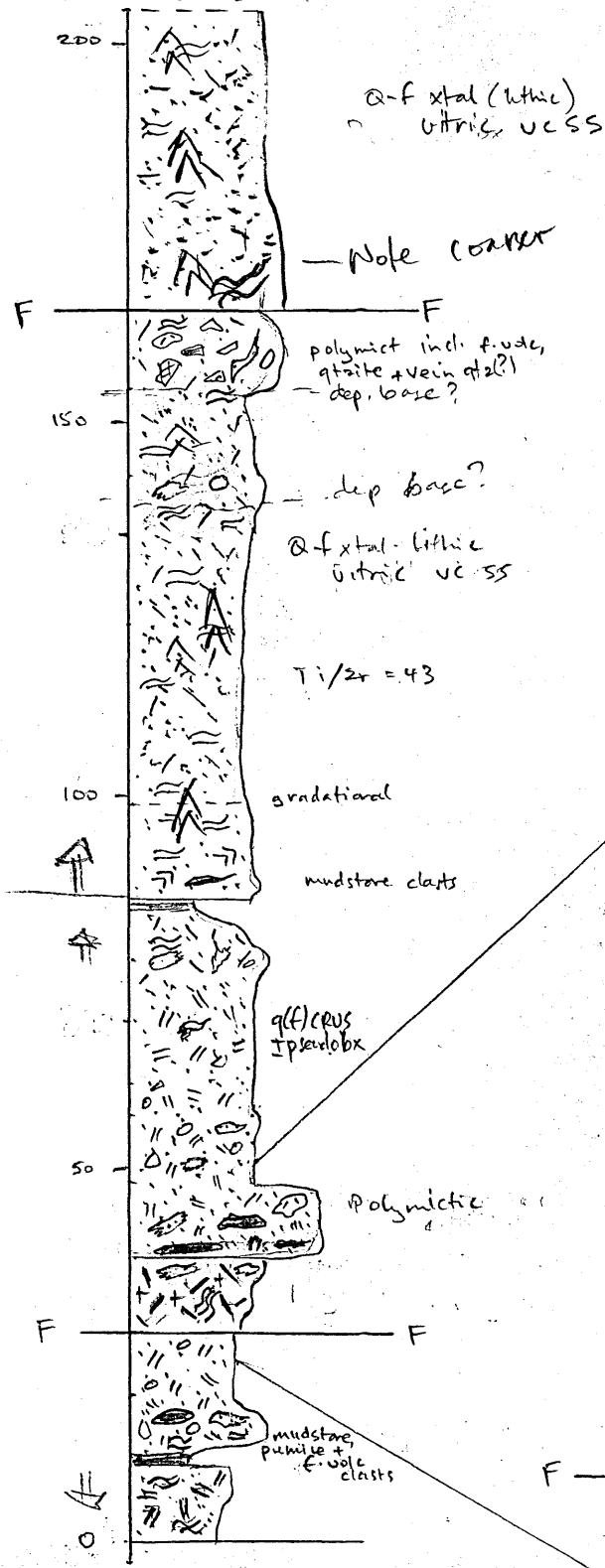


1/16 2 64 mm

1/16 2 64 mm

LYNNEA MB.
Rhyolite
YR 70S



EAST
1:1000

1:250

SCALE 1:1000, 1:250

* ESTIMATED TRUE THICKNESS

DIAMOND DRILL LOG				LOCATION: LYNCH FORD			HOLE NO: LF 01	
				AMG: E N		Page 2 of 16		
Mag. sus.	Structure	grainsize mm		ALT	RL:	DIP:	AZ:	
		1/16	1/8		Description		Logged by: GBE	Date: 11/09/01
	FAULT Fol. ~15/CA				As above - fault/broken			
					53.7m - base of oxidation			
					54.5m mod. broken, mainly CRVS?			
55	mod. high SI? 20-30/ CA			ablk ->f chkr	ANDESITIC F-(q, mt) VITRIC CRVS massive unit with weak SI?, comprising 40-50% ablk alt, euh-sabh, 1-2mm felds xtal's 5-10% euh-sabh, 1-2mm qtz xtal's minor subround - vitreg, 0.5-1mm, mt in a greenish pumiceous? or shard- rich, mod. chloritized, f. grol. matrix			
60					LF 1103 - 56.6m vitric CRVS			
65	mod. high			S ab/h				
70								
75					~72-76m minor q-f phytic felsic volc clasts - some with wispy margins (pumiceous?) most sub-ang-angular, 2-5cm. LF 1104 72.5m CRVS & clasts.			

CHANGE SCALE 50

55

60

65

70

75

DIAMOND DRILL LOG				LOCATION:			HOLE NO:	
				AMG:	E	N	LFO1	
		grainsize mm		RL:	DIP:	AZ:	Page 3 of 16	
Mag. sus.	Structure	$\frac{1}{16}$ $\frac{1}{2}$ 2 8 64	ALT	Description		Logged by: GBE	Date: 11/09/05	
75								
80	high							From ~76.0m, CRUS is finer grd and has a distinctly vitric matrix with shards + pumice. Milder coarser grd. parts, with grad'l contacts, at first, then dominantly finer grd CRUS strong haem. alt in parts (asm. with small fault?). still f(-q) xtal rich - andentc
85								
90	high	88.9m FAULT?	M haem VS haem					Slightly coarser grd ~91-94m
95		Y?						appears to fine downhole slightly
100	mod low							~97m conformable, gradabund RHYCLITE? Fine grd, vitric (pumiceous?) qtz xtal w slt distinctly qtz phytic with 10-20% 0.5-1mm enh. qtz in a vitric (pumiceous/shard rich) matrix # LFI/05 100.0m

DIAMOND DRILL LOG				LOCATION: AMG: E N			HOLE NO: LF 01	
Mag. sus.	Structure	grainsize mm 1/16 1/8 1/4 1/2 3/8 1/2 3/4 1		ALT	RL: DIP: AZ:	Page 4 of 16		
					Description	Logged by: BBE	Date: 11/09/01	
100				101m	(Pumiceous?) vitric Q(F) VC SLST			
				VS ab? haem alt	From ~101m the unit is pink/bleached looking with v. strong (ab?) haem. alt. + minor thin (2-3mm) haem-carb-qtz-py veins.			
105	low							
						LF1/06 107.7m typical vitric slst		
							SYNCLINE??	
110	broken 20-30cm							
	low	FAULT		110.30m	FAULT with well developed white gouge at top, then broken core, 2m of core loss			
		30/CA		112.70m	sharp lower contact strongly quartz/carb veined, 30/CA, for first 30cm			
115	low	FAULT			(Pumiceous?) vitric Q(F) VC SLST-BX			
		113.8			cut by a series of brittle, puggy faults, gen. low/CA with v. broken core.			
		114						
		115						
		116						
		117.0			From ~114m the unit coarsens down hole with an increase in size + abundance of volc quartz + pumice clast size?			
		118.3			Fields, if present is not obvious.			
		119.0			Pumice clasts are difficult to est. as they stray fol (sl) but prob.			
		119.6			~0.5-1cm. Qtz 2-3mm, emb.			
		120.4			Minor large quartz clasts? or altered masses, 1-2cm.			
120	low	Sd/SI			Minor wavy, 2-3cm x 1-3mm chlorid pumices (?).			
		25/CA						
		123.85						
		125.3						
125		FAULT		125.3m	VC fault			

DIAMOND DRILL LOG				LOCATION:			HOLE NO:	
				AMG:	E	N	LFO1	
		grainsize mm		RL:	DIP:	AZ:	Page 6 of 16	
		1/16	1/2	2	8	64	Description	
	Mag. sus.	Structure		ALT	Logged by: GBE		Date: 11/9/01	
150								
160		Y?						<p>~155-159.5 minor 0.5-1 cm red-pink, subround, q-f amphib. felsic volc lithics, total 2-5% most 0.5-1cm, some parts abt 7-5mm</p> <p>F(q) vitric crvs, minor volc. lithics, med-coarse grad.</p>
170	high							<p>175-6 - 3cm f-q-felsic lithic</p>
180	high	So/Si						
190	high							<p>192.5-192.9 minor red q-f amphib. lithics, most 0.5-1cm, one 3cm</p>
200								

CHANGE SCALE
150

160

180

190

200

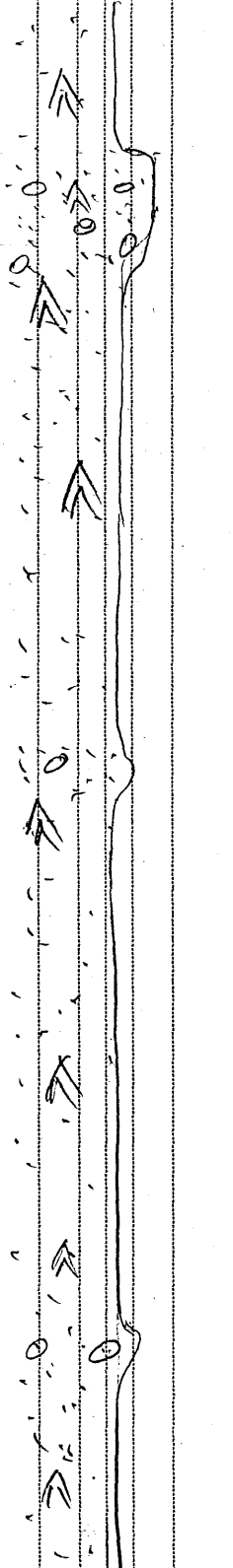
M
chkr

high

high

high

So/Si
30% CA



~155-159.5 minor 0.5-1 cm red-pink, subround, q-f amphib. felsic volc lithics, total 2-5% most 0.5-1cm, some parts abt 7-5mm

 F(q) vitric crvs, minor volc. lithics, med-coarse grad.

 175-6 - 3cm f-q-felsic lithic

 192.5-192.9 minor red q-f amphib. lithics, most 0.5-1cm, one 3cm

DIAMOND DRILL LOG				LOCATION: LYNCHFORD			HOLE NO: LF 01	
				AMG: E N				
Mag. sus.	Structure	grainsize mm		RL:	DIP:	AZ:	Page 7 of 16	
		1/16	1/2	2	8	64	ALT	Description
200	weak So/Si? ~30/CA							200.5 - 204.5 ~ 10% chkr. pumice, 0.2 - 0.5 cm
	high							209 0.5 cm mudstone? lamina/clast.
210	So/Si? on MS ~25/CA							F-(q) (lithic) med-fine CRUS
220								220 - 230 m - minor red-pink q-f-phylz felric vlc clasts - v. poorly sorted; max. clast ~ 5 cm (s. ang) av. 1-2 cm (s-round)
								223-5 m - 2 cm black mudstone laminae or large clast?
								227.22
	SS/CA FAULT							227.35 PUGGET FAULT + qtz-carb veins
230	Y9 qtz veins So fo /CA							228 m abth minor q-f felric vlc lithics
								common 1-3 cm qtz-carb veins
	high							232.4 - 232.6 m - several 0.5-1 cm mudstone? clasts?
	weak So/Si (MS) ~45/CA							234-235.5 m ~ 10% chkr pumice, 0.1 - 0.4 cm
								F-(q-) (lithic) med-coarse CRUS
240								Coarsens downhole
								minor q-f felric vlc lithics (0.5-1 cm, sub round-s. ang) th/out
	↑↑ graded f/CA							246.45 Probable stamp base - used by Small fault
250	weak So/Si ~45/CA							F-q - fine grnd CRUS

DIAMOND DRILL LOG				LOCATION: LYNCHFORD			HOLE NO: LFO1			
Mag. sus.	Structure	grainsize mm				ALT	RL:	DIP:	AZ:	Page 8 of 16
		1/16	1/8	2	8		64	Description	Logged by: GBE	Date: 12/9/01
250										
						W-M ablk				minor - 5% 2-5mm pumice? after chlonk
260										257.3 - 257.7 several 1-3cm, wispy bl. mudstae? laminae/clasts concrens downward
						M ablk				~266.5 - ~276m pink-red q-f porph, subround - 5. avg felic volc lithics common but still minor overall
270										270.4m - several large volc lithics to 6cm.
280										~280 - 290m minor f-q-felicitic lithics most 0.5-1cm, s. round.
290										Strong q-carb veins to 3cm. 291.20-291.25m small puggy fault
										minor - 5% 2-4mm. white wisps - after pumice? common 1-3cm q-carb veins
300										minor f-q-felicitic lithics - most 5-10mm, s. round.

DIAMOND DRILL LOG				LOCATION: LYNCHFORD			HOLE NO: LFO 1				
				AMG: E N			Page 9 of 16				
Mag. sus.	Structure	grainsize mm				ALT	RL:	DIP:	AZ:	Logged by: GBE	Date: 12/9/01
		1/16	1/8	2	8		64	Description			
300	high	ms. g.? 45/ck									minor - common fine (2-5mm) lithics 301.60m - thin wispy mudstone? laminae minor 0.5-1 cm pink red f-g porph. felsic v. + lesser cream q-f phytic. pumiceous-looking clasts
310	high										F-(q)-(lithic) med CRUS Common lithics as prev - most 3-5mm - some 1-2cm.
320	high	ms. so/ S1m20/ck									wispy mudstone? clast? 320.75m <u>LF1109 320.75</u> - wispy mudstone? - pumic? clast possibly finer grd, but masked by chlor alt minor lithics?
330	low										331m vs chlor 331.7 - 333.0 strong 5-10cm q-carb-chlor vein strong chlor alt has destroyed mt. → leucocere? after infil?
340	high										341m 339.9 - 353.5 v. strong q-carb-chlor vein + asse. silicification. veins 10-20cm + form bx zones. Silic. masks gneiss F-(q)-(lithic) med CRUS Minor mainly fine (3-5mm) pink f-g v. lithics thout * 5-10% 0.5-1m qfz
350											

Not as
faults
similar
to 200
at 350.
368

DIAMOND DRILL LOG			LOCATION: LYNCHFORD			HOLE NO: LFO 1	
			AMG:	E	N	Page 12 of 16	
Mag. sus.	Structure	grainsize mm 1/16 1/8 1/4 1/2 1 2 4 8 16 32 64	ALT	RL:	DIP:	AZ:	Logged by: GBE Date: 12/09/09
450	low		VS ser- carb 452.8				F-g vitric vc ss (pumiceous bx?)
			S ser hain ab? 460.7	} Prob same unit			457.2-457.4 Strong puggy fault
460	low						Q-f) vitric vc polyminc bx-cgl. As previously but with 5-10% round-subang 0.5-3cm, av. 1-2cm lithics comprising - red q-f - plagioc felsic v.d. - quartz - vesic ? Matrix: pumice? - A. quartz chlor. alt. c qtz xtals (0.5-3cm) - S/SF or v.f. ss maybe (f) vc ss minor felds (1-2mm) - qtz v.f. ss fine (2-3mm) lithics - pink q - pumiceous Mafic clast gradational
470			471.8 S carb	471.8	LF111 - 464m		
			475 VS Ser				F-g vitric vc ss or pum. bx as prev., same lithics
480	low						~482.5-484 minor lithics as prev. ~488m gradational
490			S ser/ chbr				F-0) lithic vitric vc bx-cgl rel. lithic rich part of prev. lithol - clasts, dom. white - cream soft pumice? or alt. sed? Most clast 1-3cm, some ~1.5cm Some to 5cm, esp. q-f porphy fols v.d. clasts. less clasts towards base
500							

Red
qtz n

(f) vc ss

Mafic clast
gradational

DIAMOND DRILL LOG					LOCATION: LYNCHFORD			HOLE NO: LFO 1				
					AMG: E N			Page 13 of 16				
Mag. sus.	Structure	grainsize mm					ALT	RL:	DIP:	AZ:	Page 13 of 16	
		1/16	1/2	2	8	64		Description		Logged by: GBE	Date: 12/09/01	
500												
							M-S					
							chkr					
510	low	Sol Si 95% CA										
520												
530	low	Sol Si ~40-45% CA										
540	low											
550												

Q(f) (lithic) vitric vc ss or bx? (pumice)
 As above but only minor
 1-2cm pink felsic volc. clasts

~518.00 gradational

Q (f?) vitric vc ss-slst
 10-30% emb, 0.5-2mm qtz xfrs
 in a vitric, chloritized gnd mass
 - minor 2-5um wispy dark chloritized
 pumice.
 - strongly chloritized - destroys fabric
 → appearance of finer grain size

533.6m } 4cm
 534.5m } strong q-carb veins,
 2cm

LFI/12 540.85m - vitric vc ss, minor
 pumice/dithics

Ti/2r = 43

DIAMOND DRILL LOG			LOCATION: LYNCHFORD			HOLE NO: LFO 1	
Mag. sus.	Structure	grainsize mm 1/16 1/8 1/4 1/2 3/4 1	ALT	RL: DIP: AZ:	Page 15 of 16		
					Description	Date: 12/09/01	
600	Fal/Si 70/CA		US Ser (ok)		pseudobx in Q-vitric grainstone/ bx as above - rare pumiceous clasts, 1-2 cm. parts have coarse qtz x'tals - others finer + more like CRUS		
610	Fal/Si 70/CA				612.45 Q-vitric CRUS - 20-30% 1-2.4 mm 3mm qtz x'tals in vitric matrix - part 614.90m replaced by per-pseudobx		
620	Si? 45/CA				619.30 LFI/17 618.40 pseudobx replace qtz CRUS sharp		
630	Si? 45/CA				Sharp alt. contact to CRUS Q-(leucocryst? alt min) vitric? CRUS - bx Med sorted CRUS with 30-40% 1-2mm, some 3mm, sub. qtz x'tals minor - 2% tabular leucocryst-alt min (see oxides?); in a fine chloritic/vitric? matrix Grades down hole to med bx of cream-grey, subang-subround, 2mm-3cm, av. 5-radius; alt clasts 2-some pumiceous totalling ~ 10-20%, in q-CRUS matrix minor polyqtz-qtzite, rounded, 2-4mm? - 2-4cm pumiceous clasts at 625-625.3 From ~ 633m, 10-20% 2-2.5cm; but 5-10cm mudstone clasts + minor 5-10cm q-perth labic volc + pumiceous clasts form POL/MICR BX LFI/18 634.40 bx.		
640	45/CA		642.9 Scarb 645.1		Strong sheared carb clasts, clastic looking alt zone LFI/19 624.35 642.9-645.1 646.6 Just above con, f qtz vitric mudstone? 1B or clasts		
650	30/CA				647.9 Qtz-carb vein - bx at top of thin massive See below minor washed pumiceous clasts? suggests partly pumiceous LFI/20 649.4m injectic		

Note melt inclusions
in q porph.

DIAMOND DRILL LOG				LOCATION: LYNCHFORD			HOLE NO: LFO1	
				AMG: E N				
Mag. sus.	Structure	grainsize mm		ALT	RL: DIP: AZ:	Page 16 of 16		
		1/16	1/8			2	8	
						64		
					Description	Logged by: GBE	Date: 13/09/01	
650	mod Si? ~50/CA W.FB in part?			M-S lacm	Coarse quartz-phyric rhyolite porphyry. 2-5% euh, 2-4 mm qtz phenos & common melt inclusions, <u>IB</u> minor chlorite alt. ferruginous? in a v.f.gnd, lacm, fibrous banded in part and mass * LFI/21 657.0m rel. unalt undeformed q-porphyr.			
660	FAULT 60/CA			M-S chlor	660.8m finer gnd → base - chaled mag in?			
670	low			M-S chlor	Q-(f) - vitric VC SS-slst 10-20% 1-2mm + minor 3mm euh, qtz xtal, minor 1-3mm felds in a chloritic vitric-looking matrix carb alt as at 642.9m Only minor grey-cream v.f.gnd alt, 1-2cm around clasts (some pumice?) to ~671m			
680	low S/Si → fines ↓ or opt. texture			M-S chlor	676.9 1/3 sec carb 678.8 bleached q-carb veins			
690	low Si? ~60/CA			M-S chlor	Polymict (f) vitric lithic VC bx As above with ~ 10-20% grey-pink clasts including def q-pumice, some mudstone, matrix poss more felds-rich. 674-676.5 several 2-10cm laminated mudstone clasts Then unit appears to fine downhole through vitric VCSS with no clasts to a laminated mudstone at its base 681.3m - Sharp, erosional? LFI/22 681.3			
				M-S chlor	Q-f - vitric? rhyolitic CRSS 20-30% 0.5-1mm, minor 2-3mm, euh qtz 5-10%? (poss more) 1-2mm felds in chloritic vitric matrix. Felds less distinct → EOH LFI/23 690.05m q-f - vitric CRSS			
				S chlor	697.0m			
					EOH			
700								