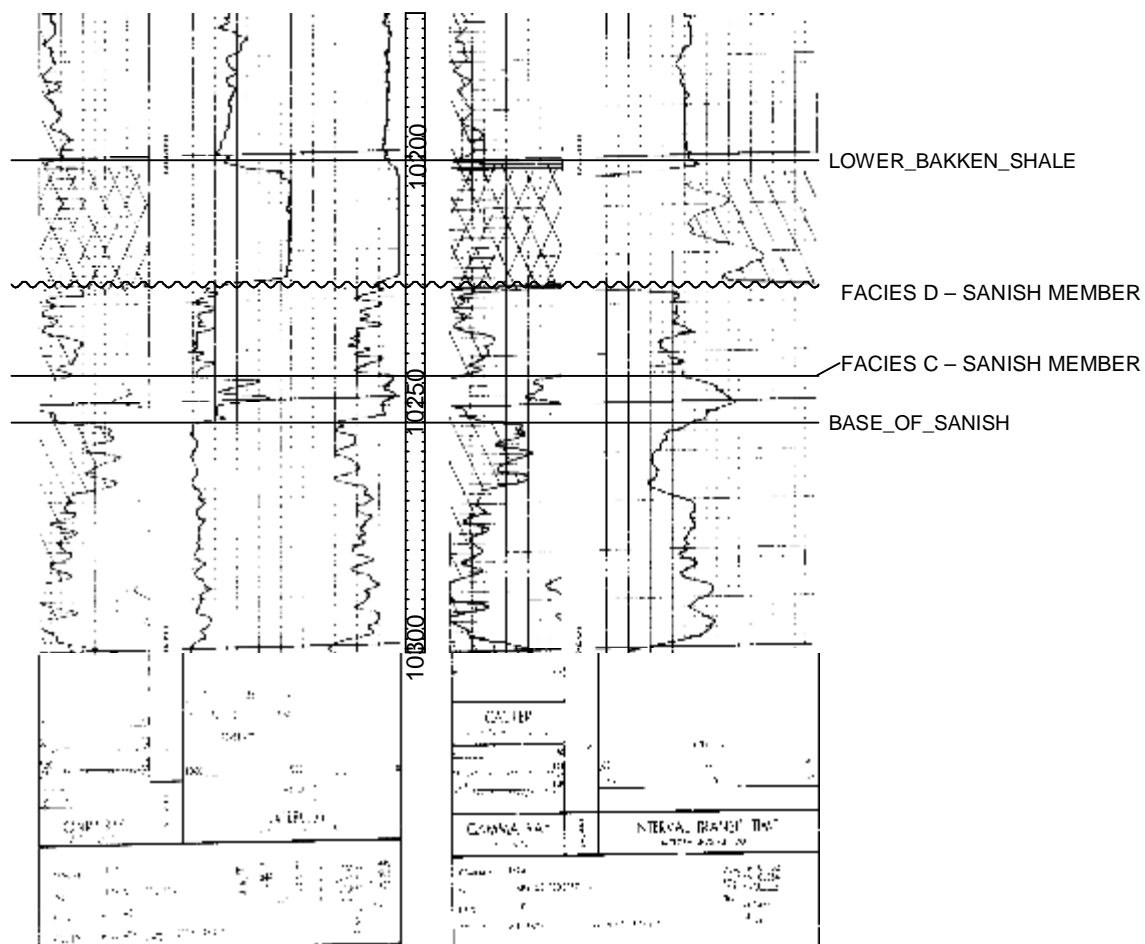


Appendix A.12 Core #12 Clarence Pederson (NCT-1)#1-19 Core Descriptions 157N 96W Sec 19 Core to log = +4'						
Depth (ft)	Composition	Primary Structures	Secondary Structures	Single Diagnostic Criteria	Additional Diagnostic Criteria	Facies
10,213' – 10,222'	Grayish black (N2) to dark black (N1) shale	Vague parallel-laminations, very thin, platy.				LBS
10,222' – 10,224'	Light green (5 G 8/1) to greenish gray (5 G 6/1) slightly dolomitic shale (50%) to very light gray silty dolomite (N8) (50%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,224' – 10,225'	Light green to greenish gray slightly dolomitic shale (40%) to very light gray silty dolomite (60%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation,	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,225' – 10,226'	Light green to greenish gray slightly dolomitic shale (50%) to very light gray silty dolomite (50%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,226' – 10,227'	Light green to greenish gray slightly dolomitic shale (20%) to very light gray silty dolomite (80%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,227' – 10,228'	Light green to greenish gray slightly dolomitic shale (40%) to very light gray silty dolomite (60%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures - Algal Mats?	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,228' – 10,229	Light green to greenish gray slightly dolomitic shale (80%) to	Parallel-laminations, cross-laminations,	Desiccation cracks, scour surfaces, energy decrease	-Mud drapes -Uni- and bidirectional Reactivation	-Flaser bedding	D

	very light gray silty dolomite (20%), 66-88μ, well-sorted, tightly packed	SSD	features, loading features, brecciation	surfaces -Bottom sets		
10,229' – 10,230'	Light green to greenish gray slightly dolomitic shale (30%) to very light gray silty dolomite (70%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,230' – 10,231'	Light green to greenish gray slightly dolomitic shale (90%) to very light gray silty dolomite (10%), 66-88μ, well-sorted, tightly packed	Parallel-laminations		-Mud drapes	-Flaser bedding	D
10,231' – 10,232'	Light green to greenish gray slightly dolomitic shale (40%) to very light gray silty dolomite (60%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Flaser bedding	D
10,232' – 10,237.2'	Light green to greenish gray slightly dolomitic shale (50%) to very light gray silty dolomite (50%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Flaser bedding	D
10,237.2' – 10,239'	Light green to greenish gray slightly dolomitic shale (50%) to very light gray silty dolomite (50%), 66-88μ, well-sorted, tightly packed	Massive cross-laminations, SSD and parallel lamination in silty dolomite clasts	Highly deformed bedding, high amounts of brecciation, Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
10,240' – 10,240.7'	Light green to greenish gray slightly dolomitic shale (90%) to very light gray silty dolomite (10%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, SSD	energy decrease features	-Mud drapes	-Flaser bedding	D
10,240.7' – 10,243.6'	Light green (5 G 8/1) to greenish gray (5 G 6/1) shale and very light gray (N8) to medium gray (N5) silty dolomite	Massive, cross-laminations, SSD and parallel lamination in silty dolomite clasts	Highly deformed bedding, high amounts of brecciation	Mud Drapes		C



Described Cored Interval 10,213' – 10,243.6'.