" bd appearing calcite vn at 70° to ca
-at 277.3', a few thin Py-Po-Cpy filled frac
-at 278', a few 1/2" calcite vns/seams parallel bd at 70° to ca
-sharp contact at 280.5' at 70° to ca, w strong underlying chl agg unit.

280.5 - 282'

Intensely Chloritized Andesitic Agglomerate or Brecciated Altered Wacke.(slumped breccia)

-distinct interbd at 65° to ca, foliation at 65° to ca, comprised of v soft light green intensely chloritized fg slightly granular appearing andesitic or altered wacke type frags (maybe altered wacke as chl alteration appears to halo fresher light gray cores of frags) elongate paralle to bd and to 1" set in a dark gray vfg arg carb rich matrix. (frag/matrix ratio 80/20)
-matrix appears v dirty in places w small chl lithic frags, maybe a breccia
-contains 1% Py as thin seams and vfg diss mineralization in matrix.
-matrix weakly carb.

282 - 288'

Agglomeratic Andesite or Slumped Equivalent - Argillaceous to Graywacke Type Meta-Sediments

-rock comprised of dark gray moderately carb and light green moderately chl vfg slightly granular appearing andesite or arg to arenaceous epiclastic equivalent rock, occasionally as elongate parellel to bd (well developed at 65° to 70° to ca) frag appearing blebs to 1 to 2" and 95% of rock rimmed by thin (1/16 to 1/32") dark gray often v carb rich weakly carb in places seams that appear to be either matrix for agg frags or for slumped metasediment clasts.
-numerous irregular predominantly calcite w minor qtz vns to 1/2", often rebreccia rock, predominantly parellel subparellel bd, to 10% of rock.
-rock is moderately frac with calcite, chl minor hematite sulfide frac filling.
-moderately sch parallel bd
-gray seams/frag slightly harder maybe weakly silicified
-at 284', 1/4" qtz calcite vn at 70° to ca w Py seams to 1/32" at rims.

-unit pred clastic/granular appearing w small white fspar occasionally qtz (to 1/64" blebs throughout
-at 286', a few 1/4" v cherty dark gray silica bd/bands
-a few small diss hematite blebs to 1/32" throughout rock
-overall sulfide content, 0.25%, Py, trace Cpy predominantly associated w calcite seams and frac filling, minor vfg diss mineralization.

288 - 306'

'Crystalline Intermediate Rock' (Volcano Clastic)

Rock predominantly a fg to a med grained (fg from 288 to 298, med grained from 298 to 303', fg from 303 to 306'), light green weakly foliated (schistose and in places banded appearing) intermediate rock comprized of 50 to 60% crystalline (anhedral to uhedral) blebs/white laths of fspar?, often acicular radiating clusters, and 40 to 50% light green chl to sericite altered ferromag minerals, v mottled appearing v grainy appearing in places to diabasic textured in places, but looks more recrystal lized than a primary crystalline rock, cld be an intermediate dyke rock, but v graditional contacts w sedimentary appearing units above and below, cld be recrystalized sediment or volcano clastic.
-numerous 1/4 to 1/2" calcite vns occasional w minor qtz, at random orientations
-moderate pervasive carb (fg diss calcite to 5 to 10%)
-moderately frac at random orientations w pred calcite, some chl, hematite, Py, graphite frac filling.
-appears slumped in places, weakly brecciate in places with thin dark 1/64" chl seams
-overall sulphide content 0.25%, pred Py minor Po-Cpy, associated w calcite vns and seams and as fract filling, minor vfg diss mineralization.
-at 294.5', 1" qtz minor calcite vn at 30° to ca

-at 300.5', 1/2" black chl minor graphite and calcite seam at 45° to ca w a few diss 1/32" Py blebs.
-from 303.6 to 304', numerous 1" grey calcite - graphite rich bds - vns, paralled bd/foliation, discontinuous, slumped appearing w 5% vfg diss sulfides (3% Po, 2% Py, trace Cpy) looks v clastic locally.
-grad arbitrary contact at 306'

306 - 328'

Interbedded Metasediments (Argillite to Siltstone)

-rock predominantly a relatively hard, relatively siliceous, (softer in places where carb and sericitized) med gray to light green in places (patchy weak sericite occasionally chl alteration) vfg siltstone type litho, to arg in places.
-v granular appearing, but in places exhibits a vfg crystalline appearing texture w 20 to 30% small (1/64") white asicular fspar ? carb? low grade metamorphic mineral?
-bd - foliation at 65 to 70° to ca, well developed, thickly bd (4 to 6"), irregular bd in places, appears slumped in places.
-patchy carb or vfg diss calcite to 15% of rock.
-moderately frac at random orientations w pred calcite, some chl, ser, Py, graph frac filling.
-numerous (2 to 3% of rock) to 1/2", grey calcite vns/bands pred parallel bd, often v discontinuous
-in places appears slumped - brecciated or agg, w 1" elongate chl frag parellel bd rimed by dark grey carb - carbonaceous chl seams to 1/32"
-weakly schistose parallel to foliation, w some streaching of grains, lends to tuffaceous appearance to unit.
-some minor diss carb material.
-sulphide content, from 306 to 321', 0.5% pred Py-Po trace Cpy, as vfg diss mineralization associated w sericite zones/bds frac filling and associated w calcite vn
-from 321 to 328', 2% pred vfg diss Po-Py trace Cpy.

-at 309', 2" irregular calcite vn parallel bd locally 45° to ca, appears to weakly brecciate rock w 2% vfg diss Po-trace Py Cpy,locally light green sericite rich siltstone type litho is v carb rich and weakly brecciated appearing by dark grey carb-carbonaceous-chl seams, from 308.5 310.5', w 1% vfg diss Po-Py trace Cpy, numerous thin calcite seams parallel bd w Po blebs to 1/16"
-at 316.5', 1" granular fg calcite and sericite vn at 45° to ca, w 0.5% vfg diss Py-Po-Cpy
-at 317', 1"fg granular calcite vn at 45° to ca, w 1% vfg diss Po-Py-Cpy, locally host w 0.5% vfg diss Po-Py-minor Cpy, and Po-Py frac filling
-from 321', getting increasing number of light green ser altered/rich indistinct zones/poorly defined bds, usully containing 1 to 2% vfg diss Po-Py-trace Cpy, to 30% of rock
-at 326', 1/4" semi massive Py band comprise of vfg Py and calcite parellel bd at 60° to the ca,
from 327.6 to 328', sul to 30%(Py) as vfg diss Py, Py seams to 1/32" parelle bd, and w calcite.
-at 328', 1" brown vfg massive sul bands (Py) in v carb rich (30% diss calcite) rich host
-arbitrary contact w underlying unit which contains more ser-chl altered zones/bds

328 - 380'

Interbedded, Altered, "Intermediate" (Volcanic Derived) Metasediments (Argillite-Siltstone)

Rock v similar to overlying unit, w more light green, chl and ser "zones" and distinc interbds,
-rock varies in appearance and composition but pred:
a dark grey vfg arg to siltstone, v granular appearing (in places w crystalline appearing faces where small white fspar ? laths and acicular crystals present, maybe recrystalized) relatively soft, altered
-moderately to v intensely carb, / calcite rich, w vfg diss calcite to 30% in places but v patchy
-contains numerous light to med greens slightly coarser v strongly chl-ser altered interbds and less distinct altered 'patches
-bd mod dev at 60 to 70° to ca, ranges fr 1/2" to 2 to 3feet, some slumping present
-in places appears weakly brecciated, slumped w elongated frag parallel bd to 1" v agg appearing
-numerous(from 5 to 10% of rock) fg granular calcite vns/bds parallel bd, often v contorted
-moderately frac, pred parallel bd, but othe orientations present, w pred calcite, some chl, ser, graphite, Py, hematite frac fil
-a few slightly coarser grwk type interbds
-where chl-ser altered v 'andesitic' appearing
-weakly to moderately schistos parallel to bd
-sulfide content, av 0.25% as Py-Po trace Cpy smeared along bedding planes and sch planes, some frac fil, and some mineralization associated w calcite seams, occasional thin Py-Po seams parallel to bedding, minor vfg diss mineralization in a few bds (in places to 1% over a few inches)
-at 330', 4" brecciated/agg appearing zone w bright light green strongly sericite-chl altered frag elongate parallel to bd set in a darker gray-green carb rich ground mass, as well as brecciated by calcite seams parallel to bd (slumped zone)

-from 330 to 331', 1/2" calcite-qtz and pink hematite stained calcite vns/seams parallel to ca at 0°, w 1% diss Py in vn and at rims, locally host v chl
-at 332.5' a few 1/2" black chl and minor graphite interbds at 70° to ca, v calcite rich (30%) with 1% vfg diss Py
-at 333', 1/4" qtz cal vn cross cuts foliation at 45° to ca, with minor hematite at rims, locally host v slumped-brecciated appearing w strong chl - ser minor alteratio
-at 334' at 60° to ca, 1/4" black chl and minor graphite seam w 1% Py over 6" as blebs along seam to 1/32", locally host v slumped /agg appearing, v soft v chl - ser altered
-at 335', 2" fg granular calcite vn parallel bd, v contorted, sheared appearing
-from 335.5 to 336.5', coarse grained crystalline calcite vn brecciates rock, slightly pinkish orange in places w minor hematite staining, a few chl altered brec host rock frag, trace fg diss Py, crudely oriented at 50° to ca, although highly variable
-from 328 to 337.5', Pred v chl in places ser, light green, slumped agg appearing arg to siltstone, very 'andesititc' appearing and could conceivably by an andesitic agg interbd
-from 341 to 342.5', numerous 1" bright green ser-chl v soft appearing bands/blebs to 30% of rock
-from 344 to 346', pred light green soft strongly chl - ser altered, slumped appearin rimed by dark grey green chl - carb- graphit seams, numerous thin bd appearing calcite vn to 1/2" parallel bd at 70° to ca
-from 351 to 356', v vuggy, w abundant hematite frac fil and altered carb seams rock carb rich(30% diss calcite)
-at 357.8', 1/4" hematite-calcite-Py seams vn at 70° to ca,
-from 359 to 364', numerous 1/2" hard white carb (magnesite ?) vn and thin associated calcite/magnesite stringers pred parallel bd although highly contorted in places to 10% of rock
-at 364.5, 3" highly contorted hard white magnesite - calcite- qtz vn, vuggy, w ser altered brec host rock frag, a few diss 1/16" Py blebs.

-at 365 to 366', highly contorted, brec hard white carb vn w minor calcite,qtz, w numeours brec ser altered host rock frag/ seams, vn oriented parallel to fol at 70° to the ca, trace fg diss Py
-from 372 to 380', crystalline appearing w small acicular white fspar needles to 30% of rock (recrystallized sediment)
-grad contact over 6" at 380' becomes ser altered bright light green.

380 - 400.5'

Light Green Sericitized Dacite Tuff or Epiclastic Equivalent Metagraywacke (Mineralized)

-rock pred a vfg, granular appearing, bright light green, mod to strongly ser dacite tuff or epiclastic equivalent rock (ser metagrwk)
-bd mod to well dev at 65° to ca, thinly bedded(less than 1/4of " to 2 to 3")
-appears tuffaceous/wacke in places w small white fspar occasional qtz blebs to 1/32" elongate parallel to bedding, aligned parallel to bd and a v granular matrix/groun mass.
-mod to strongly frac pred parallel/sub-parallel to bd, w calcite harder white carbonate, ser, occasional chl Py frac fil.
-in places appears dolomitized, particular toward 400.5'
-some frac have strong like green carb-ser alteration halos to 1"
-a few thin intensely chl 'zones'
-some slumping - ssd type features in places with contorted bd
-appears weakly brec in places by gray carb fill frac
-appears agg in places w elongate frag parallel to bd rim by pred grey green ser rich seams to 1/32"
-sulphide content : variable, increasing towards 400.5' from 380 to 394.5', 1% pred Py as frac fil and mineralization associated w calcite and chl seams, vfg diss mineralization.

-from 394.5 to 400.5', Py to 15% as above
-numerous thin to(1/2" av 1/8 to 1/4") irregular often discontinued calcite seams pred parallel bd to 2 to 3% of rock.
-increasing alteration towards 400.5' (at 380' relatively hard, siliceous, at 400.5', v soft)
-at 383.5', 1" fg granular calcite vn parallel bd at 65° to ca, with 1% Py as 1/16" to 1/32" diss blebs.
-at 385', 1"highly contorted slumped appearing hard white carb and calcite vn crudely oriented parallel foliation at 65° to ca with minor diss Py blebs to 1/32"
-from 380 to 385.5', relatively hard sil becomes increasingly softer more ser alt from 385.5'
-at 385.5', at 70° to ca, 1/2" sheared appearing strongly chl zone w Py seams to 1/16" and 10%
-from 386 to 386.5', strongly sheared appearing at 65° to ca, strongly chl, slumped appearing, w numerous 1/4" calcite vn parallel bd and 10% Py as thin seams parallel bd and diss blebs to 1/4" parallel bd and mineralization associated with calcite seams, v soft
-at 388', 2" mottled appearing zone at 65° to ca parallel bd, where vfg slips of Py to 10% of rock
-at 390.1', 2" zone w thin calcite seams to 1/4" parallel bd in chl host w 2% Py as thin seams w carb and diss slips parallel bd to 1/32"
-at 390.5', 2" chl zone w thin 1/4" calcite rich bds to 5%, w 5% Py as thin blebs in seams parallel to bd to 1/16"
-at 391.3', a few thin 1/4" chl-Py seams /bds, locally host is weakly carb/dolomitize from 391', weak to mod pervasive carb
-from 391.5 to 392.5', numerous 1/4" chl-Py bds parallel bd at 65° to ca
-at 393', 1/4" calcite-hematite-Py fil frac at 45° to ca, locally abundant hematite frac fil
-from 394.5 to 396.5', numerous 1/4" hard white carb-Py-minor qtz-calcite-hematite fil frac at 0 to 20° to ca w strong 1/2" domomitized alteration halos.

-from 409.5 to 410', massive Py bd, slumped, brecciated Py to 80% w a few graphite-carb blebs to 1/4", and vfg interstitial carb
-from 414.5 to 415.5', light green fg granular intense carb grwk interbd (bd appears to weakly cross cut at 80° to ca) w 3% cubic Py blebs to 1/4"

419.5 - 433'

Brecciated (Slupmed Breccia) Massive Sulphides (Pyrite)

-rock comprised of approx 85% Py, as frag to 1 to 2", av 1/2", of both nodular type Py (w excellent accretionary growth structures and zonations) and more massive - bd Py frag (some bd apparent in frag, thinly bd, to 1/32")
-approx 60% massive Py and 25% nodular type Py, set in a calcite ground mass (thin seams surrounding brecciated sulphide frag, occasional w minor qtz and graphite
-v crude overall foliation at 65° to 70° to ca
-strongly frac pred parallel foliation w qtz, calcite, graphite frac fil, appears to re-brecciate slumped frag in places
-from 423 to 424.2', a few 1 to 2" weakly black graphitic arg bands/bds at 65 to 70° t ca, w 5 to 10% vfg diss Py

433 - 456.5'

Mineralized Graphitic Argillite

-rock pred a thinly bd (less than 1/32" to 1 to 2") jet black v graphitic (60%) arg rock, bd v contorted, w severe slumping and soft sed type deformation features, at an av orientation of 65° to ca although varies fr 40 to 90° to ca, totally brecciated, slumped in places.
-numerous (to av 15% of rock) thin (1/32 to 1/2") calcite, occasionally qtz vn/bds parallel to bd, often sulphide rich, often discontinuous, brecciated, boudinaged
-sulphides, 15% Py as large blebs to 1/2 to 2", often intensely frac, brecciated, usually associated w minor qtz and carb, a few semi massive 2 to 3" bands, pred thin 1/16" to 1/4" bands parallel to bedding,

minor vfg diss mineralization, a few 1/4" nodules
-from 433 to 434', fg granular dark grey soft strongly carb intermediate volcanic derived grwk interbd w 3% Py as diss cubes to 1/8"
-from 436 to 438', massive Py band(Py to 85% intensely brecciated by thin qtz, minor calcite, graphite seams to 15% of rock

456.5 - 465.5'

<u>Mineralized, Weakly Carbonaceous, Thinly Bedded, Carbonate Rich Argillaceous Meta-Sediment</u>

rock pred a v thinly bd (v well dev at 65° to ca, bd av 1/16 to 1/4", occasionally 1 to 2" bds dark grey vfg to arg carb rich rock (pred calcite rich) w 15% vfg diss graphite and thinly graphitic seams parallel to bd
-Py to 15% ad vfg mineralization in carb bds occasional Py seams parallel to bd to 1/16" and Py frac fil
-rock is mod frac pred parallel to bd although other orientations present,w pred calcite, Py, minor graphite, hematite frac fil.
-numerous thin (av 1/16" to 1/2") calcite vn parallel to bd to 15% of rock
-banded appearing w bd w varying graphite, sulfide and carb content
-a few thin bright light green v ser rich interbd
-at 459' a few small 1/16" bright green fuchsite blebs
-from 460', ser rich interbd become 50% of rock
-from 461 to 462.5', arg is v bright light green, v ser rich, mottled appearing w thin small black Py slips parallel to bd and Py seams parallel to bd to 15% w associated calcite

-at 462.5', 2" bd appearing calcite vn parallel to bd at 65° to ca
-from 462.5 to 465.5', Py only 1%, rock becomes dark grey carbonaceous, carb rich arg metasediment, grad contact w underlying unit

465.5 - 615' Intermediate (Volcanic Derived) Metasediment (Altered Siltstone)

-rock comprized of pred of a fg v granular appearing relatively soft light green to gray metasediment-siltstone type litho (intermediate vol derived) but contains 15 to 30% vfg crystalline appearing a cicular often radiating agg of white mineral (fspar? carb?) appears recrystallized
-contains numerous (to 15% of rock) thin (to 1") light green, v soft intensely chl 'sheared-schistose' appearing zones-bands pred parallel subparallel bd (occasionally sericitic)
-bd mod dev at 65° to ca although variable in places, appears slumped in places, appears agg in places, w elongate parallel to bd 1/2 to 1" frag of rock in similar appearing material matrix.
-numerous (to 5% of rock) gray fg granular calcite vns pred parallel to bd to 1"
-mod frac at random orientations w pred calcite minor chl, ser, Py, hematite frac fil
-maybe weakly carbonaceous in places
-patchy but v strongly carb or carb rich bd - zones w up to 25% diss calcite
-a few weakly ser, chl zones
-calcite vn/seams often discontinuous, contorted, off set by slumping
-light green chl zones appear to brecciate rock in places or act as matrix to siltstone type frag
- sulfide content, 0.25 to 0.5% pred Po less Py - Cpy, associated pred thin chl shears zones and interbd, occasionally w calcite vn in fracture fil, minor fg diss mineralization

-a few biotite bearing zones usually associated w chl altered patches and zones
-rock is weakly schistose in places pred parallel to bd
-from 467.5 to 472', light green, weak pervasive ser alteration, v strongly carb
-from 468.5', 2" zone within calcite seams parallel to bd to 70% of rock
-at 485', 2" zone w thin contorted calcite vn to 80% of rock
-at 491', 4" zone w calcite vn parallel to bd to 1/2" and 80% of rock w 1% associat Po
-from 515 to 517', numerous (to 50%) dark green chl bands to 2", locally host w 5% diss biotite
-at 518.5', 2" chl zone w 3% Po 1% Cpy
-at 523', 1" calcite vn parallel to bd locally unit is v chl altered v sheared appearing/

HOLE NO. JL-84-ML1 | PROJECT: JIM'S LAKE | PAGE NO: 1 OF 10

CASING COLLAR ELEV.: 4' above ground | GROUND ELEV.: | DATE STARTED: APRIL 7, 1984 | REF. TO CLAIM CORNER:

COORDINATES: LB&E, TISON (NORTH GRID) N. E. | DATE FINISHED: APRIL 10, 1984 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

COMMENTS: DIP TESTS (CORRECTED) @ 300': 50° 450': 49° 700': 40° · NO PLASTIC PIPE · HOLE COLLAPSED & ABANDONED @ 700'

AVE CORE REC'Y / HOLE 98.32%

SECTION	ALTERATION: CHLORITE	ALTERATION: SERP.	ALTERATION: CARBONATE	ALTERATION: TALC	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTIMATED
150'							OVERBURDEN								
160'															
	WK	STRONG	FR. FILL	NIL		Py		serp pseudomorphs SERPENTINIZED, CUMULATE TXT'D PERIDOTITE 5% magnesite veining 10% mte as frac fill & vfg diss min.	TRACE	165'	100%	Ba			
170'						Py		locally mag & serp vns to 50% rock							
	OCCASIONAL ALT. XSTALS	V. STRONG ALT XSTALS & MATRIX	STRONG ALT. XSTALS	OCCASIONAL ALT. XSTALS		Py		mag-serp vns serp & magnesite pseudomorphs after olivine & interstitial serp & mte.		173'					
								magnesite-serp vns to 5% rock mte-serp vn sheared serp zone & locally 30% mte mte to 10% rock as frac fill & interstitial min.	TRACE		100%				
180'						Py		serp-mag vn							
						Py		ALTERED (SERPENTINE/MAGNESITE) CUMULATE TXT'D PERIDOTITE	TO 0.25%	184'	100%				
190'						Py		becomes wkly talc alt. locally mag-talc-ser-serp vns to 15% rock		193'	100%				
	WK	STR	STR	STR		Py		brec. by magnesite-talc-serpentine vns to 50% rock BRECCIATED CUMULATE TXT'D PERIDOTITE	TR		100%		198' 201'	100%	
200'		STRONG	STRONG	WK. PATCHY		Py		magnesite-serp seams wkly brecc. rock CUMULATE TXT'D ALTERED (PRED. SERPENTINIZED) PERIDOTITE	0.25% to 0.5%	203' 206' TO 214	66% 100%				
210'															

HOLE NO. JL-84-ML-1 | PROJECT: JIMS LAKE | PAGE NO: 2 OF 10

CASING COLLAR ELEV.: 4' above ground | GROUND ELEV.: | DATE STARTED: APRIL 7. 84 | REF. TO CLAIM CORNER:

COORDINATES: L84E, 7150N N. E. | DATE FINISHED: APRIL 10. 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

ALTERATION: CHLORITE | SERP. — STRONG ALT. AS PSEUDOMORPHS & GROUNDMASS | CARBONATE — STRONG ALTERATION AS PSEUDOMORPHS | TALC — WEAK PATCHY ALTERATION

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y / HOLE

DESCRIPTIVE GEOLOGY

SECTION	DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
210'					BQ	213'		
	mag-serp vn			100%		216'	100%	
	magnesite veins		216'			217'		
220'	light blue serp. seams	0.25% to 0.5%				219'	100%	
	magnesite vn		226'	100%				
230'	CUMULATE TEXT ALTERED (PRED. SERPENTINIZED) PERIDOTITE					231'		
	serpentine vn		236'			236'	100%	
240'		0.25% to 0.5%		100%				
			246'					
250'				100%				
			256'					
260'	intensely serpentinized zone	0.25% to 0.5%		100%				
			264'					
270'	coarse cumulate phase		270'	100%				

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 3 OF 10

CASING COLLAR ELEV.: 4' above ground GROUND ELEV.: | DATE STARTED: APRIL 7. 84 | REF. TO CLAIM CORNER:

COORDINATES: L84E, 7+50N N. E. | DATE FINISHED: APRIL 10. 84 | SCALE: 1" = 10'

INCLINATION: -50° BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

ALTERATION: CHLORITE | SERPENTINE: STRONG AS PSEUDOMORPHS & ALT. OF GROUNDMASS | CARBONATE: STRONG AS PSEUDOMORPHS | TALC: WEAK PATCHY ALTERATION

FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y / HOLE

DESCRIPTIVE GEOLOGY

SECTION	DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
270'	intensely serpentinized & locally talc mte pseudomorphs		270'		BQ	270'		
	intensely serpentinized			100%			100%	
			276'			276'		
		0.25% to 0.5%						
280'				100%				
			286'					
	magnetite seams							
290'				100%		290'		
	CUMULATE TXT'D ALTERED (PRED. SERPENTINIZED) PERIDOTITE						100%	
	magnetite-magnesite-serp. seams		296'			296'		
		0.25% to 0.5%						
300'	magnesite veins			100%				
	magnesite stringers to 30% rock							
			306'					
	locally pred mag pseudomorphs							
310'	locally limonite frac fill			100%				
		0.25% to 0.5%	316'			316'		
	coarse cum zone ± mte ± mag pseudomorphs							
	mag-serp vn						100%	
320'				100%		321'		
	mag-mte seams					325'		
	mag vns		326'			327'	100%	
330'	20% mag veins		TO 336'	100%		330.5'	100%	

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 4 OF 10

CASING COLLAR ELEV.: 4' above ground | GROUND ELEV.: | DATE STARTED: APRIL 7. 84 | REF. TO CLAIM CORNER:

COORDINATES: L84E, 7+50N N. E. | DATE FINISHED: APRIL 10. 84 | SCALE: 1"=10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

ALTERATION: CHLORITE | SERP. | CARBONATE | TALC | FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE CORE REC'Y / HOLE

DESCRIPTIVE GEOLOGY

SECTION	DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
330'	magnesite veining				BQ	329.5'		
						331.5'	100%	
						332.5'		
		0.25%		100%		334'	100%	
		to	336'					
		0.6%						
340'	CUMULATE TXT'D ALTERED (PAED SERP) PERIDOTITE			100%				
			344'					
	magnesite veining							
350'	mag vn			100%		350'		
		0.25%	354'			354'	100%	
		to						
		0.5%						
360'	magnesite pseudomorphs increase			100%				
			364'			364'		
	becomes pad magnesite - talc pseudomorphs					367'	100%	
	mag-serp vn					367.5'		
370'				100%		369'	100%	
	magnesite vn	TRACE	374'					
	INTENSELY ALTERED (MAGNESITE - TALC) CUMULATE TXT'D (REMNANT) PERIDOTITE							
380'				100%		380'		
	mag vn						100%	
	mag-serp vn							
	mag-sericite rich shear zone		384'			385'		
	talc-ser-mag rich shear zone							
390'	mag-talc vn			100%				
			TO 394'					

HOLE NO. JL-84-ML-1
CASING COLLAR ELEV.: 4' above gr.
GROUND ELEV.:
COORDINATES: 284E. 7150N N. E.
INCLINATION: -50°
BEARING: 360°

PROJECT: JIM'S LAKE
DATE STARTED: APRIL 7. 84
DATE FINISHED: APRIL 10. 84
TOTAL DEPTH: 700'

REF. TO CLAIM CORNER:
SCALE: 1" = 10'
LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	SERP.	CARBONATE	TALC	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	% SULPHIDES
390'–450'		WEAK, VERY PATCHY	V. STRONG ALT. AS PSEUDOMORPHS MAGNESITE	V. STRONG ALT. AS PSEUDOMORPHS		Py			TRACE

AVE CORE REC'Y / HOLE:

Comments (390'–450'):

- locally intensely altered pseudomorphs. to clay minerals & siderite
- contorted magnesite vn.

INTENSELY ALTERED (MAGNESITE-TALC) CUMULATE TXT'D (REMNANT) PERIDOTITE

- becomes wkly foliated @ 65° to c.a.
- magnesite vn
- mag-talc vn
- siderite alt. halos along fracs
- mag. vning
- talc-mag vn.
- magnesite veining
- magnesite vn.

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE
394'	100%	BQ
404'	100%	
414'	100%	
425'	100%	
435'	100%	
445'	100%	
To 455'	100%	

SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTIMATED
395'		
398'	100%	
400'	100%	
409'	100%	
414'		
420'	100%	
430'		
435'	100%	
446'		
450'	100%	

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 6 OF 10

CASING COLLAR ELEV.: 4 above gr. | GROUND ELEV.: | DATE STARTED: APRIL 7. 84 | REF. TO CLAIM CORNER:

COORDINATES: L8AE, 7+50N N. E. | DATE FINISHED: APRIL 10. 84 | SCALE: 1" = 10'

INCLINATION: - 50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: TALC	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
450'			V. STRONG ALT. AS PSEUDOMORPHS	V. STRONG ALT AS PSEUDOMORPHS	/			mag vn foliation becomes well developed @ 65° to c.a. becomes increasingly schistose towards 482'			455'	100%	BQ			
460'								INTENSELY ALTERED (MAGNESITE-TALC) CUMULATE TXT'D (ARMNANT) PERIDOTITE.		TRACE		100%		460'		
											466'			465'	100%	
470'								- magnesite veins				100%				
								- mag. vn.			476'			476'		
480'						Py		mag vn - magnetism abruptly ends @ 482'				100%		482'	100%	
	INTENSE PERV ALT.	INTENSE PERV. ALT.		INTENSE PERV ALT.	/	Py		- remnant mg xlline tex locally TALC-CHLORITE-SERICITE SCHIST			486'					
490'										TRACE	490'	100%		492'	100%	
								locally v. strong schistosity @ highly variable orientations. 0°-90°			494'	100%				
500'	STRONG	STRONG	STRONG	WEAK	/			PYROXENITE/ ALTERED GABBROIC ROCK		TRACE	504'			501.5'	100%	
510'					/	Py					To 515'	100%	V			

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 7 OF 10

CASING COLLAR ELEV.: 4' above gr. | GROUND ELEV.: | DATE STARTED: APRIL 7. 84 | REF. TO CLAIM CORNER:

COORDINATES: L84E, 7+50N N. E. | DATE FINISHED: APRIL 10. 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
510'	STRONG	STRONG	STRONG	WK. TALC ANT	/	Py		spinifex type textures PYROXENITE / ALTERED GABBROIC ROCK	TRACE	513'	100%	BQ	517'		
					/	Py		qtz-calc vn					519'	100%	
520'	MODERATE ALTERATION OF FERROMAGS	WEAK TO MODERATE ALT/REPLACEMENT OF FERROMAGS	WEAK ALT/REPLACEMENT OF FSPARS & FERROMAGS	WEAK PATCHY SILICIFICATION		Py		locally v sheared & 2% ass Py-Po-Cpy qtz vns			100%		524'		
						Py		calc vn		526'			526'	100%	
530'						Py		shear zone & strong ass chl-ser alt.							
						Py		wkly brecc by thin chl seams	1%		100%				
						Cpy		qtz-calc vn		536'					
						Py		wkly brecciated by thin chl seams							
540'								DIORITE locally wkly silicified			100%				
								qtz vning locally mg silline tst overprinted by ser-sil alt.					544'		
										546'			546'	100%	
550'						Py		brecciated by thin chloritic seams			100%				
								wkly brecciated by thin dark chloritic seams		556'					
								qtz vns							
560'						Py		qtz vns	1%		100%				
										566'					
570'						Py		breccia zone		To 576'	100%		568' To 571'	100%	

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 8 OF 10

CASING COLLAR ELEV.: 4' above gr. | GROUND ELEV.: | DATE STARTED: APRIL 7.84 | REF. TO CLAIM CORNER:

COORDINATES: L0+1E 71+50N N. E. | DATE FINISHED: APRIL 10.84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McEVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	COMMENTS: / DESCRIPTIVE GEOLOGY
570' – 580'	MODERATE	WEAK	WEAK	WK. SIL.	– qc vns DIORITE
580' – 630'	WEAK PATCHY ALT FRAGS & BRECCIA MATRIX SEAMS	WEAK TO MODERATE PERVASIVE ALT. OF FRAGS	WEAK PATCHY ALT FRAGS	WEAK, PATCHY SILICIFICATION	– mod brecc. f/m ratio 90/10 – unbrecciated dacite tuff or epiclastic equiv. interbed (or large frag) – locally fragments are strongly silicified. – black cherty seams locally breccia matrix – locally frags appear clastic (sltst) BRECCIATED DACITE TO ANDESITE OR EQUIV. METASEDS (VOLCANOCLASTIC SLUMP BRECCIA) – fol. @ 65° to c.a. – qc vn – locally sheared, c̄ v. strong ser-chl-carb alt – multiphase brecciation by qc seams & black graph-chl seams – calc vn – intensely chl. alt zone

Fracturing, mineral and geology columns: graphic logs; mineral column marked Py.

% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT.	ESTIMATED
			BQ	571'	100%	
1%	576'	100%				
	580'	100%				
		100%				
1%	591'					
				593.5'		
		75%		595'	100%	
	599'				80%	
		100%		605'		
	606'				100%	
		100%		615'		
	616'					
1%					100%	
		100%		625'		
	626'					
	To 636'	100%	↓	To 635'	100%	

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 9 OF 10

CASING COLLAR ELEV.: 4' above gr. | GROUND ELEV.: | DATE STARTED: APRIL 7, 84 | REF. TO CLAIM CORNER:

COORDINATES: L84E, 7+60N N. E. | DATE FINISHED: APRIL 10, 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP INT.	ESTIMATED
630'	WEAK PATCHY ALT. OF FRAGS & BRECCIA MATRIX SEANS	WEAK TO MODERATE PERVASIVE ALT. OF FRAGS	WEAK PATCHY ALT. OF FRAGS	WEAK PATCHY SILICIFICATION				qc vn - locally v. strongly brecciated			100%	BQ	635'	100%	
640'								- ank veining - qc veining - locally strongly brecciated	1%	636'	100%		695'	100%	
								BRECCIATED DACITE TO ANDESITE OR EQUIV. METASEDS (VOLCANOCLASTIC SLUMP BRECCIA)		696'					
								- qc vn - spherical silicification blobs - strongly brecciated		648'	100%				
650'											100%			100%	
										659'			659'		
								- qc veining		656'	100%				
660'									1%		100%			100%	
								qc vn					664'		
										666'					
								- qc veins						100%	
670'								- strongly brecciated zone qc vn			100%		674'		
								- spherical silicification patches		676'			677'	100%	
								- strongly brecciated					681'	100%	
680'								graphitic-fy seams to 40% rock	1%		90%		684'	100%	
								- thinly bedded graphitic arg.		686'					
		-	SILICIFICATION SEANS	SILICIFICATION SEANS				MINERALIZED GRAPHITIC ARGILLITE	15%	689'	100%		689'	80%	
690'										692'	100%				

HOLE NO. JL-84-ML-1 | PROJECT: JIM'S LAKE | PAGE NO: 10 OF 10

CASING COLLAR ELEV.: 4' above gr | GROUND ELEV.: | DATE STARTED: APRIL 7. 84 | REF. TO CLAIM CORNER:

COORDINATES: 184E, 7150N N. E. | DATE FINISHED: APRIL 10. 84 | SCALE: 1" = 10'

INCLINATION: -50° | BEARING: 360° | TOTAL DEPTH: 700' | LOGGED BY: D. McIVOR

SECTION	ALTERATION: CHLORITE	ALTERATION: SERICITE	ALTERATION: CARBONATE	ALTERATION: OTHER	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y. SAMP. INT.	ESTIMATED
690'								- thinly bd. graph arg.			692'	100%	BQ	689'		
								MINERALIZED GRAPHITIC ARGILLITE		15%	696'	50%			55%	
700'											700'	85%		700'		

HOLE ENDS @ 700'

42 SAMPLES SPLIT FOR ASSAY

D. McIvor.

MAY 31. 84

JL-84-ML-1

0 - 165' Overburden

165 - 171' Serpentinized Cumulate Texture Peridotite (To Dunite)

-rock a dark blueish green, massive, cumulat texture ser peridotite to dunite
-cumulate crystals serpentine pseudomorphs to olivene, to 1/4" av 1/16 to 1/8" (coarsens from 169' to 171', to 1/4")
-strongly magnetic w approx 10% magnetite as vfg diss maineralization and micro frac and macro frac fil
-rock is v strongly frac at no prefered orientations w pred magnesite - serpentine (antigorite) frac fil, and minor magnetite hematite and trace Py
-numerous (to 5% rock) thin 1/8" to 1/4" randomly oriented magnesite and minor serpentine seams-vn
-overall sulfide content, trace, Py associated w magnetite and magnesite frac fil and trace vfg diss Py
-rather arbitrary contact w underlying cumulate textured ultramafic where crystals are altered more to tremolite and talc chl

171 - 198' Altered (Serpentine/Magnesite) Cumulate Textured Peridotite to Dunite

-rock a v coarse cumulate (w pseudomorphs of olivene av 1/4 to 1/8") (and 80 to 90%) of rock in massive texture w interstitial serpentine and lesser magnetite
-pseudomorphs are dark grey to green, appear fibrous to granular, altered to serpentine and softer talc-tremolite-magnesite in places (pred magnesite)
-v mottled appearing
-rock is v strongly magnetic w approx 10% magnetite as vfg diss mineralization

-frac fil, and occasional diss blebs to 1/8"
-rock is mod to strongly frac at no prefered orientations w pred magnesite and serpentine frac fil, some magnetite, chl, hematite frac fil.
-a few diss redish brown sub metallic chromite ? blebs to 1/16",
-trace to 0.25% diss fg Py, associated w car and magnetite frac fil, and trace pentlandite (a few pin prick red spots indicated w dimmethol glymoxide staining)
-numerous 1/4" to 1/2" magnesite and serpentine vn to 3 to 5% of rock at no prefered orientations
-at 171', 3" zone w thin 1/4" to 1/8" magnesite and serpentine vn to 50% of rock minor associated light blue talc and serpentine at 50° to the ca,
-a few intensely frac zones w corresponding increases in magnesite alteration/replacement of cumulate crystals, proximal to frac increased magnetite content
-in places cumulate crystals are replaced by magnetite
-at 174', numerous 1/2" magnesite-serpentine vn pred at 50° to the ca,
-at 176.5' 2" thinly banded magnetite serpentine vn at 45° to the ca,
-at 178', 2" intensely sheared (at 65° to the ca,) serpentinized zone cumulate texture overprinted), locally magnetite replaces olivene crystals to 30% of rock
-at 180.5', 1/2" serpentine-magnesite vn at 40° to the ca,
-from 191 to 198', becomes slightly greasy, slightly softer, maybe weakly pervasive talc alteration, coarse grained cumulate texture only faintly visable, w pseudomorphs to 1/4" and 90% of rock pred magnesite, more strongly frac at random orientations w magnesite serpentine and talc frac fil, numerous magnesite ser minor talc seams to 1/2" at random orientations to 10 to 15% of rock, often weakly brecciated rock
-from 192.5' to 193', 1" magnesite vn at 0° to the ca,

-at 195.5', 2" intensely micro fractured/ brecciated zone w serpentine magnesite frac fil, locally magnesite seams to 1/2" at random orientations w minor serpentine

198 - 201.5' Brecciated Cumulate Peridotite to Dunite

-similar to above unit w coarse cumulate peridotite to dunite, pseudomorphs of grey fibrous appearing mottled magnesite (w minor tremolite) and green translucent serpentine (faintly visable to 1/8" and 30% of rock,) interstitial serpentine
-50% of rock as magnesite-minor serpentine talc vn to 1", range from minute stringers to massive vn to 1"),
-mod to strong talc alteration around magnesite vn (halos) affecting most of rock and overprinting cumulate texture
-most serpentine antigorite but a few more fibrous chrysotile stringers.
-vn brecciates rock
-some light blue serpentine ?/talc
-approx 5% magnetite as pseudomorphs after olivene and diss slips and blebs
-trace vfg diss Py

201.5 - 367.5' Cumulate Textured Altered Peridotite To Dunite (Perd Serpentinized)

-rock is v slightly in composition and appearance depending on intensity of serpentinization and magnesite alteration of olivene crystals and on coarseness of cumulate texture but pred,
- a f to med cumulate textured (pseudomorphs of olivene av 1/16", range from 1/32" to 1/8" av 70 to 80% of rock), altered ultramafic pseudomorphs pred altered to light grey magnesite and bright translucent dark green serpentine (antigorite) w some replacement by magnesite in places, serpentine is pred alteration

-matrix material or material interstitial to pseudomorphs is pred serpentine and magnetite and occasionally magnesite
-in places intensely serpentinized and in some places intensely magnesite altered
-massive, no prefered foliation, but v sheared appearing in places
-v strongly frac at random orientations w magnesite, serpentine, some magnetite, hematite, talc frac fil (v strong slick in sides along frac in places)
-numerous magnesite and serpentine vn av 1/4 to 5 to 10% of rock, often highly contorted at irregular orientations
-cumulate texture only faint (but still coarse) in places w pseudomorphs and similar interstitial material
-rock contains an av 10% magnetite as frac fil, pseudomorphs after olivene, and diss seams and blebs, to 25% in places usually proximal to frac
-in places cumulate texture overprinted by strong serpentization
-some light blue serpentine ? in places
-from 201.5' to 206', v strongly frac to weakly brecciated by numerous thin (to 10% of rock)(to 1/8",) magnesite-serpentine seams at random orientations locally strongly serpentinized
-overall sulphide content, 0.25 to 0.5%, vfg diss Py, trace Cpy, pentlandite (a few pin size positive nickel test in places), Py often associated w magnetite
-a few small diss redish brown sub metallic chromite ? blebs
-numerous 1 to 2" intensely micro frac to brecciated zones w thin magnesite and ser pentine stringers brecciating rock, usually with increase serpentine and magnesite alteration of surrounding pseudomorphs micro frac/brecciated zones usually proximal to major magnesite vn
-from 213 to 214.5', 1" magnesite and minor serpentine vn at 10° to the ca, strongly frac w magnesite stringers parallel to vn rims, strong serpentization around vn
-from 215.2 to 216', v intensely frac at weak prefered orientations of 25° to the ca, w magnesite - serpentine - magnetite fil frac and seams to 1/4", and minor vfg diss Py and pentlandite

-from 217 to 219', numerous 1/2 to 1" magnesite vn (usually w associated minor serpentine) at 0 to 20° to the ca, w 1/4", associated magnetite seams proximal to vn rims and magnetite replacement of olivene (pseudomorphs), magnetite to 20% locally, some blue serpentine locally, some minor diss Py-pentlandite (often pseudomorphs of magnetite)
-from 221 to 222.7', locally v strongly serpentinized w numerous 1/4" to 1/2" dark green to blue serpentine vn/seams to 20% of rock, at highly irregular contorted orientations, cumulate texture locally overprinted.
-from 227.5 to 228', magnesite vn w serpentine blebs crudely oriented at 50° to the ca, surrounding rock intensely micro frac w magnesite, serpentine, magnetite frac fil,
-at 236.5', 2" massive serpentine vn (alteration zone), locally v strongly serpentinized, cumulate texture overprinted vfg diss Py to 0.5%,
-from 257', unit coarsens slightly (crystals av 1/16 to 1/8"), in a good med g cumulate texture, w a few finer intensely serpentinized phases, pred strongly serpentinized some mottled magnesite altered crystals /pseudomorphs, as from 201.5 to 236', but less common, rock also less strongly frac
-from 259 to 260', intensely serpentinized zone as alteration around several thin magnesite seams, locally complete magnesite replacement of olivene as pseudomorph some magnetite pseudomorphs
-locally from 265 to 270', coarse cumulate phase, serpentine pseudomorphs to 1/8" to 1/4" and 90% of rock, often rim by minor magnetite and magnesite
-from 267.5 to 268.5', 1/4" well zone magnetite vn at 20° to the ca, w 1/16" magnetite seams at rims and a 1/4" serpentine alteration halo
-from 270 to 271', intensely serpentinized zone, locally magnetite pseudomorphs to 30% of rock

-from 272 to 274', fg phase, intensely serpentinized, cumulate texture almost completely overprinted
-from 277', continues to be fine to med g cumulate texture to peridotite to dunite w pred serpentine replacement of olivene
-at 289.5', a few 1/4" massive magnetite w minor magnesite seams at 35° to the ca,
-at 289.7' a few 1/2" serpentine-magnetite vn/fil frac at a reg orientations
-from 290 to 290.5', locally magnetite pseudomorphs of olivene to 30% of rock w 0.5% vfg diss Py
-from 290.5 to 291', massive serpentine vn at 30° to the ca, with numerous thin associated magnetite seams and magnetite seams to 1/4" parallel vn
-from 296 to 296.5', numerous 1/4 to 1/2" intensely serpentinized band/vn pred at 35° to the ca, w abundant associated magnetite and thin magnesite seams
-from 299 to 300', numerous 1/2" magnesite vn at prefered orientations of 30 to 50° to the ca, locally rock is intensely serpentinized from 299 to 301', vn contain a few 1/32" Py blebs.
-at 303', 4" zone w numerous thin 1/8" magnesite stringer to 30% of rock, w minor associated serpentine and trace Py, weakly brecciate rock, locally abundant hematite frac fil
-from 307 to 308', numerous 1/32" magnesite pseudomorphs usually proximal to serpentine magnetite seams , numerous 1/8" magnetite fil frac locally
-at 312', minor limeotite frac fil locally w minor Py frac fil
-from 317.3 to 318', coarse cumulate zone w total replacement of olivene by magnetite and magnesite, crystals to 1/4" as alteration halos around 1/2" serpentine-magnesite vn at 317.5', at 40° to the ca,
-at 318.3' to 318.7', coarse cumulate zone w magnetite and magnesite pseudomorphsism locally numerous randomly oriented 1/16" magnesite-magnetite-hematite-Py seams
-at 318.7', 1/2" magnesite - serpentine vn at 35° to the ca, w trace diss Cpy

-from 325.5 to 326', numerous thin (1/32") magnesite and magnetite seams at a reg orienations w Py to 1% as mineralization associated w seams and vfg diss mineralization
-at 326.5', 1/16" magnesite seam at 40° to the ca, w 1/32" Py-magnetite seams at rims.
-at 327.2', 1/4" magnesite w minor serpentin vn at 55° to the ca, w trace diss Py
-at 328', 1/2" magnesite vn at 30° to the ca, w numerous thin 1/32" stringers parallel vn, a few thin magnetite stringers
-at 329.5', to 331.5', magnesite vn to 1/2" to random orientations and 20% of rock, numerous thin associated stringers, rock intensely frac w magnesite frac fil, locally pseudomorphs pred fibrous appearing magnesite and serpentine, a few thin Py seams associated w magnesite vn
-from 332.5 to 334', thick 1 to 2" magnesite vn at crude prefered orientations of 20° to the ca, to 50% of rock, w associated thin serpentine seams and numerous thin magnetite - Py seams at irregular orientations (Py locally to 1%)
-from 334', Py content increases to 1% as fracture filling, usually as associated w minor hematite, magnesite, and magnetite
-at 335.5', 1/4" magnesite vn at 45° to the ca, w numerous thin 1/32" Py seams at rims, locally minor Cpy fracture fil
-from 338 to 339', abundant Py-hematite frac fil
- at 339.5', numerous 1/4" magnesite magnetite - hematite - Py vn at 50° to the ca,
-at 340', 1" magnesite - serpentine vn at 50° to the ca,
-at 341', 2" zone w numerous 1/4" magnesite seams at 40° to the ca, locally hosted is strongly serpentinized w abundant hematite frac fil
-342 to 344', several 1/16" hematite Py-magnesite fil frac at random orientations
-at 344', 2" zone w magnesite blebs and vn to 1/2" in strongly serpentinized host

-from 345.5 to 346', intensely serpentinized zone w 10% thin magnesite stringers and bleb
-from 350.5 to 352', numerous thin 1/32" Py-hematite-magnesite fil frac at prefered orientations of 0° to the ca,
-at 351.5', 1/2" magnesite vn at 30° to the ca,
-at 353', 1/2" Py bleb w magnetite along magnesite fil frac
-from 352 to 367.5', becomes increasingly more strongly frac w pred magnesite, hematite, serpentine, minor Py, and magnetit frac fil, v serpentinized w some pseudomorph of magnesite and tremalite - talc
-numerous magnesite vn at random orientation to 1/2" and 5% of rock
-rather sharp distinct contact at 367.5', w underlying more altered unit

367.5 - 482'

<u>Intensely Altered (Carbonate-Magnesite and Talc) Cumulate Textured (Remnant) Ultramafic Lithology (Peridotite to Dunite)</u>

-rock pred an intensely altered coarse cumulate periodite to dunite, now comprised of 80% pseudomorphs to 1/4" av, 1/8" (pred coarse cumulate a few f to med phases where pseudomorphs 1/32 to 1/16")
-rock a bright light green, pseudomorphs pred light green to white totally altered to magnesite and in places talc and talc magnesite (may be minor ser in places) (pred talc - magnesite, occasionally just magnesite, occasionally just talc pseudomorphs) w and av of 20% intersticial dark blueish green pred talc, in places minor ser, serpentine, magnetite
-in places some remnant serpentine alteration
- cumulate crystal content v slightly throughout the unit from 60 to 90%, av 80%
-rock is v soft

-appears sheared but no distinct foliation of schistosity, v crude and weak foliation and a few places at av orientation of 60° to the ca,
-v strongly frac at no prefered orientation w pred magnesite frac fil, some magnetite talc, ser, serpentine, hematite, limeotite and Py
-2 to 3% fg diss magnetite on av, varies up to 5 to 10% over a few feet in places
-numerous secondary randomly oriented magnesite vn to 1", av 1/4" to 1/2", to 5 to 10% of rock overall, appear in places to be shear zones, usually have minor associated talc, ser, and often v contorted
-from 367.5' to 385', some remnant serpentinized zones, serpentinized frac fil,
-from 367.5 to 368', magnesite-serpentine vn at 35° to the ca, banded to brecciated appearing w magnesite seams rimed by serpentine
-at 368.5', 2" magnesite vn w numerous associate serpentine seams and blebs at 25° to the ca, w trace fg diss Py and Py frac fil in vn
-magnetite from 367.5 to 380', still approx 5%, serpentine still pred alteration, but becomes softer more magnesite altered
-at 373', 2" brecciated magnesite vn at 35° to the ca, brecciated by numerous thin cross cutting serpentine seams
-at 382.5', 2" magnesite (light green, with minor serpentinite) vn/zone, brecciated by numerous thin ser seams
-locally from 382.5', to 384', v coarse g cumulate w light green magnesite and serpentine pseudomorphs to 1/4" and 90% of rock
-locally a few 1/4" magnetite seams w trace Py
-at 383.5', 1" magnesite-serpentine vn at 60° to the ca,
-at 386', at 60° to the ca, 1 inch light green sheared appearing magnesite - sericite serpentine band
-at 386.6', 1" light green magnesite-ser shear zone/vn at 60° to the ca,
-at 387.5', 2" shear zone at 65° to the ca, w magnesite, talc, and ser seams

-from 388 to 388.5', 1" irregularly oriented (35 to 60° to the ca,)sheared appearing light green pred magnesite w minor talc vn and minor diss magnetite
-at 396', numerous 1/8" magnesite - Py fil frac at 35° to the ca,
-from 396 to 397.5', v soft, strongly frac w magnesite seams and Py to 0.5% locally
-from 398 to 400', intensely altered, soft, crumbly, w pseudomorphs to locally of grey green clay to bright orange iron carb (sliderite), v sheared appearing but w no distinct foliation
-from 402.5 to 403.5', 1" highly contorted irregular magnesite vn at 0 to 30° to the ca,
-from 408', becomes increasingly foliated (still only v crude weak sch at av orientation of 60 to 65° to the ca, increasingly altered, in places resembles a talc-carb-ser sch, w cumulate texture completely over printed, some elongation of pseudomorph parallel to sch, pseudomorphs pred light green talc-ser and magnesite, rock now only v weakly magnetic,
-at 413.3', 1" magnesite bleb
-at 414.5', 1/2" magnesite vn at 70° to the ca, w trace diss Py
-from 416 to 417', 2" magnesite-talc vn av orientation of 30° to the ca, locally intense talc alteration of host, hos sch parallel to vn at 30° to the ca,
-from 417.5 to 418.2', several thin magnesit fil frac have bright yellowish orange iron carb (sliderite) alteration halos as pseudomorphs to 1/8", halos to 2"
-at 437.5', 1" magnesite vn at 55° to the ca,
-at 438', 1" talc magnesite vn at 65° to the ca
-at 438.8', 1" magnesite vn at 65° to the ca locally well dev sch at 65° to the ca,
-at 447.7', 1" magnesite w minor talc and magnetite vn at 35° to the ca,
-at 450.5', 1" magnesite bleb,
-at 451 to 452', 1/2" magnesite-talc vn v contorted, av 10% to the ca, w locally magnesite-Py fil frac at 0° to the ca, locally well dev foliation at av orientation 60° to the ca, w v intense carb and talc alteration.

-from 452', well dev sch at 60 to 65° to the ca, some elongation of pseudomorphs parallel to sch, very intensely magnesite and talc altered, only weak to mod remnant -cumulate texture appears more a talc carb-sch, appears spotted w elongate stretched pseudomorphs of dark green talc and magnetit blebs in lighter green talc carb ground mass, locally magnetite to 3 to 5%
-at 461', 1/2" magnetite bleb along sch plain, locally numerous 1/32" magnetite fil frac,
-from 465', well dev sch at 70° to the ca, some stretching of talc and magnesite pseudomorphs parallel to sch, rock appears much more ser rich but maybe sheared talc
at 471', 1" highly contorted magnesite vn
-at 472.7', 1" contorted magnesite vn, locally numerous thin magnesite seams appear to weakly brecciate rock
-477.5', 1" magnesite vn parallel sch at 70° to the ca,
-at 479 and 479.5',1" magnesite vn parallel sch locally w minor Py smeared along sch plains
-at 481' 1" magnesite vn parallel sch
-at 482', distinct abrupt contact at 90° to the ca, where magnetism abruptly ends and remnant cumulate texture ends.

482 - 501.5'

<u>Talc-Chlorite-Sericite "Schist" (Intensely Altered Ultramafic Lithology)</u>

-rock varies in appearance w varying degrees of alteration but pred a v soft, v sheared appearing, strongly sch, (at highly variable orientations ranging from 55 to 65° to the ca) dark green intensely talc-chl-ser-altere mafic to ultramafic lithology,
-overall composition approx 40% chl, 40% talc, 20% ser
-a few thin 1/8" magnesite stringers and vn pred parallel to sch
-v strongly frac pred parallel sub parallel sch, w talc, chl, ser, magnesite, calcite frac fil,

-some remnant appearing crystalline phases blebs, that appear gabbroic, but pred vfg to ~~affinitic~~, aphanitic
-v mottled appearing in places w 1/4" blebs of talc and minor magnesite that appear to frag? or brecciated zenoliths,
-v minor fg diss magnetite but rock as a whole non mag
-a few v small white sericite clots that appear frag, lend tuffaceous appearance to rock in places,
-trace fg diss Py and Py frac fil, w minor Po - Cpy in places
-from 489', to 490', remnant med g crystalline texture, now totally altered to talc & magnesite
-at 489.5', 1" magnesite vn at 70° to the ca, w a few 1/8" Po and Cpy blebs at rims
-from 490 to 494', talc becomes a light honey brown color, rock is v granular appearing, w blebs to 1/16" of green talc - ser-chl altered mineralization in light brown green talcos ground mass, maybe stretched crystals, sch intense but a variable orienations at av of 55° to the ca,
-from 494 to 497', extremely talcos (80% of rock) as bands to 1" and pervasive alteration of rock, highly irregular sch locally ranging from 0 to 90° to the ca,

501.5 - 519' <u>Pyroxenite/Altered Gabbroic Rock</u>

-rock pred a fg crystalline v weakly foliated (at 55°) gabbroic appearing pyroxenite rich unit comprised of (this is an av composition highly variable) 60% ferro mag altered now to chl and minor talc-serpentine and 30 to 40% ser and carb (magnesite) altered feldspars, some fresh unaltered feldspar present in places
-rock is weakly to mod frac pred parallel foliation w chl, magnesite, calcite frac fil
-from 501.5', to 505', mod sch at 55° to the ca, w stronger chl alteration of ferromags and ser alteration of feldspars, v soft, locally,

-from 505 to 510', only v weakly sch, good 'gabbroic' appearing unit
-from 510 to 519', rock coarsens to med grained to coarse grained w dev of spinifex type textures w elongate acicular dark green pyroxenite ? blades av 1/8 to 1/4" a few coarse zones to 1/2", ground mass becomes pred pyroxenite ferromags, often in small acicular clusters,
-from 512 to 513', spinifex type texture is v coarse w radiating clusters of dark green pyrx /serpentine? blades to 1/2" and 50% of rock, interstitial material pred magnesite
-from 513 to 519', rock remains coarse grained pyroxnite rich w carb altered interstitial material but spinifex texture only v weak and in a few places
-at 511.5', 1" qtz magnesite vn at 35° to the ca, w a few small 1/32" Py-Cpy blebs at rims
-from 518 to 518.5', 6" qtz calcite vn at 55° to the ca,
-overall sulphide content, trace Py-Cpy associated w frac fil, and v minor diss Py
-sharp distinct contact w diorite at 519' at 55° to the ca,

519 - 580' Diorite

-slightly variable appearing unit w differing types and intensities of alteration but rock pred a sheared appearing relatively altered med g (w both coarse g and f phases) diorite comprised of 60% feldspar, pred anheudral to sub heudral blebs to 1/8", often weakly ser altered, often carb mottled / replaced, and 40% ferromags, pred light green, mod chl altered blebs, in places strongly ser altered

-v crudely foliated in places as exhibited by weak gn'c and sch textures at highly variable orientations av 35 to 45° to the ca, (pred massive to v weakly foliated appearing)
-strongly frac one set parallels foliation although numerous set present w calcite qtz, chl, ser, minor hematite, sulfide frac fil,
-a few thin (to 1/2", av 1/8" to 1/4") randomly oriented qtz calcite vn (often vuggy)
-appears weakly silicified in places
-appears weakly brecciated (autobrecciated) in places w faint seams of light green ser occasionally chl-silica rich rock brecciating diorite (overprints crystalline texture)
-a few diffuse appearing light grey calcite seams lends weakly carb appearance to rock in places
-a few small diss qtz blebs, often light blue, and diffuse silica seams present throughout rock
-minor vfg diss calcite in places and calcit alteration/replacement of feldspars
-a small (1/32") pink sub heudral shattered garnets diss throughout rock from 1 to 2%
-rock is strongly micro frac w silica, calcite, and minor sulfide frac fil,
-overall sulfide content, 0.75% to 1% of (0.5% Py, 0.15% Cpy, 0.1% Po) as micro frac fil, fg diss mineralization, and mineralization associated w qtz carb vn
-from 519 to 524.5', coarse g,
-at 524', 1" qtz calcite vn at 20° to the ca w Py and Cpy blebs to 1/16" at rims
-at 524.5', 1/2" qtz-calcite vn at 35° to the ca, w minor diss Py and Cpy at rims
-from 524.5 to 526', v sheared appearing w strong chl alteration of mafics and ser alteration of feldspars, some carb replacement of fspr, v intensely frac and micro frac at random orientations w calcite, chl, and sulfide frac fil, sulfide locally to 2% (pred Py trace Po-Cpy) as frac fil in mineralization riming vn
-at 524.5', 1/4" calcite vn at 55° to the ca w Py-Cpy at rims

-at 525.3', 2" calcite qtz vn at 90° to the ca w Py at rims
-at 526', 1" qtz calcite vn at 45° to the ca, w Py at rims
-at 527.7', 1.5" qtz calcite vn at 75° to the ca,
-from 526 to 527.7', Py to 1% as frac fil
-at 529.5', 1/2" calcite talc vn at 25° to the ca, w 1/16" Py blebs at rims minor Cpy
-at 530.5', 1/2" qtz calcite vn at 35° to the ca, locally some hematite and Cpy frac fil
-at 531.5' 4" f sheared appearing zone med g crystalline texture overprinted sch at 40°, strong chl - ser alteration a few thin 1/16" calcite seams parallel sch w diss Py-Cpy
-at 532.5', at 55° to the ca, 1/16" black chl seams w diss Cpy and Py blebs to 1/16" locally rock appears weakly brecciated by thin chl - ser - calcite seams to 1/32" often w vfg diss Py-Cpy
-at 535.8', 1/16" calcite-Py-Cpy seams at 30° to the ca,
-at 536.7', 1/2" qtz calcite vn at 35° to the ca, w trace diss Py at rims
-from 537 to 537.5', a few 1/32" calcite hematite fil frac w minor Py, locally sheared appearing, w strong chl-ser alteration of mafics, appears weakly brecciated by thin chl-ser darker bands to 1/4"
-at 538', 1/4" dark black chl seam at 0° to the ca, w diss Cpy and Py locally numerous calcite-hematite seams, and fil frac to 1/16"
-from 538.5 to 539.5', rock appears weakly brecciated by thin 1/32" to 1/16" dark green to black chl seams at weak prefered orientations of 35° to the ca,
-at 539.5', 1/4" calcite vn at 35° to the ca, w Py blebs to 1/4" at rims
-from 539.5', to 540', locally appears patchy silicified w blebs and thin diffuse seams to 1/4" w minor associated Py and Cpy to 1%
-from 540 to 555', med g crystalline texture only weakly dev, pred overprinted by mod pervasive ser alteration, v mottled appearing, patchy silicification and carb w

numerous thin 1/16 to 1/8" randomly oriented qtz and carb vnlet and seams, sulfides locally to 1% (Py-Po and minor Cpy)
-at 541', 1/2" chl rich band at 30° to the ca, w minor associated thin Py and Cpy seams, locally rock appears weakly autobrecciated by faint darker weak chl seams to 1/4"
-at 541.5', 1/2" calcite and minor qtz vn at 30° to the ca, w a few Py-Cpy-Po blebs, locally numerous thin 1/16" diffuse qtz seams lend patchy silicification appearance to rock.
-at 544', a few 1/2" qtz vn at 70° to the ca,
-from 544.5 to 545', 1/2" qtz calcite vn at 25° to the ca, w 5% diss Py blebs to 1/16"
-from 553 to 554', locally appears slumped w large dioritic frac in darker chl - ser carb rich ground mass (brecciated-volcanic clastic zone)
-from 555 to 563.5', becomes darker grey to green w numerous (to 10% of rock) irregular to affinitic dark grey green chl rich hard seams (diffuse) and blebs weakly brecciating rock (appear autobrecciated) w 0.5% Py and trace Po - Cpy associated w pred vuggy calcite vn and fil frac at random orientations, weakly foliated at highly orientations from 35 to 70° to the ca,
-at 557.5', 1/2" qtz minor calcite vn at 45° to the ca, w strong chl alteration at rims
-at 558', 1" qtz calcite vn at 80° to the ca,
-from 563.5 to 573', good fg to med g diorite
-from 563.5 to 564', 1/2" qtz minor calcite vn at 25° to the ca,
-at 564.5' 1" hard white magnesite-calcite-qtz vn at 40° to the ca,
-from 565 to 568', rock is coarse g
-at 568.5', 2" zone brecciated w thin hard black chl seams w 5% Py blebs to 1/16"

-at 570.5', 1" calcite minor qtz vn at 45° to the ca, w strong chl alteration at rims and w numerous thin 1/32" Py seams
-at 571', 1"calcite vn at 45° to the ca,
-from 571', to 580', becomes increasingly fg begins to appear andesitic by 578 to 580', w numerous thin vuggy qtz calcite vn at reg orientations

580 - 684'

Brecciated Dacite to Andesite/or Brecciated Altered Metasediments (Vocano Clastic Slump Breccia)

-rock varies considerably in appearance w varying degrees & types of alteration and degrees of brecciation but pred,
-a vfg crystaline appearing to aphanitic light green dacite to andesite, or clastic equivalent rock weakly to mod pervasive ser alteration (a few weakly chl zones)
-vfg diss calcite to 5% in places, weakly carb
-brecciated by hard dark black weakly to mod carb (graphitic) chl arg seams to 1/4" av 1/32",
-crude prefered orientation to well dev foliation at av 65° to the ca, (v slighlty 55 to 75°), to breccia seams and elongate breccia frag lending agglomeratic appearance to rock in places,
-frag range from 1/32" to 2 to 3", av 1 to 2", and overall frag matrix ratio approx 95/5 w zones where intensely brecciated and frag matrix ratio to 50/50
-pred weakly brec ciated
-matrix seams often strongly contorted often v calcite rich
-rock is v strongly frac parallel foliation strongly micro frac, w graphite, chl, calcite, minor sulfide frac fil, where strongly frac, usually at correspondin increase in ser alteration and in places carb alteration of dacitic frag

-occasional dacite appears v granular tuffaceous to epiclastic siltstone type equivalent lithology, but no distinct contacts, entire unit maybe a volcanic clastic or epiclastic slumped breccia
-a few secondary calcite and occasional qtz vn, randomly oriented, in places rebreccia rock,
-some patchy silicifications in places w numerous thin (to 1/4") silicified band parallel to foliation, often w vfg diss Py, to 3 to 5% of rock,
-overall sulfide content, approx, 1%, Pred Py and Po w trace Cpy,occurring pred as mineralization associated w black matrix seams and frac fil w carb, some minor diss mineralization in frag
-from 580 to 584', mod brecciated w a frag matrix ratio 90/10, numerous (to 10% rock) vuggy qtz calcite vn and fil frac at random orientations, only trace Py as small blebs to 1/32" associated w black matrix seams and frac fil
-from 584 to 589.5', dacite tuff or epiclastic equivalent, unbrecciated interbed consists of a vfg v granular light green ground mass w weakly dev foliation/bd at 60° to the ca, and numerous (to 20% of rock), small (less than 1/64"), white fspr clots aligned parallel to bd (tuffaceous frag?),
-v siliceous, w 10% small qtz blebs,
-silicified w thin 1/8 to 1/4" light grey siliceous seams crudely oriented parallel sub parallel foliation
-strongly frac at random orientation w vuggy qtz frac fil and associated 1% Py Po and trace Cpy, as blebs along frac, occasional minor diss sulfides, unit looks v clastic
-from 589.5' to 593.5', vfg dark grey brecciated dacite w a few silicified frag,1% Py-Po and trace Cpy as frac fil and mineralization associated w black matrix seams.
-from 589.5' to 590', frag of dacite locally are stronly silicified w thin v small(less than 1/32") Py slips diss throughout frag.

-occasional dacite appears v granular tuffaceous to epiclastic siltstone type equivalent lithology, but no distinct contacts, entire unit maybe a volcanic clastic or epiclastic slumped breccia
-a few secondary calcite and occasional qtz vn, randomly oriented, in places rebreccia rock,
-some patchy silicifications in places w numerous thin (to 1/4") silicified band parallel to foliation, often w vfg diss Py, to 3 to 5% of rock,
-overall sulfide content, approx, 1%, Pred Py and Po w trace Cpy,occurring pred as mineralization associated w black matrix seams and frac fil w carb, some minor diss mineralization in frag
-from 580 to 584', mod brecciated w a frag matrix ratio 90/10, numerous (to 10% rock) vuggy qtz calcite vn and fil frac at random orientations, only trace Py as small blebs to 1/32" associated w black matrix seams and frac fil
-from 584 to 589.5', dacite tuff or epiclastic equivalent, unbrecciated interbed consists of a vfg v granular light green ground mass w weakly dev foliation/bd at 60° to the ca, and numerous (to 20% of rock), small (less than 1/64"), white fspr clots aligned parallel to bd (tuffaceous frag?),
-v siliceous, w 10% small qtz blebs,
-silicified w thin 1/8 to 1/4" light grey siliceous seams crudely oriented parallel sub parallel foliation
-strongly frac at random orientation w vuggy qtz frac fil and associated 1% Py Po and trace Cpy, as blebs along frac, occasional minor diss sulfides, unit looks v clastic
-from 589.5' to 593.5', vfg dark grey brecciated dacite w a few silicified frag,1% Py-Po and trace Cpy as frac fil and mineralization associated w black matrix seams.
-from 589.5' to 590', frag of dacite locally are stronly silicified w thin v small(less than 1/32") Py slips diss throughout frag.

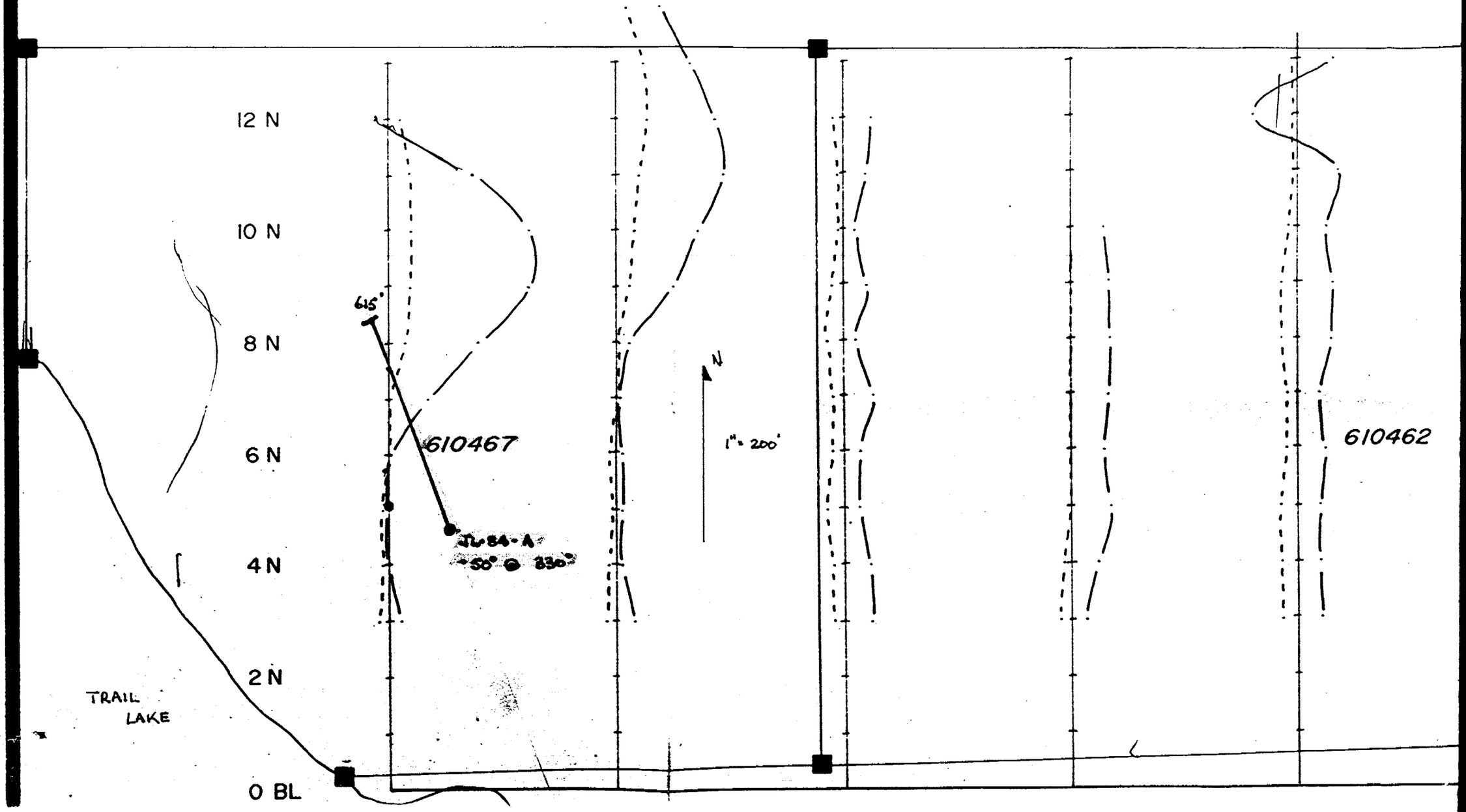
-from 593.5', to 595', strongly brecciated w a frag matrix ration of 70/30, well dev foliation at 60° to the ca,
-at 594.2', 1" black cherty vn at 60° to the ca,
-frag av 1/2", here appear v granular, siltstone to graywacke type lithology, Py and Po as vfg diss mineralization in both matrix and frag to 2%,
-from 595 to 599', appears v granular, siltstone appearing, but at 599 w no distinc contacts, appears dacitic.
-locally from 598 to 599.5', numerous thin vuggy qtz carb seams and fil frac at irregular orientations
-at 603', 1/2" vuggy black graphite-carb rich breccia matrix seam at 60° to the ca, w 10% vfg diss Py and minor Po-Cpy,
-at 609', 2" qtz calcite vn at 75° to the ca
-from 610 to 611', locally soft, intensely ser
-at 615.2', a few 1" qtz calcite/seams at 55° to the ca, w locally black breccia matrix seams w 5% Py and trace Cpy over 3",
-from 617.2 to 618.2', brecciated frag are intensely ser, v soft,
-from 618.2 to 618.5', v sheared appearing w strong calcite-ser-chl, alteration of frag, sch locally at 50° to the ca,
-from 618.2 to 628', appear v granular dacitic
-from 618.5 to 620.5', numerous 1/4 to 1/2" qtz calcite stringers and seams at random orientations rebrecciate rock, locally a vfg granular appearing clastic equivalent to dacite
-at 623', 1" calcite vn at 30° to the ca
-from 623.5 to 624', intensely chl zone,
-from 630.5 to 631', 1/2" contorted qtz carb vn at 10° to the ca,
-from 633.5 to 634.5', strongly brecciated w a frag matrix ratio of 60/40, frag av 1/4 to 1/2", v strong ser alteration,
at 634.2', 1/4" calcite minor qtz vn at 65° to the ca,

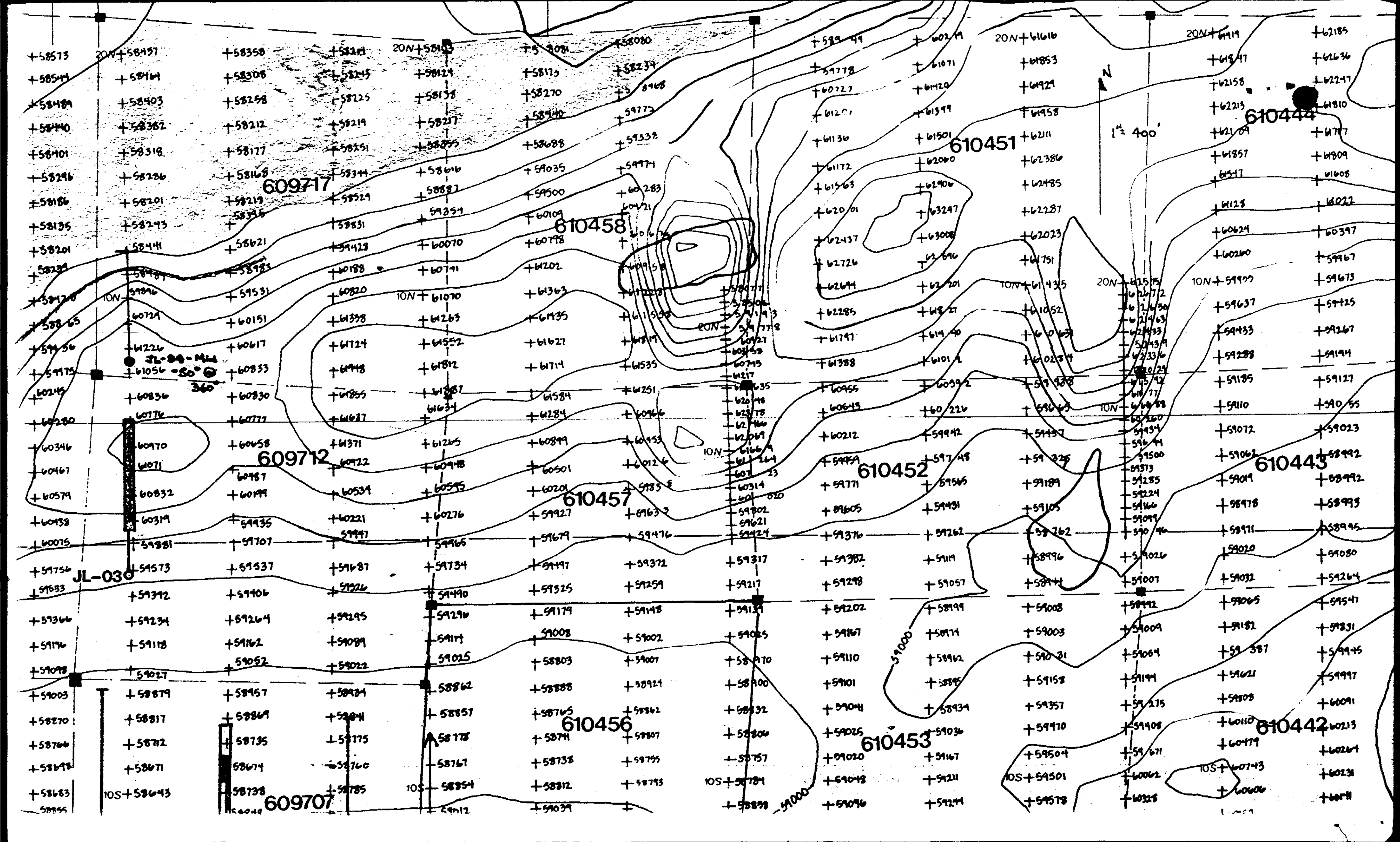
-at 638.5', numerous 1/2" calcite seams at random orientations w Py seams to 1/8" at rims.
-at 643', 1/4" calcite vn at 30° to the ca, w 1/4" Py blebs at rims
-at 644', 1/4" calcite minor qtz vn at 40° to the ca,
-from 645 to 645.5', strongly brecciated zone w a frag matrix ratio 60/40, w 3% Py and minor Po-Cpy,
-from 649 to 649.5', 1" qtz calcite contorte vn at 40° to the ca, begins seeing a few sub spherical 1/8 to 1/4" silicification blebs
-from 650 to 651', strongly brecciated zone w a frag ratio of 70/30, frag are angular av 1/4 to 1/2",
-from 654 ', becomes more granular, tuffaceous appearing, more chl, and andesite tuff or epiclastic equivalent rock, w well dev foliation at 55 to 65° to the ca,
-at 656', 2" zone w numerous 1/4" qtz calcit vn at 70° to the ca,
-at 663.3', 1" qtz calcite vn at 55° to the ca,
-from 668 to 669.5', numerous 1/2" qtz calcite vn at 20 to 30° to the ca,
-from 671 to 672', strongly brecciated zone w a frag matrix ratio 80/20, frag av 1/2"
-at 672.5', 2" qtz calcite minor hard beige carb vn at 55° to the ca,
-from 675 to 676.5', numerous 1/2 to 1" silicified frag and spherical silicification blebs
-from 677 to 681', strongly brecciated w a frag matrix ratio of 80/20, strong ser chl alteration of frag, highly contorted foliation and av orientation of 55° to the ca, numerous qtz calcite vn at irregular orientations to 10% of rock and 1", sulfides (pred Py) increased to 3%
-from 681 to 684', graphitic pyritic seams at 55° to the ca, to 40% of rock, strongly brecciated locally, Py to 10%,

684 - 700'

Mineralized Graphitic Argillite

-rock pred a jet black, v graphitic (70%) thinly bd arg rock
-bd from 684 to 686', well dev at 55° to the ca,
-bd from 686 to 700', intensely contorted, ranges from 0 to 90° to the ca, (av 55° to the ca,)w slumping and soft sediment deformation features.
-contains numerous v thin (1/32") cherty silica bd and bands parallel to bd to 5% of rock, often vuggy, a few similar calcite seams, afew frag 1/4" silica and carb blebs usually associated w sulfide mineralization
-sulfide content, 15% Py, as semi massive bands to 1" noduels to 1", and thin seams of diss mineralization parallel foliation and bd, a few frag appearing 1/4" blebs, often Py v brecciated as is rest of rock, slumped breccia, Py often associated w minor amounts of carb and silica, Py often appears corroded, dark brown
-from 686 to 700', v slumped, rock intensely frac at random orientations w pred Py-carb - graphite frac fil,
-at 684 to 684.5', Py to 80% is massive bands of vfg mineralization to 1" at 55° to the ca,


12 N
10 N
8 N
6 N
4 N
2 N
0 BL
TRAIL LAKE
45°
610467
JL-84-1
-50° @ 330°
N
1" = 200'
610462



609717
610458
610451
610444
1" = 400'
N
609712
610457
610452
610443
JL-03
610456
610453
610442
609707

Ontario Ministry of Natural Resources

Report of Work

Mining

42A16SW0067 18 MOODY

900

Name and Postal Address of Recorded Holder

UTAH MINES LTD

1238 Riverside Dr, Timmins, Ont., P4R 1A4

T-793

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: 1315

for Performance of the following work. (Check one only)

- ☐ Manual Work
- ☐ Shaft Sinking Drifting or other Lateral Work.
- ☐ Compressed Air, other Power driven or mechanical equip.
- ☐ Power Stripping
- ■ Diamond or other Core drilling
- ☐ Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
L	576915	15	L	609700	38	L	609708	38
	576946	40		609701	38		609709	38
	576947	20		609702	38		609710	38
	576948	20		609703	38		609711	38
	576949	20		609704	38		609712	38
	576950	20		609705	38		609713	38
	609698	38		609706	38		609714	38
	609699	38		609707	38		609715	38

All the work was performed on Mining Claim(s): L 609717, 610467

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

Two Diamond Drill Holes, Both Drilled By:

HEATH & SHERWOOD DRILLING
4 Duncan Ave. N, Kirkland Lake
Ontario.

During the period of: April 7 to 15, 1984

Both 'BQ' Core

Hole JL-84-ML1, Total 700'

Hole JL-84-A Total 615'

Enclosed are logs and hole location maps

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
RESEARCH OFFICE
JUN 18 1984
RECEIVED

LARDER LAKE MINING DIV.
RECEIVED
JUN 4 1984
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

RECORDED JUN - 4 1984
REC. No.

Date of Report: June 01/84

Recorded Holder or Agent (Signature): Duncan McIvor

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Duncan F. McIvor, 1238 Riverside Drive, Timmins, Ont. P4R 1A4

Date Certified: June 01/84

Certified by (Signature): Duncan McIvor

Table of Information/Attachments Required by the Mining Recorder

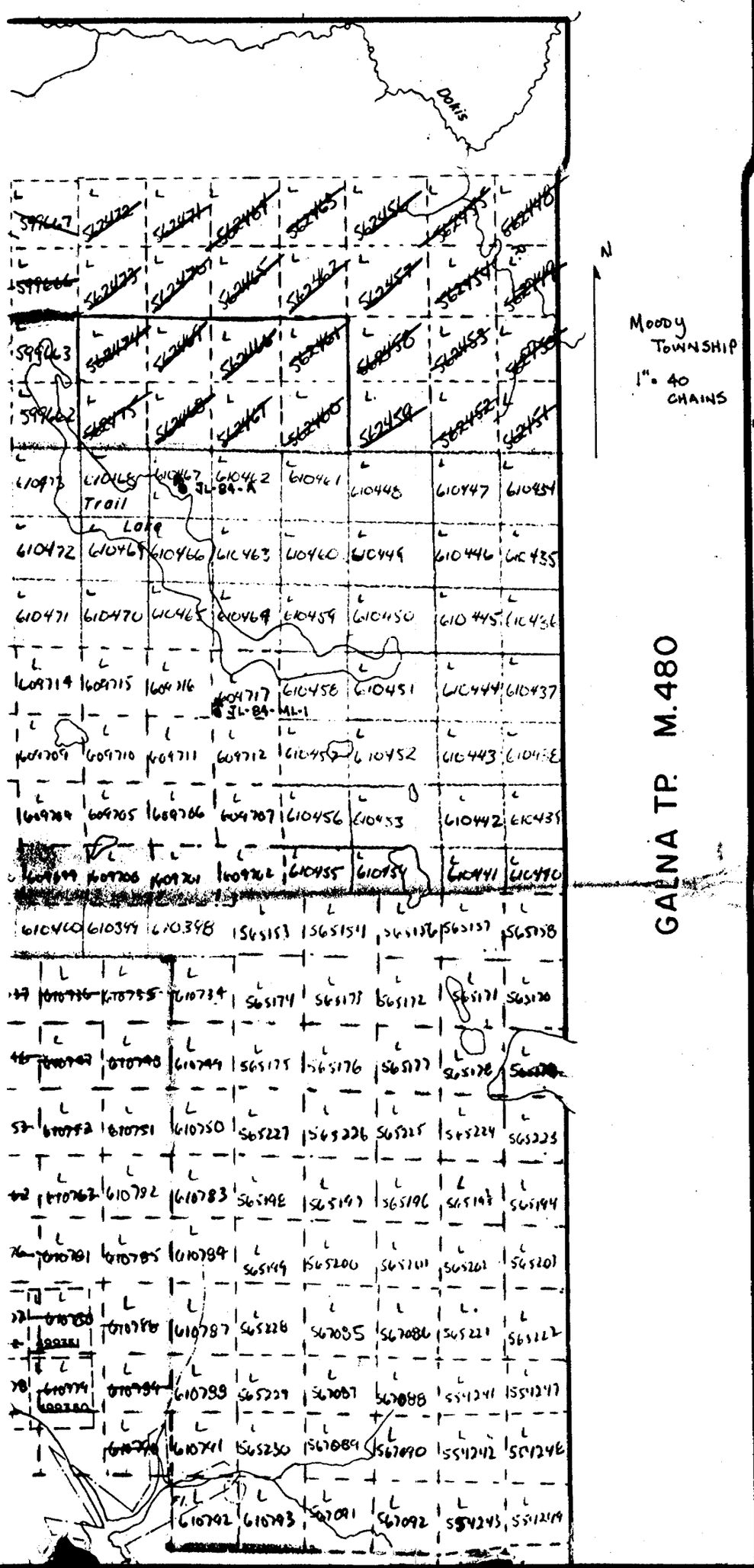
Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
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 done.	
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyer.	Nil	Nil

768 (81/3)

REPORT OF WORK (cont from Page 1.)

Mining Claim Number	Work Days Credit
L.609716	38
609717	38
610455	38
610456	38
610457	38
610458	38
610466	40
610469	38
610470	38
610471	38
610472	38
610475	38
610476	38

1315 Days, applied against 37 claims In Moody and Kerrs Twps.



THE TOWNS
OF

MOOD

DISTRICT O
COCHRANE

LARDER LAK
MINING DIVIS

SCALE: 1-INCH=40

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY
ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES
CANCELLED

NOTES

400' surface rights reservatio
shores of all lakes and rive

L.O. 8674 shown thus:- co
contour 826' and 881'.

Subdivision of this township in
concessions was annulled. May

9 1984