Structural Geology

Exp: 316 | Site: C0001 D | Core: 1R 5 | Observer: A.T

Summary: Dark mud, contains mudstone nodules, which are rounded.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
						3R										
1	bedding	34	34			90	0	0	13			31	41	274.0	75.7	
3	fissility	51	52			90	1	0	1			49	56	78.3	-33.8	
1	bedding	104	104			90	11	180	7			90	113	193.9	78.3	
						4R										
1	joint	78	81			90	41	0	53			49	94	145.8	17.0	
						5R										
1	joint	62	64			90	23	180	31			60	77	340.0	-12.7	
1	joint	69	75			270	74	42	0			60	77	344.0	-11.0	
1	joint	69	75			90	56	39	0					12.6	-16.6	
								(180)	(45)							
1	faut	124	125			270	60	180	31	46	90	121	140	123.6	-50.0	
1	faut	124	125			90	66	0	47	28	270	121	140			
1	faut	128	130			90	14	180	62	44	270	121	140			
1	joint	130	139			270	78	180	76			121	140	305.3	-34.2	
cc	fissility	15	17			90	9	180	26							

1R: nothing (CC only) ~ 0.16 m

3R: pebbly mudstone w/ subhorizontal bedding & fissility.
no obvious deformation structures.
(190 – 199.5 mbsf)

conjugate fractures.

Structural Geology

Exp: 376 | Site: C0007D | Core: 6R | Observer: Fabbri, L. | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	joint	47	52			270	44	0	11			42	56	0.5	-36.7	
1	Fissility	64	64			270	12	0	1			56	64	350.6	-43.8	
1	Fissility	108	109			270	2	180	18			106	110			
1	fracture	118	120			270	18	180	2			116	127	154.6	-67.6	
1	fracture	119	122			270	38	180	15			116	127	141.2	-35.3	
2																
3																
4																
1	fissility	67	75			90	17	0	1			67	75	307.9	-21.1	
1	fissility	96	97			90	6	180	10			88	98	No data		
2	fissility	39	42			270	5	180	4			39	42			
cc	bedding	19	21			90	3	180	7			16	25			
2	shear band	71	71			90	2	180	16			57	86	109.33	-27.34	

7R

black veins in mud

one PMAg sample taken to Yujin

Structural Geology

Exp: 316 | Site: C0007 D | Core: 8R 9R | Observer: K.U A.T

Summary:

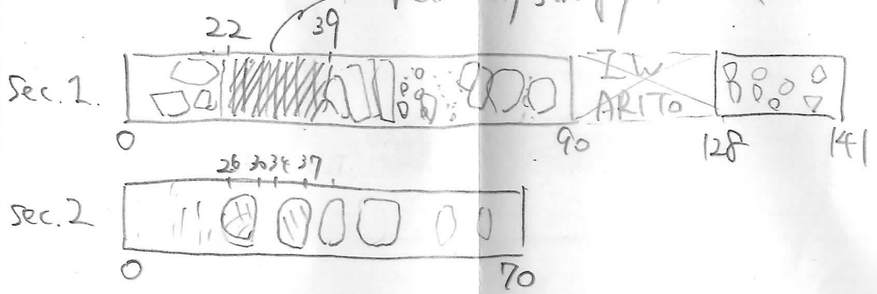
section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fault (normal)	39	43			270	61	180	8	86	270	39	44	338.8	8.4	
	fissility	42	43			270	12	0	8							
	fault breccia	22	39													
2	deformation band	26	30	}	reverse sense of shear conjugative bisector of acute angle // fissility											
	deformation band	34	37	}												
						9R										
2	bedding	14	14			90	0	0	9			14	24			
	fault breccia	41	60													
1	def. bands	103	107	—												

Sec. 1: fractured & brecciated

2, CC: Coherent but locally fractured.

26-30 cm, 34-37 cm: conjugate sets of def. band.

relatively strongly fractured & brecciated. (22-39 cm)



Overall, quality of core is so poor!!

Sec. 1, Sec. 2 0-24 cm, Sec. 2 82-104 cm, CC: dominated by cm-size fragments. locally polished & striated faintly. layers of ash and mudstone are still preserved.

Sec. 2, 41-60 cm: dominated by mm-size fragments in drilling mud

Structural Geology

Exp:316 | Site: C0007D | Core: 10R | Observer: K.U A.Y | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fissility	136	137			270	10	180	6					105.7	42.8	
1	Fissility	36	46			270	0	180	22			36	46	324.5	66.8	

fragments in drilling mud matrix

Sec. 1. 0-20 cm: cm-scale coherent fragments.
20-51 cm: cm-mm scale fragments in drilling mud matrix (51-90: IW)
90-Kf cm: Coherent pieces but disturbed by drilling.

Sec. 2 CC: cm-mm scale fragments in drilling mud matrix.

Overall, faintly polished & striated. No deformation bands. ash & mudstone layeres are preserved.

11R (266-277 mbsf)

Sand layer on top. Found Gravels from section 1 (31-37 cm). A little similar to 17R of C0007C.

Structural Geology

Exp: 316 | Site: C0007D | Core: 15R | Observer: KU AY

Summary: Dominated by coherent pieces
locally fragmented but NO polished / striated

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fissility	68	69			90	2	0	8			64	69	250.4	33.4	
						12	R									12R: No deformation structure (gravel layer)
						16	R									
1	fissility	53	53			90	5	180	7			51	54	122.5	32.8	sec. 1 : coherent pieces of < 5cm in length
2	def. bands	6	8			90	45	29	0			5	8	147.8	59.2	sec. 2, 0-28cm "
	fissility	26	26			270	2	180	1	-		23	28	20.0	26.2	sec. 2, 28-143 cm : coherent pieces of ≤5cm in length + breccia
	def. bands	107	111			270	66	162	0			107	111	110.9	46.8	sec. 3 "
																cc : coherent mudstone

Structural Geology

Exp: 316 | Site: C0007D | Core: 17R | Observer: T. Fabbri

Summary: sections 1 ~ 3 ↓ mainly drilling or splitting induced brecciation. Rare and faint striations
No brecciation, Coherent ?

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fissility	19	20			270	5	180	7			15	25	153.8	31.9	
1	fissility	32	33			90	7	0	1			25	41	289.1	33.4	
1	shear zone	63	68			270	39	17	0			63	68	308.4	63.5	
	def'n band	63	68			90	9	0	9			63	68	308.4	63.5	
2	def'n band	6	10			90	32	180	20			6	10	142.5	36.3	
		"	"			90	30	180	22			"	"			
2	fissility	10	10			270	0	180	8			5	21			
2	fissility	72	74			90	11	180	9			64	93	163.2	79.4	
3																
4	shear band	20	23			90	13	180	2					NO	data	
4	shear band	20	23			270	0	0	01							

Section 1: from 0 to 136, coherent but broken apart along fissility

Taken As a → P-MAG Sample 63-65cm

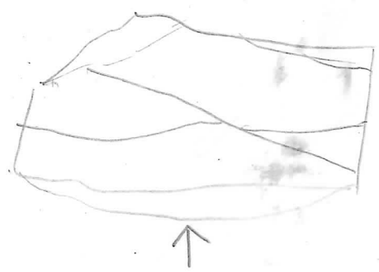
Section 2: from 0 to 93: coherent but broken apart along fissility

ash @ 44-45 cm

from 93 down to 143: slightly brecciated but likely drilling induced

Section 3: 0 ~ 41 → I W

41 → 140: broken but drilling / splitting induced



(two shear bands)

Structural Geology

Exp:316 | Site: C0007 D | Core: 17R | Observer: KU A.T.

Summary: Conjugate sets of deformation bands in coherent pieces.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	def. band	10	13			270	39 R	173	0			10	13			
	"	10	13			270	32 R	171	0			10	13			
	"	10	13			90	31 R	215	0			10	13			minicore for Xixi
	"	10	13			90	38 R	220	0			10	13			
	"	10	13			90	41 R	216	0			10	13	175.8	56.9	
	"	10	13			90	39 R	217	0			10	13			
	"	10	13			90	48 R	212	0			10	13			
2	def. band	57	60			270	51	129	0			57	60			

Structural Geology

Exp: 316 | Site: 6000 D | Core: 18R | Observer: Fabbri G.

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fault (R)	30	37			90	26	0	1	36	90	25	62	159.8	-52.1	fairly coherent section, showing weak brecciation & numerous burrows. [photo taken on section 1 (104-140 cm)]
1	fault (R)	37	39			90	12	180	57	20	270	25	62	206.5	-51.1	
1	fault	47	48			270	9	180	37	56	270	25	62	288.8	-47.0	
1	fracture set	104	140			90	19	0	0					261.3	-50.3	From 104-140 cm. Nearly parallel set of fractures (see picture)
2	fault (R)	10	20			270	85	110	0	21	90	10	20	187.6	-42.0	Coherent section. no brecciation
2	fault	12	14			270	18	180	17			10	20			
2	fault	129	133			270	33	180	25			124	140			
2	shear zone	10	12			90	70	0	1			10	20	188.38	36.6	→ P-MAG sample
2	fault	129	135			270	47	0	5			129	140			
2	fault	131	137			270	53	180	20			124	140	145.4	26.1	
3	fissility	83	83			270	0	0	1			78	107			
3	fissility	129	129			90	2	0	2			94	133			

Structural Geology

Exp: 376 | Site: C0007 D | Core: 18R | Observer: Fabbri | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
4	breccia	11	36													Breccia and microbreccia contains thin ash layer? (photo taken)

OF thinks it is drilling induced and/or splitting-induced because striation ≃ 0.

Structural Geology

Exp: 316 | Site: C0007 D | Core: 20R | Observer: KU AY

Summary: Fracturing and brecciation of mudstone into angular to subangular fragments, common in polished / striated surfaces

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fault (reverse)	13	22			90	72	180	2	77	270	13	22	223.4	-40.9	
	fault	26	27			90	7	180	1					314.2	-13.6	
2	def. bands	120	123			90	58	168	0			120	123	139.2	-31.9	
	def. bands	120	123			90	45	157	0			120	123			
CC	def. bands	13	16													
						19	R									
1	fault	24	29			270	57	142	0	84	90	24	29	224.1	-41.8	
2	fissility	98	98			90	1	180	2			93	100	182.9	-42.3	

Sec. 1, 0–31 cm : coherent pieces of < 5cm in length one fault

31–72 cm : IW

72–141 cm : brecciated fragments in drilling mud some fragments polished / striated two ash layers have been preserved despite brecciation

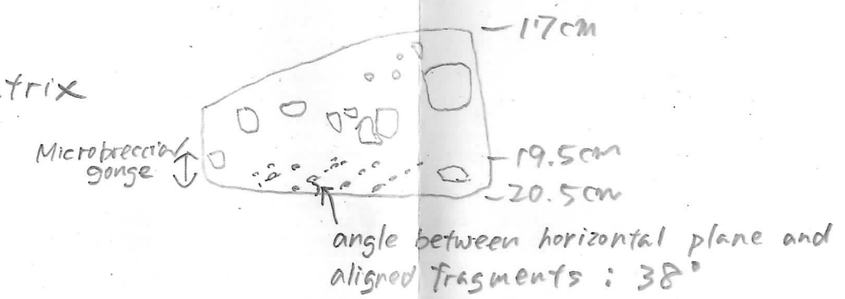
Sec. 2, CC : brecciated fragments in drilling mud some fragments polished / striated

Structural Geology

Exp: 316 | Site: C0007 Hole D | Core: 21R | Observer: KU AY

Summary: Breccia and microbreccia/gouge in CC could be affected by drilling-induced def.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
	Sec. 1: CC: 0-14 cm	Dominated by 1-10 cm size fragments of mudstone polished / striated particularly in finer grained mudstone														
	CC:	14-	19.5 cm:	BRECCIA sub-angular to rounded fragments in matrix characterized by random fabric												
		19.5 - 20.5 cm:	MICROBRECCIA / GOUGE dominated by matrix foliation defined by alignment of sub-rounded fragments													
		20.5 - 26.5 cm:	the same as Sec. 1													
		26.5 -	30 cm:	BRECCIA fragment size ranging from ≤1mm to 1.5cm												



Structural Geology

Exp: 316 | Site: COOP D | Core: 22R | Observer: RU AY | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
4	fault (normal)	53	60			270	53	0	35			47	61	324.4	82.9	healed, offset 2.4 cm
	sed-filled veins	126	141													
5	"	9	29													

Structural Geology

Exp: 316 | Site: C0007 Hole D | Core: 22R | Observer: KU AY

Summary: subhorizontal bedding
healed normal faults and sediment-filled veins in hemipelagic mudstone.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-mag pole) top	cohoerent interval (for P-mag pole) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fault (normal)	32	37			270	57	0	70			20	38	105.3	40.6	healed, offset 2.2 cm
	bedding	68	69			90	4	180	3			65	76	1.6	44.8	
	dewatering struct?	96	112		perpendicular to bedding											
	sediment-filled veins	132	135													
2	fault (normal)	31	36			270	59	180	34			31	38	156.7	49.4	healed, offset 8 mm
	sed-filled veins	41	43													
	"	53	55		planar											
	dewatering struct?	137	142													
3	sediment-filled veins	9	37		planar or sigmoidal arrays											
	bedding	8	9			90	4	180	5			0	39	25.2	58.3	
	sed-filled veins	75	80													
	"	120	122													
	"	129	131													
4	fault (normal)	26	33			90	55	180	21			25	37	42.0	54.7	healed, offset 6 mm
	bedding	32	33			270	24	0	2			25	37			
	fault (normal)	45	49			270	64	0	37			37	50	344.1	78.1	healed, offset 4 mm

Structural Geology

Exp: 316 | Site: 1000 D | Core: 23R | Observer: Fabbri

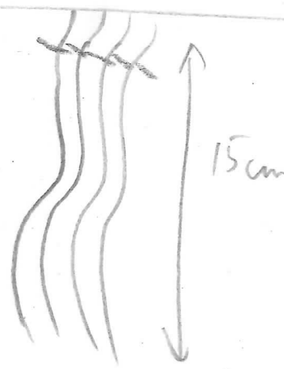
Summary:

section 1: coherent but slightly broken

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	faut	58	63			90	48	180	48			58	63	274.9	-13.0	healed. offset = 2mm. normal faut.
	(N) sediment fille veins	13	16													
1	bedding	44	45			90	1	0	1			0	140	86.8	57.0	
1	bedding	116	117			90	0	0	1			0	140	270.0	56.9	
2	bedding	55	56			90	0	180	3			26	58	15.3	53.7	
2	~~vein~~ ? fault	76	82			90	79	0	0			75	84			- healed offset = 2mm. Normal Sense.
3	sediment filled vein	25	40			2 arrays of sigmoidal sediment-filled veins → vertical on average						10	63			
	smear above	50	57													
	N-S fault	123	133			90	52	180	77	18	270	105	144	28.1	-5.1	
	deformation band	43	46			270	35	0	30			0	63			
	bedding	10	10			270	02	0	01			0	63			
	"	12	13			90	10	0	01			0	63	299.5	55.5	
	"	47	48			270	3	0	02			0	63			
sediment-filled veins		116	123													the sediment filled veins strike E-W and dips
4	shear band	40	41			90	12	180	35			17	81	29.7	-22.0	
4	breccia	82	106													

3 other shear bands

43-43	270-6	0-04	0-63
47-48	270-4	0-14	0-63
50-51	270-0	0-04	0-63



80-81cm: drilling mud injected.
82-106cm: highly fractured interval (drilling-induced)

Structural Geology

Exp: | Site: 7D | Core: 24R | Observer:

Summary: Similar to 23R. Coherent.

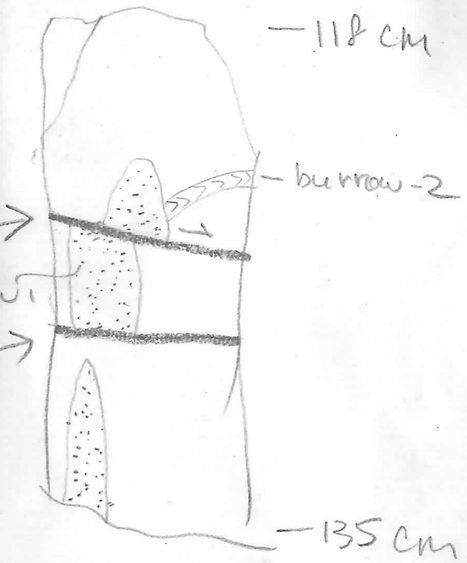
section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
1	sediment filled vein	108	110									47	142			
		79	81													
	~~deformation band~~ fault	60	61			90	10	180	9			47	142			healed
1	faut	95	103			270	58	180	53	66	90	47	142	176.5	65.2	Normal
1	faut	121	130			90	56	180	1	36	270	47	142	295.1	56.3	Normal
2	sed. filled vein	73	76													
4	shear zone	14	16			270	15	0	4			0	63			
												~~0~~	~~140~~			
4	shear zone	17	20			90	41	180	30			0	63			
												~~0~~	~~140~~			
4	shear zone	76	76			90	4	0	3			74	94			
												~~0~~	~~140~~			
4	shear zone	76	78			90	33	0	1			74	94			
												~~0~~	140			
4	shear zone sed. filled	83	83			90	2	0	2			74	94			
4	vein	100	102													
4	shear zone	94	100			270	45	180	70			94	116	331.8	49.4	
4	shear zone	127	128			90	20	180	32			118	135			
4	shear zone	128	129			90	8	0	8			118	135	127.3	-23.3	

healed faults

not consistent. ~~please~~ keep consistency in your descriptions!!

normal, offset = 3 mm

Section 4



Structural Geology

Exp: 316 | Site: C0007 D | Core: 24R | Observer: A.T. K.U. | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
3	sed. filled veins	82	84													
	fault	92	93			90	8	0	9			77	93			healed
	fault	96	97			90	4	180	14			96	97	161.8	-29.9	healed
	fault	96	97			90	8	180	11			96	97			healed
5	fault	11	13			270	13	180	4			8	26	NB	data	healed
	fault (normal)	12	18			90	61	12	0			8	26			healed displacement: 3mm.
	sed. filled veins	14	16													
	fault	48	51			270	18	180	20			44	52			healed
1	bedding	83	83			90	3	0	9			78	92	170.4	-43.7	
2	bedding	86	86			270	2	0	1			84	95	149.7	22.7	
4	bedding	132	134			270	19	0	15			117	141	127.3	-23.3	

Structural Geology

Exp: 316 | Site: C0007 D | Core: 25R (1) | Observer: KU AY

Summary:

Sec. 1.0 - 70cm : fractured / brecciated mudstone.
fragment size : mm - less than 10cm.
70cm - 141cm : fractured mudstone.
Sec. 2 - Sec. 5 : fractured mudstone.
fragment size : 2 cm - 15 cm.
cc : breccia. fragment size : mm - 3cm.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fault	6	13			90	63	20	0			6	22	83.4	22.7	
	fault (normal)	6	8			270	66	8	0	72	270	6	22			
	fault	12	15			90	37	0	54	85	90	6	22	320.5	69.3	
	fault (normal)	15	18			90	48	180	18	39	90	6	22			
	fault (normal)	34	43			270	86	150	0	58	270	34	48			
	fault (normal)	43	46			90	74	6	0	75	90	34	48			
	fault	70	73			270	23	0	23	30	270	70	73	5.1	61.8	
	fault (reverse)	82	87			270	73	163	0	58	270	82	87	293.0	57.5	
	fault	95	96			270	6	0	25	25	270	95	96	288.2	56.0	
	fault	111	111			90	5	180	21	14	90	111	115			
	fault (normal)	111	115			270	34	0	31	19	270	111	115	326.9	28.0	
	fault (normal)	120	124			270	24	180	15	5	270	120	124	326.2	26.7	

Structural Geology

Exp: 316 | Site: Coop'n D | Core: 25R (3) | Observer: K U A. r | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
2	fault (normal)	53	57			270	24	180	38			53	66	76.5	71.9	healed
	fault	56	57			270	6	180	4			53	66			healed
	fault	57	58			270	9	180	1			53	66			healed
	fault	59	62			270	26	0	21			53	66	110.4	67.1	healed
	fault	62	64			270	20	0	12			53	66	116.9	54.7	healed
	bedding	104	104			90	1	180	4			100	113			
	fault (LL)	105	113			270	88	0	1	88	270	100	113			
	fault (LL)	103	111			90	74	0	3	89	90	100	113			
	fault	130	130			90	4	180	11	30	90	128	132			
	fault (LL)	132	137			270	80	34	0	42	90	132	137			
3	fault (normal)	7	15			270	57	192	0	81	270	7	15	84.8	2.7	
	fault	13	17			90	70	184	0	72	90	9	17	64.9	12.7	
	fault (LL)	25	35			270	83	173	0	80	90	25	35	355.1	31.9	
	fault	14	15			270	20	0	3			9	17			healed
	fault	34	36			90	22	180	11			30	36	322.4	42.1	healed

Structural Geology

Exp: 316 | Site: C0007 D | Core: 25R (3) | Observer: [illegible] | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
3	bedding	42	43			90	25	0	4			41	50			
	fault	41	50			270	56	188	0			41	50	243.3	54.1	
	fault	46	47			90	9	180	6			41	50			healed
	fault	104	105			90	2	0	23			99	106	303.9	46.3	healed
	fault (RL)	107	113			270	65	231	0	40	90	107	113	0.4	38.9	
	fault	109	110			90	6	180	13	21	90	107	113			
	fault (RL)	131	139			270	66	198	0	65	90	131	140	321.5	59.6	
	sed. filled veins	137	139													
	sed. filled veins	43	50													
4	fault	8	15			90	58	123	0	45	90	8	15	326.3	24.4	
	fault (normal)	21	28			270	60	234	0	13	270	21	28	14.3	27.8	
	fault	34	37			270	23	0	8	67	90	34	38	2.5	53.8	
	fault (RL)	46	50			90	77	218	0	50	90	46	50	274.0	58.0	
	fault	58	63			270	60	204	0	33	270	58	63	237.2	61.3	

Structural Geology

Exp: 376 Site: C0001D Core: 2R Observer: Fabbri C. **Summary:** Fault breccia and fault gauge.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
1	breccia	0	24													brecciated mudstone. The clasts range from 1mm to 4cm in size.
1	proto-breccia	50	80													+ brecciated mudstone. strong striations.
1	breccia	80	97													clasts go smaller downcore.
	microbreccia	97	105													one ash layer from ~ 80 cm to 89 cm
1	proto-breccia	105	111													(many photos taken here)
	microbreccia	111	120													
CC	breccia	5	12													
CC	gauge	12	25													

average size of clast	fault rock category
clasts have lozenge shapes length = 1cm on average max length = 5cm	proto breccia still coherent (no scattering of fragments) (the puzzle can be reconstructed
average length of fragments: 5mm but heterogeneous sizes (1mm long fragments are mixed with 1cm long fragments)	breccia
average size: 1 ~ 2mm large fragments (5mm) also included	micro breccia
visible no fragments pyrite crystals have formed after deformation ("post-tectonic")	foliated gouge

Structural Geology

Exp:316 | Site: C0007 D | Core: 25R (4) | Observer: KY AY | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
4	fault (normal)	100	103			270	35	180	21	30	270	100	112	351.0	43.4	
	bedding	108	109			90	8	180	4			100	112	2.2	42.8	
	fault (normal)	124	126			270	38	136	0	15	270	122	128	333.5	23.5	
	fault (LL)	128	138			270	72	130	0	48	270	128	138	320.6	2.5	
5	bedding	20	21			270	8	0	5			17	25	NO measurement too short core		
cc	fault breccia	5	25													

Structural Geology

Exp: 316 | Site: C0007D | Core: 26R | Observer:

Summary:

Sec. 1: fractured mudstone.
Sec. 2 0-34cm: dominated by 1-10cm size fragments.
Sec 2. 34cm 5 cc: fractured / brecciated mudstone. fragment size: min - less than 5cm.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	fault	57	63			270	56	135	0	70	270	57	63	0.9	24.5	
	bedding	89	89			270	3	0	5			86	96	241.8	59.3	
	fault	107	110			270	20	180	17			107	110			
	sed. filled veins	119	120													
	fault	124	125			270	8	0	61	36	270	122	128	72.9	40.5	
2	fault	20	22			270	38	0	18			20	25			healed
	fault	22	23			270	6	180	13			20	25			healed
	fault (reverse)	31	34			90	55	189	0	14	90	31	34			
	fault (normal)	28	31			270	33	180	8	14	90	28	31			

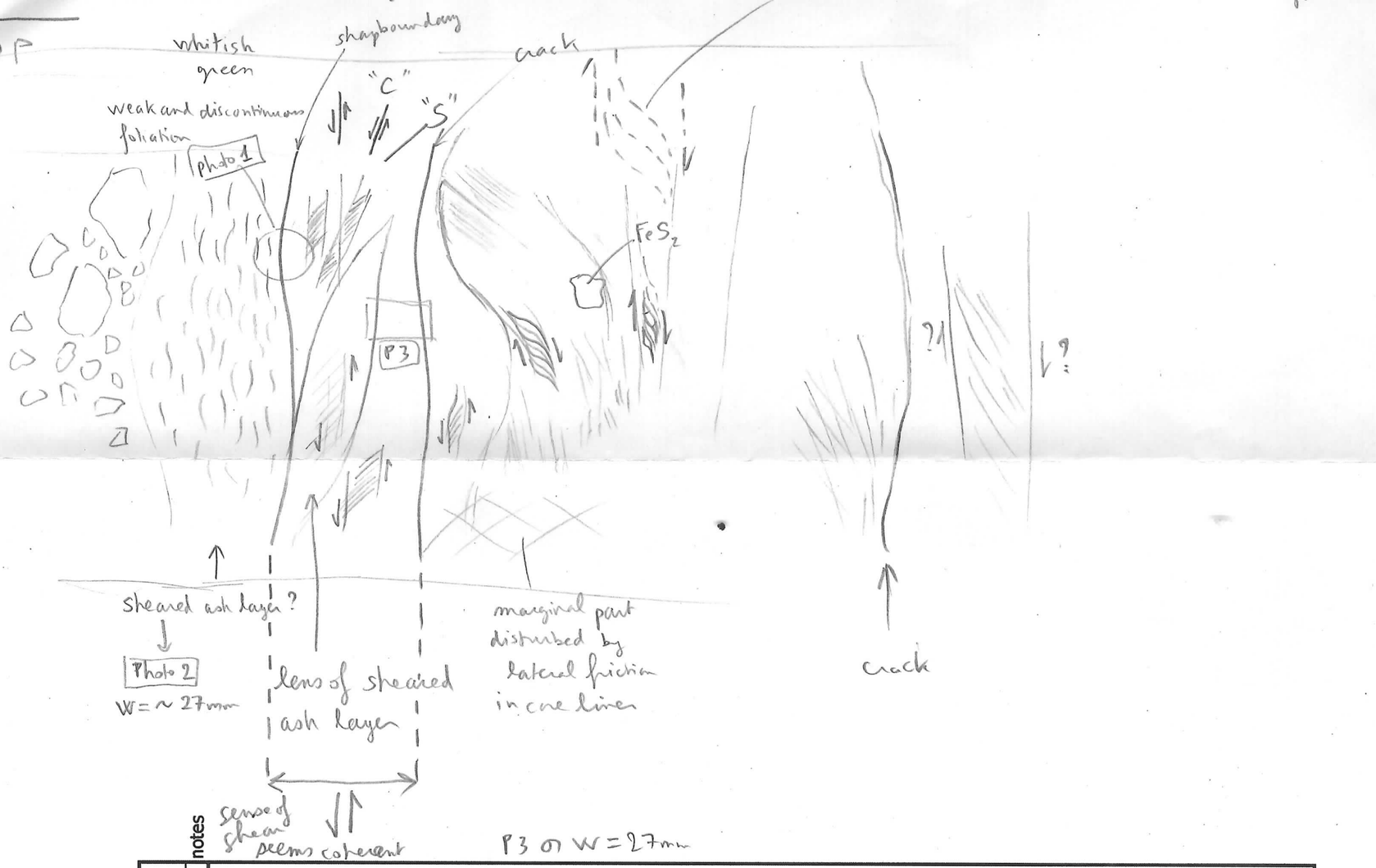
Structural Geology

Exp: 316 | Site: C0007P | Core: 28R | Observer: Fabbri, Li

Summary: highly fractured sections 1, 2, 3, but few striated surfaces
" " " 4, 5 and CC

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-mag pole) top	cohoerent interval (for P-mag pole) bottom	P-mag pole az/trend	P-mag pole dip	notes
1	proto-breccia	0	41													
1	breccia	41	60													
1	proto-breccia	60	98													
1	breccia	98	108													
2	breccia	0	73													
2	Faut	104	108			270	32	0	52	55	90			NO consistent Pmag data for this interval		RL
2	fractured zone	73	142													Highly fractured zone
3																" " "
4	breccia	0	13													
4	breccia	57	83													
5	breccia	0	71													ash from 10 cm to 27cm at section 5 : ash includes angular fragments of mud stone more polished / striated surfaces than above
CC	breccia	0	17													→ fractured but still coherent

27R-CC-Archive half



Structural Geology

Exp: 316 Site: 0000 D Core: 28R Observer: T. Wagner

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P-mag pole) top	cohoerent interval (for P-mag pole) bottom	P-mag pole az/trend	P-mag pole dip	notes

Structural Geology

Exp: 316 | Site: C0001 D | Core: 29R | Observer: Li | Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	striation on surface rake	striation on surface from	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	notes
1	breccia	0	32													
1	breccia	69	141													
2	breccia	0	37													
2	Gauge	37	56	(?)												
2	breccia	56	66													
2	Coherent interval	66	106													
2	breccia	106	126													
EC	breccia	11	29													