

Appendix A.8  
Core # 8  
Koeser-NCT-1 Core Descriptions  
151N 97W Sec 35  
Core to Log = -2'

Depth (ft)	Composition	Primary Structures	Secondary Structures	Single Diagnostic Criteria	Additional Diagnostic Criteria	Facies
11,011' – 11,017'	Grayish black (N2) to dark black (N1) shale	Vague parallel-laminations, very thin, platy,				LBS
11,016' – 11,018'	Light green (5 G 8/1) to greenish gray (5 G 6/1) slightly dolomitic shale (40%) to very light gray silty dolomite (N8) (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
11,018' – 11,022'	Light green to greenish gray slightly dolomitic shale (50%) 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
11,022' – 11,023'	Light green to greenish gray slightly dolomitic shale (40%) 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
11,023' – 11,024'	Light green to greenish gray slightly dolomitic shale (40%) 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
11,024' – 11,025'	Light green to greenish gray slightly dolomitic shale (70%) very light gray silty dolomite (30%), 66-88μ, well-sorted, tightly packed	Parallel-laminations, cross-laminations, SSD	Energy decrease features, loading features	-Mud drapes -Uni- and bidirectional Reactivation surfaces -Bottom sets -Flame structures	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D
11,025' – 11,026'	Light green to greenish gray slightly dolomitic shale (50%) very light gray silty	Parallel-laminations, cross-laminations, SSD	Desiccation cracks, scour surfaces, energy decrease features, loading	-Mud drapes -Uni- and bidirectional Reactivation surfaces	-Flaser bedding -Herringbone x-bedding -Syneresis cracks	D

	dolomite (50%), 66-88μ, well-sorted, tightly packed		features, brecciation	-Bottom sets -Flame structures		
11,026' – 11,027'	Light green to greenish gray slightly dolomitic shale (40%) very light gray silty dolomite (60%), 66-88μ, well-sorted, tightly packed	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
11,027' – 11,028'	Light green to greenish gray slightly dolomitic shale (60%) very light gray silty dolomite (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
11,028' – 11,029'	Light green to greenish gray slightly dolomitic shale (50%) 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
11,028' – 11,029'	Light green to greenish gray slightly dolomitic shale (40%) very light gray silty dolomite (60%), 66-88μ, well-sorted, tightly packed	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

