78 features reoriented w/ a save 50 p-mag pole

400 measured features

Paleomag

Data Sheets

(copies of stone)

elim bed fissility vein stone

£100 Bed + Fissil vein stone

100

200

Could work to get more faults oriented.

Structural Geology

Exp: 315 | Site: C0002B | Core: 20R | Observer:

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	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P-) top	coherent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	~36	38		2	270	5	0	5											light gray clay layer with a sharp base
	fissility	58	59			270	3	0	2											
	shear zone(?)	65.5	66		0.2	90	2	180	8											dark gray forams in this zone; greenish layer truncated ?
	bedding	88	90		≤2.0	270	3	0	1											greenish gray clay with a irregular top
	fissility	96	96.5			270	3	0	2											
	bedding	122	127		5	270	7	180	3											sharp top; bioturbated; light gray clay; 2.5mm thick white ash
2	bedding	2	6		4	270	3	0	6											fine sand layer
	"	74.3				270	5	0	0											contact between a lighter gray clay and a darker gray clay
3	bedding	66.5	67.5		0.5	270	5	180	5											fine-sand layer
	bedding	110				90	0	0	4											thinly laminated sand

Reverse (95.5, -51.4)

Reverse (61.2, -51.4)

Structural Geology

Exp: 315 | Site: C0002B | Core: 21R | Observer: JAN

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	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P-) top	coherent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	84.5	84.5			270	08	000	02											contact; siltstone below w/ v. fine sandstone above
4	bedding	59.5				90	2	000	2											contact between dark gray laminated fine-grained (thinly) sand and greenish silt bioturbated
																				Reverse (247.3, -49.4)
	4	120	120.5		0.5	90	0	0	0											greenish gray silt layer
	4	133	133.5			90	1	0	0											thinly laminated fine-grained sand layer

Structural Geology

Exp: 375 | Site: C0012B | Core: 22R | Observer:

Summary:

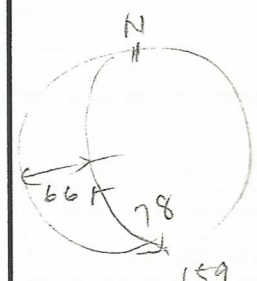
section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P- top	coherent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	12	12.5			230	2	0	2											pumiceous ash

Structural Geology

Exp: 315 | Site: C0002B | Core: 23R / 24R | Observer: JON

Summary: Lots of drilling disturbance, bedding disturbed, most pieces <4cm long

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	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P-) top	coherent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	122	122			090	03	180	08											contact at ~ top of coherent piece from 121 - 125
4						Reverse (253.4, -54.4)														Interval of conspicuous steep fractures (core ref. frame) from 22-47 cm. Filled w/ drilling breccia and mud. Drilling induced
23R																				
24R										plunge										
1	fold	46	48	47	02	~~350~~				350	00			46	48					up core ↑ 1cm recumbent (slump?) fold isochronal in stratified mud layer thickening observed in fold hinge
	bedding	81	82	81		090	04	000	02	Reverse (270.7 -17.3)				79	84					
3	bedding	16	17	16.5	0.3	270	03	000	01					10	20					dark mud layer 0.7 cm fine sand layer in silt
1	Fault	123	126			270	60	180	34											Slicks South 180° 78° thrust

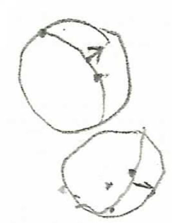


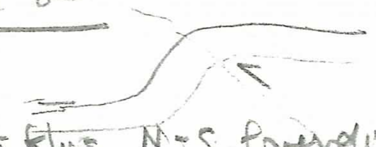
Structural Geology

Exp: 315 | Site: C0002B | Core: 25 | Observer: Tim

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	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P-mag) top	coherent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	63	78			90	2	0	2					63	78					
	Fault	66	74			90	51	15	0	No sense of slip No slicks										Disturbed by drilling but similar bedding as #1
2																				
	26R																			
1	bedding	73	84			90	8	180	8					73	84					
	Fault	43	50			90	57	357	0	Reverse (331, -48.2)										No sense but looks Normal; No slicks
	27R																			
1	bedd.	61	75			270	4	0	0					61	75					
	fault	101	107			90	41	180	41	Reverse ~~(122.7, -60.6)~~ (143.6, -66.7)										Slicks rake 81 from south; Normal
2	IW																			
3	Fault	57	62			90	49	303	0	[286 76] All trend reversed				57	62					Thrust trend 77° [All trend plus 63]
	Fault	104	113			90	51	180	24					103	115					Thrust Trend 112 w/ ductile fold; w/ axis flat N-S trending

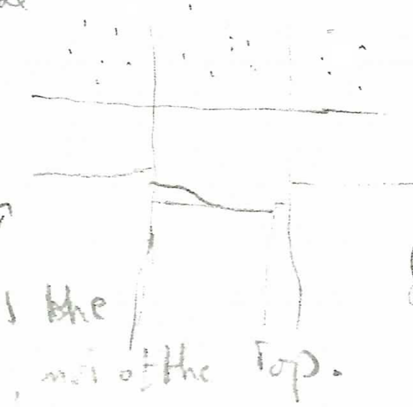




Structural Geology

Exp: 315 | Site: C0002B | Core: 28R | Observer: Tim V. | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P- top	coherent interval bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	Synsedim. fold	12	15	NA																Axis 49 10 - Synsedimentary
	fold	21	23																	Synsedimentary 20 10
	~~bedding~~ (fissility or schistosity)	19	20			90	11	0	14											between folds, schistosity.
	fold	27	30																	148 15 Synsedimentary
	schistosity	38	39			90	10	0	4											
	bedding	75	77			270	8	0	8											Mode on coarser
	schistosity	88	89			90	8	0	0											irregular contact.
	bedding	108	111			270	13	—	—											coarser & dark
	bedding	132	135			270	9	0	4											
2	~~be~~ schistosity	77	78			90	4	180	2	(122.7		-60.6)								Reverse
3	Veins	8	17																	Subvertical



Structural Geology

Exp: 315 | Site: C0026 | Core: 29R | Observer: TM | **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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	71	82			270	21	0	5					71	82					~1-140 - 15 or so coherent pieces all with fairly good bedding- but pieces are too small for normal paleomags as this all may have rotated.
	fault thrust	51	60			270	54	180	7					51	60	Slicks from 242				
	Fault Thrust	100	109			270	49	0	22	Slicks from 32										
	bedding	100	109			270	31	0	22											
2	In																			
3	Fault N-dip	0	34			270	86	335	0	Slicks plunge 42 south										- Although broken this looks coherent
	bedd.	0	34			90	8	0	12											
	Fault	43	64																	Prob. same sheep as above but more deformed by drilling
CC	shear bands	10	11			90	8	180	12					10	14					Normal sense but no Slicks
	2nd band	112	13			90	8	180	12											

Structural Geology

Exp: 315 | Site: C0002 | Core: 30R | Observer: [illegible] | **Summary:**

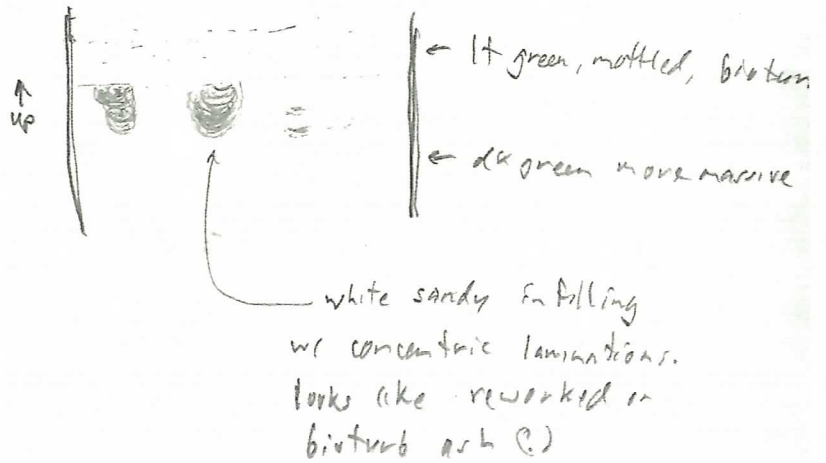
section	structure ID	top of struct	bottom of struct	average depth	thickness (cm)	core face app. dip az.	core face app. dip dip	2nd app. dip az.	2nd app. dip dip	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	22				90	7	180	17					60	31	maybe to 45				
	bedding	84				90	12	180	12					76	92					
2	EW							(323.1, −59.4)												<10cm Few blocks have rotated by drilling
3																				
31R																				
1	bedo	98	108			270	19	0	28	→ (~~323.1, −59.4~~) Reverse (267.9, −68.5)										More fissile and w/ lots of soft sediment structures esp Sec#2 Lot of coherent 5-10cm block [illegible] prob beautiful synsedimentary N-[illegible] - compact.
		90	97																	
2	bed	65	79			90	11	180	6	→ Reverse (280.9, −60.3)				65	79					

Structural Geology

Exp: 315 | Site: C0002B | Core: 32R | Observer: JON | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	24.5	25.0		0.5	090	00	000	02											
								Reverse												
3	folds	18.0	36.0					(356.9, -50.6)						0	42					
4	bedding (mottled black bed)	32	33		1.0	090	00	000	06											
								Reverse												
								(167.9, -36.3)												
6	bedding (green bed)	82	82.5		0.5	090	00	000	01											This is the NOT Archive Half the working half
								Reverse												
								(302.5, -39.3)												
	sm. unconformity (scour plane)	100.5	100.5	0	0	090	00													
								Reverse	(~~188.3, -43.3~~)											
									(188.6, -19.5)											No things to rotate here

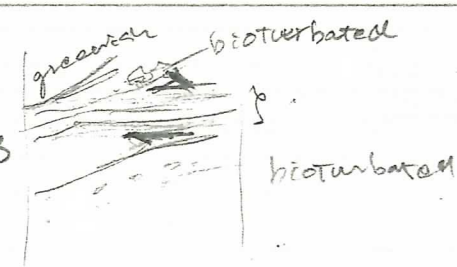
FA plunges 08 toward 000



Structural Geology

Exp: 315 | Site: COD28 | Core: 33R | Observer: JON

Summary: Poor recovery, drilling breccia from sect 3 to CC. Sect 2 = IW

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedding	63.5	63.5			270	01	180	02											contact between sandy unit below w silty unit above. Bedding fissility weakly developed
								→	(301.9, -43.3)											
																				CORE 34 empty CORE 35 empty
CORE 36 1																				drilling damage throughout largest intact piece 40.5-47 cm interval well developed ~horiz fissility
2																				
CC																				
37R 1	shear zone	6	6.5		0.5	220	5	180	9											
Drilling Disturbances	fissility	113				270	1	0	5	?	// bedding									Section 1: broken into 0.5 ~ 8 cm thick pieces
	bedding	139				90	7	180	28	?	contact between lighter gray silt below and darker greenish gray clay above									Section 3: broken into pieces up to ~5 cm
3	) drilling disturbances throughout the section																			
CC																				

not sure, because of disturbances

38R?

Structural Geology

Exp: 315 | Site: C0002B | Core: 39R | Observer: Kyu | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1		0	50																	broken into pieces of 0.5~5cm long pieces.
		50	140																	mud slurry with broken pieces of mm ~ to several cm size
2	fault breccia	2.5	12																	brecciated into submm ~ several mm-size pieces, but still coherent!
CC	1	2.5	12																	
		24	26			290	3	180	11											
		28.5	33																	

Structural Geology

Exp:315 | Site:C0002B | Core:40R | Observer:Kyu | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1																				broken into 3 ~ 15 cm long pieces; core width thinner due to drilling (≈ 3.5 cm) LOTS of bioturbation
	dish structure (?)	21	26																	 dish-like mud pieces in sandy matrix
	fault	39																		black polished surface with slickenlines measurement impossible due to rotation during coring
2		0	29	massive																Thin cores 3.5 ~ 4 cm in width and mud slurry
		31	52	bioturbation and dish (?) structures																
4																				relatively massive
cc																				broken into pieces subhorizontal fissility

Structural Geology

Exp: 315 | Site: C0001 | Core: 41R | Observer: TM | **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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bedd.	80	82			270	16	0	6	→		(331.2		-33.7)						'All hem[illegible] area w/ [illegible] of bioturbation
											Reverse									
2	bed	62	63			90	16	0	9	→		(195.9		-9.18) / 50	65					
	bed	125	126			270	22	0	3		Reverse				131					
										X(				)						
4	bed	70	71			90	7	0	2					53	83					
										→	Normal									
5												(218.1,		52.3)						Not much.
6c																				

Structural Geology

Exp: 315 | Site: C0002 | Core: 42R | Observer: | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	coherent interval (for P-mag) top	coherent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
2	bed.	60	60			270	1	180	10					34	116					good for 160.5
2	bed					90	13	180	8			?		121	140					Slicks trend 131 plunge 50 Rake 82
3	fault	88	96			90	34	180	41	52	51			84	96					
3	fault Normal	136	138			90	23	0	43	305	52									Slicks trend 50° plunge 57 Rake 99

fell

(161.5, 60.4)

Normal

less reliable

looks more like 100° Declination

99.0

See notes from Kataro

Says Declination is 94

Structural Geology

Exp: 315 | Site: 000020 | Core: 42R | Observer: | Summary:

Pmag / old

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
2	bed.	60	60			270	1	180	10					~~34~~	~~116~~		~~0 = 90~~			NA
2	bed					90	13	180	8					121	140		~~100 = 35~~			slicks trend 131
3	fault	88	96			90	34	180	41					84	96		100-35			
3	fault normal	136	138			90	33	0	43								Dec 94			slicks trend 50°

Structural Geology

Exp: 315 | Site: C0002A | Core: 43R | Observer: | Summary:

Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	vein struct.	63	68			~~270~~ 64	64	0	36					59	70					sigmoidal and birfucated veins structures at the top and bottom of sec. 1.
	bed	120	120			270	15	180	10					107	119					
2	bed	21	21			270	1	0	80					10	35		~~0~~ -60		~~90~~	2
															273.6			(2)		
1	vein struct.	131	135																	
2	vein struct	12																		- multiple sets of Sigmoidal vein structures - some w/ offset (normal
	"	16																		
	"	19																		
	"	22																		
	vein	45	54																	
	"	60	62																	
		68																		
		70																		
		90																		
		9~~7~~																		
3	vein struct.	18	23																	must have a slightly "sigmoidal form
		39	41																	
		57																		
		64	~~66~~																	
4	vein	11	14																	
	"	16	22																	
	"	29	32																	
	"	33	34																	
	"	116	118																	

Structural Geology

Exp: 315 | Site: C0002 | Core: 43R | Observer: | Summary:

Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
6	Vein sfw.	76	80													43R-6				
		82	84													0-20				
7		4	6			Dec 345.5										50-70				
		36	40																	
44R																				
1	bed	270	11	0	15									9	40	10 ~ 70				Dec 80.1
	vein sfwrt w/ bed													40	72					
	bed	41	42			270	7	180	11					72-100		70-100				Dec 42.1
	vein sfw	45	52																	
	vein sfw	55	57																	
	large vein	of vein 57	72			90	80	0	10											
	large vein w/ narrow sfw		72	97		270	81	319	0											

photo Norm

photos Norm

30 cm long dark vein + lay ends in vein structure - exerted

Structural Geology

Exp: 315 | Site: C0002 B | Core: 44R | Observer: | Summary:

Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
2	vein struc	5	10											5	27					
	"	27	32											27	40					
	bed.	28	29			90	6	180	16							90 – 140				⇒ Dec 271.4
	vein struc	61	71			270	3	001	0					61	112					
		85	100																	
	vein str	131	13																	
3		0	6											Drilling disturbance						
	vein struc	60	70																	
		82	84																	
		85	84																	
		92	100																	
		24	130																	
4	vein struct	0	5											0	32	2–32				→ Dec 234.2
		15	19											32	62	32–62				→ 226.4 Dec
	vein struc	31	50											38	115					
	vein	56	60																	
	vein	83	85																	
	"	89	90																	
		99	101																	
		106	115																	

Photos //

Multiple scales of veins/vein in single piece of the core

Beautiful Sigmoidal veins Marking down slope

Structural Geology

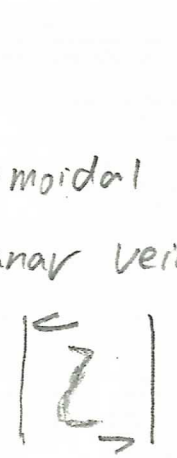
Exp: 315 | Site: 1002C | Core: 45R | Observer: Tm | Summary:

P-mag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bed	4	6			90	5	0	0											
	vein struct.	8	10																	
	vein struct	16	18																	
	mud dyke	22	27																	
	vein struct.	27	35			270	78	0	80					5	35	→	5-35			
		59	65			90	76	0	43											
		68	74			90	70	0	85											
		75	79			90	55	0	66											
		81	84																	
		89	91																	
		93	97											59	142					
		100	108			90	59	0	70											
		110	113																	
		115	117																	
		124	126																	
		128	131																	
		133	137																	
		139	141																	

sigmoidal vein struct.

planar vein struct.



drag of mud dyke at edges showing left-lateral sense of shear on core face

bifucated vein struct.

251.4

multiple sets of sigmoidal, bifucated vein struct.

Structural Geology

Exp: 315 | Site: 1000A | Core: 45R | Observer: KH | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
2	vein struct.	0	3			90	~~84~~	0	~~80~~					0	26		0	-26		= 119.2
	"	5	10																	
	"	13	14																	
	fault	21	26			90	~~58~~	0	30					0	26					trend of slick on fault 82
	vein struct	32	37																	
	"	59	74			270	~~85~~	0	~~88~~					59	74					
	"	76	99			270	65	0	~~88~~					76	100	~~75~~		-100		= 289.2
3	vein struct	0	42														0	-20		sigmoidal vein struct. throughout
4	vein struct	33	40																	22.4
	"	44	46																	
	"	98	112			270	77	0	88					85	122					
5	vein struct	2	17																	multiple sigmoidal vein struct
	"	26	28																	
	"	37	40																	

Structural Geology

Exp: 315 | Site: C0002B | Core: 46R | Observer: KU | Summary:

Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	vein struct	0	11			90	74	0	81					0	98					
		17	23																	
		28	30																	
		34	36																	
		38	40																	
		42	45			270	79	0	68					0	98					
		49	50																	
		55	59																	
		61	65																	
		68	72			270	85	0	53					0	98					
		84	88																	
		89	112																	
		118	125																	
		128	129																	
		135	140																	
2	vein struct	3	4																	
		13	22																	
		37	72			90	88	0	85					37	97					
						90	78	0	82					37	97					
		81	91																	
		118	138																	

10 - 100

Dec

288-4

multiple sets of vein struct.

40 - 95

multiple sets of vein struct
sigmoidal form
some w/ normal offset (< 1cm)

94.3

Structural Geology

Exp: 315 | Site: 1000zB | Core: 46R | Observer: KU | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
3	vein struct	25	31																	
	"	53	76																	
	"	78	95																	some w/ normal offset (< 1cm)
5	vein struct	10	22										219.6				0-40			curviplanar vein struct
	"	24	30										48.10							
	shear zone (def. bands)	50	55			90	44	180	44					35	75		40-70			~1 to 3 mm thick offset unknown
	veins struct	129	131																	sigmoidal
6	vein struct	20	25																	curviplanar
	"	30	38											28	68					planar, birfucated vein struct.
	"	41	45											28	68					
	"	48	52											28	68					
CC	vein struct	23	30																	

Structural Geology

Exp: 315 Site: Core 28 Core: 472 Observer: CU 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	vein struct	0	10															82		sigmoidal, some w/ normal offset
	"	88	89																	
	fault	90	91			90	18	180	25					184	8			-128		~1-2 mm thick, normal sense
2	fault	14	15			90	13	180	6					8	21					// bed
	fault	47	54			270	25	0	8					36	63					gently dipping faults
	fault	55	63			270	78	0	56					36	63					conjugative normal sense
	fault	58	63			90	62	0	13					36	63					
	vein struct	97	99																	sigmoidal
3	vein struct	0	17																	
	"	73	77													333.6		53	85	sigmoidal, locally planar
	"	114	116																	
	fault	113	115			270	15	180	25					120	142			100	-	
	vein struct	127	142			90	65	0	70					120	142	66		135		
4	vein struct	0	10																	birfucating
	shear zone (def. bands)	15	26																	anastomosing
5	vein struct	20	23															0	73	sigmoidal

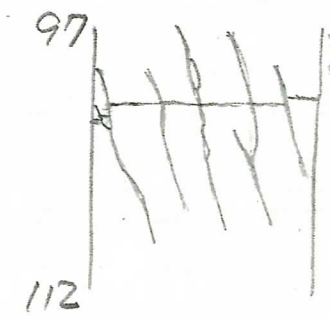
check

148.3

Structural Geology

Exp: 315 | Site: C0002 | Core: 48R | Observer: KU | Summary:

Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bed	57	58			90	10	0	4					15	117			20	-120	= 289.2
2	vein struct	97	112			90	60	180	53					50	111					Vein structures cut gently dipping fault (seam) showing reverse offset.
						90	62	0	58					50	111			191.7		
	11	124	139			90	42	180	53					111	141			50	-139	
																				 97 / 112
																				sigmoidal vein struct. shear zone (def. band) - like appearance at the bottom of the section
3	bed	51	51																	horizontal bed
4	fault	28	31			270	18	180	25					3	90					
	fault	43	44			270	15	180	130					3	90					reverse offset
	fault	71	76																	229.2
6	faults and shear zones																			zone of subhorizontal faults and shear zones (def. bands) some w/ normal offset
cc	faults																			subhorizontal faults one fault at the bottom of the section shows reverse offset

50-65 | 270.6

10-40 | 50-140

0-80

0-58 | 178.3

Structural Geology

Exp: 315 | Site: 5000ZB | Core: 49R | Observer: KU

Summary: well-developed breccia

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	fault	31	33									NEC		320.1			-	20	88	normal offset
																				"
2	faults	9	10													314.7		20	60	brecciated into fragments along the slip surfaces, locally showing normal offset.
	breccia	36	50															70	100	
4	breccia	0	20															10	40	159.5 — brecciated into fragments along the slip surfaces, locally w/ normal offset
	shear zones	20	35			270	5	0	5					8	35			50	80	— intense (spacing ≤ 1cm) development of gently-dipping shear zones (def. bands) some are cut by faults w/ normal sense
						270	13	0	12					8	35					
	breccia	35	52																	— brecciated into mm ~ 5cm size fragments, possibly enhanced by drilling polished, slickenlined
	breccia	52	78																	282-9 — the same as 0-20 cm
	breccia	78	86																	— the same as 35-52 cm
	breccia	86	125																	— the same as 0-20cm
cc	breccia	0	28																	— intensely brecciate along the sets of polished and slickelined surfaced could be enhanced by drilling

Structural Geology

Exp: 315 | Site: U1025 | Core: 50R | Observer: TM | Summary:

All BRECCIA - Drilling and prob. fractures and many slicks -

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-) top	cohoerent interval (for P-) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	Fault	33	34		4mm	90	7	0	34											slicks rake 66 from East (Normal sense)
	Fault	30	31			270	12	0	4											slicks trend 303 -
	Flt L.L	28	30			90	66	0	67											slicks trend 300 - Lh. Strike Slip
N-	Flt	33	34			90	18	0	37											Slicks trend 002 - rake - 54 from E
	N-flt	48	49			90	16	0	26											slicks trend 33 -
Thrust	RL S-Sflt	51	52			270	24	0	23											Slicks trend 248 Right lateral
Thrust	Flt	55	56			90	16	180	1											Slicks trend 248
	Thrust Flt	62	66			90	24	353	0											66 from north
	Fault	71	72			270	6	0	102							No DATA				
Thrust	Fault	73	74			90	6	0	7											slicks trend 339 -
	Flt - N?	82	83			270	10	180	48											) slicks rake 41 from 270
						270	50	180	57											
	Nodule	29	31			→ CaCO3 & Dolomite (acid test)														
		41	46			→ CaCO3														
		81	85			→ CaCO3														
cc	All Breccia	0	35																	

Structural Geology

Exp: 319 | Site: U0028 | Core: 52 | Observer: TW | Summary:

Sect coherent and fractured
2 coherent plus breccia
3 breccia
4 breccia
5 IW
6-7-8 coherent

5IR

Breccia - Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	blocks	0	45																	Too loose to measure blocks and breccia
1	breccia	45	103																	
CC	breccia																			
										51	R									
1	bed	4	11			90	10	180	14							235	8			
1	vein Sheet	66	69			270	75	348	0											
1	Fault	74	76			270	15	180	20					72	113	↔ 70-110				slicks trend 235 Normal?
1	N-ft	102	110			27	36	180	19											slicks trend 240
2	S.S fault	0	9			90	60	325	0											slicks rake 67 from 270 No force
2	fault	18	17			90	7	180	62	slicks trend 320 thrust										
2	N-ft	30	35			90	47	180	11	slicks trend 104 Normal										
						90	59	180	9	slicks trend 90										COHERENT 25-52
	Nft	67	74			270	58	0	0	slicks trend 305										
Photo	N-ft	81	84			270	71	335	0	- slicks trend 270										cm offset sandwich layer
	RL fault	105	110			270	33	0	54	slicks rake 44 from 90 trend 47										

55-90 - coherent

Structural Geology

Exp: 351 | Site: [illegible] B | Core: 5R | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
2	RL S.S. fault	117	132			270	78	340	0					112	136		~~30~~-100			slicks rake 7 from N
3	bed	6	9			270	25	0	29									bed		
	fault	1	17			90	66	180	29					0	28					slicks rake 51 from 90 to the NE should be thrust
														maybe 0-50						
	Sand	25	34											50	92					
	Fault	60	61			270	20	180	12					92 → Drilling Rotation						slicks trend 247
	Fault	119	122	del		90	27	0	1											slicks trend 134 Normal FH
	Fault	132	136			270	11	0	54											slicks trend 0 - Normal
	Fault	131	136			90	53	180	34					44	99	= 45-110 cm		358.3		slicks trend 287 Normal; ↳ older set, tie to 287?; Younger set trend 13 - Normal
4	Fault	41	41			270	6	0	12											
6	Shear zone	67	77			90	88	11	0					67	100					Normal (wrong side down)
	Fault	84	85			90	1	180	27											slicks trend 348 Normal
N	Fault	95	96			90	19	180	32											slicks trend 04 Norm
N-	Shear zone	101	111			90	57	0	56	1cm offset (1)										
																65 - 85		211.3		← photo
																100 - 120		171.5		

gray

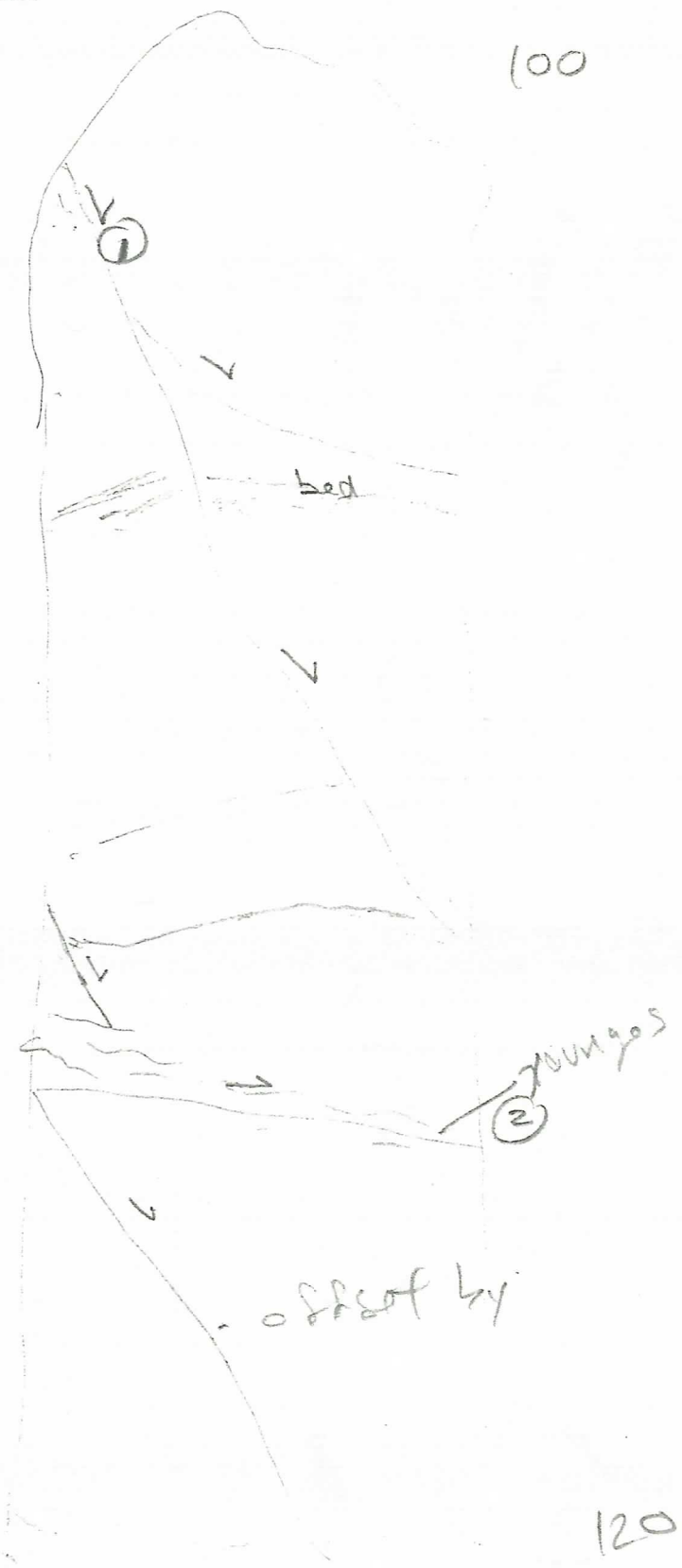
Structural Geology

53R-3 No Recovery
54R-5

Exp: 315 | Site: 6002B | Core: 51R | Observer: TM | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
6	Shear Zone	112	112	(2)		90	0	180	16	— cuts and offsets #3				100	120					
	Shear Zone	113	120	(3)		90	74	330	0											
	N-Shear Zone	128	131	(4)		90	26	0	47	cuts	#5			125	140					
		127	130	(5)	1cm	270	43	0	21											
	Normal Shear	133	141			90	44	0	47											
7	—			5-6	blocks	Many shears shears (blocks)														
Plates	Shear Zone	15	23			90	0	180	3	⇒ 32.75										
	11	23	41		m	90	1	180	17	⇒ 109.8										
		22			m	90	1	180	17					22	42					
	Ded	27	26			90	3	180	42											

Discrete
8 - 15
15 - 23
23 - 33
33 - 43
43 - 54



Structural Geology

Exp: 345 | Site: 1002B | Core: 55R | Observer: TM | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	clastic dike	45	48			270	72	72	0											S

Structural Geology

Exp: 315 | Site: 6002B | Core: 56R | Observer: TW | Summary:

Pmag

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bed	25	32			270	19	180	23					22	32					Broken and rounded mussle at top and sandstone at base
	Shear Zone					270	85	336	0											Normal 5 mm offset
3	Fault	50	53			90	81	304	0											Slicks value 33 from 90 Normal → plunge 45°
						90	70	358	0											Slicks plunge 70 north, Normal
								57R												
1	Sand stone	1	15																	- Carbonate cement - marked clean sandstone
	—	15	56																	355.87
	bed	58	60			90	17	180	10					55	64					- rubble white-ish carbonate mud
CC	shear zone	22	27			270	51	0	56											meaned 60 - 65
																				Normal shear Zone

Structural Geology

Exp: 315 | Site: C0002B | Core: 58R | Observer: KU

Summary: brecciated into a few mm to a few cm fragments w/ relatively coherent intervals (size)

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	fault	87	96			90	62	344	0					75	110					slick trend 87 normal offset
	fault	104	110			90	51	348	0					75	110		NA			slick trend 55 normal offset
2	fault	10	15			270	35	0	40					7	39					
	fault	65	71			90	37	0	6					67	106		NA			slick trend 65
	fault	101	106			270	54	0	42					67	106					slick trend 251
CC	breccia	5	24																	
									59R											- light gray ~ whitish silt at 49–50 cm
1	breccia	50	55																	brecciated into mm-size fragments
2	shear zones					270	16	0	28					44	77					birfucated
CC	breccia	0	20																	

Soc. 1 and 2 — breccias of > a few cm in size and coherent intervals

CC — brecciated into a few mm to a few cm size fragments

Structural Geology

Exp: | Site: C0002B | Core: 60R | Observer: KU

Summary: breccias of > a few cm size w/ coherent intervals

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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	fault	29	34			270	42	352	0					27	58					
	fault	35	37			90	18	0	38					27	58					slicks trend 14
	breccia	14	20																	
2	shear zone	100	103			90	30	0	20											
	shear zone	138	138			0	0	0	0											horizontal shear zone displaced by normal fault
cc	breccia																			dominated by mm-size breccias

Structural Geology

Exp: 315 | Site: C0002B | Core: 61R | Observer: CU | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	shear zone	50	54			270	26	0	65					30	57	20	-47	336	9	Sec 1, 2, 4 } coherent interval and breccias of > 2-3 cm size
2	bed	13	14			90	7	0	30					0	25					
	bed	72	72			270	8	0	15					55	80		0-25	97		
	shear zone	107	108			270	7	0	8					96	122					Sec 5 0-57cm : coherent intervals w/ breccia of 2-3 cm size
3	IW																			57-101cm : comminuted siltstone locally w coherent pieces
4	bed	43	44			270	22	0	20					29	48					
5	bed	9	10			270	4	0	19											
CC	breccia																			CC comminuted siltstone

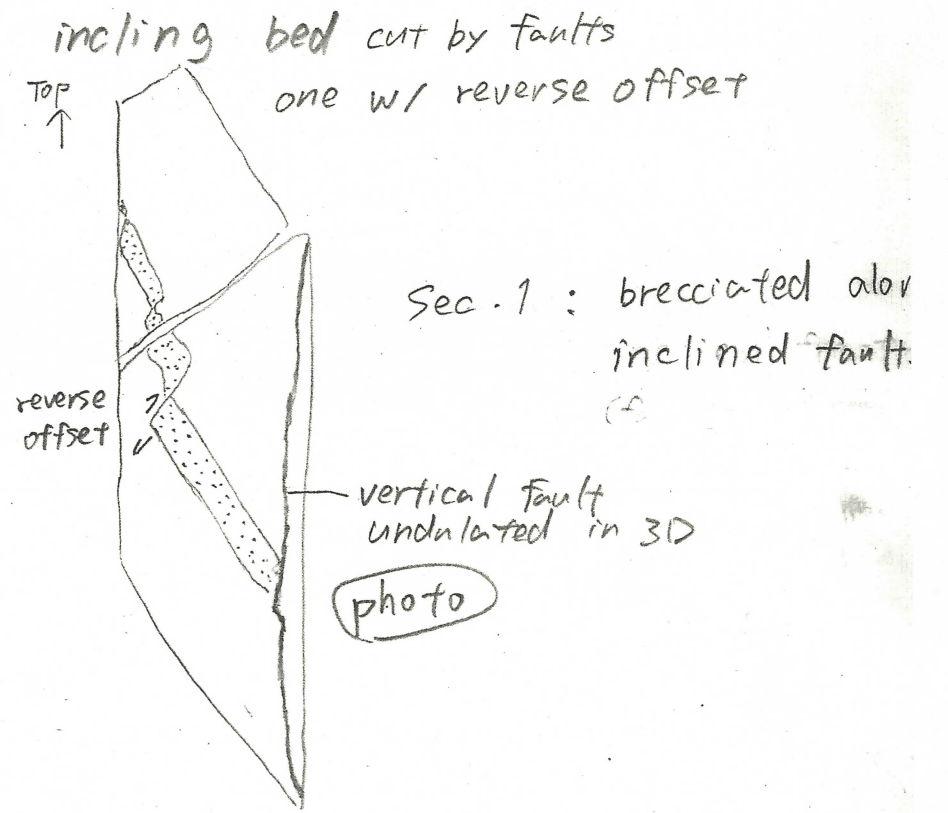
Structural Geology

Exp: 315 | Site: C0002B | Core: 62R | Observer: KU | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag pole) top	cohoerent interval (for P-mag pole) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bed	9	23			90	60	0	36					2	32					
	fault (trend of slick 73)	22	29			90	53	0	8					2	32					
	bed	85	90			90	78	0	21					81	98					
	normal fault (trend of slick 111)	84	90			90	52	0	15					81	98					
	fault	90	93			90	38	0	14					81	98					
2	IW																			
3	fault	11	12			270	6	0	30											

Sec. 1 brecciated along inclined faults // bed

Sec. 3 0–20 cm : brecciated along the sets of faults
23–27 cm : brecciated into mm scale fragments
38–bottom : relatively coherent



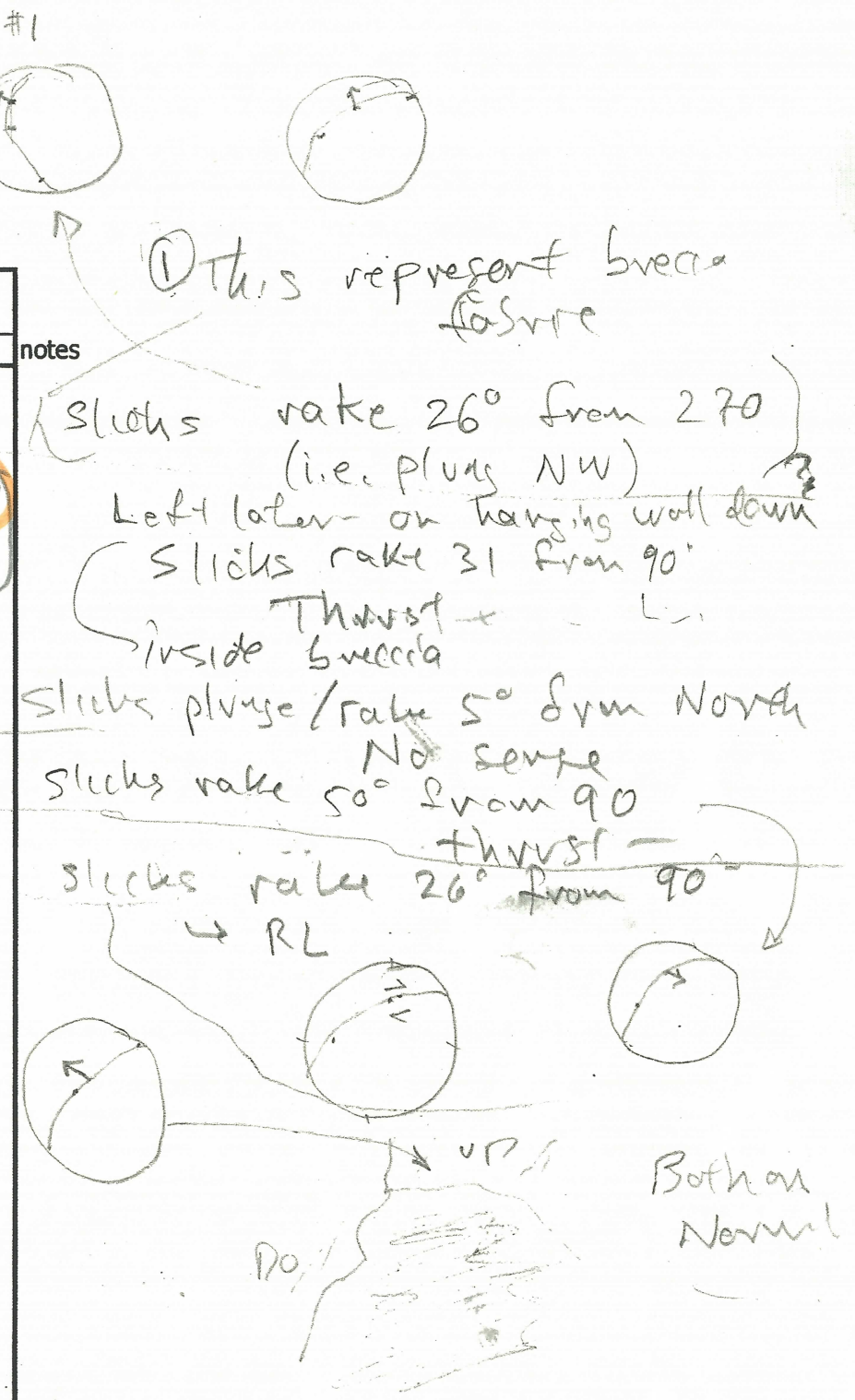
Sec. 1 : brecciated along inclined fault.

Sec. 4 + CC breccias possibly by both drilling and faulting

Structural Geology

Exp: 315 | Site: C0002B | Core: 63R | Observer: KU | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P-mag) top	cohoerent interval (for P-mag) bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	Coarse Breccia fabric	17	31		}	270	42	180	17 (1)					18	36					
		29	31			270	54	56	0					max 42 to 56						
	S.S. Fault in S.S.	57	63			90	68	5	0											
	fault	111	114			270	36	0	54											
	Fault	114	118			270	28	0	44											
2	thrust Fault	29	32			90	23	a	13	Slicks rake 21 from 90				17	32					
	fault	40	44			270	76	54	0	slicks rake 23° from 90 trend 253 Normal L.L.										
	fault	44	47			90	47	43	0	slicks rake 58 from 270 Normal										
	thrust fault	70	73			90	35	180	17	Rake 27° from 270				32	60					
	Normal fault	76	80			270	44	180	60	slicks trend 142 Rake 90° from 90				66	82					
CC	Drilling disturbance																			



Drilling disturbance extends 20 cm

Structural Geology

Exp: 315 | Site: 6029 | Core: 64L | Observer: TM | 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1		0	40																	rubble and core sample
	bed	45	46		1cm	270	11	180	23											
	fault	49	57			90	8	0	83	slicks Rake 8° 270										L.L.
	bed	52	53		1cm	270	7	180	29											
	bed	58	59		1cm	270	12	180	23											
	N-ftt shear zone	60	63			90	72	180	58											
	N-ftt	70	75			90	42	0	57	cuts										
	N-ftt	74	75			90	8	0	30											
2	L.L S.S ftt	10	18			90	57	0	57					0	26					
	Thrust ftt	17	18			270	18	180	37					28	41					
		19	23			270	38	180	42					42	80					
	?Normal	21	26			270	65	180	65					85	96					
	Thrust? fault	36	46			270	52	0	0											
	shear zone	55	59			270	24	0	24											
	Normal ftt	47	59			270	60	0	0											

all

40 – 100

94.3

Slicks trend 326

Drilling?

Slicks rake 50° from 270°

Slick rake 15° L.L.-Strike slip

slicks rake 14 from 90 - Thrust

slicks rake 0 from 90

slicks rake 56 from 270

cuts shear zone

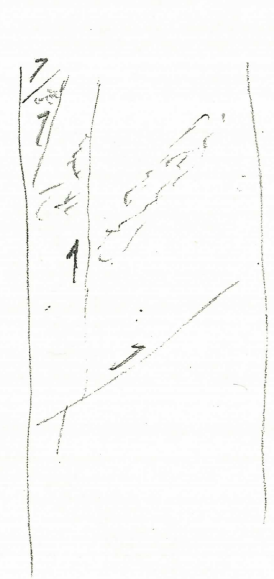
fault

black shear

Structural Geology

Exp: 315 | Site: 1000B | Core: 65R | Observer: 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	orientation strike	orientation dip	orientation dip dir	orientation dip	cohoerent interval (for P- top	cohoerent interval (for P- bottom	P-mag pole az/trend	P-mag pole dip	corrected orientation az/trend	corrected orientation dip	notes
1	bed	22	26		cm	270	31	180	44					10	-					
	shear zone	24	28			270	35	180	35					poss	154					
															82					
	thrust	18	21			270	29	180	15					107	142					
	thrust fault	28	32			270	44	180	11											
	fault	36	37			270	26	180	35											
	fault	41	44			270	34	180	31											
	fault	45	49			270	29	180	51											
	shear zone	65	67			270	17	180	17	prob thrust										
	shear zone	66	72			270	51	180	21											
2	bed	11	16			270	33	0	22					0	20					
	shear					270	83	5	0					Maybe 48cm						
	thrust zone					270	65	3	0					50	65					
	shear	33	41			270	48	180	16 (1)					65	83					
	fault	30	36			270	44	0	34 (2)					83	104					
	bed	38	40			270	23	180	7 (3)											
	fault	42	50			270	50	302	0											



Upper piece (not shown) rotated ~45°

Slicks rake 21 from 90

Slicks rake 17 from 90

Slick rake 21 from 90) - seems pretty good

(Slicker rake 32 from 90

second (younger) slicks rake ~5 from

older slicks rake 41 from 90 (90

younger slicks w/ Normal offset rake 7° from 90

top 8cm rotate ~45° CW WRT lower 10 cm

Excellent high angle thrust -

Excellent " thrust

Plot // Thrust

Plot // Normal

sheer fault

Slicks rake 25 from 90

① and ② are subparallel and look very "related" to these Normals

③ bedding is offset by ①

slicks rake 15° from 90 Normal