

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C24 Hole: G Core: 1 Observer: YY, KU Summary: _____

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤ 90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1	bed	45.5	46			90	3	0	1			38	46			disturbed
	bed	73	73													
	bed	121	121			270	4	0	2			112	128			
2		I	W													
3	bed	23	23			270	6	180	35			22	41			
	bed	37	37			90	5	180	6			22	41			
4	bed	36	37			270	5	180	11			33	40			
5	bed	13	14			270	2	180	6			0	15			
6	bed	13	13			90	2	0	1			4	17			
	bed	69	70			90	1	180	01			66	70			

Structural Geology Observation Sheet

No. _____

Exp.: Site: 24 Hole: G Core: 2 Observer: YY, KU Summary: _____

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1	Bed	45	46			90	13	0	2			35	58			
1	Bed	114	115			90	14	0	2			110	119			
1	Bed	132	132			270	1	180	2			130	139			
3	slump	28	62									25	62			slump tuffaceous silt clasts (partly flowered) in silty/sandy matrix. Base of slump 62.5cm?
4	tanH	32	40			90	90	19	0	(within slump)						
4	Bed	84	85			230	6	0	6							
4	Bed.	52	52			90	5	180	11			45	57			
4	Bed	86	86			90	4	180	5			79	118			
4	Bed	104	104			90	2	0	0			4	2			
4	Bed	126	126			90	2	0	1			119	132			
5	Bed	67	67			270	11	180	6			53	117			
	Bed	77.5	78			90	2	180	1							
	Bed.	107	107			90	0	180	5							

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C24 Hole: G Core: 3 Observer: KU, DF Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (±90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1.	bed	39.5	40			90	6	180	2			36	40			
2	bed	54	54			90	2	0	5			54	62			
	bed	59.5	60			90	2	0	3			54	62			
	bed	76	76			90	0	0	0			62	81			
	bed	107.5	108			270	4	0	6			105	119			
3																
4	bed	44	44			270	1	0	3			42	63			
	bed	51.5	52.5			90	7	0	4			42	63			
	bed	100.5	100.5			270	3	0	14			96	126			
	bed	122	122			90	2	0	1			96	126			

Structural Geology Observation Sheet

No. _____

Exp. : 358 Site : C24 Hole : G Core : 4 Observer : KU, PF Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1	bed	14	15			90	10	180	10			10	15			
	bed	37.5	38			90	7	180	1			32	38			
2	bed	40	40			270	2	180	3			36	40			
3	bed	123.5	124.5			90	5	180	7			110	125			
6	bed	6	7			90	5	0	0			0	11			
	bed	33.5	34.5			90	7	0	4			24	34.5			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: 9 Core: 5 Observer: Summary: MO, BS

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤ 90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1	bed	79	80			270	8	0	2			35	42			
								0	-			91	93			
3	bed	77	78			270	8	0	2			29	32			
												59	62			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0029 Hole: G Core: 6 Observer: MD Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (±90)	from (±1, 90 or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	bed	62	63			90	8	0	4			83	87			
2	bed	44	85			90	6	0	2			52	58			
3	bed	18	19			90	4	0	2			22	26			
							7									
54	bed	66	67			90	2	0	2			68	73			

Structural Geology Observation Sheet

No. _____

Exp.: Site: 24 Hole: 24G Core: 7X Observer: YT, KU Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1	Bed	49	51			90	24	0	5			42	53			
	Bed	63	64			270	11	0	12			59	70			
	bed	120	121			270	7	180	3			115	124			
2	bed	55	57			270	14	0	5			48	60			
	bed	66	66			270	5	0	1			60	68			rotated?
	bed	105	107			90	11	180	3			101	110			
5	bed	73	74			270	3	180	4			63	78			

Structural Geology Observation Sheet

No. _____

Exp.: _____ Site: 24 Hole: G Core: 8X Observer: TK/DF Summary: _____

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	bedding	127.5	127.5			090	03	180	03	-	-	126	129			
2	bedding	24	25			090	13	000	05	-	-	22	26			
2	bedding	30	30			090	07	000	01	-	-	28	32			
2	bedding	131	131			270	03	000	03	-	-	128	134			
3	bedding	3.5	3.5			090	02	000	04	-	-	0	5			
4	bedding	6	6			090	02	000	00	-	-	4	9			
4	bedding	52	52			090	01	000	05	-	-	48	54			
4	bedding	98	98			270	01	180	03	-	-	96	99			
4	bedding	113	113			270	02	000	03	-	-	110	116			
5	bedding	102	102			090	04	000	06	-	-	99	104			
5	bedding	115	117			090	12	180	01	-	-	110	117			
6	bedding	15	15			270	02	180	02	-	-	12	19			
6	bedding	111	111			270	05	000	01	-	-	109	112			

Structural Geology Observation Sheet

No. _____

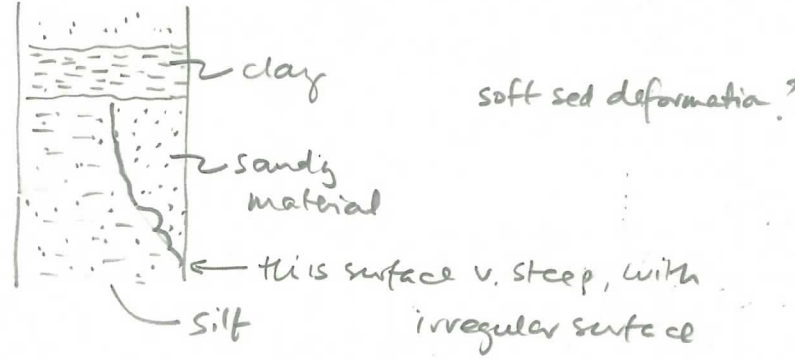
Exp.: 358 Site: C24 Hole: G Core: 9 Observer: KU, DF Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤ 90)	from ($\pm 1, 90$ or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	bed	46	46			90	1	0	0			41	51			
2	bed	67.5	67.5			270	4	0	7			52	82			
	bed	78	78			90	2	180	2			52	82			
3	I W															
4	bed	4	4			270	2	0	6			0	12			
	bed	46	46			90	0	0	7			38	49			
5	bed	62	63			270	7	0	2			57	65			
		103	103			270	1	180	10			92	109			
6	bed	55	56			90	3	0	1			52	57			
7	bed	10.5	12			90	16	0	5			8	14			
	bed	38	38			270 090	02	0	00			30	42			
	bed	73.5	73.5			270	05	000	07			64	77			
	bed	87	87.5			090	02	000	02			80	93			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C24 Hole: G Core: 10x Observer: KU/DF Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (±90)	from (±1, 90 or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
2	bed	15	16			090	08	000	07			8	17			
	bed	27	29			270	16	180	14			23	37			
	bed	102	102			090	02	180	03			88	118			
5	bed	4	4			090	00	180	04			0	7			
6	bed	90.5	90.5			270	07	180	03			85	95			
7	bed	89	89			270	03	180	01			84	94			
6	soft sed def.	55	65		10											

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 11 Observer: MO, BJ Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
4	bed	100	101			270	8	180	2			93	115			
5	bed	94	95			90	6	180	2			94	99			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 12 Observer: MO, BJ Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
3	bed	3	4			90	2	0	2			0	15 13			

Structural Geology Observation Sheet

No. _____


Exp.: 358 Site: C0024 Hole: G Core: 13 Observer: MO, BJ Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (±90)	from (±1, 90 or 270) Top → +1° Bottom → -1°	top	bottom	az./trend	dip	
2	bed	56	57			90	2	0	2			48	57			
4 ^{3/8}	bed	70	71			90	2	180	2			63	71			
	bed	123	123			90	2	0	2			119	133			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: 00029 Hole: G Core: 14 Observer: MO BJ Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (±90)	from (±1, 90 or 270) Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
																<p>no structures</p> <p>section 1 - 4 are "fill":</p> 

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: 00024 Hole: 9 Core: 15 Observer: MD, JB Summary:

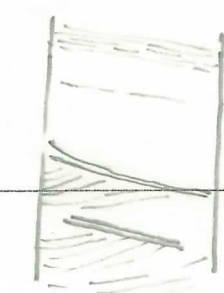
Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top "+1" Bottom "-1"	top	bottom	az./trend	dip	
1	fault	79	84			90	38	180	8							strike/slip is unclear, sense unknown
2	bed	64	66			90	22	0	10			58	73			
3	fault bed	37	39			270	70	0	0							normal fault
		38	39			270	46	180	8			30	48			
4	bed	93	94			90	4	180	2			86	110			
		126	127			270	10	0	6			122	134			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: 24 Hole: G Core: 16x Observer: KU YY DF Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	Bed	14	15			90	7	180	5			13	16			
2	Bed	50	50.5			90	5	180	1			42	50.5			
	Fissility zone	84	97			270	9	180	2			84	97			
4	Fissility zone	81	84			270	2	0	3			81	84			
7	bed	23.5	23.5			090	03	180	12			16.5	23.5			
	zone of fissility	16.5	23.5													
	zone of fissility	26	35			270	02	180	20			26	35			
8	zone of fissility	101	111			270	10	180	03			101	111			
	zone of fissility	62	65			090	11	000	08			62	65			
	zone of fissility	69	75			090	02	180	11			69	75			
9	zone of fissility	5	12			090	05	000	01			5	12			
	zone of fissility	41.5	48			090	02	000	06			41.5	48			← may extend a little lower into unconsolidated material.
	zone of fissility	67	76			090	09	000	01			67	76			
?	sed filled fracture	49	56			090	03	180	03			49	54			these occur in unlitified sediment. Finer material in structures ~ 1mm wide that cuts oblique to bedding.
?	sed filled fracture	51	51.5			090	05	180	01			49	54			these are not surface features - they are evident through the core on CT.



Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C24 Hole: G Core: 17 Observer: KU, DF Summary: _____

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	fissility bed	84	87			270	3	0	5			84	87			sec. 1: highly brecciated mudstone, ^{a few} mm size fragments in places coherent pieces preserving fissility, sandy portions, one subhorizontal ash layer
2	void and	25.5	29		IW											sec. 3: highly brecciated mudstone. fragments size ~2-3 mm common
4	fissility	136	140.5			270	5	180	2			136	140.5			sec. 4: 0-5: WR 5-47: highly brecciated mudstone w/ coherent pieces of mudstone frag. size ~2-3 mm 47-78: soupy sands 78-149: highly brecciated mudstone locally soupy sands one mudstone piece preserving fissility CC: fissility mudstone

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 18 Observer: MO, BJ Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
2	bed	26	28			90	6	180	4			22	31			Section 3: All to I w (20 cm)
4	bed	18	19			90	4	0	4			16	19			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 19 Observer: MO, JB Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) * Top → "1" Bottom → "-1"	top	bottom	az./trend	dip	
1	bed	115	116			270	16	0	2			115	120			
3	bed	51	53			270	16	0	6			50	59			
4	bed	20	22			90	16	0	2			16	22			sense unknown.
	fault	19	31			90	64	0	12							
	bed	63	65			270	14	180	2			60	63			
	fault	62	66			270	82	180	6							normal.

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 20 Observer: MO, JB Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) * Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	bed	108	108			90	2	0	4			108	114			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 21 Observer: MD, BJ Summary:

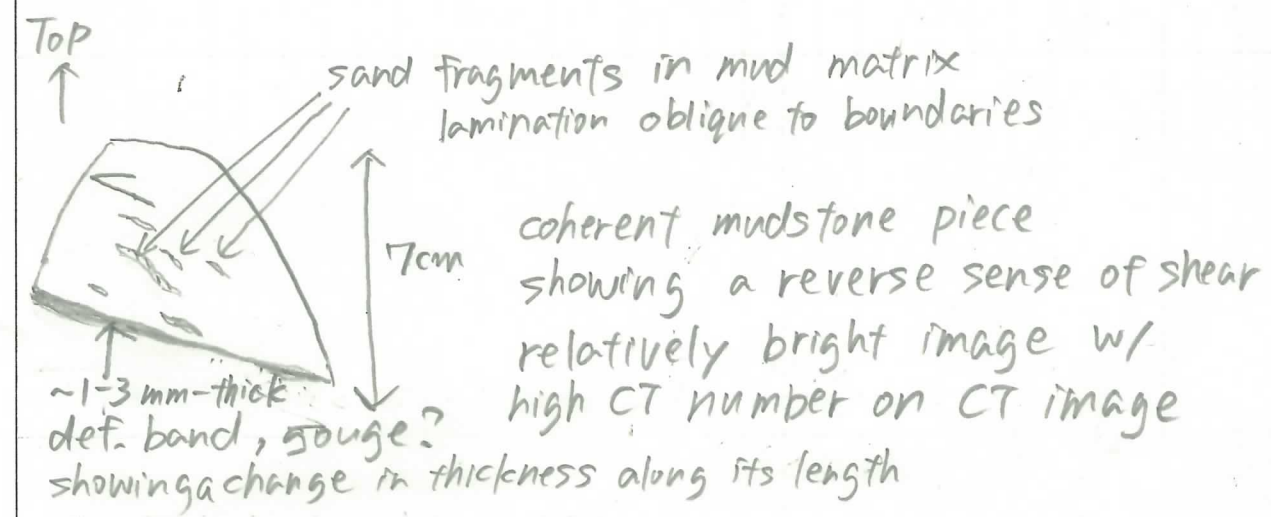
Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤ 90)	from ($\pm 1, 90$ or 270) Top \rightarrow "1" Bottom \rightarrow "-1"	top	bottom	az./trend	dip	
																<p>Section 1, 2, 4 and CC Alteration of sand and mud, but disturbed by coring</p> <p>No structures for measuring.</p>

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C002X Hole: 9 Core: 22 Observer: YS/KU/DF Summary: _____

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (±90)	from (±1, 90 or 270) * Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
1	fissility	20	26			90	1	0	12			20	26			
	zone of fissility	50	63													
2	fissility	41	46			90	8	0	2			39	48			
	fissility	77	79			270	7	0	7			77	79			
3	zone of fissility	2	49													
	fissility	42	48			270	5	0	7			42	48			
4	shear zone & def. band? gouge?	40	47													
		43	47			90	31									
5	I W															
8	fissility	37	42			90	4	0	7			37	42			



Structural Geology Observation Sheet

No. _____

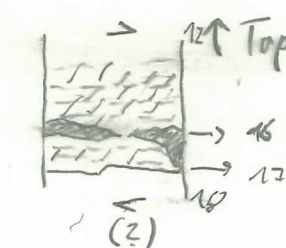
Exp.: 358 Site: Q0024 Hole: 9 Core: 23 Observer: MO, AD Summary: _____

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top -1° Bottom -5-1°	top	bottom	az./trend	dip	
4	bed	76	77			270	6	0	3			75	83.			sections 1 and 2 sections 1 and 2 are inched intervals
	fly	119	119			90	4	0	0			118	121			
5	bed	72	73			90	5	0	2			68	75			
	bed	114	115			270	4	0	0			107	124			

Structural Geology Observation Sheet

No. _____

Exp.: 358 Site: C0024 Hole: G Core: 24 Observer: AD/MO/1/1 Summary:

Section No.	Structure ID	Top of Struct	Bottom of Struct	ave. depth	Thickness of Struct	Core face app. Dip		2nd app. Dip		Striation on surface		Coherent interval (for P-mag)		P-mag pole		Notes
						az.	dip	az.	dip	rake (≤90)	from (±1, 90 or 270) Top - "1" Bottom - "-1"	top	bottom	az./trend	dip	
② 1	fault (shear zone)	12	18	16		0	0					12	18			Potential fault/shear zone at ~16 cm subhorizontal → ~30-35° towards 270  → Two fracture sets (drilling or recovery induced, but may reactivate weak planes)
2	fissility	38	45									55	64			→ Remaining of section 1 is "sludge"
	z	76	84) No orientation measured (disturbed)
3	fissility zone	0	14													
		(12)	12			90	2	180	3			7	14			
3	fissility zone	45	85													
		77	78			90	3	180	6			74	82			
4	fissility zone	25	68			90	1	180	2			59	66			
		(61)	61													
	Bed (sand laminae)	82	82			90	3	0	2			81	89			
6	fissility	34	34			90	2	180	2			33	42			
	Bed (sand laminae)	117	117			90	1	180	2			116	118			
8	fissility	26	26			270	2	180	3			24	29			