

APPENDIX 8

Orientation Structures - NCT002 to NCT005
(See Digital File EL20_2003_200505_16_ Appendix8.pdf)

NCT-002 Structure Measurements

Depth	Description	Alpha	Beta
155.30	Minor shear	8	40
163.50	Minor shear	15	35
164.00	Aligned clasts-cleavage	18	350
164.10	Fracture	30	30
165.70	Fracture	15	310
166.10	Fracture	25	270
167.20	Fracture	35	285
167.25	Qtz-cb vein	35	195
178.05	Fracture	35	25
178.80	Fracture	25	335
179.05	Fracture	60	15
197.10	Fracture	70	215
198.00	Fracture	15	345
198.50	Upper contact of small py-sil mylonite zone	30	40
198.60	Lower contact of small py-sil mylonite zone	20	350
202.10	Foliation of mylonite (dodgy)	25	345
202.50	Foliation of mylonite	10	335
211.20	Qtz-cb vein	55	260
211.90	Open fracture - rough	25	245
212.20	Upper contact of small quartz-cb vein.	75	325
217.50	Open fracture - smooth	65	310
217.90	Open fracture - smooth	50	5
221.30	Open fracture - smooth	70	140
221.90	Qtz-chl-cb vein	42	325
222.15	Qtz-chl-cb vein - cuts mylonite	60	130
222.20	Upper contact of py-sil mylonite zone	25	290
223.00	Upper contact of py-sil mylonite zone	40	30
225.30	Open fracture - smooth	15	210
226.40	Cleavage	20	15
233.70	Open fracture - smooth flat	75	135
234.70	Cleavage	20	350
235.80	Fracture - rough	65	200
238.60	Cleavage	18	350
285.70	Fracture smooth	65	195
286.30	Fracture rough	40	170
287.05	Fracture moderately smooth	35	60
288.70	Fracture moderately smooth	50	160
289.50	Cleavage on aligned pumice	25	350
289.80	Open fracture - smooth flat	50	190
290.70	Open fracture - smooth flat	30	40
290.85	Cleavage	20	350
291.05	Carbonate vein - slicksided fractures	35	20
293.00	Fractures - stepped and smooth	40	200
293.95	Cleavage - bedding (see photos 294m)	30	325
294.30	Fracture - moderately smooth	25	10

NCT-002 Structure Measurements (cont'd)			
Depth	Description	Alpha	Beta
295.70	Quartz-chlorite vein ~15mm	60	190
295.85	Quartz-chlorite vein ~20mm	70	35
296.34	Quartz-chlorite vein	35	20
296.35	Quartz-chlorite vein	30	25
297.80	Calcite vein ~4mm	60	80
298.35	Fracture- flat and rough	50	5
298.80	Quartz-carbonate vein ~10mm	60	210
299.30	Open fracture - smooth flat	70	345
436.6	clean fracture with slickenside, fibrous chlor, wht carb, qtz and orthogonal break surfaces with pyr	10	320
441.65	clean fracture with slickenside, fibrous chlor, pyr, qtz, wht carb	10	n/a
442.7	set of wht, cream carb veinlets probably cleavage controlled	35	325
444.8	set of 1 mm – 8 cm qtz, chlor, carb veins	50	n/a
446	set of deformed veins with 3 main orientations apparent, coarse milky qtz, selvage style, chlor, infill carb	40 60 90	n/a
447.3	0.5 cm carb, qtz vein probably cleavage controlled	25	25
450.5	clean fracture with chloritic slickensides, probably cleavage controlled	10	305
453.0	stepped fracture with slickenside chlor, qtz, carb	15	325
463.2	stepped fracture with slickenside chlor, pyr (possible minor carb)	15	n/a
465.4 – 466.3	zone of up to 0.5 cm qtz, carb and up to 4 cm chlor, qtz, carb veins	70	90
466.4 – 470.3	zone of probably cleavage controlled veinlets, fractures with slickenside chlor, carb, minor qtz, (measurement @ 470)	10	40
478.9 – 479.7	zone of deformed intersecting veins coarse milky qtz, cream carb, chlor laths, at least 3 orientations.	40-80	n/a
482.3	chloritic foliation probably cleavage controlled	15	
485.3	0.5 cm carb, qtz, minor chlor vein	30	n/a
487.7 – 489.5	zone of 2 mm – 2 cm deformed intersecting veins of coarse milky qtz, cream carb, chlor laths, in part with deformed en-echelon, tension style arrangement	40-80	n/a

NCT-003 Structure Measurements

Depth (m)	Description	Alpha	Beta
217.0	0.5 – 2cm quartz carbonate veins	40	180
219.5	A/a	35	100
222.8	Ragged coarse quartz chlorite vein	30	180
248.3	0.5 – 2 cm coarse quartz>carbonate veins	40	230
255.5	Bedding and parallel chloritic cleavage	35	190
260.5	Cleavage in lapilli volcanics	40	350
266.7	Quartz carbonate chlorite veins	40	335
275.9	Cleavage in chloritic volcanics	45	015
291.0	A/a	45	360
295.5	1mm – 1cm quartz carbonate veins	40	310
304.0	Cleavage in chloritic volcanics	45	010
330.6	Bedding and parallel cleavage in volcanics	40	030
341.5	Bedding	45	050
341.9	1 cm coarse quartz chlorite carbonate vein	45	020
355.5	Bedding and parallel cleavage in volcanics	30	140
356.4	Bedding	40	070
362.3	Bedding and parallel cleavage in volcanics	30	030
369.4	Multiple 0.5 cm quartz carbonate veins	40	360
667.9	5 cm pegmatite vein	50	110
669.3	Cleavage	35	035
694.1	Cleavage	55	340
702.9	5 cm quartz carbonate chlorite vein	60	175
709.9	Cleavage	50	345
747.5	Cleavage	60	020
748.0	Bedding	55	230

NCT-004 Structure Measurements

Depth (m)	Description	Alpha	Beta
234.8	Pegmatite vein	60	335
258.5	Cleavage	40	025
273.0	Cleavage	50	015
326.5	Cleavage	30	180
332.0	Cleavage	35	180
344.0	Qtz-carb veins up to 1 cm	30	015
362.0	Qtz-carb veins up to 1 cm	40	025
373.0	Cleavage	30	015
397.0	Cleavage	30	300
610.2	Cleavage	20	340
617.8	3 cm qtz-carb-chlor-pyr vein	40	165
633.3	Stacked 1-5 cm qtz-carb veins	40	050
637.0	Cleavage	25	015
643.0	Qtz-carb-pyr breccia/vein zone	35	345
644.0	Cleavage	35	010
663.0	Cleavage	35	000
675.5	1 cm qtz-carb-pyr vein	35	320
682.0	Cleavage	40	350
702.8	5 cm qtz-carb vein	35	290
704.8	Cleavage	35	305
709.6	Cleavage parallel qtz-carb veinlets	40	340
723.0	Cleavage	40	000
737.0	Cleavage parallel qtz-carb veinlets	35	020
747.0	Cleavage	35	020

NCT-005 Structure Measurements

Depth (m)	Description	Alpha	Beta
236.3	1-3 mm qtz carb chlor veins	60	140
245.3	1-3 mm qtz carb chlor veins	60	180
245.5	1-3 mm qtz carb chlor veins	40	075
247.0	1-3 mm qtz carb chlor veins	55	045
299.0	0.5-2 mm qtz carb chlor veins	75	040
300.0	cleavage, veinlets	40	210
323.0	cleavage	40	050
330.5	1 cm qtz carb chlor pyrite veins	60	230
339.0	cleavage	40	045
354.0	qtz carb veinlets, weak cleavage	50	025
388.5	1-5 mm qtz carb chlor pyrite veins	70	040
390.5	cleavage	40	030
391.0	5-10 mm qtz carb chlor minor pyrite veins	70	015
395.0	cleavage	40	120
396.0	1 cm qtz carb chlor veins	60	040
404.0	Quartz veins	45	050
412.0	Quartz veins - Carb-±chl±py±he	55	135
424.1	cleavage	50	055
425.5	5-15 mm qtz-carb-chl-py-K veins	40	235
426.1	Fine qtz-carb veinlets	45	075
431.8	Fine silica veinlets	40	000
435.9	1 cm qtz-carb-py vein	25	245
441.0	cleavage	40	100
445.0	1mm- 10mm qtz-carb-py vein	45	190
452.1	Sericite vein	45	335
460.5	Carbonate-qtz vein	55	230
460.6	Minor qtz vein set	30	050
476.2	2-5 mm Qtz veins	55	185
488.8	5-15 mm carbonate-qtz vein	50	170
497.5	Carbonate-qtz vein	30	195
507.0	Spaced cleavage	35	010
509.4	Carbonate-qtz veins, Qtz-py veins	65	180
513.1	Qtz-carb-Pb-Zn veins	50	170