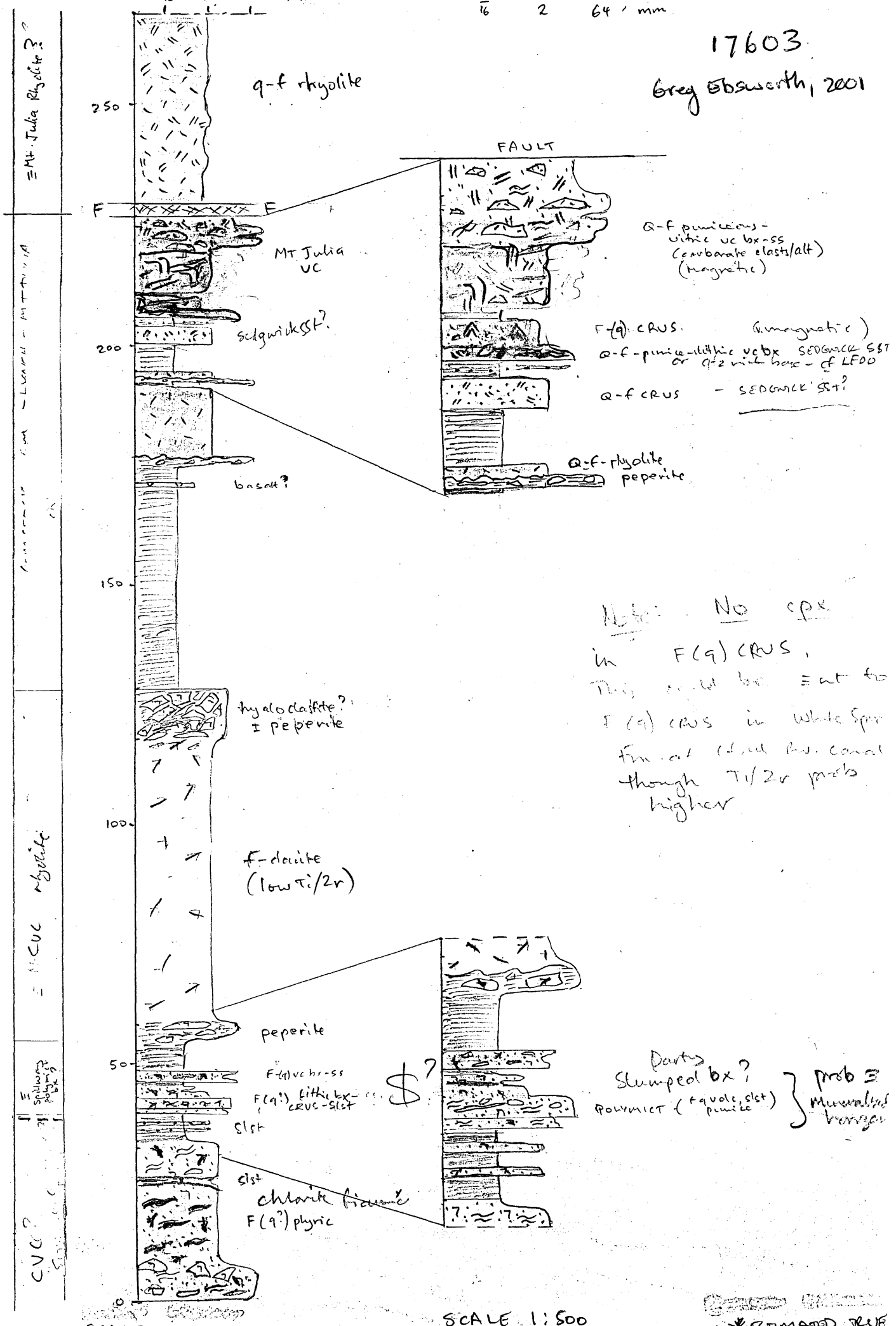
KED HILLS DDH RH18

17603

Greg Ebsworth, 2001



DIAMOND DRILL LOG	LOCATION: RED HILLS AMG: 382403 E 5363402 N	HOLE NO: RH18
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Mag. sus.	Structure	grainsize mm (1/16, 1/2, 2, 8, 64)	ALT	Description	Logged by: GBE	Date: 15.08.01
				TRICONE		
				14.1m		
low <0.1	Fol FB? S1? 40°/CA		W-M ser-chlor	Weakly-mod. foliated, cream-grey to pink, q-f-phyric coherent rhyolite lava or intrusion. Variably porphyritic with zones of abundant phenos which are also coarser grd. overall (" ")		
			S haem in parts	- q gen 1-2 mm, 2-4mm in parts, total ~ 5-10%		
				- f - mstly 1-2mm, ~1-5%		
			W-M ser-chlor ± haem	- v. minor ferromag (bi?), <1%		
				- v.f grd qtzo-felds. groundmass, var. alt to ser/chlor ± haem, spherulitic in places?		
low <0.1	FB? S1? 50° 15°/CA			- foliation looks like flow banding in places.		
				~45m		
			S ser-chlor	Zone of stronger, patchy ser-chlor alt. Possibly vc lox, probably a pseudolox 48.8		

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Mag. sus.	Structure	grainsize mm (1/16, 1/2, 2, 8, 64)	ALT	Description
			W-M ser-chlor ± therm	as above q-f-rhyolite
low <0.1	Fol-?FB/S1? ~40°/CA			RH001 – 56.5m
				60.0m Strongly foliated / sheared with minor vuggy qtz veins
low <0.1	Strong Fol. 40°/CA			61.5 m
	MAJOR FAULT?			HOST CORE – FAULT?
				65.2 m ~ Base of oxidation
0.2 0.3 av 6	S Fol (S1?) 40°/CA		M-S chlor (ser)	Green-grey, POLYMICT / RHYOLITIC? Q-f XTAL-RICH-VITRIC-VC BX+SS BRECCIA – matrixsupported, v. poorly sorted, of 5-15% ang-s.round, orange-pink, w.m q-f RHYOLITE, most 1-2cm, some to 15cm 1-5% ang-s.round, grey-brown, ferroan CARBONATE (or carb. alt?) Minor grey-green, w-m. lam. MUDSTONE,
15-40 av 20			W-M carb in places	GNDMASS + VCSS M. str. chlor (ser) alt, strongly fol 10-15%(?) euh. 0.5-2mm q xtals 1-5% (poss. more) 0.5-2.5mm f xtals.
				RH002 74.1m Mod-high mag sus. Q(f) xtal-vitric-(lithic) vcss

AGC 70
72.7M
5-8 mafics
qtz – v. minor felsic xtals

eg 10-15% molds

DIAMOND DRILL LOG

LOCATION: RED HILLS
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Mag. sus.	Structure	grainsize mm (1/16, 1/2, 2, 8, 64)	ALT	Description
5-20			M-S chlor + carb	RH003 76.25m — Pumiceous Abt carbonate clasts / boudinaged laminae? ~10% qtz veins
10				Abt carbonate clasts/laminae?
5-30	Fol 140/ 60A thick		S chlor ± carb	RH004 81.9m — only minor q-f rhyo clasts, v.s chlor. alt. ~10-15% qtz in bands (eff only)
15			S ab/ haem	Ragged pink, 0.5-1cm ab/haem alt? bands, poss. after clasts?, pseudo bx?
				minor clasts - mainly q-f rhyolite
				Abt carbonate clasts or laminae
				Only minor clasts - mainly rhyolite, some carbonate + mudstone (?)
low			~90.5m sharp	parallel lam. vc slst-sst f graded laminae
10-30			91.50 RH005 91.25m	RH006 92.40m ab/haem alt bands F-CRYS (minor qtz only)
15			S chlor, ab? haem	Ragged, pink irreg. patches - bands of ab/haem alt (?) some poss. after clasts, pseudo bx?
				F-rich (50-60%), 5-10% qtz (0.5-2mm) 0.1-1.5mm CF COMSTOCK (LYNCH PLUS?)
			~95.40m grad.	Q-phyric pumiceous, 9(f) xtal vc bx with common carbonate clasts? laminae? or alt(?) (est 15-20% pooled qtz in bands)
low 0.2-0.4	NNW FAULT?			RH007 96.90m ST ISBOGWICK dst?
			97.55m	v. sharp with slicks on fault/slickets
low	S1? 45°/CA		98.25	Parallel lam. vc silic slst + mudstone
			S chlor	98.40 q-f xtal-rich vc ss - 30-40% q xtals?
v. low	S1? 45°/CA		S ser-chlor	Parallel lam. silt-com vc? slst + mudstone
			99.90m	sharp, conf. contact.

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Mag. sus.	Structure	grainsize mm (1/16, 1/2, 2, 8, 64)	ALT	Description
				Strongly altered (silic-ab?) dk unit. Less alt. parts are q-f xtal rich vc ss or strongly porphyritic lava (20-40% xtals/phenos - mainly q ?)
low	Weak fol ~45° CA		S sil ab? + ser-chlor	RH010 - 104.30m Q-f porph xtal ~20% q, 10% f
				~106-107, contact obscured by alteration
			M ser	Parallel-laminated, siliceous vc slst-mudstone
low	W-M S1? 50° CA			Strong ser alt cross-cuts + destroys lamination in places
			S ser	strong qtz veining
				112.10m sharp, sheared in rhyolite
				q-f - porphyry - see below:
				Peperitic ~113.5m
				black, pyritic? mudstone
				114.5m
				strong quartz veining obscures L/C
low	S shearing 45-50° CA			Strongly sheared q (f) coarsely porphyritic rhyolite porphyry
				q- euh, most 0.5-2mm, av. 1-2mm, minor 2-3mm phenos, total ~5%
				f - v. minor, euh, 0.5mm
				groundmass: v.f. grd, sheared phyllosilicate rich/qtzo felds?
				RH008 117.90m typical rhyol. porph.
				v. strong quartz veining

100
110
115
120
125

AJ 105 106m 0° S-shaped qtz + felds stgly

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Mag. sus.	Structure	grainsize mm (1/16, 1/2, 2, 8, 64)	ALT	Description	Logged by:	Date: 16.08.01
				qtz veins		
low	45-50° CA			As above		
		? ?		134.2 m sharp, possibly peperitic. qtz veined clasts? alt, poss. with same q-f rhyo.		
				qtz veins		
low	50°/CA			Black, parallel laminated, pyritic mudstone		
				140.7m broken		
				Basaltic lava / intrusion? Now v. broken 140.9m broken, + oxidised.		
				Black		
low				As above		
	50°/CA			148.8 m sharp, conformable		
				Grey, parallel laminated vc? mudstone - clst?		

125 130 135 140 145 150

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Mag. sus.	Structure	grainsize mm (1/16, 1/2, 2, 8, 64)	ALT	Description
	50/CA			Grey, parallel lam, vc? mudstone - silt
				158.00 Sharp, conformable
	~50/CA thin out			Black, parallel laminated pyritic mudstone
				197.90m sharp.
low	Fol ~50°CA		M-S ser	Altered, vc bx or pseudobx of f-phyric clasts + qtz-alt grey mudstone, v.f clasts/ patches?

150
160
170
180
190
200

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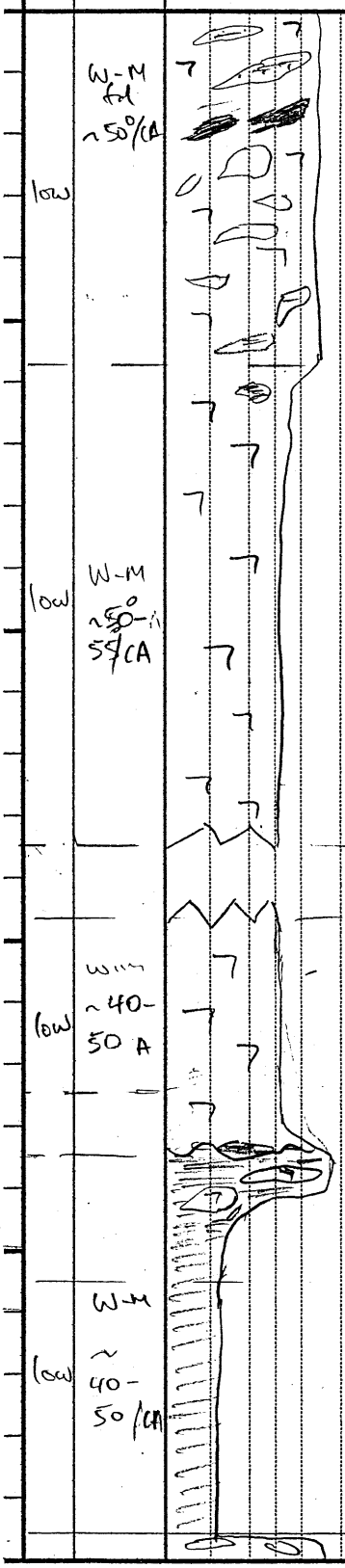

As above – possibly pepenite or hyaloclastite?

~204 m – definite dacite/mudstone pepenite

@ 211.50m gradational.

minor clasts of alt. mudstone(?)

Mainly coherent f-phyric dacite intrusion

f- 1-2 mm indistinct ~5-10%

groundmass: v f grd qtzofelds M-S ser. calt.

RH009 265.4m dacite

DACITE

f – dacite

~286.9 gradational

291.2m gradational

Black mudstone with minor grey vc slst interbeds

299.5m sharp, conformable?

see below

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Mag. sus. | Structure | grainsize mm (1/16, 1/2, 2, 8, 64) | ALT | Description | Logged by: | Date: 16.08.01

300

low | fol ~40°/CA | S ser | Strongly foliated DACITIC f(q) xtal VC BX-SS. Pseudobx: F-euh, 1-2mm, ~1-5%; q-0.5-1mm, minor. Poss. minor siroud chert/mudstone? clasts, 1-2cm
302.5m Sharp conformable

low | So/S1? ~60°/CA | S-VS patchy ser | Interbedded parallel laminated, siliceous VC SLST, AND f(q)-CRYSTAL-RICH DACITIC VCSS
VCSS has ~20%, 0.5-1mm euh felds, minor q(?) 0.5-1mm. Alt patchy, x-cuts lam.
~305m grad.

305

low | | S-VS ser | [RH011 306.70m] Intraflow bx ~~in part~~? POLYMICT DACITIC VC BX. Cherty clasts?
Minor 0.5-1cm, some 2cm, carbonate clasts; alt f(q) vdc?, slst? pumice? in a vitric groundmass with 10-15% f(±q) 1-2mm
~307.8m grad'l.

low | A? | S ser | DACITIC f(q) xtal VC SS-BX?
Possible graded laminae [RH012 -308.9m]
309.10m Irregular, prob. conformable.

310

S ser. | Parallel laminated silic, VC SLST with minor beds/laminae of f(±q) xtal-rich VCSS.
The finer lithology could be ser-alt. VCSS giving finer-grd appear.

low | So/S1? 60°/CA

315

M-S ser | Prob. fine grained top of DH-coarsening single depositional VC unit.

317.6 ~~grad.~~

POLYMICT VITRIC RHYOLITIC-DACITIC? VC SS-BX

320

bw | fol. ~45° CA | M-S ser | Abt., alt, 2-4mm pumice clasts, & 1-3mm shards; crystals - F-1-2mm ~5-10%, and Q - 0.5-1mm, minor ~5%
Minor - carbonate clasts } 2-5mm some 1-2cm
- mudstone clasts }

325

Need to sample for Qtz %

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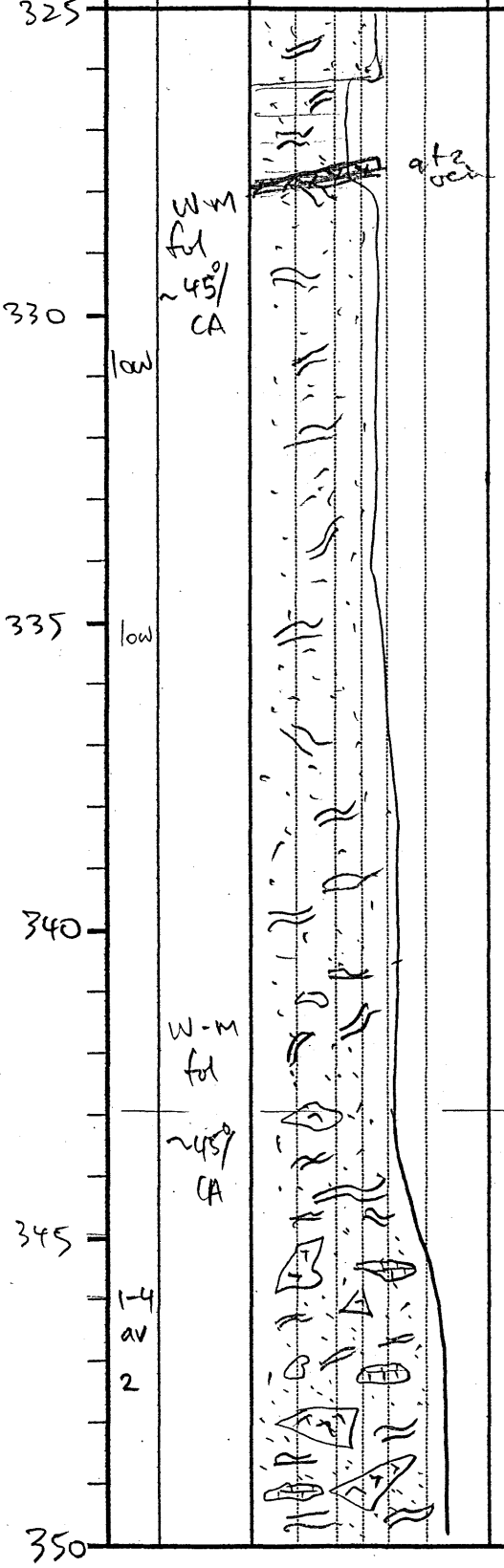

Parallel-laminated, finer grained laminated W-Mod.

PUMICEOUS, CRYSTAL VC Bx-SS

Abt dark (chloritised?) fiammé-like (pumice?) clasts

Need to look at this again esp for Qtz %.

minor volc (fg) clasts (to 12cm)

~343m – gradational.

POLYMICT PUMICEOUS-LITHIC CRYSTAL VC Bx.

- Abt - red, s.round-s.ang, f(g?) phyric VOLC to 4cm, some up to 20 cm
- common-abt - s.round-round, carbonate, 0.5-4cm
- common tagged, subang black mudstone, 1-2cm
- common, dk grey, alt volc? or pumice clasts? to 5cm
- min. andesite-dacite & phyric clasts - 2-4cm
- groundmass - pumice 2-mm, ~10% xtals, mainly f and lesser g, 1-2mm

DIAMOND DRILL LOG	LOCATION: RED HILLS	HOLE NO: RH 18
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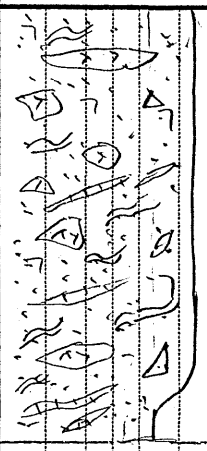
Mag. sus.	Structure	grainsize mm (1/16 1/2 2 8 64)	ALT	Description	Logged by:	Date:

350

2-10 qv 3



AS ABOVE

RH013 352.0m typical polymict bx tr. qtz. xtals

RH014 353.7 abt carbonate (alt?) clasts? lamme? magnetit rare qtz xtals

355

slightly finergnd at base, with abt carbonate clasts/lamme, 0.5-1cm

356.8m

E.O.H.

SUMMARY

0 – 61.5 q-f rhyolite (Mt Julia?)

61.5 – 65.2 major fault?

65.2 – 97.53 Polymict vitric-xtal-lithic lithic vc. bx-ss (Lynchford? or YR5?)

97.53 – 99.90 Parallel lam slst-mudstone

99.90 – 104.5 f-q-xtal-rich vc ss

104.5 – 112.10 parallel lam silic vc slst-mud.

112.10 – 134.2 q(f) rhyolite. Porphyry intrusions (minor mudstone)

134.2 – 140.7 Black py. mudstone

140.7 – 140.9 basalt dyke (?)

140.9 – 197.9 Black py. mudstone

197.9 – 286.9 F-dacite intrusion

286.9 – 299.5 Black mudstone

299.5 – 309.5 Polymict clastic vc bx – xtal-rich ss

309.5 – 356.8 Dacitic-rhyolitic pumiceous graded vc breccia-ss mass flow deposit with silic, laminated, fg top carb-alt (?) clasts