

76 VM-1

Structures Log

Monteasen

Start of casing 17' - no recognizable structure in 1st 1 ft. of core

19' - S_2 @ 86° to core axis

23' - S_2 @ 76 " " "

38' - S_2 @ 70° " " "

43.5' - S_1 @ 63° " " "

S_2 @ 82° " " "

47.5' - small fold in S_1 Axial R @ 83° to axis

↙ isoclinal, $\lambda \approx 1''$, amp. $\approx 1''$

- S_2 @ 85° to axis

53' - S_2 @ 70° to axis

68' - S_2 @ 73° to axis

78' - S_2 @ 75° to axis

89' - S_2 @ 72° to axis

99' - S_2 @ 73° to axis

109' - S_1 @ 75° to axis

109.5' - small fold in S_1 Ax R @ 83° to axis

isoclinal - $\lambda \approx 3/4''$ amp - ?

- S_2 @ 86° to axis

120' - S_2 @ 82° to axis

130' - S_2 @ 90° to axis

139.5' - 4" wide mud seam

- S_2 @ 78° to axis

- S_2 @ 76° to axis

- S_2 @ 80° to axis

- S_2 @ 74° to axis

- narrow mud seams || S_2 ($\leq 1''$ wide) @ 165', 169', 169.5', 170'

173.5' - S_1 (!) @ 69° to axis

175' - S_1 (?) @ 38° " " "

a fold zone

164.5'

160'

170'

Mortenson

181' S₁(?) @ ~55° to axis - highly sheared, muddy
 186' S₂(?) @ 84° " " - end of mud zone
 - shear plane subll to axis
 seen over 3"

188' S₂ @ 78 to axis

190' S₁ @ 65° " " S₂ @ 81° to axis

200 S₂ @ 77 " "

Z-vergence in S₁ @ 203'

Z " " @ 208.5'

211' S₂ @ 80° to axis

221' S₂ @ 77° to axis

231' S₂ @ 81° to axis

237' Z-vergence in S₁

S₂ @ 75° to axis

240' S₂ @ 75° " "

250' S₂ @ 70° " "

250.5' Z-vergence in S₁ (λ ≈ 1/2")

260' S₂ @ 76° to axis

270' S₂ @ 82° " "

280' S₂ @ 80° " "

285' S₂ @ 81° " "

289' S₂ @ 70° " "

Z-vergence in S₁ fill

299 S₂ @ 81° " "

mud seam (fold nose?) 301' - 302.5'

small fault @ 51° to axis 1/2" offset

310 S₂ @ 76 to axis

30
→ 308

what is this
1.5 - 30h.s. 45°
120° to axis

V

Footage	S ₁ attitude	S ₂ attitude	Folding	Fold axis	Remarks
310		76° to axis			
2, 317, 318.5					1/2" mud seams S ₂ att.
320		82° to axis			
321.5					4" mud seam S ₂ (85° to axis)
330		79° to axis			
332			small fold - $\lambda \approx 4"$ vergence not detectable		S ₂ orientation varies
335.6		79° to axis			
339-342					S ₁ \nearrow S ₂ \rightarrow S ₁ not measurable
342		82° "			
347-352			complex minor folding in S ₁ \rightarrow appears to be Mores vergence \rightarrow S ₂ difficult to recognize		S ₁ \nearrow S ₂
353		90° "			
354			minor folding ($\lambda < 2"$) S-vergence		
360		81° "			
364					1/2" mud seam S ₂ (83°)
370		85° "			
380		79° "			
390		85° "			
394.5					1/2" mud seam S ₂ (80°)
392-403					abundant qtz knots
401		77° "	minor fold in S ₁ - Zvergence.		
410		77° "			
420		78° "			
430		85° "			
435		79° "			
440		80° "			
450		85° "			

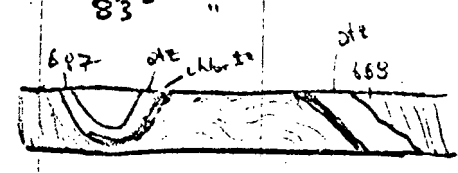
Station	S ₁ attitude	S ₂ attitude	Folding	Fold axis	Remarks
459					mud seam $\frac{1}{4}$ " wide
460		85° to axis			
461			minor S-fold in S ₁		
464					mud seam 1" wide at 18° to axis
464.5					mud seam $\frac{1}{2}$ " wide S ₂ (90°)
470		86° to axis			
480		90° to axis			
490		90° to axis			
500		84° to axis			
50.1			minor S-fold in S ₁ $\lambda \approx \frac{1}{2}$ "		
52-511			much more filling in S ₁ between bands of dominant S ₂ - \rightarrow suggests in S ₁ folding not date sensitive		abundant gtz knals + 0.6" ^{height}
510		82° "			
511			minor M-fold in S ₁ ($\lambda \approx \frac{1}{2}$ "		
520		82° "			
525					small healed fault - $\frac{1}{8}$ " \rightarrow $\frac{1}{4}$ "
529, 530					offset - @ 67° to axis $\frac{1}{2}$ " mud seams S ₂
540		82° "			
550		81° "			
552-553			much S-folding in S ₁ and in small gtz pods		
557		72° "	fold nose (anticline)		
558.5		79° "	2 verges in minor folding in S ₁		
560		79° "			
570		62° "			
580		65° "			

|| to strike of S₂ attitude

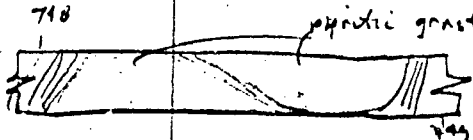
Footage	S ₁	S ₂	Folding	Fold Axis	Remarks
590		55° to axis			
599.5			S-vergence in gts rock		
596.5-602					S ₁ >> S ₂
596.5-597.5			fold nose in S ₁ (synform)	S → E → Z vergence over 1 ft.	
593-601			fold nose(?)	trace of axis & strike of S ₂ plunging at 15°	S ₁ >> S ₂ → much fracturing
606		82° "			
608-613			fold axis strike of S ₂		S ₁ >>> S ₂



Footage	S ₁	S ₂	Folding	Fold Axis	Remarks
615		73° W			
620		74° W			
623			Z vergence in S ₁ (λ ≈ 6")		
625		81° "			
616-627			chondant minor S folds in S ₁ (λ ≈ 1")		S ₁ ≥ S ₂
631			S-fold in S ₁ (λ = 4")	strike of S ₂	
632		73° "			
640		86° "			
649			S-vergence in S ₁ folds (λ ≈ 1")		
650		85° "			
653-659			S. verg. in S ₁ (λ ≈ 11")		S ₁ ≥ S ₂
660		90° "			
670		86° "			
680		83° "			
687-688					1/2" med seam at 86° to axis
690		85° "			
700		90° "			



S-vergence in S₁ || strike of S₂ S₁ >>> S₂

Photage	S ₁	S ₂	Folding	Fold Axis	Remarks
705			S-vergence in minor S ₁ fold $\lambda \approx 2''$		
710		86° to axis			
714-716			Z(?) - vergence in several minor folds in S ₁		vergence not definite ° S ₂ is nearly ⊥ to axis
720		86° to axis			
730		85° to axis	several minor folds — vergence not measurable °		S ₂ is ⊥ to axis
740		86° "			
742-746					S ₁ ≈ S ₂
748-749		710		S-vergence	
750		85° "			
752		76° "			
760		90° "			
763-764			(?) E-folding in S ₁ — $\lambda < 2''$		S ₁ ⊥ S ₂
767-770			complex minor folding in S ₁ vergence not measured ° S ₂ ≈ 90°		S ₁ ⊥ S ₂
771		86° "			
775		81° "			
779					1" wide merid seam @ 55° to axis
780		79° "			
-783			complex folding in qtz knots of S ₁ — vergence not measurable		S ₁ ⊥ S ₂
788.5		(79° "	S-vergence in minor folding in S ₁		
790		83° "			
790.5-791.5			complex minor folding ($\lambda < 1''$) in S ₁ — vergence not measured → °		S ₁ ⊥ S ₂ S ₂ ≈ ⊥ axis
795-795.5			complex defn of S ₁ around qtz knots		S ₁ ⊥ S ₂
300		90° "			
310		90° "			
320		86° "			
322			fold nose in S ₁ (within and 3")	strike of S ₂	

Stage	S ₁	S ₂	Folding	Fold Axis	Remarks
825			minor folding ($\lambda < 1''$) - in S ₁ - vergence not measurable		S ₁ \perp S ₂
27-829			complex defn around gty lens		
830		86° to axis			
71-833			complex minor folding in S ₁ Vergence not measured $\approx 90^\circ$ S ₂		S ₁ $>$ S ₂
33		90° "	fold nose	plunging $\approx 5^\circ$ from strike intersection of S ₂ tracing	
38-840			minor Z-fold in S ₁ ($\lambda \approx \frac{1}{2}''$)		S ₁ \gg S ₂
841		87° "			
15-843			complex folding in S ₁ (oprot.) vergence not measured $\approx 90^\circ$ S ₂ \perp axis		S ₁ \perp S ₂
350		90° "			
354.5					mid seam 1" wide at 73° to axis
360		87° "			
870		84° "			
879.5			fold nose (width in core = $2\frac{1}{2}''$)	axis plunges $\approx 5^\circ$ from strike of S ₂ , trend = strike of S ₂	
880		89° "			
382.5		77° (maybe S ₁)	minor S-fold 3" wide in core	axis oriented 015/15 to strike of S ₂	
388			small fold nose ($\frac{1}{2}''$ wide in core)	axis strike of S ₂	
390		81° "			
300		75° "			
100-303			much complex minor folding in S ₁ vergence not measurable		S ₁ = S ₂
45			minor S-fold (width in core $\approx 3''$) in S ₁	trend strike of S ₂ , plunging 5°	
10		87° "			
13-915			much small scale defn of S ₁ vergence not recognizable		S ₁ = S ₂
260		75° "			

Footage	S ₁	S ₂	Folding	Fold Axis	Remarks
125.5			Z-fold (width in core = 2") in S ₁		
929					9" wide med seam at 40° to axis
930		88° to axis			
931			old nose (4" wide in core) in S ₁	-axis strike of S ₂	
940		77° "			
941.5 - 948	~25° basis		fold nose (?)		-sharp zone - numerous med seams S ₁
957		72° "	Schistosity in gneiss with - maybe S ₁ (?)		
953		44° "			
960		57° "			
970		60° "			
975		31° "			
980		57° "			
985		75° "			
990		86° "			
998-1006			Complex microfolding in S ₁ - vergence not measurable		S ₁ ⊥ S ₂
1009-1010		72° "			1ft. wide med seam S ₂ (?) @ 70° to axis
1020		90° "			
1030		90° "			
1040		90° "			
1050		83° "			
1060-1062		87° "	Complex minor folding in S ₁ vergence not measurable @ S ₂ ⊥ axis		S ₁ ⊥ S ₂
1070		~81° "	local deflection of S ₁ around gty knots		
1074.5-1075					sharp zone w med seams at 59° to axis
1080		77° "			
1090		79			
1100-1109			much small scale folding of S ₁ separated by bands (< 1/2") of S ₂		S ₁ ⊥ S ₂

