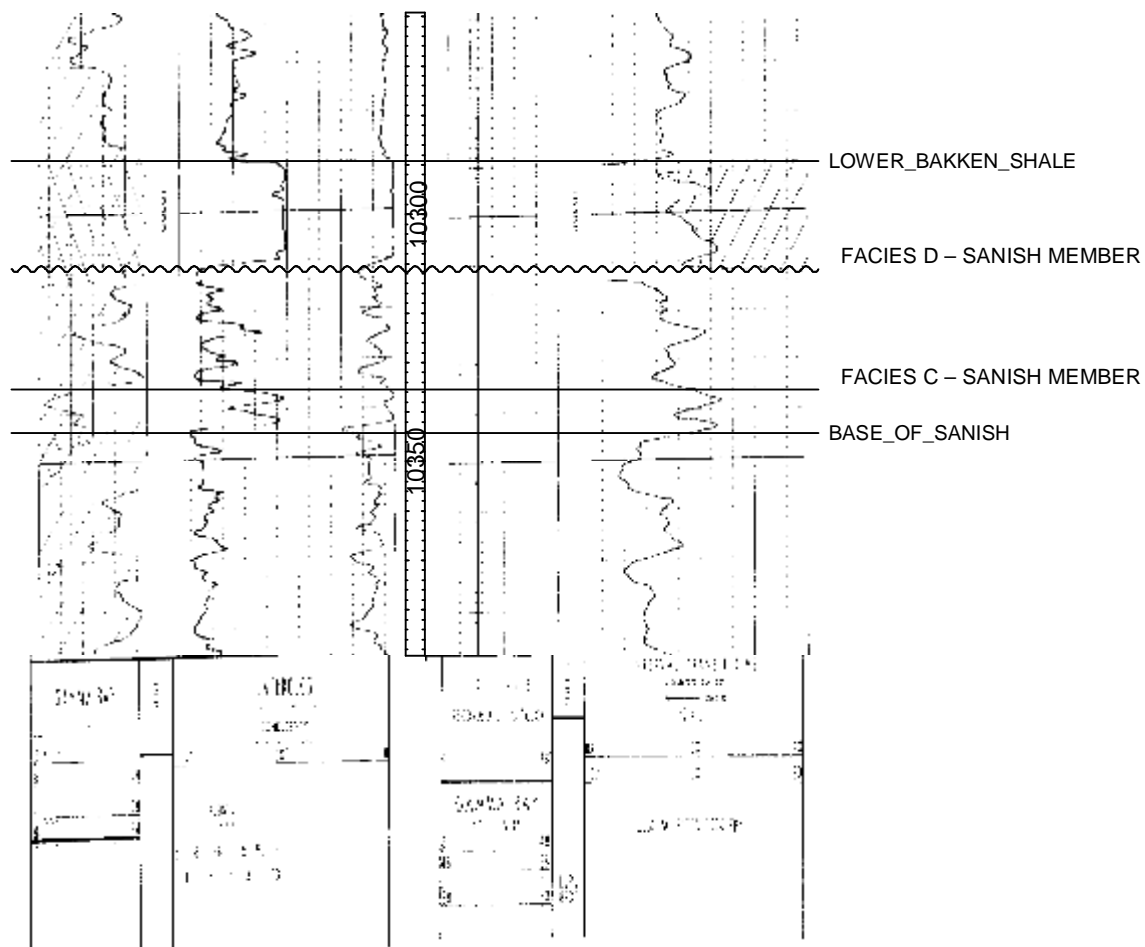


Appendix A.1 Core #1 A.S. Wisness #2 Core Descriptions 152N 96W Sec 3 Core to Log = -12'						
Depth (ft)	Composition	Primary Structures	Secondary Structures	Single Diagnostic Criteria	Additional Diagnostic Criteria	Facies
10,302' – 10,303.8'	Grayish black (N2) to dark black (N1) shale	Vague parallel- laminations, very thin, platy,				LBS
10,303.8' – 10,307'	Light green (5 G 8/1) to greenish gray (5 G 6/1) slightly dolomitic shale to very light gray silty dolomite (N8), (50:50) 66-88μ, well- sorted, tightly packed, very fine black laminations	Parallel- laminations, cross-laminations, SSD, dark layering	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
10,307' – 10,311'	Light green to greenish gray slightly dolomitic shale to very light gray silty dolomite (60:40), 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
10,311' – 10,312'	Light green to greenish gray slightly dolomitic shale to very light gray silty dolomite (50:50), 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
10,312' – 10,313'	Very light gray silty dolomite to light green to greenish gray slightly dolomitic shale , 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
10,313' – 10,314'	Light green to greenish gray slightly dolomitic shale to very light gray silty dolomite (40:60), 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
10,314' – 10,318'	Very light gray silty dolomite to light green to greenish gray slightly dolomitic shale (70:30), 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
10,318' -	Light green to	Parallel-	Desiccation	-Mud drapes	-Flaser bedding	D

10,321'	greenish gray slightly dolomitic shale to very light gray silty dolomite(40:60), 66-88μ, well-sorted, tightly packed	laminations, cross-laminations, SSD	cracks, scour surfaces, energy decrease features, loading features, brecciation	-Uni- and bidirectional reactivation surfaces -Bottom sets -Flame structures	-Herringbone x-bedding -Syneresis cracks	
10,321'-10,322'	Very light gray silty dolomite to light green to greenish gray slightly dolomitic shale (50:50), 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
10,322'-10,329'	Light green to greenish gray slightly dolomitic shale to very light gray silty dolomite (50:50), 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
10,329' – 10,332'	Massive very light gray silty dolomite, 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
10,332' – 10,332.5'	Massive very light gray silty dolomite, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD,	Desiccation cracks, scour surfaces, energy decrease features, loading features, brecciation	-Mud drapes -Uni- and bidirectional	-Flaser bedding -Herringbone x-bedding	D
10,332.5' -10,336'	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
10,336' – 10,340'	Dark greenish-gray (5 GY 4/1) to medium dark gray (N4) silty dolomite	Massive, rip-up clasts of varying size.	Vague. Pyrite			B



Described cored interval 10,302' – 10,340'