

Structural Geology

Exp: 16

Site: C0006 F

Core: 2H

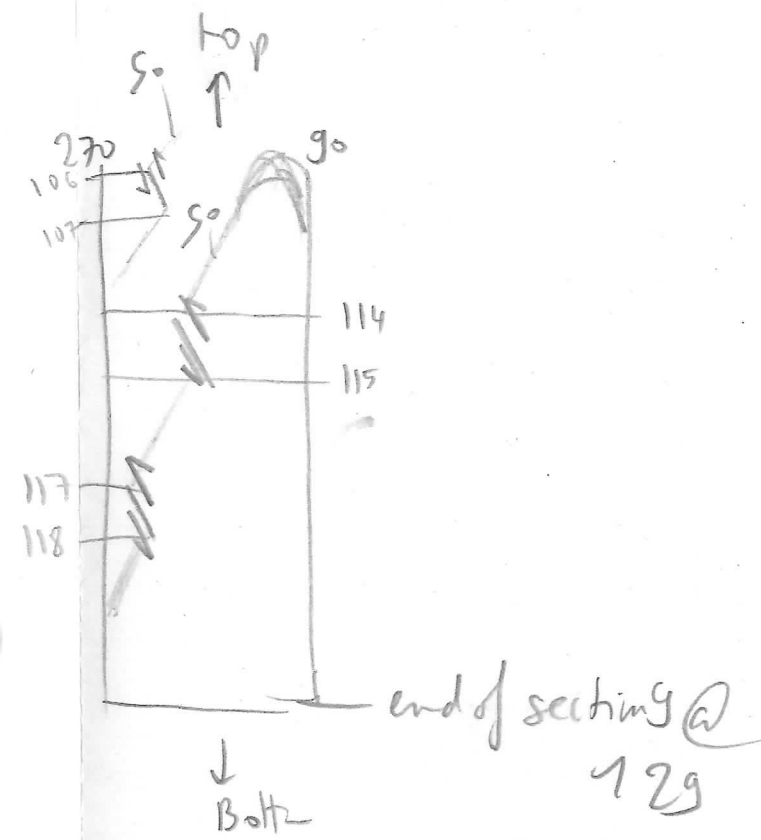
Observer: Falob

Summary: Steeply dipping well stratified succession of sand and mud

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
2	bedding	48 81	66 87			270	25	180	19			45	106			- well consolidated greenish siltstone layer, brecciated, probably from somewhere else.
						270	43	180	13					285.8	5.3	
3	Iw															
4	bedding	39 102	48 108			270	51	180	08					32.1	13.4	
						270	53	0	08					16.5	21.8	
5	bedding	47	58			270	53	0	06					33.7	31.1	
8	bedding?	10	10			270	0	0	0					13.0	52.8	
	bedding	30	31			270	03	0	0					3.0	19.4	
	"	46	51			270	55	180	24					14.4	34.9	
9	bedding	32 57	38 66			270	56	180	01					44.7	-74.2	
						270	60	0	20					356.1	-64.2	

bottom of section 9:

reverse-fault looking features
dulling - induced?



Structural Geology

Exp: 316

Site: Coodo

Core: 3H

Observer: Fabbri

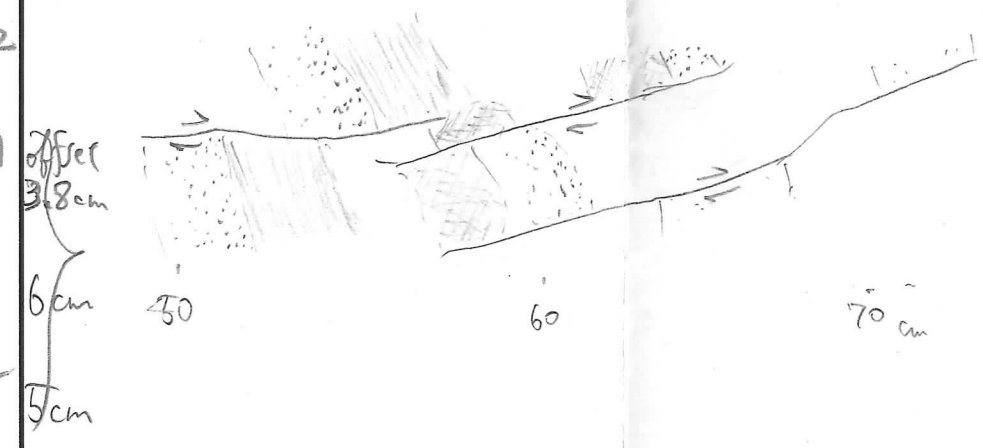
Summary: Normal faults in inclined sand/mud alteration

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	112	115			270	19	0	0			110	130	24.5	47.9	
2	Fault (Normal)	28	80			90	80	2	0			0	118	355.8	38.2	offset 3.5 cm
	bedding	0	10			270	69	136	0			0	118	318.8	47.2	
	bedding	95	99			270	180	0	0			0	118	351.2	27.3	
4	bedding	8	10			270	19	180	12			0	145	354.4	26.9	whole section shows dipping beddings
	bedding	34	37			270	24	120	0			0	145	342.8	36.7	
	bedding	64	68			270	30	180	9			0	145	343.8	65.6	
	fault (normal)	47	65			270	71	172	0			0	145	1.3	49.5	
5	bedding	65	68			270	32	0	11			60	145	5.9	33.6	
	fault (normal)	96	89			90	60	114	0			60	145	356.8	39.5	
	bedding	108	110			270	32	0	9			60	145	23.1	43.7	
	fault (normal)	116	130			90	23	71	0			60	145	176	26.1	offset 3.5cm.

Structural Geology

Exp: 316 Site: C0006E Core: 34 Observer: A.T Summary:
(continue)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
6	fault (normal)	5	18			270	71	166	0			0	45	12.9	35.9	offset = 2.5 cm
	bedding	42	44			270	29	180	17			0	140	6.8	25.2	
8	fault (normal)	17	39			270	72	168	0			0	140	343.0	18.9	offset = 8 cm
	bedding	55	60			270	31	180	13			0	140	15.1	37.7	
	bedding	106	110			270	29	180	14			0	140	358.9	38.8	
9	bedding	15	20			270	43	0	12			0	150	10.9	46.2	
	fault (normal)	47	59			90	86	19	0			0	150	24.3	44.9	offset 3.8 cm
	fault (normal)	56	67			90	74	16	0			0	150	12.2	24.1	6 cm
	fault (normal)	56	73			90	68	139	0			0	150	29.7	20.5	5 cm
	bedding	99	103			270	31	180	10			0	150	16.1	11.8	
	bedding	118	125			270	46	13	0			0	150	43.6	43.6	
	fault (normal)	119	140			270	75	174	0			0	150	332.1	53.5	
	bedding	10	15			270	44	0	7			5	53			
	fault (normal)	22	30			90	67	8	0			5	53			offset = 4 cm



Structural Geology

Exp: 3/6 Site: CoobE Core: 4H Observer: AJ Summary: -

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	121	122			270	9	180	5			88	142	194.3	21.9	sec. 1. 0-110cm: bedding is disturbed (maybe caused by HCPS coring) sec. 2. altered volcanic ash. sec. 3. 0-20cm: disturbed (coring induced?) 75-138cm: black volcanic sand with many bubbles. offset = 7cm offset = 2cm sec. 7, CC: similar to sec. 3 (bubbly volcanic sand)
2	bedding	4	5			270	8	0	22			0	65	152.7	36.7	
3	bedding	93	109			90	60	0	60			80	147	231.9	-10.2	
	fault (reverse)	97	106			270	64	32	0			80	147	243.5	-13.6	
6	bedding	28	29			270	5	0	66			0	49	89.4	64.7	
	fault (reverse)	80	83			270	29	0	6			53	92	178.8	60.3	
	bedding	99	101			270	24	0	19			96	132	110.9	35.9	

Structural Geology

Exp:

Site:

Core: 7H

Observer: F. Blom

Summary: dipping beddings (sand/mud contacts)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
8	/															drilling - disturbed or sedimentary disturbed section
62	/															nothing clear
1	bedding	92	120			90	66	11	0	(8H)		90	120	164.9	28.1	(8H)
2	bedding	50	51			90	11	0	47			0	89	281.9	63.6	
2	bedding	130	132			270	17	0	0			115	142	356.8	-6.4	
5	bedding	25	33			270	39	0	5			0	44	305.7	16.2	
3	bedding	33	41			270	47	150	0			0	78	346.5	14.5	
1	bedding	65	65			270	10	0	12	(9H)		1	70	81.4	-11.7	(9H)
2	bedding	60	65			270	27	180	27			55	70	227.3	-49.0	
2	bedding	116	122			90	40	9	0			116	130	164.4	-35.4	
3	bedding	20	20			270	03	0	01					202.8	-25.0	

Structural Geology

Exp: 316 Site: Coocbe Core: 10H Observer: AT
5 Li Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	74	75			11	-1									10H: nothing 11H: black soupy sand 12H: almost same as 11H 13H: sand including site patches, probably disturbed by drilling
						270	12	0	8			0	78	136.0	13.9	
1	bedding	20	21			90	0	0	3			4	140	3.3	38.5	15X
	bedding	60	65			90	19	180	19			4	140	117.4	22.9	
	bedding	79	83			90	26	0	37			4	140			
	ash layer	29	132			270	6									
2	bedding	24	26			270	17	0	4			0	30	152.4	3.8	
3	bedding	64	70			90	21	180	4			48	70	150.9	-21.6	
5	bedding	14	18			270	12	0	25			0	130	130.3	4.7	
6	bedding	22	25			90	17	0	27			1	32	172.1	49.4	
6	bedding	61	63			270	22	0	13			52	77	194.0	35.1	
7	bedding	13	15			270	10	0	45			1	28	133.3	-34.6	

Structural Geology

Exp: 316

Site: 0006

Core: 16X

Observer: ^{Fisher} Li

Summary:

turbidites. interbedding sand and mud layers.

hole #

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	23	25			270	23	0	22			46	95	23.2	-39.8	
2	= IW															
3	bedding	3	5			50	20	0	35			0	35	171.5	-4.2	
	bedding	22	24			270	26	180	43							
CC																
1	ash	57	65									15	38			17X
	bedding	84	85			270	10	180	26			40	76			
														54.6	-22.8	
2	no core	(whole round samples)														
3	IW															
4	bedding	52	53			90	01	0	09			0	61	1.1	-25.6	
5	bedding	10	11			50	05	0	02			0	27	N/A		
CC	bedding	29	30			180	05	180	19							

Structural Geology

Exp: ³¹⁶ Site: 617 Core: 18X Observer: Patricia

Summary: *inter-bedding sand layers/mud layers*

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
CC	bedding	77	79			270	16	180	29			0	110	66.2	46.3	
		121	123			270	12	180	7			112	136	66.2	23.1	
1	fissility bedding	50	80			90	1	180	12					329.4	9.4	(19 X)
		72	72			270	3	180	8			15	80	316.9	15.3	
3	bedding	68	70			90	11	180	13			0	98	216.5	77.7	
4	bedding	2	4			90	17	0	12			0	95			the contacting surface can be irregular
		71	73			90	21	0	0					102.1	73.1	
5	IW															
6	bedding	19	21			270	9	180	4			0	38	346.4	14.7	
CC																

but irregular
can see sharp contacts between sand and mud layers.
the contacting surface can be irregular

Structural Geology

Exp: 3/6

Site: Coob E

Core: 20 X

Observer: Li

Fabrizi

Summary: getting more sand. strong seismic reflections

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fissility bedding	0	14			270	11	180	24			0	37			
		15	15			90	0	0	02					16.7	-0.6	?
2	bedding	16	19			270	30	0	10			0	121	38.9	3.1	
3	bedding	14	19			90	33	0	21			18	143			
4	bedding	94	99			270	17	0	4			34	140	269.7	-15.3	
4	bedding	52	54			90	0	0	6			34	140	137.8	23.5	
5	bedding	68	72			90	30	0	21			58	98	270.3	-49.8	

Structural Geology

Exp: 316

Site: Coobe

Core: 21X

Observer: AT
KU

Summary: *interbedding sand and mud layers*

mud layers are well consolidated

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	31	37			270	4	180	1			0	149	129.3	-5.1	
	bedding	113	113			horizontal						0	144	167.3	24.5	
2	bedding	33	34			90	17	0	1			0	110			
	bedding	94	94			horizontal						0	110	121.2	23.0	
4	bedding	26	27			270	15	0	17			0	141	67.2	47.1	
	bedding	62	62			horizontal						0	141	158.5	-4.0	
	bedding	137	137			90	2	0	10			0	141	42.0	-35.7	
1	bedding	111	112			270	4	0	13			0	136	167.3	24.5	
2	bedding	67	73			90	37	0	32			32	107			
2	bedding	86	88			270	160	0	18			32	107			
4	bedding	92	97			90	40	0	12			47	100	185.0	45.8	
5	bedding	62	64			270	9	0	16			0	141			
5	bedding	96	100			90	22	0	39			0	141			
CC	fissility	22	30			90	0	0	6			6	30			
CC	bedding	21	23			270	10	0	0			6	30			

22X

core 21X?
we do not have records for 21x5

Structural Geology

Exp: 316 Site: Coochiberg Core: 24X Observer: A.S. Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	33	35			270	8	0	9			0	115	177.0	33.4	
	bedding	56	57			270	3	0	3			0	115	118.5	12.8	
						<u>25X</u>										
1	bedding	85	88			270	11	0	12			83	88	79.6	-26.5	bottom of sand layer.
3	bed	70	72			90	22	0	10			68	70	32.2	45.7	
4	bed	131	132			270	24	0	1			130	141			Our record shows this section is only 87.5 cm long!
5	bed	63	65			270	15	0	14			62	66	356.3	46.3	
						<u>26X</u>										
2	bedding	110				90	2	0	9			90	115	328.9	43.9	
3	bedding	38				horizontal										
7	bedding	17	19			270	16	0	6			15	21	321.1	61.2	
8	bedding	84	85			270	10	0	2			83	91	346.0	-21.0	

Structural Geology

Exp: 316

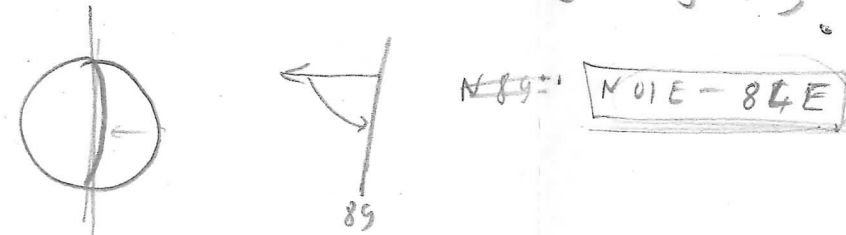
Site: C0006

Core: 27X

Observer: Fabbri

Summary: well consolidated, interbedding sand and mud.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fissility	1	35			270	4	180	1			1	35			well consolidated fine sand and mud layers
2	bedding	84	85			90	9	0	9			64	102			Numerous thin dark colored clay layers between greenish clay layers. } pruling induced biscuits
2	joint	79	83			270	52	0	39			64	102			
2	joint	83	86			270	89	6	0			64	102			
2	joint	114	119			90	43	180	7			107	124			
3	fissility	0	4			270	7	180	9			0	6	49.3	-27.5	Starting from section 2 ~ 70 cm, there appear to be some fractures. No striations
3	breccia zone	31	38													found faint striations on the fragments, which range in sizes from (photo taken)
3	fracture	31	33			90	49	180	30			22	58			
3	fracture	31	33			90	49	180	38			22	58	35.6	5.8	
3	joint	102	109			90	54	180	45			91	110	318.9	47.5	
3	breccia zone	109	111													photo taken
3	bedding	109	109			90	3	180	16			91	110			



Structural Geology

Exp: 316

Site: Cooot E

Core: 27X

Observer: Fabbrini

Summary:

bshowing sharp contacts between sand and mud layers. normally the mud layers are slightly brecciated and foliated. Found fault breccia zone.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
4	6 bedding	34	36			90	20	10	1			28	37	88.2	51.6	
	6 bedding	74	75			270	6	0	5			45	75	65.4	72.9	
	7 fissility	17	18			270	1	0	5			16	22	92.6	-35.2	in mud layers immediately below sand layers. The mud layers often appear to be brecciated, indicating minor faulting in this zone
	7 bedding	53	56			270	8	0	5			32	85	244.9	59.8	
	7 fissility	55	56			270	5	0	33			32	85			
	8 bedding	41	41			270	5	0	4			16	42	266.2	-57.4	
	ash layer	54	55													
CC	fissility	7	8			270	7	0	10			4	19			
	fissility	30	31			270	8	0	10			30	31			

hole E **Structural Geology**

Exp: Site: 00006 Core: 28X Observer: ^{OF}CFL

Summary: fissility shows changeable dips(?)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fissility	12	15			270	25	180	11			0	16	74.9	73.9	alternation silt-sand no joints could be observed
	bedding	99	101			270	8	180	6			34	78			
	bedding fissility	125 100	126 142			270 90	4 1	0 180	10 22			91	142	24.4	-49.0	
2	bedding	5	7			90	8	0	1			0	14			(core 27X) apparently less deformed than above
2	fissility	39	52			90	0	180	6			39	52	7.5	-70.0	
2	joint	43	47			270	43	0	15			43	47			
2	joint	43	47			90	32	180	16			43	47	296.2	-39.7	
2	bedding	87	90			270	17	0	8			87	90	350.6	-41.3	
4	bedding	26	26			90	1	0	3			12	30			
	fissility	26	55			90	0	180	18			26	55	213.0	-62.2	
CC																

alternation silt-sand
no joints could be observed

(core 27X)

apparently less deformed than above

Structural Geology

29x as a whole: really compacted rock

Exp: 316

Site: C0006

Core: 29x

Observer: Fabrik

Summary: I (OF) consider that there is an incipient (nascent) cleavage from section 2 (?)

This cleavage is sometimes // to bedding but may dip up to 20° (see e.g. section 2)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fissility	0	141			90	0	0	0							45~57: breccia-like interval similar to core 27x section 2 drilling-induced?
	bedding	80	81			270	80	180	20			78	85	181.9	-28.3	
1	bedding	130	130			90	0	0	0			130	135	54.4	37.9	Fissility weakly marked
												16	19			
2	bedding	17	19			90	13	0	10			0	83	39.4	40.8	
												69	84	24.3	67.0	
2	bedding	79	82			90	24	0	0			106	141	93.2	53.3	
												116	127			
2	bedding	124	125			90	7	180	9			106	141	93.2	53.3	
												116	127			
3	fissility	8	9			90	0	180	10			0	136	293.4	15.3	
												0	12			
4	fracture (joint) bedding	80	83			90	80	0	0			66	97	327.2	-7.9	
												63	64			
5	bedding	15	16			90	03	0	5			0	145	82.9	78.3	
												0	57			
5	fissility	119	145			90	9	90	0			0	145	199.4	20.0	
												0	110			
6	fissility	0	110			90	0	180	16			0	110			fissility is dipping southwards. Could this dip be due to drilling? 50,5~55: brecciated zone as in core 27. But no clear striations on fragment surfaces
												0	110			

Structural Geology

Exp: 316 Site: Coobee Core: 31 Observer: K.O. A.T.

Summary: two normal faults and two reverse faults in siltstone

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	bedding	37	37			90	2	0	10			0	144	304.5	25.0	
4	fault (normal)	83	87			90	35	241	0	12	90	67	124	129.2	-23.3	
	fault	101	104			90	40	241	0			67	124	15.5	-27.7	
	fault (reverse)	113	116			90	51	235	0	46	270	67	124	268.1	-23.7	
5	fault (normal)	37	42			90	54	266	0	23	90	0	61 70	185.6	-44.0	
	fault (reverse)	61	66			270	42	140	0	35	270	61 0	128 70	183.1	-57.6	
	fissility	107	108			90	15	0	23			0 98	61 117	223.5	-25.8	



← Coherent interval: should be checked by CT images

checked!

Thick sand layer found

Structural Geology

Exp: 316 Site: 00006 E Core: 32X Observer: Fabbricelli Summary:

coherent intervals (from VCD)

Section 1:
 → 0-17
 → 20-29?
 → 32-~~68~~ 69-74
 → 74-76
 → 77-81
 → 82-87
 → 87.5-91
 → 92.5-95
 → 96-142

Section 2
 → 0-37
 → 39-48
 → 50-57
 → 58-63
 → 64-68
 → 69-74
 → 75-87
 → 88-140

Section 3

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	Fissility	0	141			270	5	0	10							
	joint	50	56			270	73	0	80			32	73 68			
	joint	33	42			90	34	0	1			32	73 68			
	joint	57	65			270	9	0	2			32	68			
	joint	57	65			270	24	180	30			32	68	106.0	-31.2	
	joint	62	65			90	20	0	36			32	68			
	normal fault	104	108			90	25	180	24	17	270	56	142			
2	joint	28	32			270	50	0	57			0	37	289.7	-19.8	
2	joint	115	118			90	47	180	38			88	140	218.4	-17.0	
3	joint	54	57			90	9	0	45			53	58	347.5	-17.6	

Structural Geology C0006E

Exp: Site: Core: 32 Observer: Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
5	nothing noticeable															
6	fishy	83	83			270	74	180	13			82	87	220.7	-38.5	
	joint	95	96			90	5	0	35			93	101	336.2	-33.5	
7	reverse fault	51	54			90	24	0	14	52	270	38	91			
	joint	38	41			90	23	180	44			38	91	268.8	-21.8	
	joint	19	26			90	48	0	55			13	36			
cc	beddis	12 27	12 27			270	01	0	01			0	33			

Section ⁷ 70cm downwards: sand.

core 8 and cc - are thick sand

Structural Geology

Exp: 316 Site: C0006 Core: 34X Observer: Fahrri Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fissility	1	14			270	0	0	0			1	10			fracture zone. brecciated siltstone. weakly striated and polished fragments
	fissility	24	26			90	9	0	3			13	40			
	normal fault	33	36			90	50	180	69	40	180	13	40			
	joint	6	11			90	41	180	46			1	10			
	joint	59	65			90	45	3	0			50	67			
	joint	59	65			90	31	180	4			50	67	242.3	-31.4	
	joint	59	65			90	72	40	0			50	67			
	joint	52	56			90	53	0	69			50	67			
	fissility	123	125			90	0	180	8			88	141	11.4	-49.5	
	9 fault	75	79			180	90	0	0	15	180					
	joint	93	97			270	43	180	68			82	100	207.9	-64.2	
2	fault	110	113			270	24	180	20	73	270	0	132			
	fault	109	117			270	75	0	0	15	90	0	13			

left lateral

Structural Geology

Exp:

Site:

Core: 24X

Observer:

Summary:

alpha intensities factored
 this core is factored but striations remain faint

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
2	bedding	44	45			90	3	180	50			0	141 133	306.6	-47.5	
2	bedding	53	55			90	3	0	14			0	141 133	359.6	-17.7	
	normal fault	77	79			270	57	0	23	30	270	0	133	83.5	-44.1	
	joint	128	131			270	50	180	59			0	133	128.6	-54.6	
	jt	97	100			90	65	0	0			0	133	323.6	-28.5	
3	jt	0	4			90	16	180	53			0	84			
	joint	29	33			90	90	0	0			0	84	140.1	-48.9	
	fractility	33	34			270	0	180	25			0	84			
	joint	113	117			270	75	180	5			111	142	9.8	0.8	
	fault?	10	15			90	72	0	59			10	90			
4	fault	57	60			90	49	0	45			56	104	257.2	-12.0	
	fault	18	21			270	87	180	57			56	94	279.7	-17.6	

Structural Geology

Exp: ³¹⁶ Site: ^{C0006}_E Core: ^{34X} Observer:

Summary: many fractures but striations remain faint

=> do we really deal with faults?

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
6	fissility	4	5			270	9	0	23			0	30	210.8	-12.5	
6	joint	34	36			90	10	180	20			30	46	206.0	-62.0	
6	joint	42	46			90	53	0	0			30	46	248.2	-24.6	
	joint	53	61			90	61	180	38			59	77	97.4	-42.3	
6	joint fault	63	68			270	21	0	30	75	90	51	77			
6	joint fault	68	70			270	11	180	52			51	77	294.3	-41.7	
6	joint	70	72			90	5	180	17			51	77			
6	joint	87	88			90	13	180	29			85	125	289.7	-68.5	
6	joint	93	96			90	20	180	28			85	125			
6	joint	103	105			90	5	180	40			85	125	205.6	-35.2	
6	joint	103	105			270	15	0	35			85	125			
6	fissility	124	125			270	1	0	4			85	125			
6	joint	120	125			90	58	180	24			85	125	297.2	-53.3	
6	joint	125	131			270	53	0	53			110	125			

71-76: soft material because?
dulling induced

Canoe E Structural Geology

Exp: Site: Core: 34X Observer: CFL Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
						7	joint	32	36			270	88	0	0	
	joint	26	29			90	81	0	74			0	32	302.6	-28.2	

Structural Geology

Exp: 316

Site: C0006
E

Core: 35X

Observer: KY
AY

Summary: faults in siltstone

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	Fault (Right-lateral)	51	55			90	29	0	10	71	270	50	56	323.1	-15.5	
	Fault (reverse)	53	55			270	20	180	13	50	270	50	56			
	Fault (Right-lateral)	66	72			270	44	162	0	57	270	66	79	249.1	-22.6	
	fractility	65	76			90	2	180	4			66	79	261.8	-21.3	
3	bed	129	130			90	3	0	12			122	132	138.9	52.6	



Structural Geology

Exp: 316

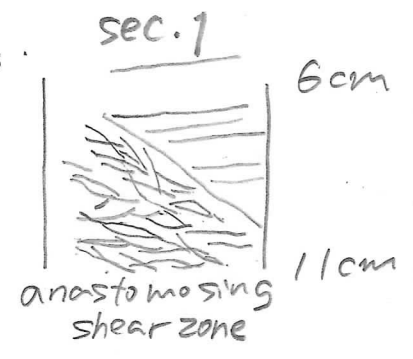
Site: C0006
E

Core: 36X

Observer: KU
AT

Summary: Fault zone characterized by anastomosing shear zones and fault breccia, presence of relatively intact pieces showing heterogeneous deformation.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	shear zone	6	15													
	fissility	15	65													
1	shear zone	65	80													
	fissility	36	37			270	2	180	8			32	37	9.4	-11.5	
1	shear zone	20	26													
	fault breccia	28	32													
1	fissility	32	40													
	fault breccia	40	70													
1	fissility	70	100													
	fault breccia	100	107													
1	fissility	110	120													
	fault breccia	120	137													
1	fissility	137	141													
	alternation of fissility intervals and brecciated interval	0	141													



Subhorizontal fissility throughout
In places, fault breccia shows a foliated aspect.

Structural Geology

Exp: 316

Site: C0026
E

Core: 36X

Observer: KH
AJ

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
4	IW															
5	shear zone	0	86													
	fissility	86	99													
	fault breccia	99	104													
	fault	43	46			270	58	0	26	54	90	44	50	352.7	22.8	
	fault	43	46			270	26	156	0	(trend, plunge)		=		(359, 58)		
	fault	75	77			270	18	0	18	30	90	65	78			
	fault (normal)	73	75			90	35	0	33	50	270	65	78	4.0	40.3	
	fault (normal)	86	88			270	45	46	0	7	270	75	88			
	fault (normal)	84	88			270	48	0	18			75	88	292.4	10.8	

Structural Geology

E

Exp: Site: 6 Core: 36 Observer: CF Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
6	crushed breccia?	22	29													crushed from 22 to 29, then blocky from 29 to 40
	fracture	8	12			270	76	180	43			0	22	22.7	27.2	
	fracture	9	12			270	81	0	60			0	22			
	fault	30	32			270	11	180	39	48	90	30	32	24.2	60.5	
	fracture	40	42			90	43	180	52			40	46			
	fault	51.5	54.5			90	68	0	48	29	90	51.5	54.5			
	fault	131	136			90	55	0	61	24	90			343.1	8.2	
7	normal fault	11.5	14			270	57	90	61	90 (n 29)	90	6	22			fractured from 0 to 45
	fault	18	21			90	49	180	30	15	270	6	22	212.2	-4.6	
	fracture					180	43	0	45			34	41			
	fracture	51	55			90	34	180	16	63	90	46	56	175.9	21.3	
	fractured interval	106	140													
8	fracture	42	51			90	65	0	37			42	48			fractured from 0 to 41
	fracture	67	73			90	56	0	55			66	70	338.4	-0.7	fractured (blocky) from 73 to 107.5

broken interval @ 101-107.5
 " " @ 111-125

Structural Geology

Exp: 316 Site: C0006 E Core: 37X Observer: Fabbri Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes	
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip		
1	blocky interval	5	93													fracture zone	
	bedding	90	21			90	8	180	01			20	21!	324.8	63.7		
	fault joint	20	21			90	33	0	17	55	90	20	21				possibly reverse fault
		20	21			90	35	0	16	50	90						
	joint	99	101			90	73	0	67			59	101!				
joint	111	116			270	31	0	71			111	121	293.2	-0.3			
2																	

low angle reverse

possibly reverse fault

Structural Geology

Exp: Site: **8 E** Core: **37** Observer: ^{OF}_{SFL} Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
2	reverse fault	12	18			90	46	180	54	78	270	8	22	296.7	-26.2	
	bedding	33	32			90	13	0	0			25	50	153.8	-61.4	
	fracture	41	43			270	12	0	32			25	50	129.8	-26.6	
	fault	45	48			90	29	180	65	45	90	25	50	105.4	-45.4	
	fracture	48	50			270	28	0	33			"	"	328.6	-27.0	
	fracture	118	122			270	53	0	0			115	133	299.8	-5.31	blocky (breccia) from 95 to 115
	bedding	69	69			90	08	180	08			61	78	214.1	-8.7	drilling induced breccia from 135 to 141
	fracture	128	132			270	48	0	16			115	133	298.3	-13.1	rare striations, faint.
3	web fracture	8	24													broken from 57 to 102 cm
	bedding	7	7			90	0	180	10			1	22	284.4	-71.6	coherent mudstone interbedded by soft sand layers or weakly brecciated zones.
	fissility	101	109			270	9	0	0			101	109	252.6	-26.1	striations or polished surfaces on the brecciated fragments can be found but they are neither clear nor well developed.
	fault	130	137			90	60	0	40	50	90	125	137			
sense?	bedding	131	131			270	05	0	20							

Structural Geology

Exp:

Site: 6E

Core: 37

Observer: ^{OF}
SFL

Summary: no more subs unit

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
4	beddy	5	5			270	02	0	5			0	25			
	beddy	70	70			90	0	0	3			62	85	128.8	-8.5	
	fracture	63	67			90	51	270	51			62	85	138.4	-49.1	
	fracture	79	82			90	56	0	60			62	85	325.3	-0.2	
	fracture	79	83			270	46	0	6			62	85			
6	fracture	5	10			270	24	90	0			2	12			
	"	7	10			270	20	0	6			2	12	283.4	29.7	
	beddy	18	18			90	8	180	3			16	30	281.9	11.1	
	fracture	26	30			90	55	0	56			16	30	359.1	9.1	
	fracture	92	98			90	51	0	0			89	114			
	normal fault 正断层	92	95			90	28	0	59	80	50	89	114	338.1	32.6	
fracture	129	134			270	48	180	5			124	139				

fractured zone from 46 to 65 (breccia?)
and from 78 to 88

Structural Geology

Exp: 316

Site: 50006

Core: 39X

Observer: F. Labri

Summary:

shear bands (deformation bands) in coherent pieces
fractured and brecciated mudstone and relatively coherent intervals.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault (fracture)	50	53			90	0	0 60				47	60			from 7 to 129, the core is severely damaged
2	Normal fault	19	21			90	28	180	23	10	270	16	25			
2	shear zone															
2	joint	64	66			270	51	180	30			64	68			
2	joint	57	60			90	52	0	63			57	62			
2	joint	23	27			90	53	0	45			23	37			
2	fissility	130	130			270	2	180	5			120	141			
2	fault	121	130			270	65	180	5			120	141			
2	fault	134	137			270	41	180	53			120	141			
3	joint	17	20			270	50	180	70			12	22			
3	fault	31	37			270	40	0	52	21	270	31	37			

Structural Geology

Exp: 316 Site: 0006 E Core: 39X Observer: Fakhri K.U. A.Y. Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
7	fault N45°E-90°	97	120									100	118			Drilling-induced breccia, showing striations
7	fault	87	93			270	69	0	69			75	93	327.8	-24.0	
1	shear zone	0	5			90	80	1	0			0	5	104.5	-17.0	
	shear zone	0	3			90	80	356	0			0	5			
2	shear zone	16	20			90	54	43	0			16	20	123.5	-9.8	
	shear zone	16	20			90	76	43	0			16	20	123.5	-9.8	
	shear zone	29	32			90	32	333	0			29	36			
	shear zone	29	33			90	27	337	0			29	36			
	shear zone	29	33			90	27	337	0			29	36			
	shear zone	33	36			90	29	337	0			29	36	262.7	28.6	
	shear zone	33	36			90	32	337	0			29	36			
	shear zone	33	36			90	33	3	0			29	36			
	shear zone	38	39			90	29	342	0			38	41	311.1	33.3	

Structural Geology

Exp: 316

Site: 0006
E

Core: 39X

Observer: Faber
Li

Summary: found numerous shear bands (dark colors)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
5	bedding	27	27			270	2	180	5			20	47			← P-mag data?
5	shear zones	54	56			90	27	0	70			54	60			black shear zones
5	shear zone	64	66			90	16	180	52			63	81			5 shear zones between 54-56 cm
5	Fault (N)	41	45			90	57	180	20	40	90	39	47			
5	shear zone	77	77			90	28	0	45			63	81			
5	fracture	120	124			90	45	0	51			109	127			
6	fault	92	94			270	28	0	0	68	90	90	96			
6	fracture	120	126			270	42	0	5			118	126			
6	fracture	129	135			270	45	0	22			129	141			
6	fracture	130	136			270	60	0	0			129	141			
7	fault (R)	6	6			270	1	0	28	23	270	6	14			
7	fault (RL)	29	32			270	29	180	48	44	270	29	34			

black shear zones

5 shear zones between 54-56 cm

← P-mag data?

det. band

Structural Geology

Exp: 316

Site: C0006
E

Core: 39X

Observer: K.U.
A.Y.

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes	
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip		
						2	shear zone	39	41			90	34	57	0		
	shear zone	40	41			90	25	359	0			38	41				
	shear zone	40	41			90	25	359	0			38	41				
	shear zone	46	51			90	55	316	0			46	51	98.9	49.7		
	shear zone	46	51			90	76	306	0			46	51				
5	shear zone	57	59			90	22	65	0			54	59	353.3	-1.5		
	shear zone	57	59			90	24	27	0			54	59				
	shear zone	55	57			90	23	8	0			54	59				
	shear zone	55	57			90	35	300	0			54	59				
	shear zone	65	67			90	16	344	0			63	67	310.4	-3.0		
	shear zone	65	67			90	14	356	0			63	67				
	shear zone	79	81			90	29	353	0			75	81	301.8	-35.4		
	shear zone	79	81			90	20	323	0			75	81				

Structural Geology

Exp: 316

Site: C0006
E

Core: 39X

Observer: A.Y

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
7	Shear zone	11	13			90	87	20	0			8	14	327.9	-10.4	
	Shear zone	11	13			90	18	315	0			8	14			

Structural Geology

Exp: 316

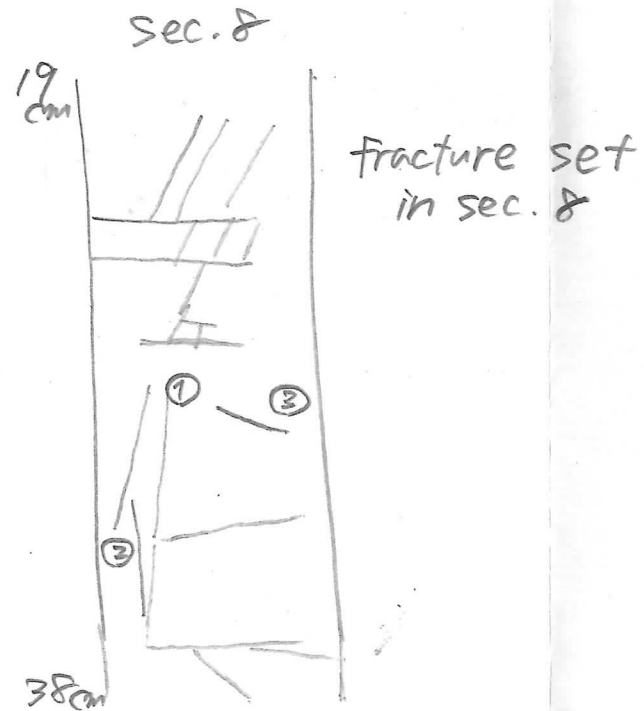
Site: C0006 E

Core: 40X

Observer: KU AT

Summary: Fractured and brecciated mudstone w/ coherent pieces. some coherent pieces include shear bands (def. bands)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault (normal)	47	48			90	4	180	30	52	270	45	52	172.2	-0.2	
	fissility	77	92			90	15	180	7			77	92	340.4	-33.2	
3	bed	43	43			90	7	0	10			25	44	34.8	48.5	
3	fissility	120	121			270	20	180	16			115	122	299.0	-7.9	
6	fault (normal)	7	10			270	45	0	48	16	90	6	11	315.9	0.9	
	fault (normal)	41	46			270	62	333	0	66	90	41	46			
	fault (normal)	41	46			270	44	322	0	78	90	41	46	285.6	11.0	
8	fault ①	26	31			270	78	172	0	76	270	19	38	63.6	-13.2	
	fault ②	26	31			270	83	28	0	82	90					
	fault ③	26	28			90	52	180	12	85	270					
	fault (normal)	115	121			90	66	180	16	28	270	110	132	offset 5mm		
	fault (normal)	122	131			90	61	160	0	62	90	110	132	45.7	7.8	



for Sedimentology

cross lamination
 Sec. 8, 73-80 cm
 (270, 20) (180, 8) } for paleo-current determination

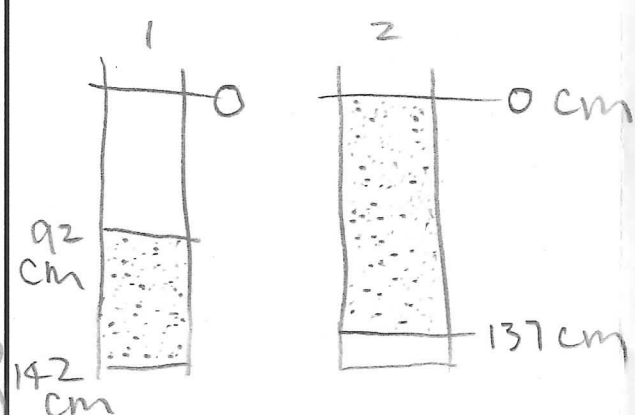
Structural Geology

Exp: Site: 6E Core: 41 x Observer: ^{OF}LFL Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole	
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip
1	fault (RL)	86	89			270	57	0	14	74	90	38	93	331.1	16.8
	joint	80	88			270	65	0	70			38	93		
	joint	75	79			270	54	0	32			38	93	337.2	16.7
	bedding	92	94			270	8	0	18			74	110	5.4	14.1
2															
3	fissility	13	14			90	11	180	18			0	60		
	fissility	16	16			90	0	0	2			0	60	230.8	-4.8
	fissility	56	56			270	2	0	1			0	60		
	black shear zone	59.5	59.5			90	7	180	34			57	60		

notes section 1
 ① broken (drilling-induced?) silt/sandstone from 0 to 71
 more coherent sandstone (laminated) from 71 down to 93
 "section 2" but soft sandstone from 93 down to section 2-10cm
 ② soft and clayey sand from 10 down to 137cm
 from 137 down to 140: coherent sandstone

thick sand layer in section 2. is 187cm in thickness.
 coincides with low resistivity read from LWP data.



In section 3 = broken section from 79 to 101 cm

Found bubbles (white) on the surface of section 2 (sand layer), due to gas hydrate? decompression of

Structural Geology

Exp:

Site:

Core: 42X

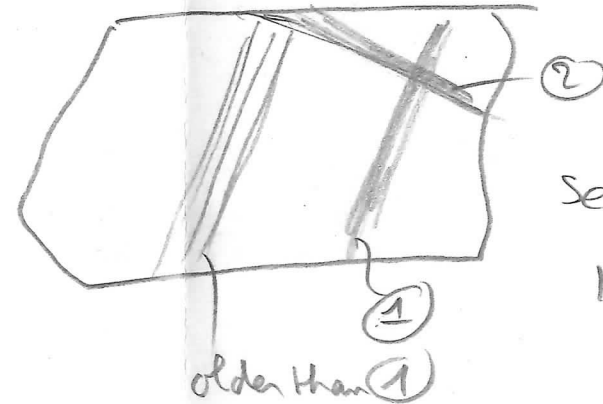
Observer:

Summary: Many shearing zones, the thicknesses of which range from 0.5 mm to 0.5 cm

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1												13	24			
												26	29			
												30	33			
												34	40			
1	black shear zone	41	48			270	64	0	0			41	48			
												53	60			
												63	91			
1	fault normal?	94	96			90	18	180	63	270	57	92	139	133.4	-30.0	
		109	111			270	14	0	50	04	270	92	139	306.6	-19.5	
1	shear zone	20	21			270	27	0	16							
1	shear zone	21	22			270	22	0	28			16	24			
1	shear zone	109	111	①		90	18	0	75			109	116			
1	shear zone	109	114	②		270	68	0	18			109	116			
1	fault	134	139			270	57	0	45	37	90	134	139	8.9	-39.5	

0-13: blocky

Kotaro's sample



Section 1 = 109-116 cm

Structural Geology

Exp: 316 Site: C0006 E Core: 42X Observer: Fabbrini Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
3	fault (R.R.L)	9	16			270	53	0	22	29	90	9	16	228.8	-16.7	
3	fissility	26	27			90	16	180	23			18	68	35.7	-15.8	
3	bedding	51	52			90	11	180	9			18	68	157.6	-4.7	
3	fracture	100	110			90	65	0	1			100	110	53.2	-7.6	
3	fracture	119	122			270	58	0	75			117	130	318.9	-9.1	
3	fracture	134	139			90	39	0	19			134	140	82.0	-16.2	
<hr/>																
4	fault	5	8			270	47	180	5			1	8	281.1	-19.7	
4	fracture	39	42			90	25	0	19			39	45	34.4	-13.1	
4	fracture	98	98			90	0	180	65			98	102	159.8	-18.5	
<hr/>																
5																
<hr/>																
6																
6	fracture	59	63			270	38	0	23			50	70			0-60 cm. strongly fractured interval



Structural Geology

Exp: 316

Site: C0006
E

Core: 42X

Observer: Falabr
Li

Summary: Mudstone with occasional brecciation. No clear

polishing and striations on the fragments

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
7	fracture	33	42			270	60	180	45			23	70	271.0	-27.2	
7	fracture	45	59			90	73	0	38			23	70	319.6	-13.2	
7	fault	61	64			270	49	180	6	50	90	23	70	341.0	-6.5	
7	fault (R)	83	87			90	27	180	20	8	90	64	95	305.8	-48.9	
7	fracture	87	93			270	52	0	27			64	95	282.3	-3.9	
7	fracture	100	110			270	68	180	50			100	110	22.2	-11.8	
7	fracture	136	141			90	56	0	0			122	141			
8																
	cc bedding	12	14			270	13	0	5			11	30			

Structural Geology

Exp: 316 Site: 0006 E Core: 43 X Observer: Fabrice Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
4	fracture	89	91			90	28	0	43			80	97	327.5	-16.0	
4	fracture	92	96			270	47	0	20			80	97	311.4	-14.6	
6	fault	33	36			90	45	0	44	56	90	33	47	16.3	-4.3	
6	fissility	58	64			270	7	0	10			57	71	341.1	-28.5	
6	fault (N)	64	68			270	37	180	19	48	270	57	71	173.6	-36.6	
7	fracture	15	19			270	39	180	12			10	20	33.4	-22.9	
7	fissility	69	70			270	10	0	1			57	72	355.1	6.2	
7	fracture	96	99			270	45	0	44			84	99	266.6	-10.9	
cc	fracture	14	15			90	10	180	13			15	31			

Structural Geology

Exp: 3/6

Site: C0006 E

Core: 43X

Observer: Fabbrini Li

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
2	fault (N)	42	49			270	50	0	11	28	90	42	49	308.1	-33.3	
2	fault (N)	43	49			270	42	0	21	21	270	42	49			
2	fissility	119	119			270	10	0	11			110	129	34.5	-22.0	
2	fault (N)	110	113			270	60	0	50	26	270	110	129	320.9	-13.3	
3	fissility	21	22			270	12	180	1			15	25	333.2	-20.3	
3	fault (N)	39	43			270	25	180	30	28	270	40	60	47.7	-31.5	well striated surface. found fault steps (see picture under microscope)
3	fault	38	42			270	30	180	16	50	270	40	60			
3	fissility	52	54			270	1	0	6			40	60	341.3	-49.3	
4	fracture	4	9			270	59	180	24			4	22	334.4	-15.3	
4	fracture	18	23			270	65	180	36			4	23	297.7	-17.2	
4	fault (N)	79	82			90	55	0	31	25	90	79	89	147.9	-21.4	

Structural Geology

Exp: 3/6

Site: 00006 E

Core: 43X

Observer: Falbbi Li

Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
2	fault (N)	42	49			270	50	0	11	28	90	42	49	308.1	-33.3	
2	fault (N)	43	49			270	42	0	21	21	270	42	49			
2	fissility	119	119			270	10	0	11			110	129	34.5	-22.0	
2	fault (N)	110	113			270	60	0	50	26	270	110	129	320.9	-13.3	
<hr/>																
3	fissility	21	22			270	12	180	1			15	25	333.2	-20.3	
3	fault (N)	39	43			270	25	180	30	28	270	40	60	47.7	-31.5	well striated surface. found fault steps (see picture under microscope)
3	fault	38	42			270	30	180	16	50	270	40	60			
3	fissility	52	54			270	1	0	6			40	60	341.3	-49.3	
<hr/>																
4	fracture	4	9			270	59	180	24			4	22	334.4	-15.3	
4	fracture	18	23			270	65	180	36			4	23	297.7	-17.2	
4	fault (N)	79	82			90	55	0	31	25	90	79	89	147.9	-21.4	

Structural Geology

Exp: Site: 6E Core: 43X Observer: Summary:

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault (R)	36	39			270	60	0	41	27	270	33	70	83.1	-6.5	17-33: drilling in deformed fractured interval
						270	59	180	22			33	70			
1	shear zone	38	39									33	70			
1	fracture	40	42			90	16	0	10			33	70			
1	fracture	41	46			270	58	0	36			33	70	71.9	3.5	
1	fracture	44	51			90	55	0	0			33	70	73.0	2.2	
1	fault (N)	55	65			270	62	0	56	53	270	33	70	53.6	-1.4	
1	fault (N)	56	68			270	57	0	18	40	270	33	70			
1	fissile	85	86			90	13	180	23			70	89	171.6	-18.0	
1	fault (N)	92	93			270	15	180	1	2	90	89	113	159.9	-25.7	
1	joint	96	103			90	52	180	21					139.2	-10.1	

114-141 cm: highly broken interval.

Structural Geology

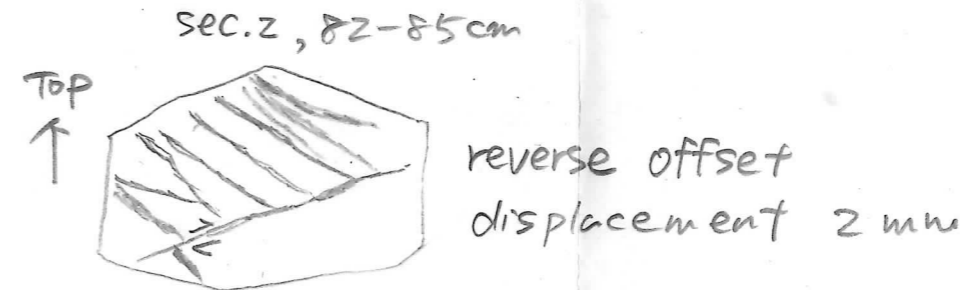
Exp: 3/6 Site: 60006 Core: 44X Observer: A.J. K.U.

Summary:

Fractured mudstone with cm-scale coherent pieces.
~10cm

Shear zones are sometimes seen in coherent pieces.
Sec. 4, 65-90cm: fine grained zone.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault	17	19			90	66	2	0			10	23	126.6	-42.3	
	fault	17	19			90	52	180	28	30	270	10	23			
2	fissility	59	61			270	20	0	2			58	64	338.7	-5.4	
	fault (normal)	74	78			270	44	180	10	40	270	73	80	355.1	-18.0	
	shear zone	82	85													
3	fault (reverse)	60	62			90	20	0	14	46	270	54	69	44.52	-27.74	
	fault (reverse)	66	68			90	13	0	16	83	270	54	69	39.9	-15.4	
	fissility	74	75			270	14	180	9			70	76	304.6	-7.0	
	fault (normal)	122	131			270	63	212	0	26	90	122	131	203.7	16.3	
6	fault (right-lateral)	12	15			90	40	0	22	87	270	10	27	13.2	-4.7	
	fissility	20	21			90	18	0	17			10	27	26.9	-3.7	
cc	fault (normal)	11	15			90	59	180	7	21	270	9	17			
	fault (normal)	19	25			270	66	0	2	20	90	17	25			



Structural Geology

Exp: 316

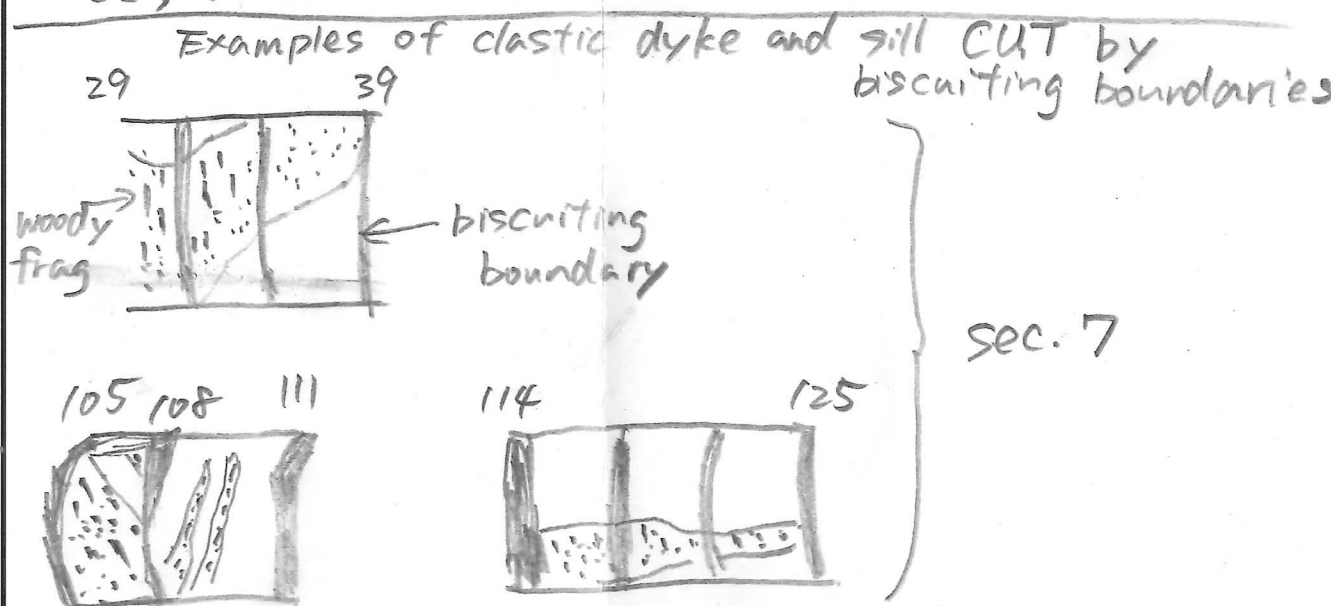
Site: C0006 E

Core: 45X

Observer: KM AY

Summary: Fractured and brecciated mudstone w/ coherent interval
clastic dyke and sill in coherent interval

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault	7	11			270	30	144	0			6	15	21.7	28.9	Sec. 1 - Sec. 5, 35 cm : Fractured mudstone
2	fault	48	49			270	6	0	44	45	270	44	56	353.5	-4.0	Sec. 5, 35 cm - Sec. 6, 71 cm : fault breccia fragments of cm- to mm- size
	fault (normal)	100	101			90	32	0	13	17	90	98	103	303.7	-20.3	Sec. 6, 71 cm - Sec. 8, 15 cm : coherent interval composed of sands and mud
	fault (normal)	110	112			90	18	0	23	84	270	108	117			Sec. 8, 15 cm - 105 cm : brecciated mudstone w/ relatively coherent interval
	fault (normal)	110	112			270	22	180	44	79	90	108	117	9.5	-2.5	
3	fault (reverse)	4	7			90	13	180	68	9	270	0	12	56.7	-9.3	CC, 0-8 cm : breccia
	shear zones (dark bands)	36	40													CC, 8-44 cm : sand
	fault (normal)	3	6			90	64	350	0	25	270	0	12			
	shear zone	36	40			270	58	189	0							
	shear zone	36	40			270	66	175	0			36	40	336.47	-32.01	
	shear zone	36	40			270	50	179	0							
7	clastic dyke and sill	30	125													
CC	bed	20	21			90	12	0	10			18	23			



Structural Geology

Core 46X
(372-381 m in depth)

Exp: 366

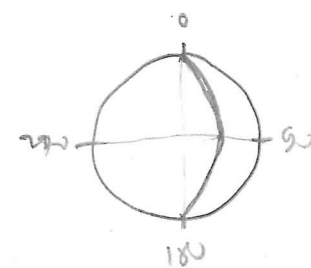
Site: 0006 E

Core: 46X

Observer: F. Adami

Summary: Highly brecciated mudstone & ash layer in section 1

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault	9	22			270	68	0	47	36	90	9	22	243.9	12.0	
1	fault	9	22			270	68	0	0			9	22			
1	breccia	33	54													Light greenish gray interval of brecciation
1	boundary	54	54			90	6	0	30					266.4	57.9	- Check CT images. + smear slides Between dark breccia and greenish gray breccia.
1	shear zone	78	80			90	48	0	85			78	81	126.5	-8.7	
1	shear zone	79	81			90	48	0	87			78	81			
1	shear zone	80	81			90	44	0	67			78	81			Vertical shear zone
1	shear zone	99	99			270	10	0	44			97	100	267.3	18.1	
1	shear zone	108	108			90	0	180	89			107	109	275.0	-34.3	
1	fault (N)	121	129			270	82	0	82	10	90	115	127	273.6	-13.35	



Structural Geology

Exp: 316

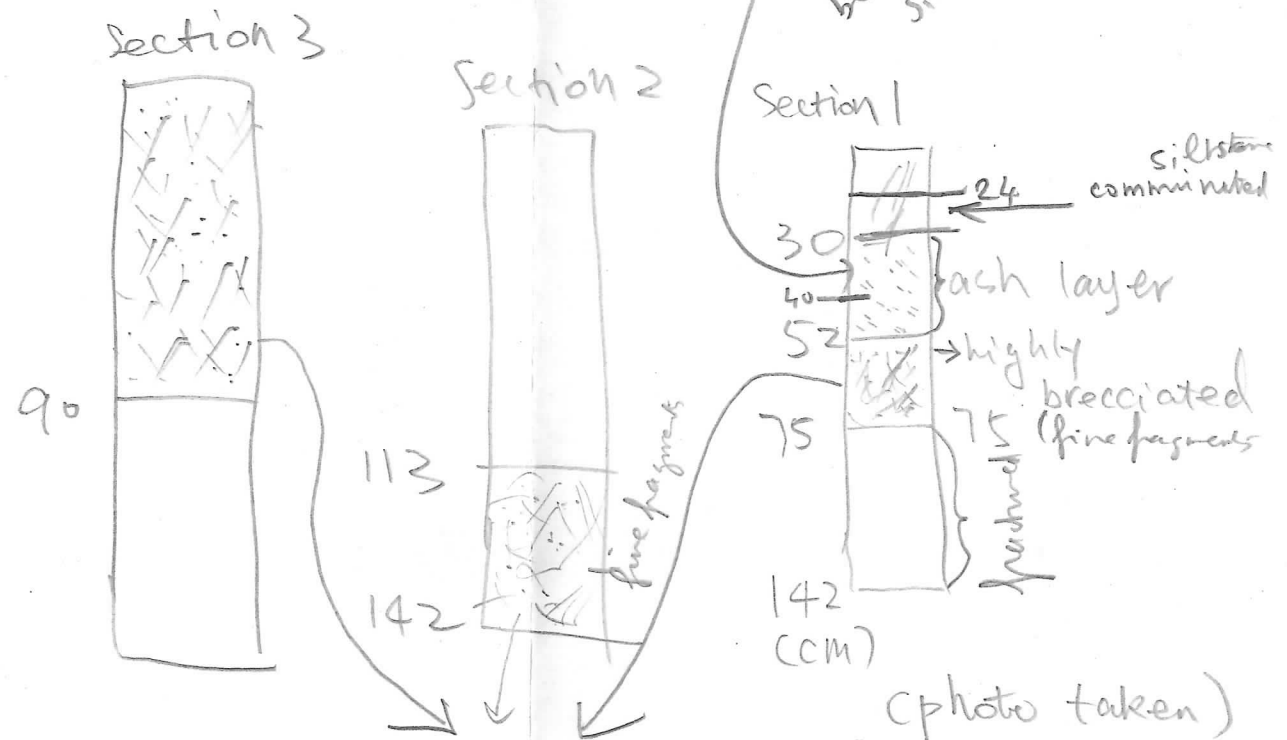
Site: 00006

Core: 46

Observer: Fabrice

Summary: Highly brecciated

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
2	fissility	11	18			270	9	0	6			9	24	340.2	-10.4	
2	fault (N)	37	37			270	12	180	14	19	270	37	62	66.9	-55.8	
2	fault (N)	36	38			90	27	180	45	2	270	37	62			
2	shear zone	38	39			270	14	180	75			37	62			
2	fracture	45	49			270	42	180	51			37	62	356.9	-20.3	
2	fracture	56	62			270	82	180	75			37	62	344.2	-23.8	
3	breccia	0	90													
3																
4	fissility	44	45			270	4	180	15			37	49	230.5	-32.2	fairly coherent.
4	fault	52	56			270	40	180	19			38	84	291.2	-18.5	
4	fault (N)	60	61			270	30	0	0	30	90	38	84	315.1	-27.0	



Highly brecciated zone. Sizes of fragments range from 1mm to 2cm. Can find ^{rare} polished or striated surfaces on the clasts.

Structural Geology

Exp: 316

Site: C0006

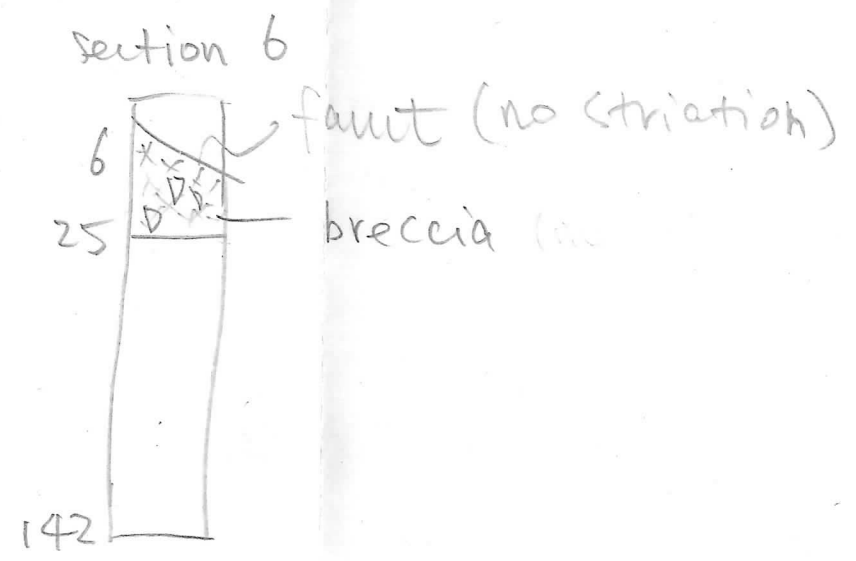
Core: 46X

Observer: Fabbri

Summary:

No shear zone found. Having thick brecciated zone

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
4	fault	52	78			270	88	0	1			52	78	232.4	-25.4	
6	fissility	3	3			90	6	180	1			0	10	203.8	-5.6	
6	fracture	4	11			90	46	0	14			0	11	297.9	-11.3	
6	fissility	42	42			270	5	0	3			36	70	224.3	-40.2	
6	bedding	122	122			270	10	180	4			104	124	204.4	-7.6	
7	fissility	23	24			90	0	180	13			14	36	160.0	-24.7	
7	fault (LL)	33	36			270	44	0	4	88	90	14	36	28.4	-28.1	
cc	bedding	25	30			90	8	0	2			7	42			



Structural Geology

Exp: 316

Site: 00006

Core: 47X

Observer: Fahri
Li
Tavakoli

Summary: Found 3 ash layers.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
7	bedding	3	5			90	16	180	8			0	28	319.7	14.8	
7	fracture	83	86			270	34	0	26			37	89	17.7	50.2	
7	fracture	124	130			90	48	0	38					19.2	37.1	
8		27	41													fractured interval
8	shear zone	9	11			270	21	180	64			7	13	8.9	268	
8	shear zone	24	25			270	40	0	72			15	36	341.0	30.7	
9																Intensive biscuiting in sections 10 & 9!

Structural Geology

Exp: 316 Site: C0006 E Core: 47X Observer: Fabbrini Summary: Fairly coherent

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fissility	25	25			270	4	180	12			21	28	358.7	8.0	
1	bedding	110	110			90	7	180	22			73	140	192.5	-4.2	
1	fracture	90	97			270	50	180	55			73	140	354.4	-3.8	
2	fault (N)	30	38			90	62	180	20	35	90	12	38	346.1	65.7	
2	fracture	59	70			90	60	180	9			59	70	38.3	6.3	
2	fissility	132	132			270	8	0	13			124	138	21.1	26.1	
3	fracture	118	127			90	60	0	44			118	127	293.3	37.1	
4	fracture	27	34			90	54	0	36			23	33	30.6	31.6	
4	fault	29	31			90	40	0	30	60	270	23	33			
6	fracture	16	19			270	41	180	29			16	35	63.3	67.1	
6	fracture	21	27			90	52	0	40			16	35	267.8	36.5	

Structural Geology

Exp: 316

Site: 6006E

Core: 47X

Observer: A.C.

Summary:

several faults in mudstone.

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
7	fault (reverse)	79	80			270	31	80	50	63	270	79	83	345.4	38.0	
	fault (LL)	84	85			270	30	0	26	32	270	83	89	17.7	50.2	
	fault (normal)	128	129			90	53	0	29	21	90	124	131	334.6	26.3	
8	fault (normal)	8	10			270	34	180	22	30	90	7	15	8.9	26.8	
9	fault (reverse)	27	30			270	84	10	0	72	90	25	34	338.4	50.0	
	fault (RL)	61	63			90	60	166	0	66	270	59	65	243.6	55.3	
	fault (normal)	99	100			90	4	0	63	65	270	97	101	4.4	55.4	

Structural Geology

Exp: 316 Site: C0006
E Core: 48X Observer: A.T.

Summary: sec. 1~6 : heterogeneous brecciation
sec. 7~CC : dominated by coherent pieces

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault (normal)	120	121			270	12	180	3	28	90	117	123	80.5	72.3	
2	fault (reverse)	28	29			90	78	350	0	73	270	25	30	344.6	58.0	
	fault	34	36			90	48	120	0			31	38	3.8	34.8	
	fault (reverse)	93	96			90	38	0	4	38	90	92	99	268.3	54.5	
3	shear zone	93	98			270	70	338	0			93	98	133.4	50.8	
	shear zone	93	98			270	60	338	0			93	98			
4	fissility	107	110			270	19	180	1			106	111	45.0	41.9	

Structural Geology

Exp: 16 Site: C006
 Core: AX Observer: AT
 FU

Summary: Dominated by coherent pieces
 In places, brecciated (enhanced by coring process)

section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip		2nd app. dip		striation on surface		coherent interval (for P-)		P-mag pole		notes
						az.	dip	az.	dip	rake	from	top	bottom	az/trend	dip	
1	fault (normal)	70	75			90	54	180	28	66	90	68	82	54.1	41.5	
	fault (normal)	94	99			90	48	180	23	8	270	94	100	9.9	51.1	
2	fault (reverse)	16	20			270	44	0	4	37	270	12	21	148.4	45.0	
3	bedding	4	15			90	5	0	7			10	15	78.7	72.1	
5	fissility	63	68			90	8	180	16			62	73	314.9	24.9	
	fault (normal)	74	83			270	54	179	0	58	270	74	83	227.1	12.2	
	fault (normal)	79	83			270	50	172	0	62	270	74	83	233.9	29.8	