FOSSIL ENERGY

DOE/BC/14936-10 (App. 2 Appendix II)
(DE98000475)

GEOLOGIC AND ENGINEERING CHARACTERIZATION OF GERALDINE FORD FIELD, REEVES AND CULBERSON COUNTIES, TEXAS - CORE DESCRIPTION

Topical Report - 1997

By
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Bureau of Economic Geology
The University of Texas at Austin
Austin, Texas

National Petroleum Technology Office
U. S. DEPARTMENT OF ENERGY
Tulsa, Oklahoma

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App. 2

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FGU3

Well RAMSEY 18-15 Core depth (+) 2666 (−) 2688 = _____ Log depth @ _____

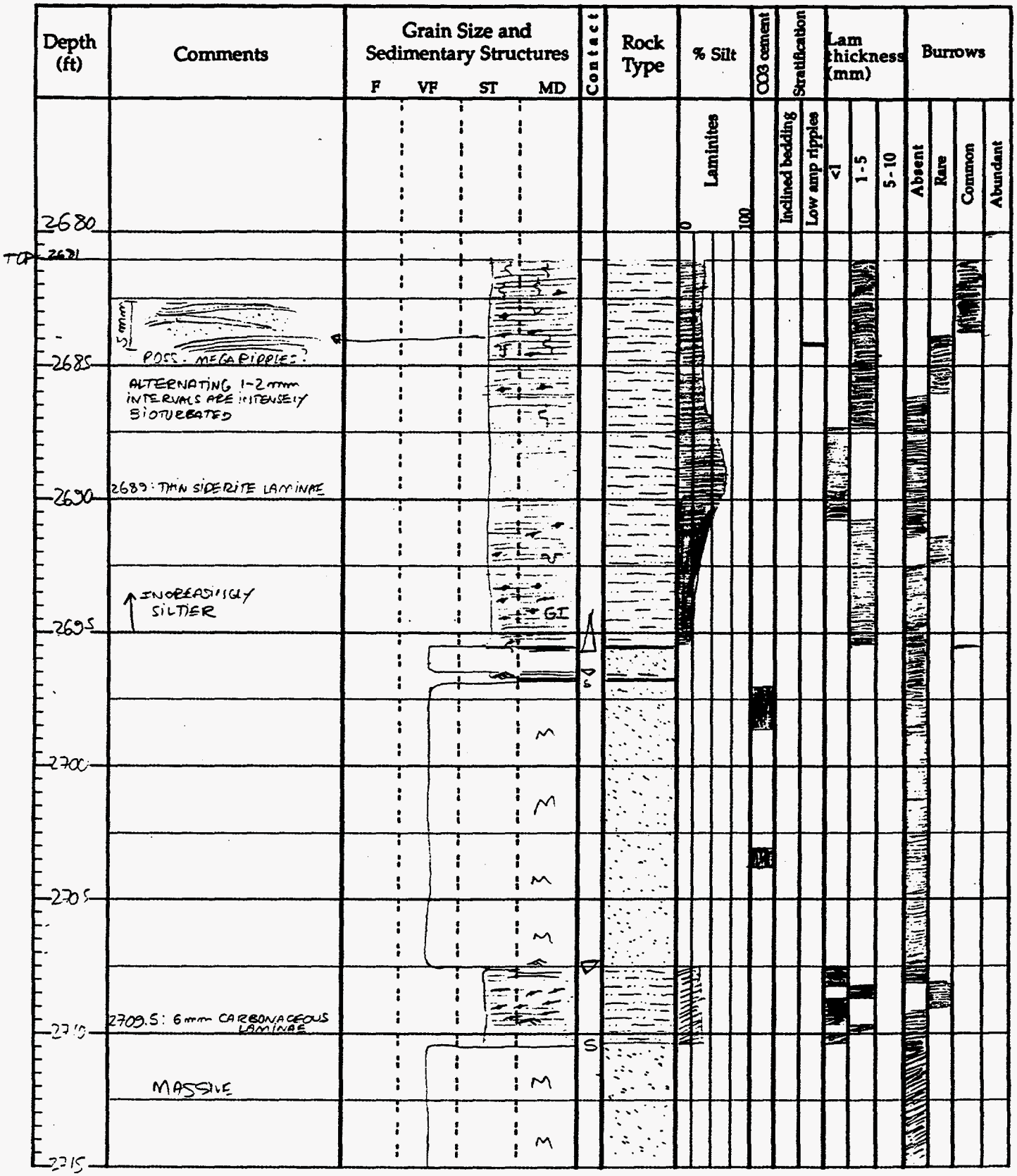
Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification: Inclined bedding	Low amp ripples	Lam Ranges (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2665																		
	Very fine grained sandstone, mainly massive, but with localize ripples, fine lamination and contorted bedding																	
2670	Some vertical and horizontal burrows																	
	Fine laminated siltstone very few bioturbated																	
2675																		
	Massive Lutite 2 inches thick.																	
2680																		
2685																		
	Black shale laminae above lenticular shale fragments that decrease size and amount toward bottom.																	
2688																		

FGU5

Well Ramsey 18-17 Core depth (+) 2681 (−) 2734 = 53' Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 07/10



Well Ramsey 18-17 Core depth (+) 2681 (−) 2734 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 07/10

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification	Lam thickness (mm)	Burrows
2715	COMPLETELY MASSIVE/ STRUCTURELESS	M							
			S						
2720	2720-2728: 8' OF CORE IN A 3'-LONG BOX; MOSTLY BROKEN SS PIECES -> CHECK LOG	M	S						
		M							
2725		M							
2730									
		M							
2735									

Stratification: Inclined bedding; Low amp ripples

Lam thickness (mm): <1; 1-5; 5-10

Burrows: Absent; Rare; Common; Abundant

FGU6

Well RAMSEY 18-12 Core depth (+) 2654 (-) 2697 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2650									
2654									
2655	Very fine laminated siltstone dark gray, locally redish by siderite cement.								
2660	Fine laminated siltstone, light gray in color, few to moderate bioturbation. Toward the bottom, contorted bedding, to continued out of phase wavy lamination. Sharp contact.		S						
2665	Massive Sandstone, with some soft sediment deformation structure. (0.5" thick). Friable, locally cemented by calcite.								
2670	Sediment soft deformation at the bottom.								
	Fine laminated siltstone		S						
	Massive sandstone. As Above								
2680	Black Lutite, finely laminated, with small soft deformation structure grades upward to								
2685	Siltstone and very fine sandstone.								

Well RAMSEY 18-12 Core depth (+) 2654 (−) 2697 = _____ Log depth ⓟ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Low amp ripples	Lam thickness (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2685																		
2690	Very fine grained					S												
	Massive Sandstone, with some ripple lamination and planar lamination where the grain becomes finer.																	
2695																		
←2697																		
2700																		

FGU7

Well RAMSEY 18-14 Core depth (+) 2662 (−) 2756 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2660																
2662	Fine laminated siltstone, with many organic-rich flakes. In a sharp contact to very fine laminated mudstone, black in color.		G S G													
2665	Some deformed soft sediment structures in the mudstone. Contact with underlying															
2670	Massive sandstone is gradual. Massive Sd. is very fine grained, slightly friable.															
2675			S S S S F													
2680	This lower contact between sandstone and siltstone, presents microfaulting. Massive sandstone with organic rich fragments toward the top.		G													
2685	sediment soft deformation. 1" thick. where the grain becomes finer.															
2690			G S													
2695	Ripple Lamination. Continued out of phase wavy lamination. Flame structure at the bottom															

Well RAMSEY 18-14 Core depth (+) 2662 (−) 2756 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2695									
	MISSED SECTION 27'								
2722									
	Very fine grained sd. good sorting, many sedimentary structures.								
2725	Ripple lamination toward top. Discontinued wavy lamination. Locally bioturbated.								
2730	The bottom could be erosive, with irregular surface and many ripup clasts.								
	Fine laminated siltstone planar lamination high angle. Ripple lamination.								
2735	Highly bioturbated toward bottom.								
	MISSED SECTION 15'								
2750									
	Very fine grained sd. With many sedim. struc. Ripple lamination,								
	Parallel lamination, Through cross bedding.								
2755	Microfaulting toward bottom.								
2756									

Well Ramsey 18-9 FGU 14 Core depth (+) 2755.5 (-) 2703.0 = Log depth @

Formation Ramsey Location Logged by Sigrid Date 7-1-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2700									
1									
2									
3				TOP OF CORE					
4		vf d							
2705									
6		vf d							
7									
8									
9									
2710									
1									
2									
3									
4									
2715									
6									
7		vf d							
8		d vf							
9									
2720									
1									
2									
3									
4									
2725									

Well Ramsey 18-9 Core depth (+) 2755.5 - (−) 2703.0 = _____ Log depth @ _____

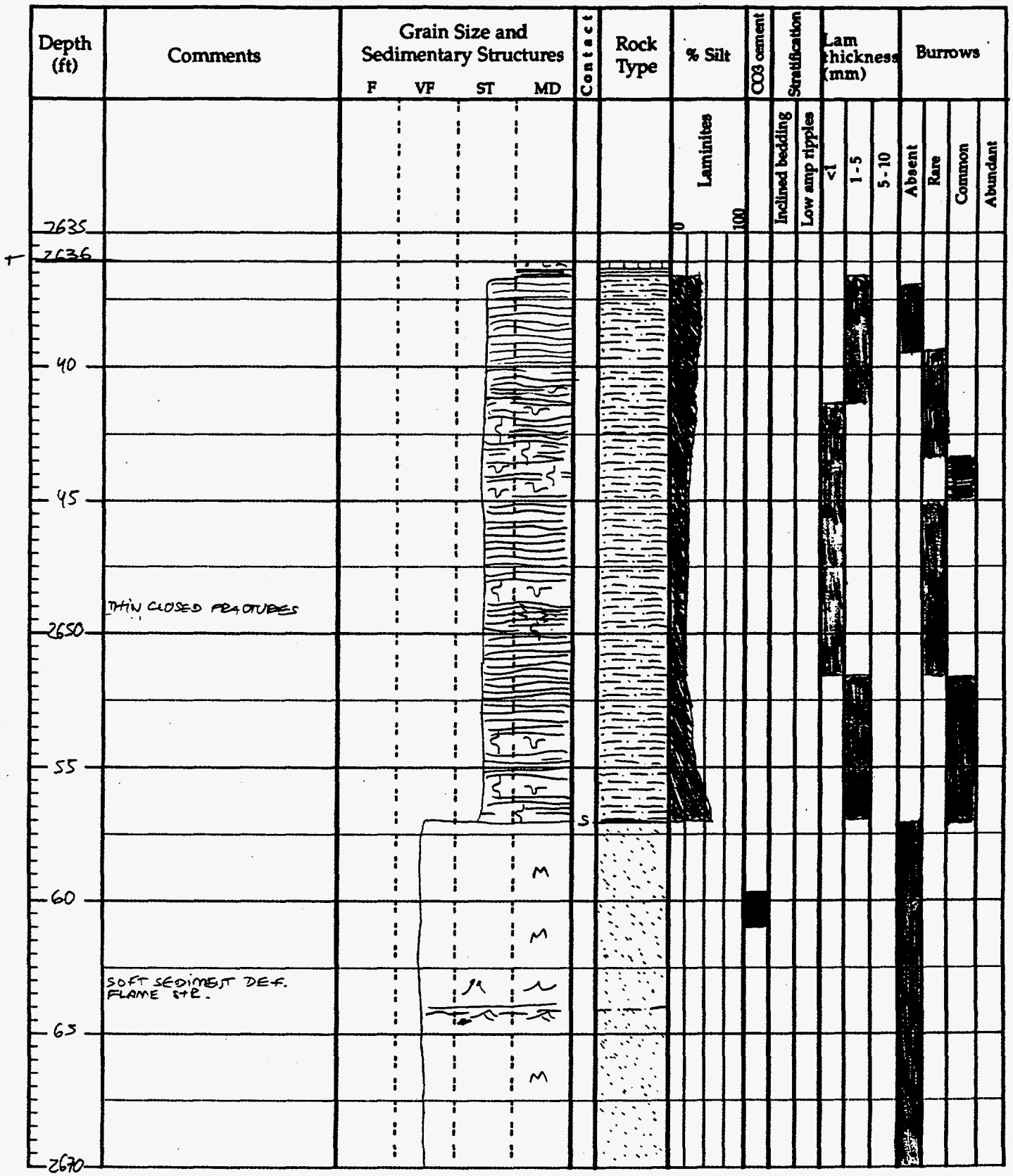
Formation Ramsey Location _____ Logged by Sigrid Date 6-28-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2725															
6	friable massive SS														
7	cm. size organic feature at 27.1 ft.														
8															
9	climbing ripples. Organic debris		L												
2730	more abundant at top & bottom of interval		S												
1	SS typically friable. SS color changes from tannish gray to tan at 31.0. Contact is														
2	sharp														
3	CO_3 cmted zone 33.0-33.5 ft														
4	Grn size reaches uvf. Wispy low-angle lams at 33.8														
2735															
6															
7	MISSING BOX from 2736-2739														
8															
9	CO_3 cmted interval from 39.0-39.7 ft														
2740															
1	SS becomes more friable moving up through interval.														
2	fining upward sequence from wavy discont. organic lams to silt size &														
3	organic cm. thick wavy lam. Coarsens upward through rippled bedding to lvg with mm organic														
4	clasts to massive SS.														
2745	Abundant CO_3 cmt. at 46.0														
6	Sharp boundary from silt/organic/ lvf laminite to lvf/uvf														
7	massive SS. Burrows? at 47.7 & 47.9.														
8			S												
9	abundant organic clasts & burrowing Laminae chewed up by burrowing														
2750															
1	Clasts are aligned horizontally with laminae														
2	Sandier lams contain some lvf size qtz. grns.														
3															
4															
2755															
	Burrowing is rare. No organic clasts														
	Bottom core														
2760															

NOTE - Laminites display "sets" of <1 mm organic/siltstone laminae with >1 mm silt/lvf ss laminae that are generally burrowed (horizontal?). Organic clasts in laminites are mm size and can be distributed

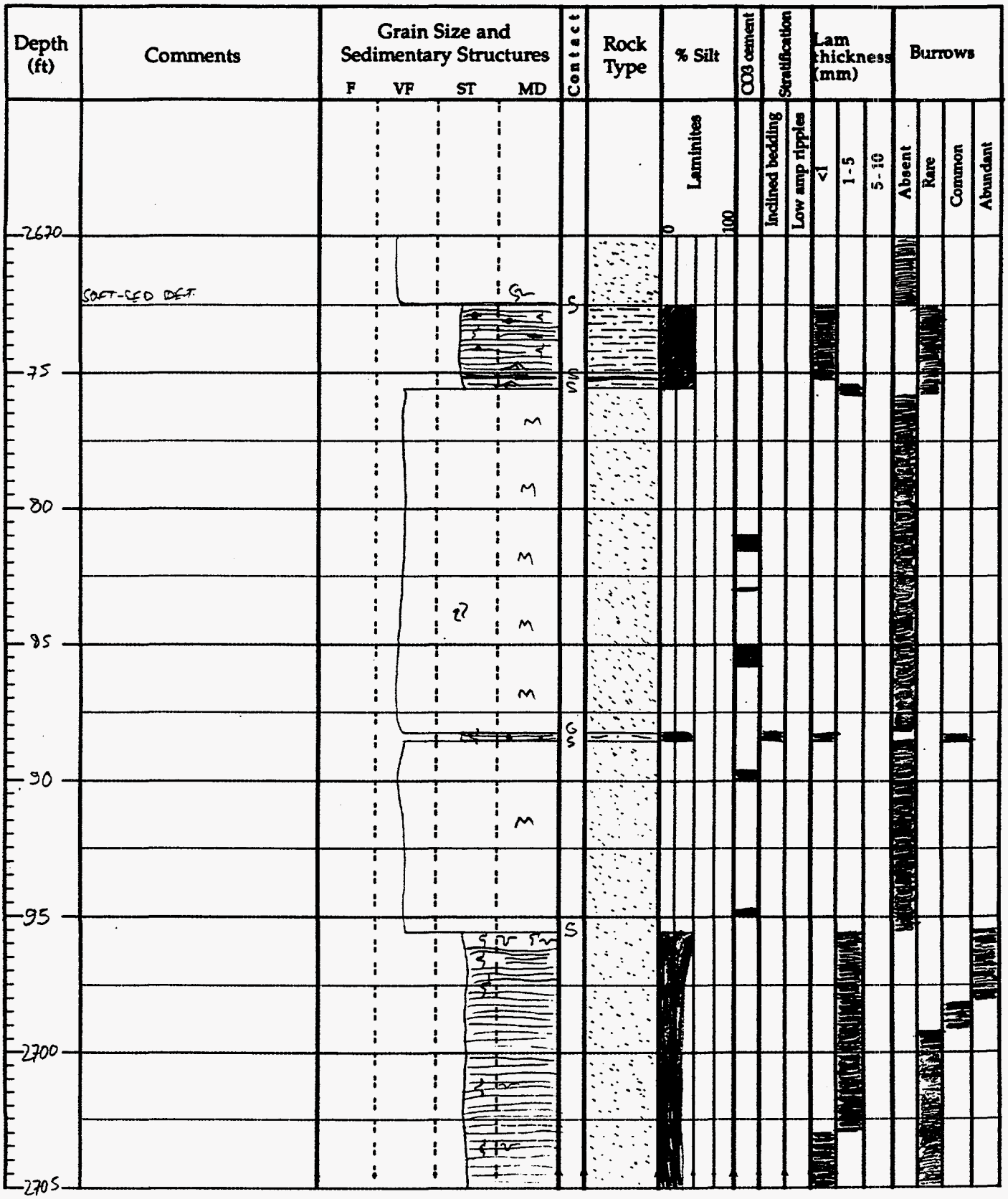
Well RAMSEY 18-7 (FGU-12) Core depth (+) 2636 (−) 2750 = 114' Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____



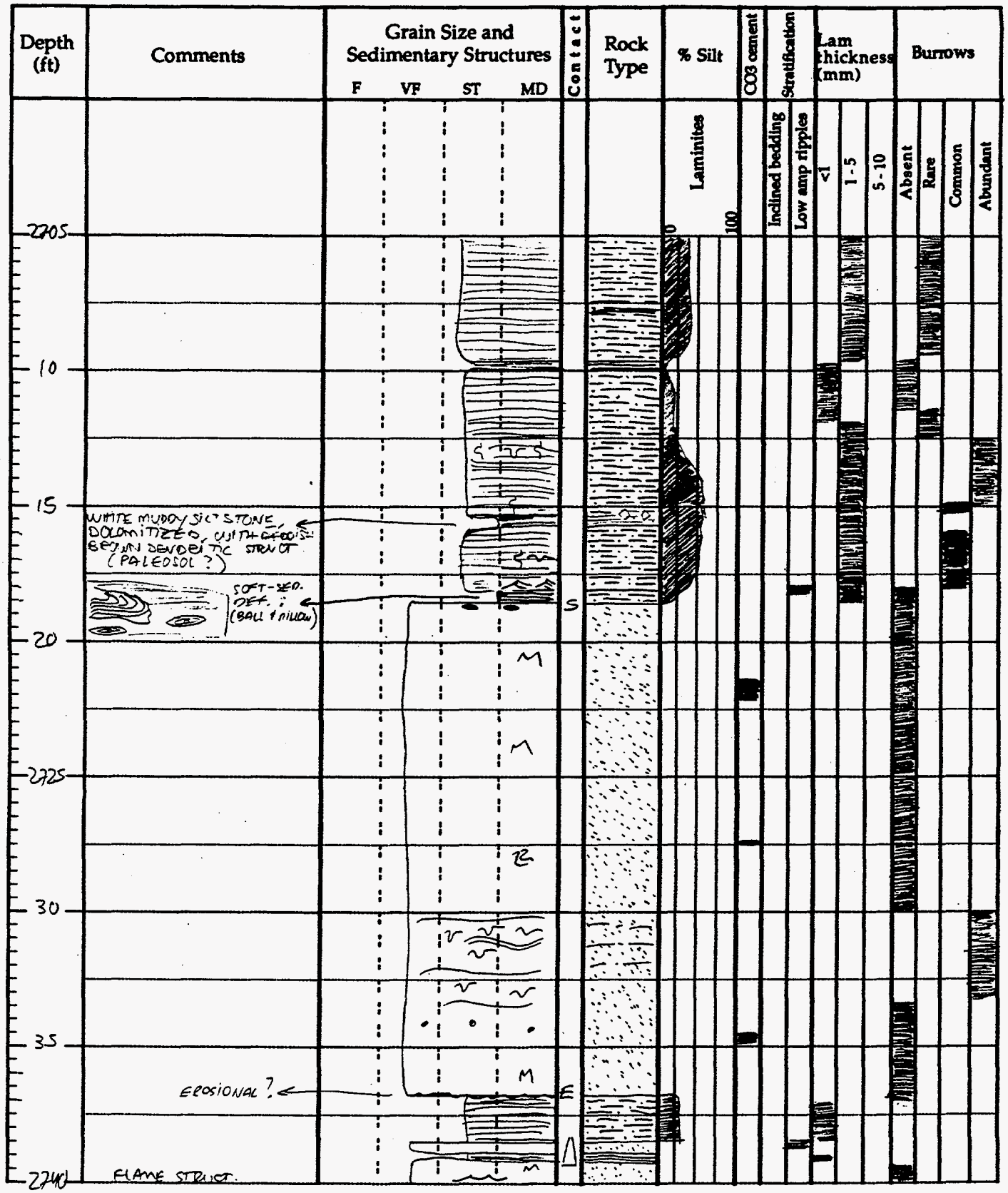
Well Ramsey 18-7 (FCU-12) Core depth (+) 2636 (−) 2750 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____



Well Ramsey 18-7 (FGU-17) Core depth (+) 2636 (−) 2750 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____



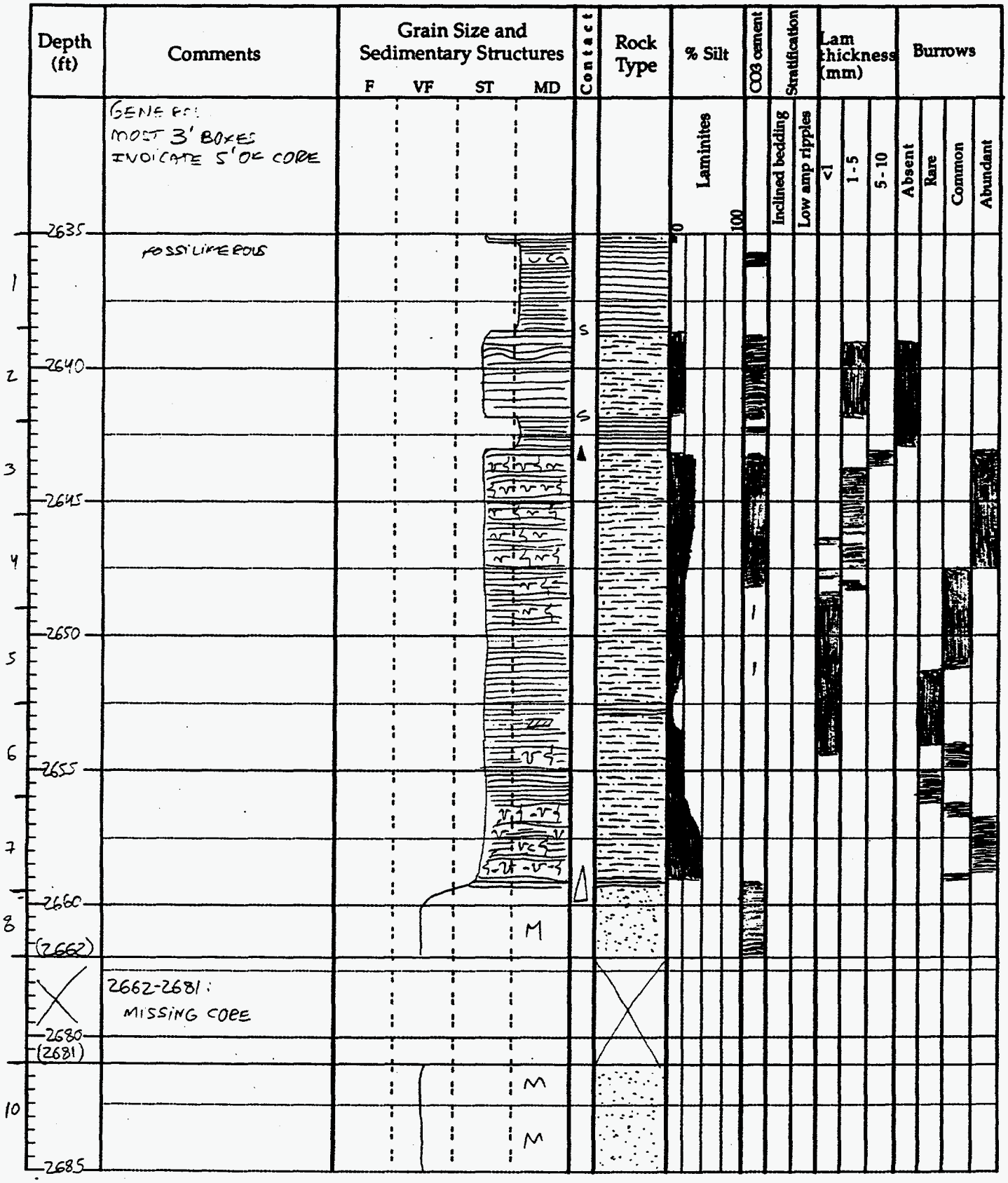
Well Ramsey 18-7 (FGU-17) Core depth (+) 2636 (−) 2780 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2740															
45															
8 2750															

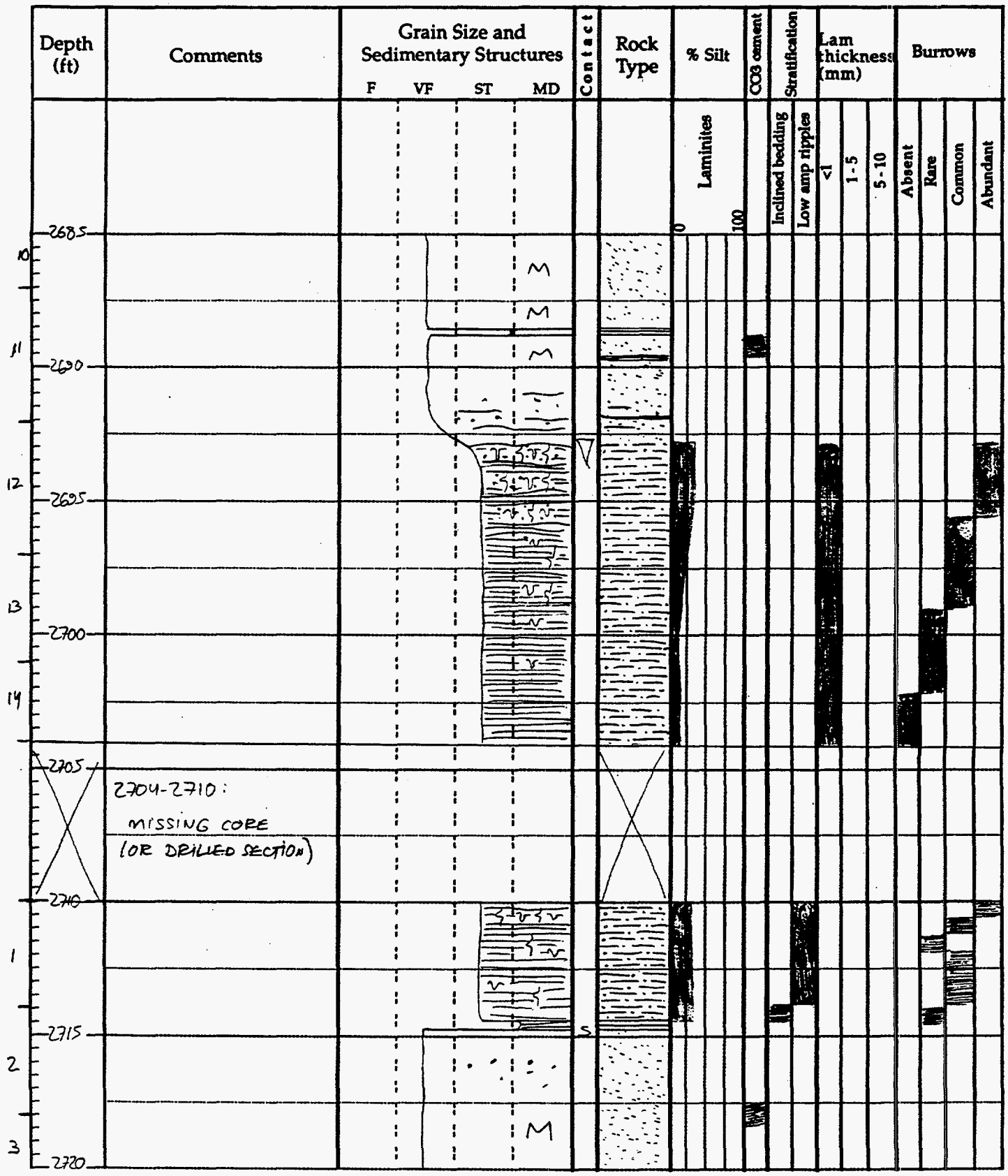
Well Ponse / 18-1 (FG420) Core depth (+) 2635 (−) 2794 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 9/20/96



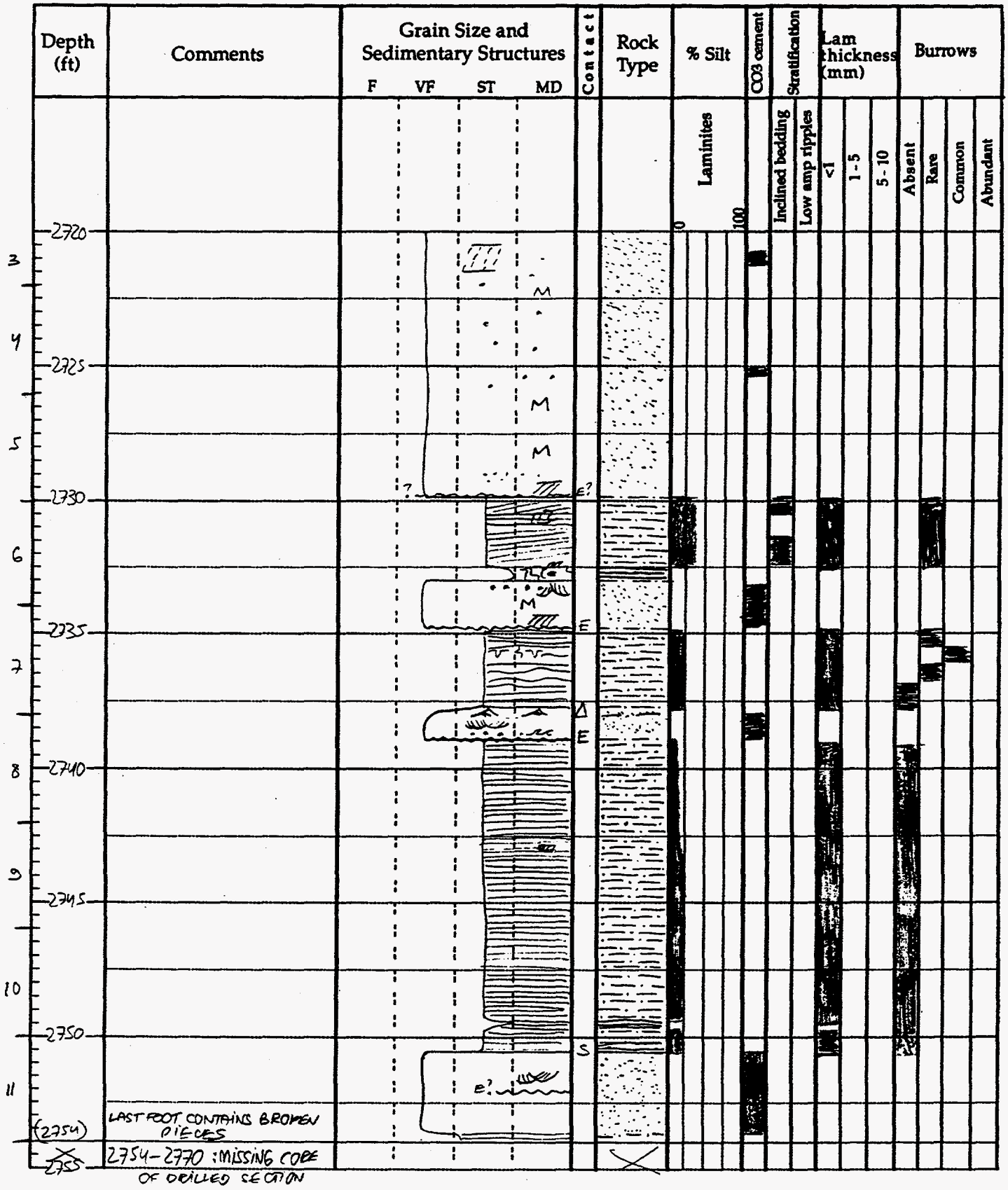
Well Ramsey 18-1 Core depth (+) 2635 (-) 2794 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JDSE Date 9/20/96



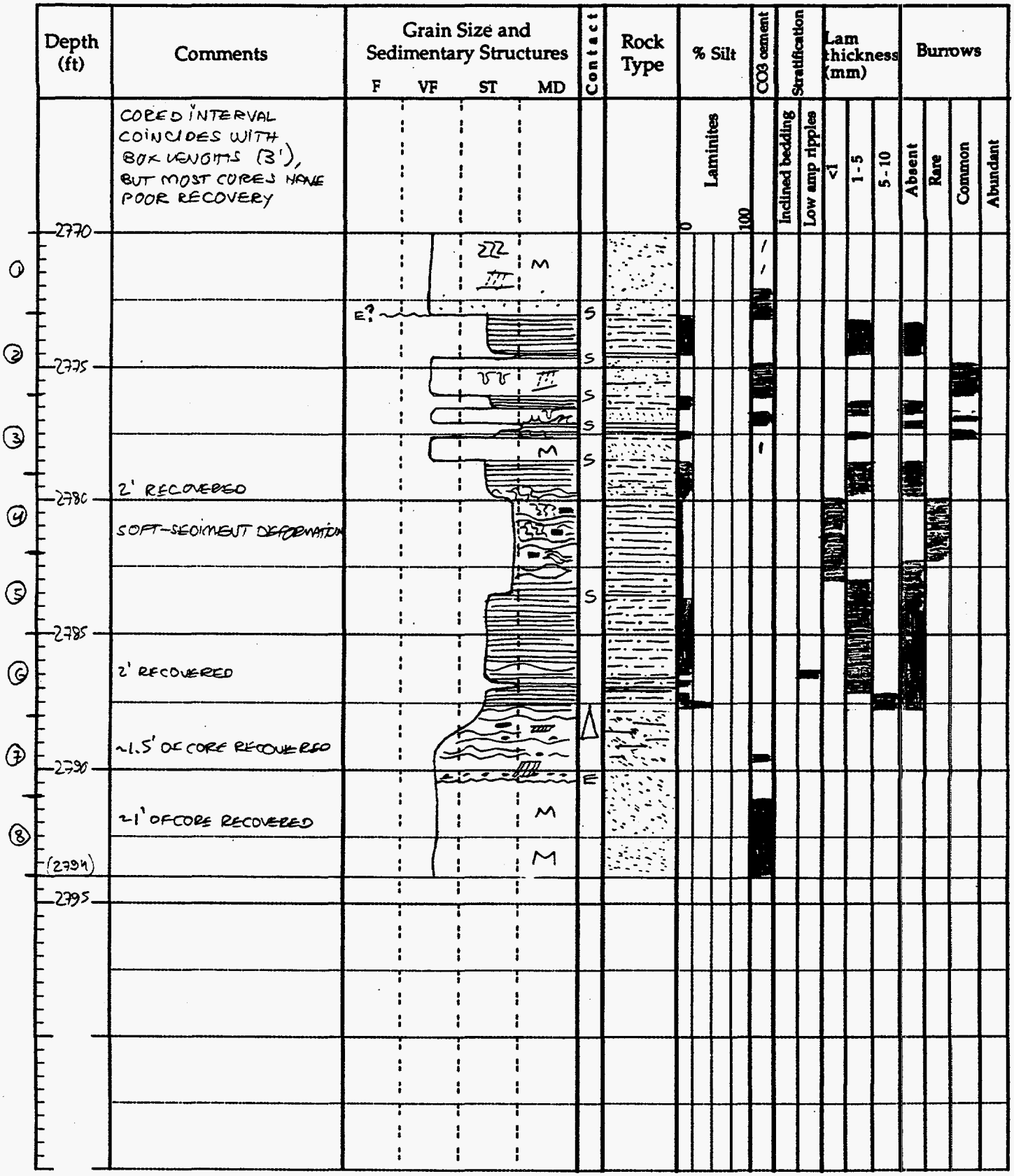
Well Ramsey 184 Core depth (+) 2635 (−) 2794 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 9/20/96



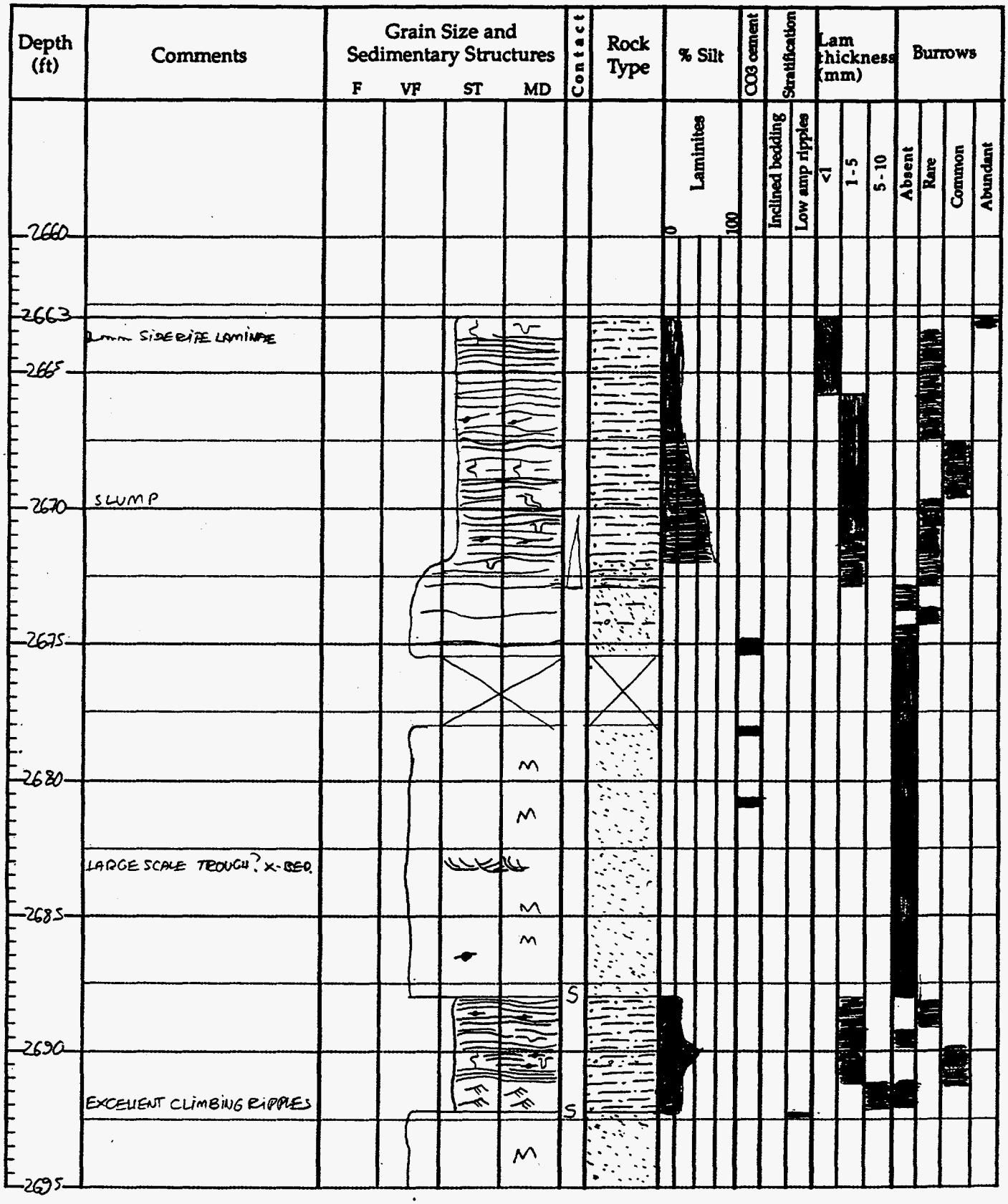
Well Ramsey 18-1 Core depth (+) 2635 (-) 2794 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 09/20/96



Well RAMSEY 18-11 (FCU-22) Core depth (+) 2663 (−) 2713 = _____ Log depth @ _____

Formation _____ Location _____ Logged by CARLOS Date _____



Well RAMSEY 18-11 Core depth (+) 2663 (−) 2713 = _____ Log depth ⓜ _____

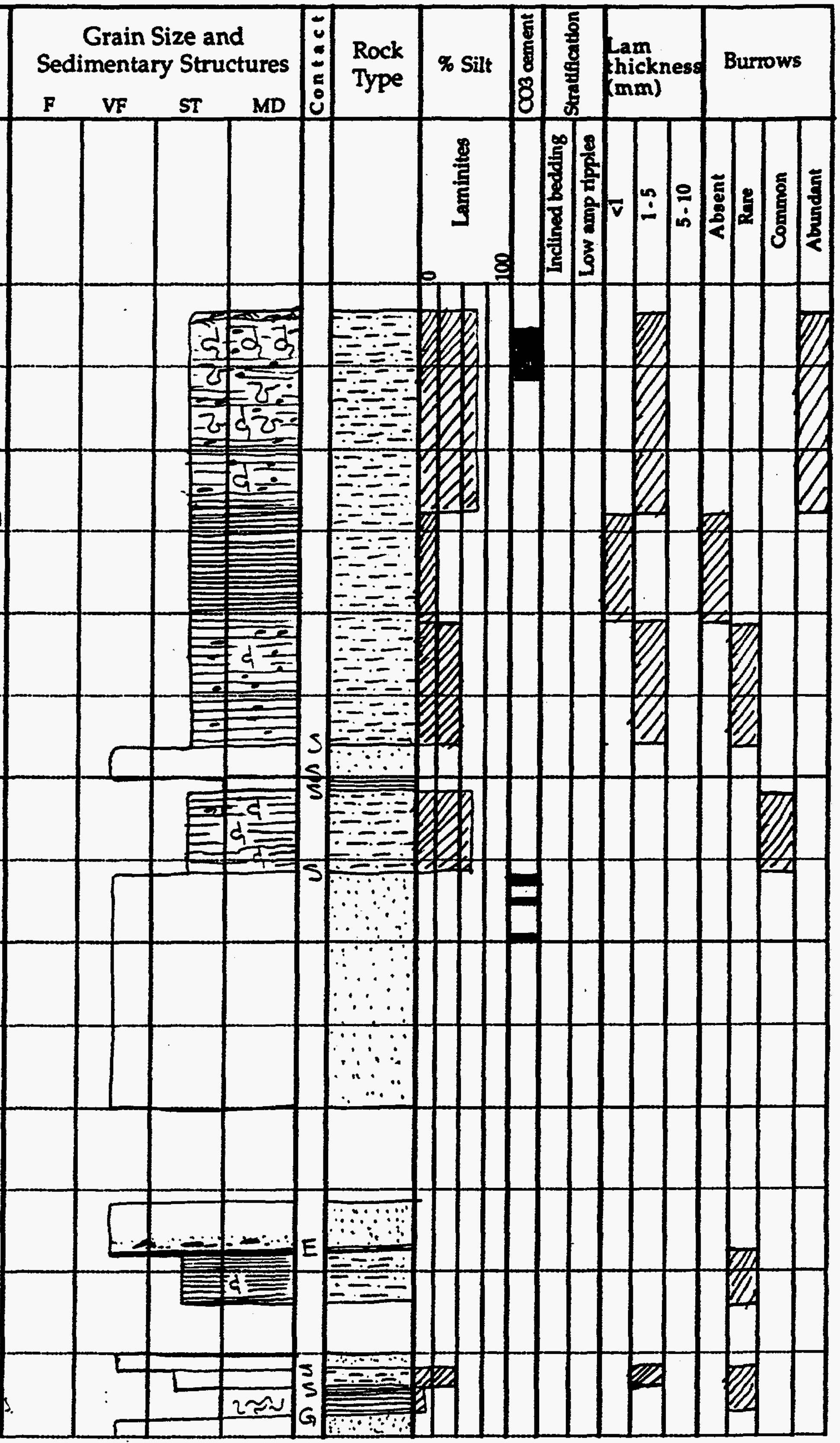
Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2695									
	- RIPPLE IN MD CHECK LOCATION OF THIN MD LATER WITH GR								
2700									
		M							
2705									
		M							
	SOFT-SEDIMENT DEF. WATER ESCAPE STRUCT.								
2710									
2713									
2715									

Well RAMSEY 13-4 (FGU 30) Core depth (+)(–) 2659 = ______ Log depth @ ______

Formation ______ Location ______ Logged by ______ Date ______

Depth (ft)	Comments
2655	
56	TOP OF CORE
	Fine laminated Siltstone, highly bioturbated, slightly Calcareous.
2660	
	Very fine laminated siltstone, with several reddish layers of siderite.
2665	
	Fine laminated Siltstone rarely bioturbated.
2670	Massive black lutite, 2" thick.
	Massive sd. Friable, locally cemented by calcite.
2675	
2680	
	Missed Section 3'
	Massive sd. As Above. Bottom is erosive, with many rip-up clasts of organic material.
2685	
	Missed Section 1.5'
2690	Massive lutite, siliceous, with some contorted bedding.



FGU 30

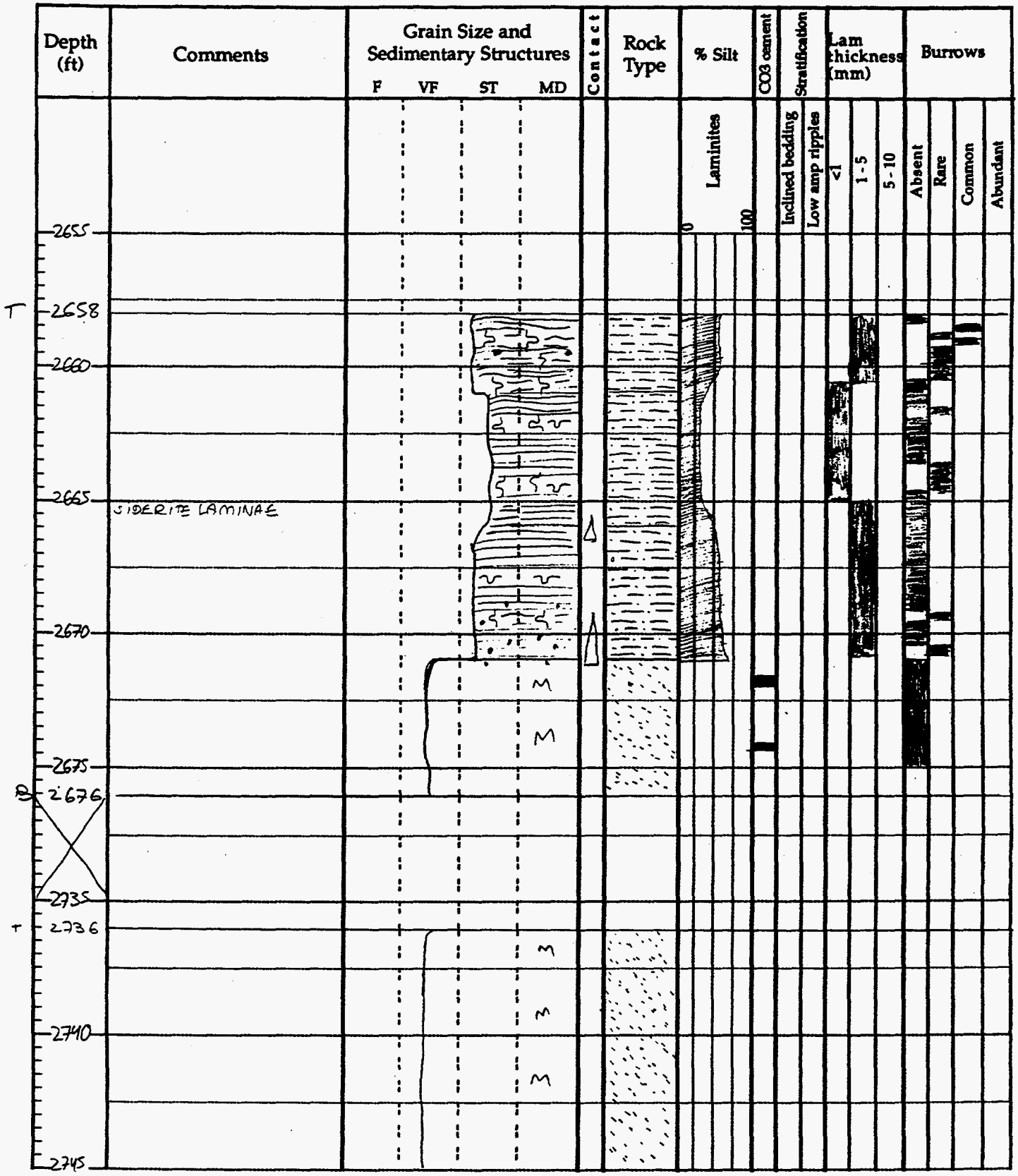
Well RAMSEY 13-4 Core depth (+) 2656 (−) 2714 = _____ Log depth (F) _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2690	Massive Sandstone Friable. Top grades to massive lutite. Bottom is probably sharp, marked by laminae of carbonaceous black shale, non calcareous.								
2695									
2700			S						
2705	Fine laminated siltstone, bioturbated with many organic-rich flakes								
	MISSED SECTION 3'								
2710	Very fine laminated siltstone with some shell fragments replaced by pyrite. Bioturbation is rare to absent.								
2714	END OF CORE								

Well Ramsey 19-3 (FGU-35) Core depth (+) 2658 / (-) 2676 = 2736 / 2763 Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____



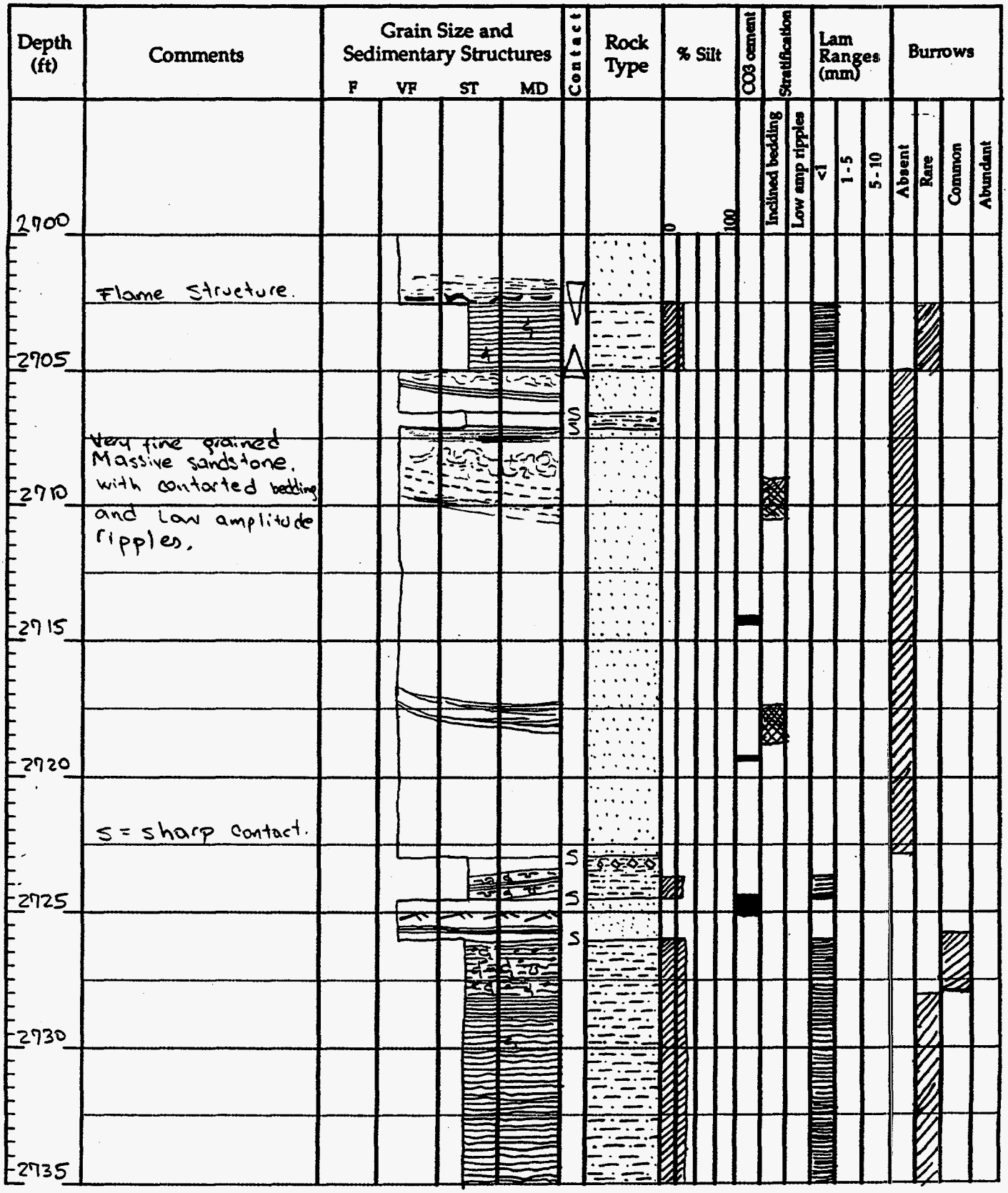
Well EGU 40 RAMSEY 19-8 Core depth (+) 2665 (−) 2781.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (0–100)	CO_3 cement	Stratification: Inclined bedding	Low amp ripples	Lam Ranges (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2665	Black Mudstone (0.5') laminated, with some fossils about 1cm diameter, replaced by calcite and pyrite. To the bottom condensed section slightly calcareous about 5mm thickness.																	
2670	Fine laminated siltstone highly bioturbated, slightly calcareous. Trace fossils are Nereites.																	
2675	Fine laminated siltstone, locally bioturbated. Several redish layers of siderite.																	
2680																		
2685	Contact section is missed. Probably Gradual. Very fine grained, massive sandstone. Top is highly cemented by calcite.																	
2690																		
2695																		
2700																		

Well RAMSEY 19-8 Core depth (+) 2665 (−) 2781.5 = _____ Log depth ⓟ _____

Formation _____ Location _____ Logged by _____ Date _____



Well RAMSEY 19-8 Core depth (+) (−) _____ = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification: Inclined bedding	Low amp ripples	Lam Ranges (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2735																		
2740																		
2745																		
2750	Massive sandstone with some circular nodules of pyrite (<0.5cm. diameter). Local carbonate cemented layers.																	
2755																		
2760																		
2765	Big horizontal burrow 5cm long 1cm wide.																	
2770																		

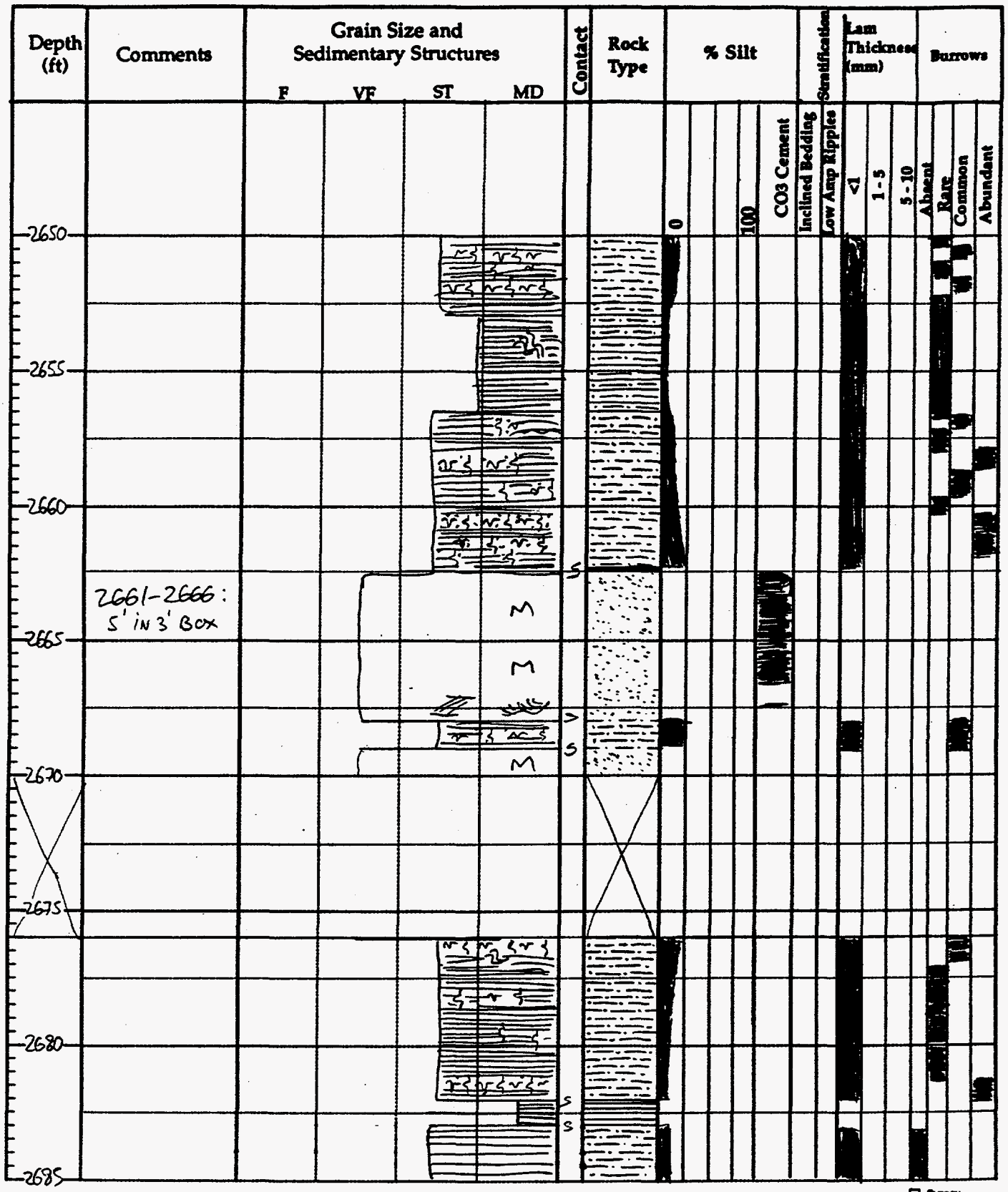
Well RAMSEY 19-8 Core depth (+) (−) _____ = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures				Contact	Rock Type	% Silt				CO_3 cement	Stratification		Lam Ranges (mm)			Burrows			
		F	VF	ST	MD			0			100		Inclined bedding	Low amp ripples	<1	1-5	5-10	Absent	Rare	Common	Abundant
2770																					
	Vertical burrows or 'pipe' structures formed by water escape. They are 5cm long and less than 1mm. wide with a black material at the top of each one. A lot of bioturbation at the bottom.																				
2775																					
2780	G = Gradual contact																				
2785						G															
27																					

Well Ramsey 24-2/FGU-44 Core depth (+) 2650 (-) 2728 = _____ Log depth ● _____

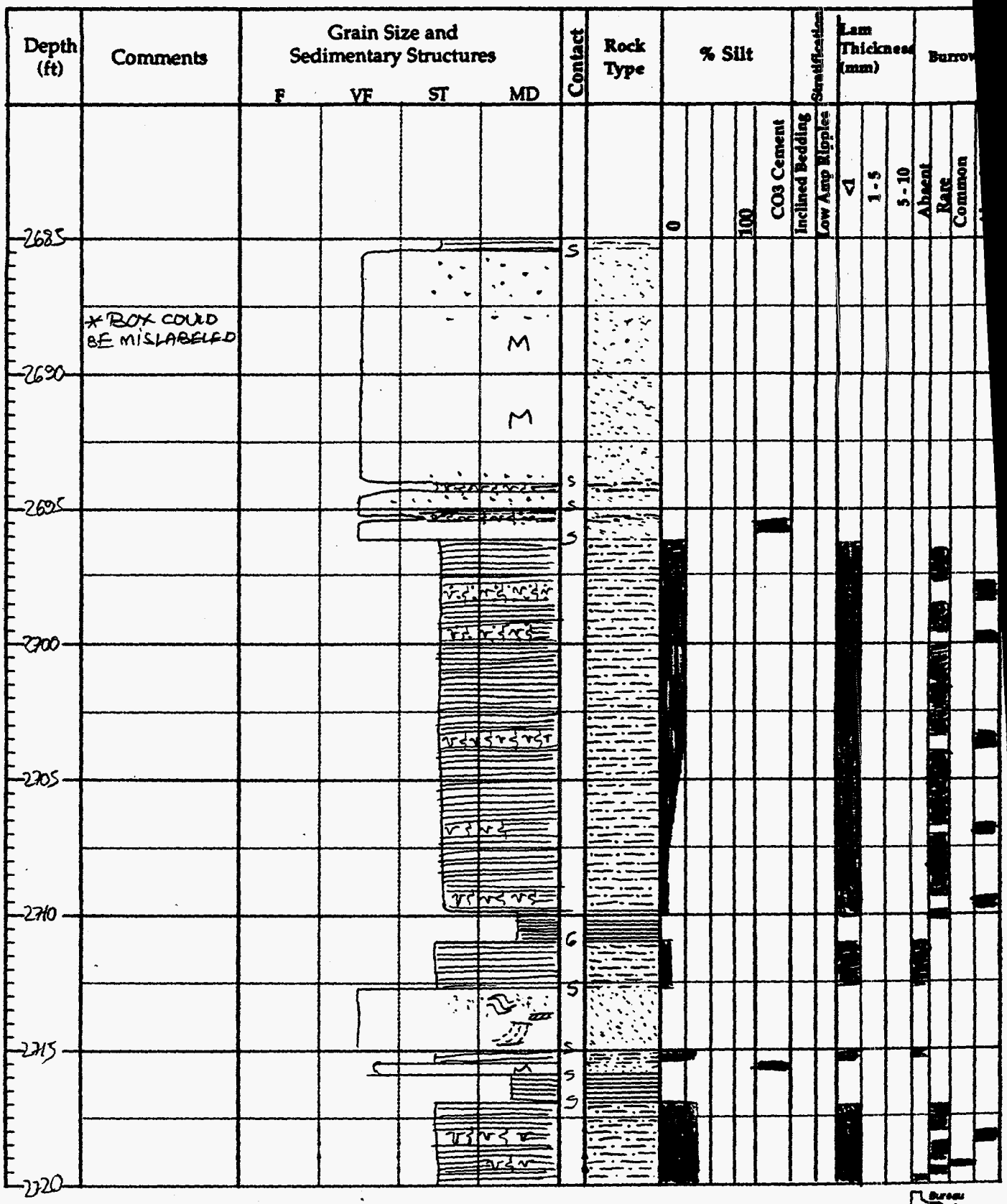
Formation _____ Location _____ Logged by JOE Date 10/24/25



Bureau of Economic Geology

Well Ramsey 24-2 / FW-44 Core depth (+) 2650 (−) 2728 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/24/



Bureau of Economic Geology

Well Ramsey 24-2 / FGU-44 Core depth (+) 2650 (−) 2728 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/28/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures				Contact	Rock Type	% Silt					Stratification		Lam Thickness (mm)			Burrows			
		F	VF	ST	MD			0			100	CO3 Cement	Inclined Bedding	Low Amp Ripples	<1	1 - 5	5 - 10	Absent	Rare	Common	Abundant
2720																					
						G															
2725																					
2730																					

Bureau of Economic Geology

Well RAMSEY 19-6/FGU-47 Core depth (+) 2659 (−) 2710 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/24/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0, 100)	CO3 Cement	Stratification (Inclined Bedding, Low Amp Ripples)	Lam Thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	2" CORE 4' REPORTED IN 3' BOXES								
2655									
	TOP OF CORE								
2660									
2665									
2670			S						
2675		M							
2680		M							
2685	OVERSTEEPENED X-BEDDING (>35°)	M							
2690		M	S						

Bureau of Economic Geology

Well RAMSEY 1-6 / FGU-47 Core depth (+) 2659 (−) 2710 = _____ Log depth ⓟ _____

Formation _____ Location _____ Logged by JOSE Date 10/24/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures	Contact	Rock Type	% Silt	Stratification	Lam Thickness (mm)	Burrows
		F VF ST MD			0 100 CO3 Cement	Inclined Bedding / Low Amp Ripples	<1 / 1-5 / 5-10	Absent / Rare / Common / Abundant
2690			S					
		M						
2695								
		M						
2700		M						
		M						
2705		M						
		M						
2710	BOTTOM OF CORE							

Bureau of Economic Geology

Well Ramsey 19-48 (FGU 50) Core depth (+)(−) 2649-2687 = _____ Log depth @ _____

Formation Ramsey Location _____ Logged by Sigrid Date 10-8-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2645															
6															
7															
8															
9		Top Core													
2650		CORE MISSING 2649-2650													
1															
2	faint lams at 2652.		S												
3		M													
4															
2655															

Well Ramsey 19-48 (FGU 50) Core depth (+) (−) 2649 - 2687 = _____ Log depth @ _____

Formation Ramsey Location _____ Logged by Sigrid Date 10-7-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2655									
6	Sharp contact at 2658 due to grain size change from vf to silt	M							
7			L						
8	very indistinct lams at 2658.		S						
9	very friable SS 2658-2662	M							
2660									
2665									
6		M							
7									
8									
9									
2670									
1									
2		M							
3									
4									
2675									
6									
7		M							
8									
9									
2680									
1									
2		M							
3									
4									
2685									
6									
7		Bottom Core 1							
8									
9									
2690									

☆ NOTE - 4 ft core labeled on each 3 ft box

N1.9
22.8

Well Ramsey 19-46 (FGU 51) Core depth (+) 2670 - (-) 2738 = _____ Log depth @ _____

Formation Bell Canyon Location _____ Logged by Sigrid Date 7-25-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2670		TOP CORE													
1	3cm. thk lutite. Almost all mud size grns. Almost no silt.		S												
2		p													
3		p													
4															
2675															
6															
7															
8			S												
9			S												
2680															
1															
2	wispy, loaded organic-rich laminations														
3	rip-up clasts														
4	5mm thk lutite.		S												
2685															
6															
7															
8	A few organic clasts distributed in this interval.														
9															
2690															
1															
2															
3															
4															
2695															

Many 3 ft boxes were marked with 4 ft of core.

Well Ramsey 19-14 (FGU 51) Core depth (+) 2670- (-) 2738 = _____ Log depth ⓟ _____

Formation Bell Canyon Location _____ Logged by Sgrid Date 7-25-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2695									
6									
7									
8									
9									
2700									
1	A patch of calcite cmt at 2700.2 patch								
2									
3	fining up to 3mm thk lutite Contorted lams due to burrowing								
4		Bottom core							
2705									
2727		TOP CORE							
8									
9	mm size pyrite blebs	P P P							
2730									
1									
2	mm size pyrite blebs	P P							
3									
4									
2735									
6									
7	Pyrite blebs horizontally aligned	P P P							
8	Contorted features								
9		BOTTOM CORE							
2740									

Well RAMSE/19-42/FGU-53 Core depth (+) 2640 (-) 2677 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 09/12/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification	Lam thickness (mm)	Burrows
2640									
2645									
2650			S						
2655			E?						
2660			S						
	MISSING CORE MATERIAL								
2665									
2670	2669-2673.5: MISSING BOX								
2675									

Laminites: Inclined bedding; Low amp ripples

Lam thickness (mm): <1; 1-5; 5-10

Burrows: Absent; Rare; Common; Abundant

Well Ramsey 19-42/FGU-53 Core depth (+) 2640 (−) 2677 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 09/12/26

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2675		M													
	BASE OF CORE														
2680															

Well Ramsey 19-31 (FGU-54) Core depth (+) 2660 (-) 2686 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/23/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	GENERAL: OVERALL BEDDING SLIGHTLY INCLINED; REGIONAL DIP. 4'-5' OF CORE IN 3' SCANS								
2660			S, S						
		M							
2665									
			S						
2670		M							
2675		M							
2680	SOFT-SEDIMENT DEFORMATION	M							
2685									
2686	BASE OF CORE								
2690									

Well Ramsey 19-10 (FGU SS) Core depth (+)(−) 2653-2702 _____ Log depth @ _____

Formation Ramsey-Bell Location Culberson Co. TX Logged by Sigrid Date 10-3-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100) / Laminites	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2650															
1															
2															
3				Top Core											
4															
2655															
6															
7															
8															
9															
2660															
1	wispy lams at 2661.6														
2															
3															
4	wispy lams, mm thick organic-rich lam at top overlain by more wispy lams														
2665															

Well Ramsey 19-10 (FGU 55) Core depth (+)(−) 2653-2700 Log depth @

Formation Ramsey-Bell Location Logged by Sigrid Date 10-1-96

Depth (ft)	Comments
2665	
6	calcite cmted. zone is mottled throughout interval
7	
8	
9	wispy lams at base of ss
2670	
1	
2	1cm. thick lutite at 2671
3	2mm thick organic rich lam. & wispy lams
4	gradual fining up
2675	
6	faulting (photo available)
7	
8	There is some calcite cement distributed throughout interval but only heavily calcite cemented areas are noted
9	
2680	
1	
2	
3	
4	cm. thick silt/organic layer with mm size organic clasts
2685	
6	>1mm lams dominate 2685-2688 interval
7	
8	
9	4cm. thick organic-rich lam (lutite?)
2690	
1	
2	
3	
4	
2695	
6	~1cm thick interval of iron-stained lams at 2695.3
7	
8	
9	
2700	

Grain Size and Sedimentary Structures: F, VF, ST, MD

Contact: S, G, F, S, F, S, G, S, S

Rock Type

% Silt: Laminites 0 – 100

CO_3 cement

Stratification: Inclined bedding, Low amp ripples

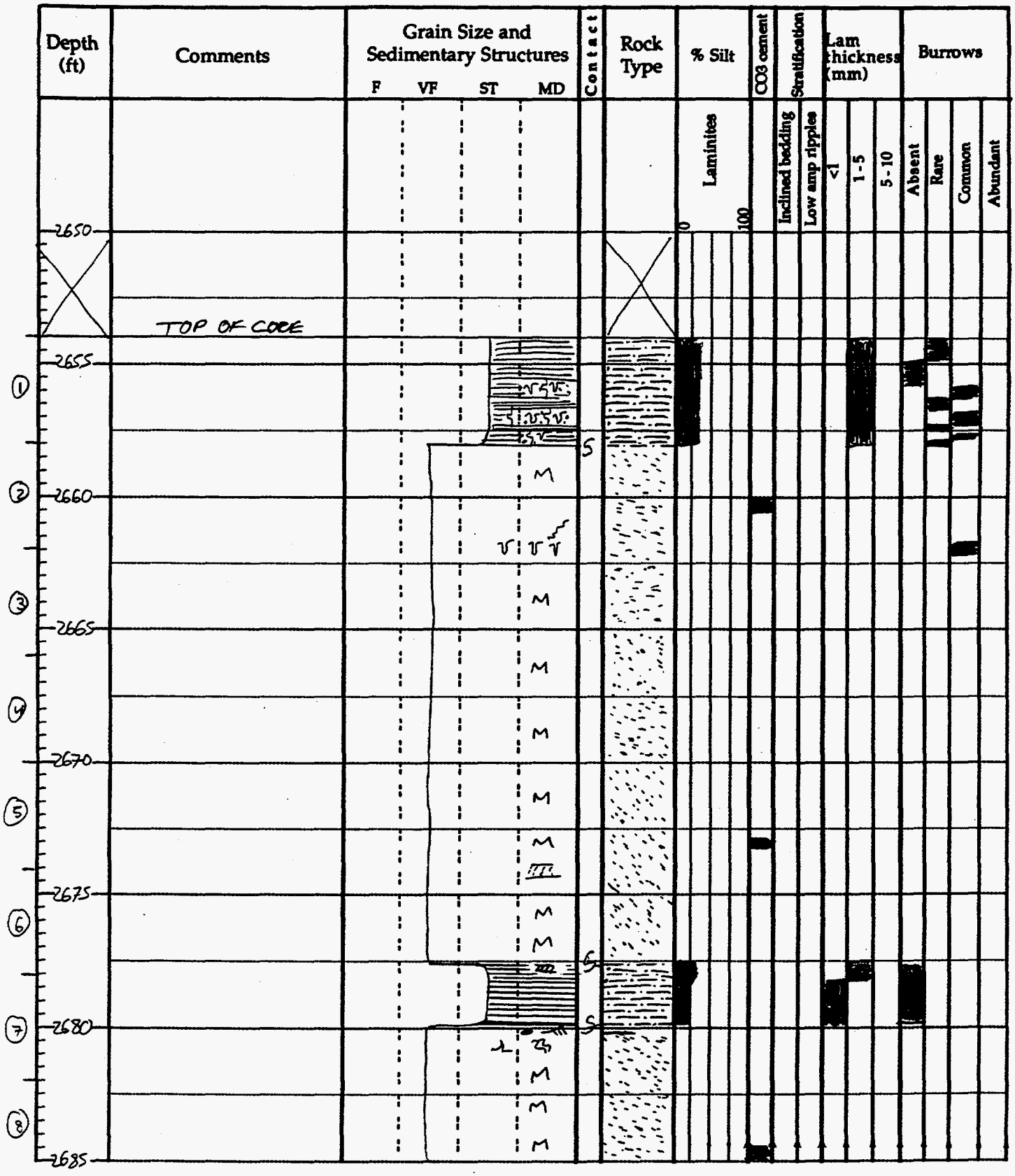
Lam thickness (mm): <1, 1-5, 5-10

Burrows: Absent, Rare, Common, Abundant

Bottom core

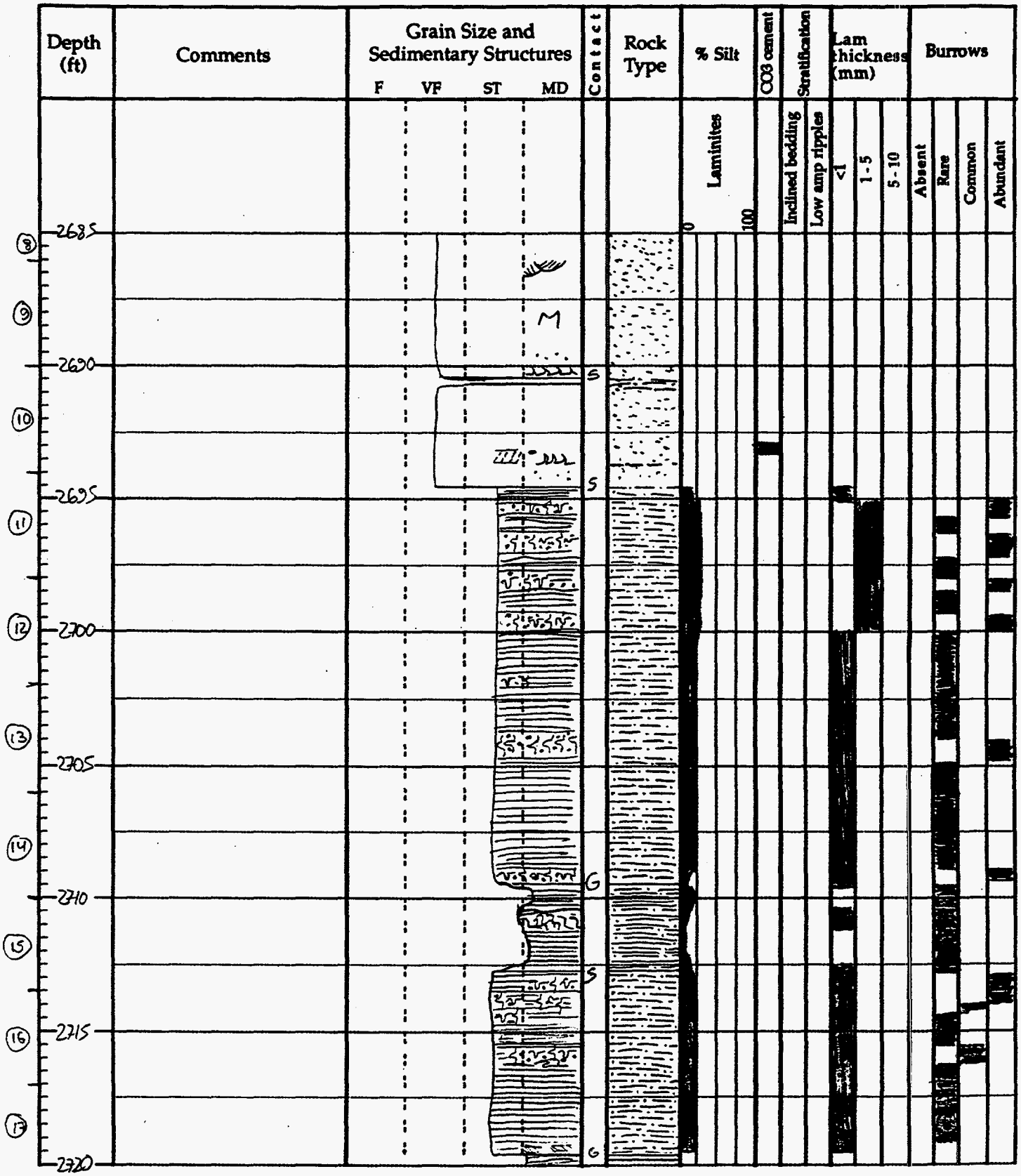
Well Ramsey 19-7 (FGU-56) Core depth (+) 2654 (−) 2765 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 09/10/96



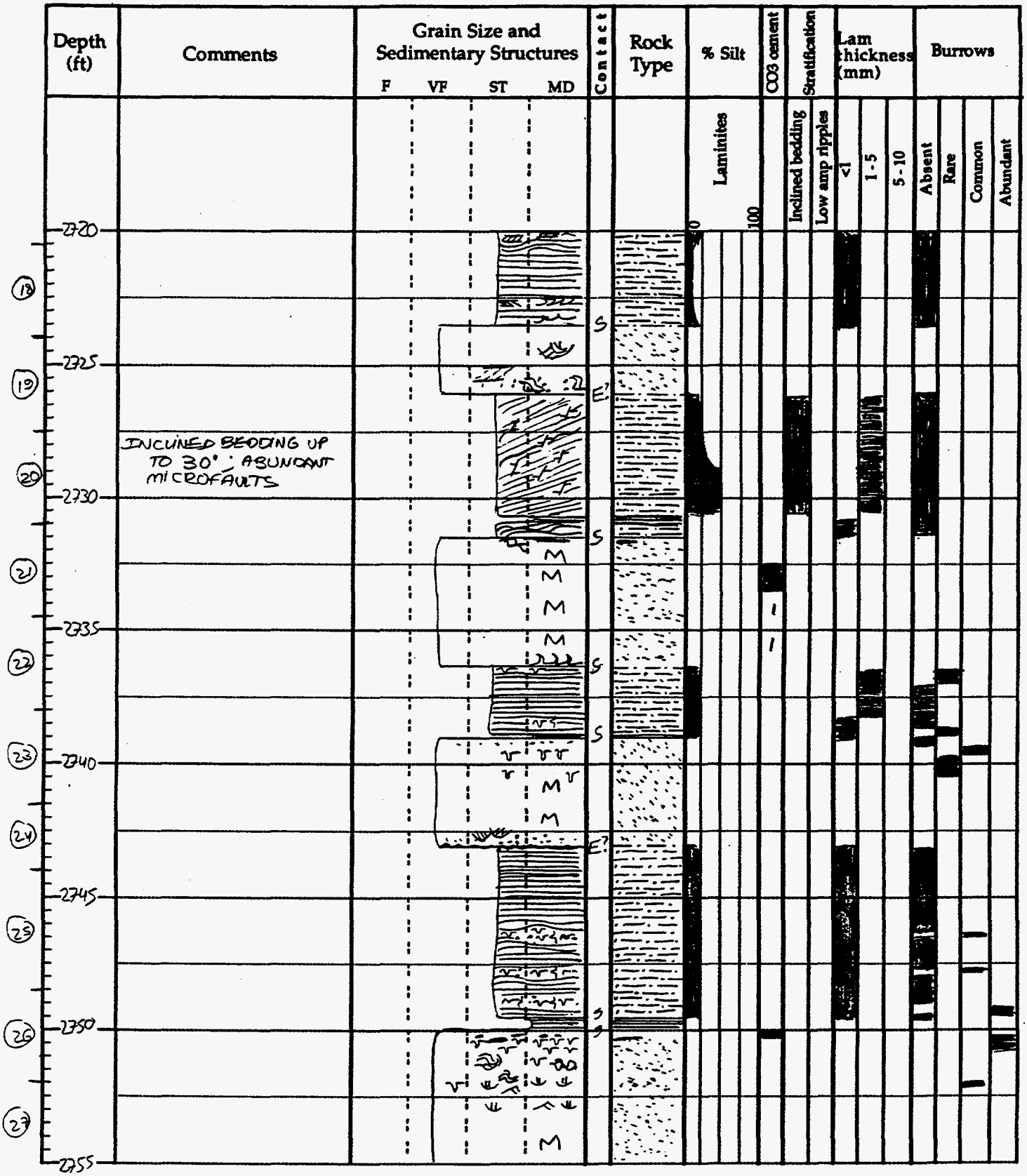
Well Ramsey 197 (FGU-56) Core depth (+) 2654 (–) 2765 = _____ Log depth ⓟ _____

Formation _____ Location _____ Logged by JOSE Date 9/10/96



Well RAMSEY 19-7 (FGU-56) Core depth (+) 2654 (−) 2765 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 09/10/96



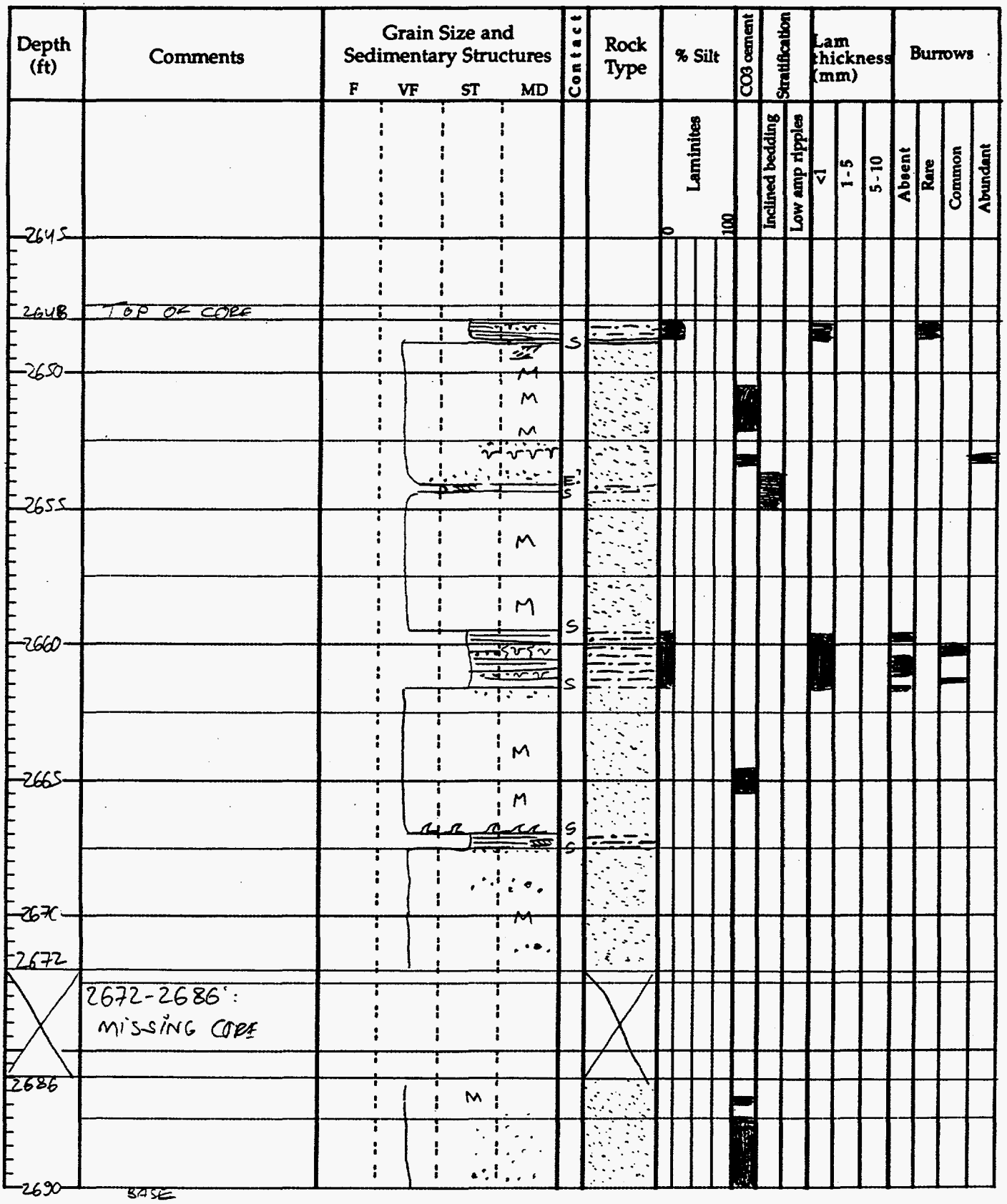
Well Ramsey 19-7 (FGU-56) Core depth (+) 2654 (−) 2765 = _____ Log depth ⓕ _____

Formation _____ Location _____ Logged by JOSE Date 09/10/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2755									
(28)		M				1			
		M				1			
2760 (29)									
(30)		M							
2765	BASE OF CORE								

Well Ramsey 19-32 (FGU-58) Core depth (+) 2648 (−) 2690 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/26



FGU 59

Well RAMSEY 19-40 Core depth (+) 2659 (−) 2680 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (0–100)	CO_3 cement	Stratification: Inclined bedding	Low amp ripples	Lam Ranges (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2655																		
2660																		
	Very fine grained massive sandstone friable, locally cemented by carbonate.																	
2665																		
	Toward the bottom presents a layer of about 4 inches thick with climbing ripples and continue wavy lamination.																	
2670																		
2675																		
	Fine laminated siltstone with some organic-rich "flakes". No bioturbation.					S												
2680																		

Well Ramsey 19-37 (FGU-61) Core depth (+) 2667 (−) 2677 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 09/12/95

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	GENERAL: 5' OF CORE REPORTED IN 3'-BOXES.								
2665									
2667	TOP OF CORE								
① 2670			S						
② 2675			S						
2677	BASE OF CORE		S						
2680									

Some missing section throughout

Well FGU 63 Ramsey 19-21 Core depth (+) (−) 2625 – 2673 Log depth @ _____

Formation Ramsey Location _____ Logged by Stupik Date 6-18-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2625									
6									
7	2mm erosional lutite lam at 2626.7 ft		E						
8	Low amp ripples (15mm tk) at 26.9 ft								
9	Contorted lams at 27.3-27.5								
2630									
	Distinct discolorated patches throughout SS								
	SS becomes more friable between 37.0 - 39.0 ft								
2635									
	Contact between SS and laminites - low amp organic-rich ripples ~20 mm tk								
	Note vertical burrowing at 38.0, clasts present		G						
2640									
1			S						
2			S						
3	some intervals very friable SS								
2645									
6	2645.0 - 2649.0 MISSING								
7									
8									
9									
2650									
	CO3 cmted zone at 50.0-50.3								
1	massive SS, friable								
2									
3	2651.5 - 2655.0 MISSING								
4									
2655									
6	massive SS friable								
7									
8	massive SS friable								
9									
2660	Soft sed defm at 58.5-58.8 S								
	Organic debris common in this interval								

Well FGU 63 Ramsey 19-21 Core depth (+)(-) 2625-2673 = _____ Log depth @ _____

Formation Ramsey Location _____ Logged by Sigrid Date 6-19-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Low amp ripples	Lam thickness (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2660																		
2																		
3	laminite zone at 62.55-62.65					G												
4																		
2665																		
6	Discrete lams at 65.0 mm size organic debris at 65.8-66.0																	
7						G												
8																		
9																		
2670																		
1																		
2																		
3																		

✡ NOTE: There is one box of massive SS with no depth interval. It probably goes with one of the massive SS intervals.

Well RAMSEY 19-30 / FGU-64 Core depth (+) 2634 (−) 2687 = 53' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 02/15/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2630									
2634	TOP OF CORE								
2635	4"-LONG BURROW (CALLIANASSA?)								
2640			S						
2645									
2650									
2655									
2660			S						
2665									

Well Ramsey 19-30/FGU-64 Core depth (+) 2634 (−) 2687 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/15/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2665		M							
		M							
2670		M							
	SOFT-SEDIMENT DEFORMATION		S						
2675									
	2676-82': MISSING CORE								
2680									
	5' OF CORE IN 3' BOX	M							
2685		M							
2687	BASE OF CORE								
2690									

This Core presents many missed intervals. Sections four feet long are in a three feet box.

FGU 67

Well RAMSEY 19-18 Core depth (+) 2656 (−) 2693 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2655									
←2656	Very fine grained sandstone, massive, friable, locally presents inclined bedding with a layer or carbonate cement. The bottom presents sediment soft deformation structure.								
2660									
2665			S						
	Fine laminated siltstone, with vertical and horizontal burrows. Top and bottom contacts are sharp.		S						
2670									
2675									
	Very friable, massive sandstone, locally presents horizontal planar lamination where grain size becomes finer.								
2680									
2685									
2693									

Well Ramsey 19-30-1 (FGU 68) Core depth (+)(-) 2654-2670 = _____ Log depth @ _____

Formation Bear Canyon Location _____ Logged by Sigrid Date 7-18-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
				TOP CORE											
2654															
2655															
6	Grn size increases from uvf to lf at bottom of sand unit														
7		FS	L												
8															
9															
2660		MISSING CORE													
2665															
2666															
7		M													
8															
9		M													
2670		Bottom core													

Well Ponse-, 19-US/FGU-79 Core depth (+) (-) 2658 = 81' Log depth @ _____

Formation _____ Location _____ 2739 Logged by JOSE Date 08/09

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2655															
2658	TOP OF CORE														
			S												
2660		M													
		M													
2665		M													
		M													
2670		M													
			S												
			S												
2675		M													
		M													
2680		M													
		M													
2685	LOAD STRUCT														
			S												
			G												
2690		M													

Well Ramsey 19-45 / FGU-79 Core depth (+) 2658 (−) 2739 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/09

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2690		M	S						
			S						
2695		M							
		M							
2700	SLIGHT EFFERVESCENCE FAINT CLIMBING RIPPLES FLAME? FLUIDIZ. STRUCTURE	?							
2702									
2720	2702'-2724': MISSING OR NOT RECOVERED								
2724									
2725									
2730		M							
		M							
2735	WARNING: 2733-39: ALL IN 1 BOX	M							
			S						
			S						
2739		M							
2740	BASE OF CORE								

Well Ramsey 19-14 (FGU 91) Core depth (+) 2633 - (-) 2661 = _____ Log depth @ _____

Formation Bell Canyon Location _____ Logged by Sigrid Date 6-25-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2630									
1									
2									
3	TOP OF CORE								
4	thicker laminae contain vfg size sand.								
2633									
6	up to 1cm thick lam area.								
7	wavy, discontinous lams 0.15 ft thick		8						
8									
9	unconformable contact at 38.8 ft, coarsening upward from 2cm		7						
2640	thick lutite into lvf ss with abundant organic clasts.								
1	Ripples at 35.9 ft								
2									
3			E						
4						3			
2642									
6	very subtle lams. Some		S						
7	are horizontal. Some are wispy, discont. Base is		E						
8	distinctive erosional								
9	contact. Some burrowing below contact.		I						
2650			S						
1									
2			S			7			
3	mm thick lutite, becoming more silt-rich upward.								
4	Sharp contact between silt and uvf sand unit above								
2655	(at 2650.0)		S			7			
6	fining upward sequence 0.1 ft								
7	thick from vf to silt dominated with organics. Distinct grain size change at top from								
8	Organic rich silt to vf sd.								
9	sharp contact at 51.5. mm								
2660	thick lutite, becoming siltier								
1	with climbing ripples in-laminae								

Note: Sand size grains range from lf to lvf. More indurated intervals tend to be silt to uvf. More friable intervals range from lf to lvf.

Well Ramsey 26-3 (FGU 101) Core depth (+) 2594 - (-) 2614 = _____ Log depth @ _____

Formation Bell Canyon Location _____ Logged by Sigrid Date 8-7-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
				TOP CORE											
4	organic clasts are														
2595 F	horizontally deposited.														
6															
7															
8															
9															
2600															
1															
2															
3		MISSING CORE		2601-2604											
4	Some lt grns. present		Sb												
2605	Organic clasts abundant but some could be remnants of burrowing.														
6															
7															
8															
9				MISSING CORE 2607-2611											
2610															
11	abundant burrowing at														
12	2612.0														
13															
14		2614.0 Bottom		Core											
2615															

☆

0.2 ft at 2604.5 ft

Well Ramsey 26-1 / FGU-102 Core depth (+) 2566 (−) 2578 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 10/16/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt: 0			100	CO3 Cement	Stratification: Inclined Bedding	Low Amp Ripples	Lam Thickness (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2595 / 2565	TOP OF CORE																				
2600 / 2570					M																
					M																
					M																
2605 / 2575					M																
			£?			A															
	BOTTOM OF CORE																				
2610 / 2580																					

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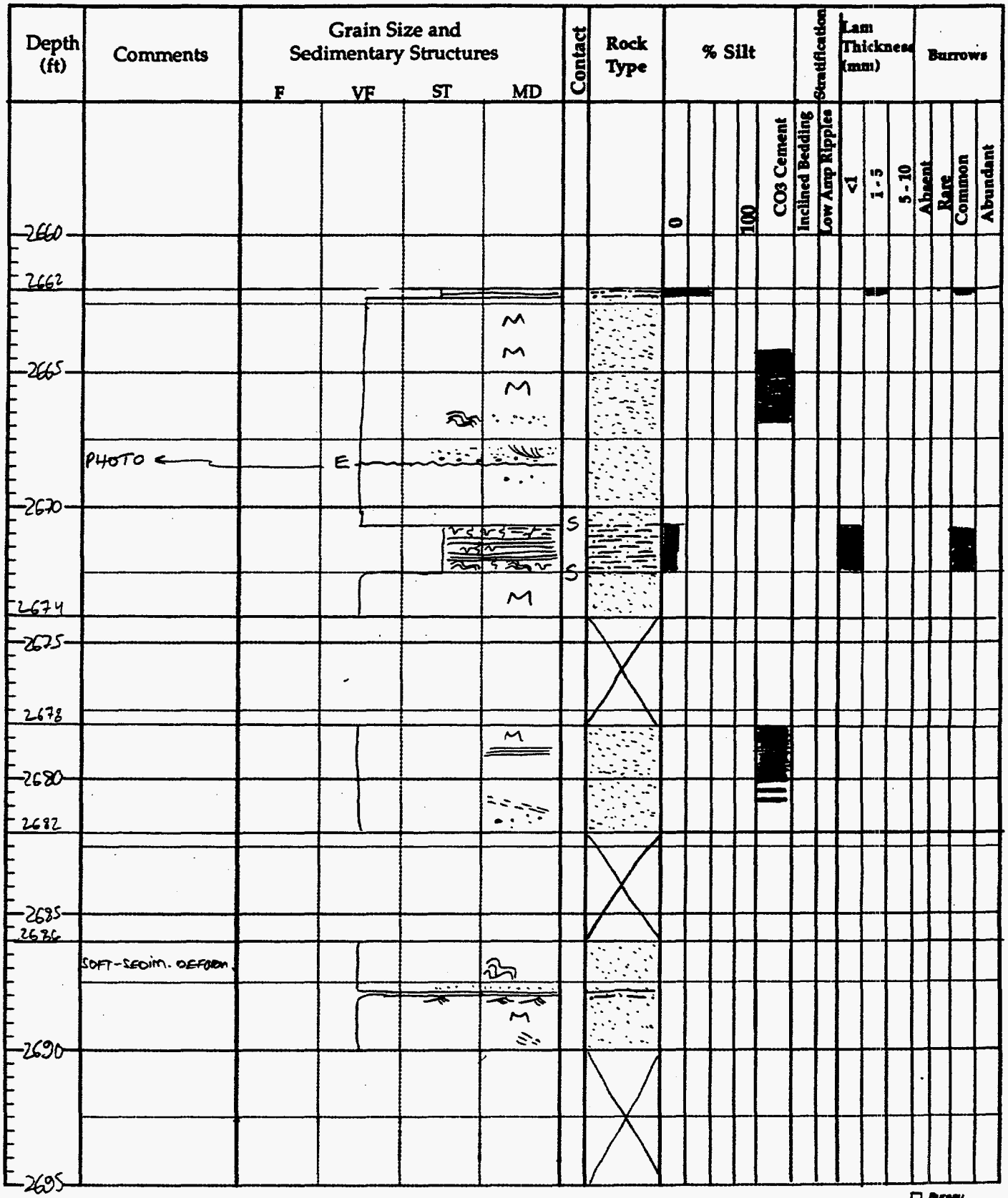
Well Ramsey 19-44/FGU-709 Core depth (+) 2662 (−) 2699 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 10/22/96



Bureau of Economic Geology

Well Ramsey 19-4A/FGU-109 Core depth (+) (−) 2662 = _____ Log depth @ _____

Formation _____ Location 2699 Logged by JOSE Date 10/22/98

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – 100)	CO3 Cement	Stratification: Inclined Bedding	Stratification: Low Amp Ripples	Lam Thickness (mm): <1	Lam Thickness (mm): 1 - 5	Lam Thickness (mm): 5 - 10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2695															
2697															
			G												
2699															
2700															

Bureau of Economic Geology

Well Ramsey 19-39 (FGU 110) Core depth (+)(−) 2652-2689 = _____ Log depth ● _____

Formation _____ Location _____ Logged by Sigrid Date 10-25-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt: 0			100	CO3 Cement	Stratification: Inclined Bedding	Low Amp Ripples	Lam Thickness (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2650																					
1				Top Core																	
2																					
3	◄ 12° ◄ 8°																				
4	~8.30° from horizontal																				
2655																					

Dips decrease upward from 30° - 0°

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Well Ramsey 19-39 Core depth (+) (-) 2652 - 2689 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Sigrid Date 10-22-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – 100)	CO3 Cement	Inclined Bedding	Low Amp Ripples	Lam Thickness (mm) <1, 1-5, 5-10	Burrows (Absent, Rare, Common, Abundant)
2655	friable wispy lams									
6										
7										
8		M								
9										
2660		M								
1										
2										
3		missing core								
4	decreased organic clast size		L							
2665										
6	increased organic clast size									
7										
8										
9										
2670										
1										
2	wispy contorted lams									
3	2mm lutite		S Δ							
4										
2675										
6										
7	wispy		L							
8	Climbing ripples bounded on									
9	top with 3.5 cm thick lutite									
2680										
1										
2		M								
3										
4	Bounded on top & bottom									
2685	by thin horizal laminites									
6										
7		M								
8										
9										
2690		Bottom core								

☆ 3 ft boxes were labeled with 4-5 ft of core

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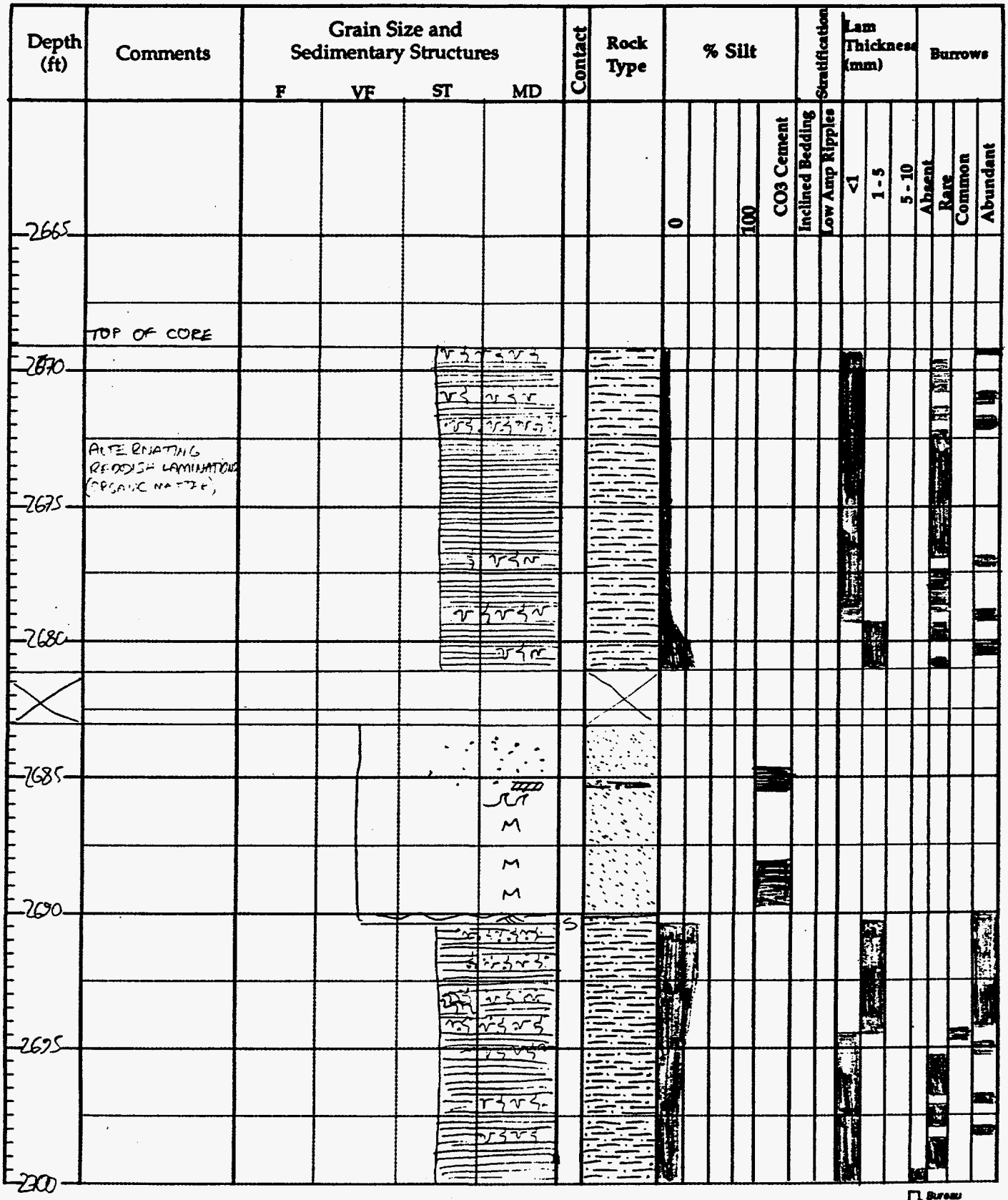
Well FGU-119 / RAMSEY 26-4 Core depth (+) 2669 (−) 2724.3 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/16/96



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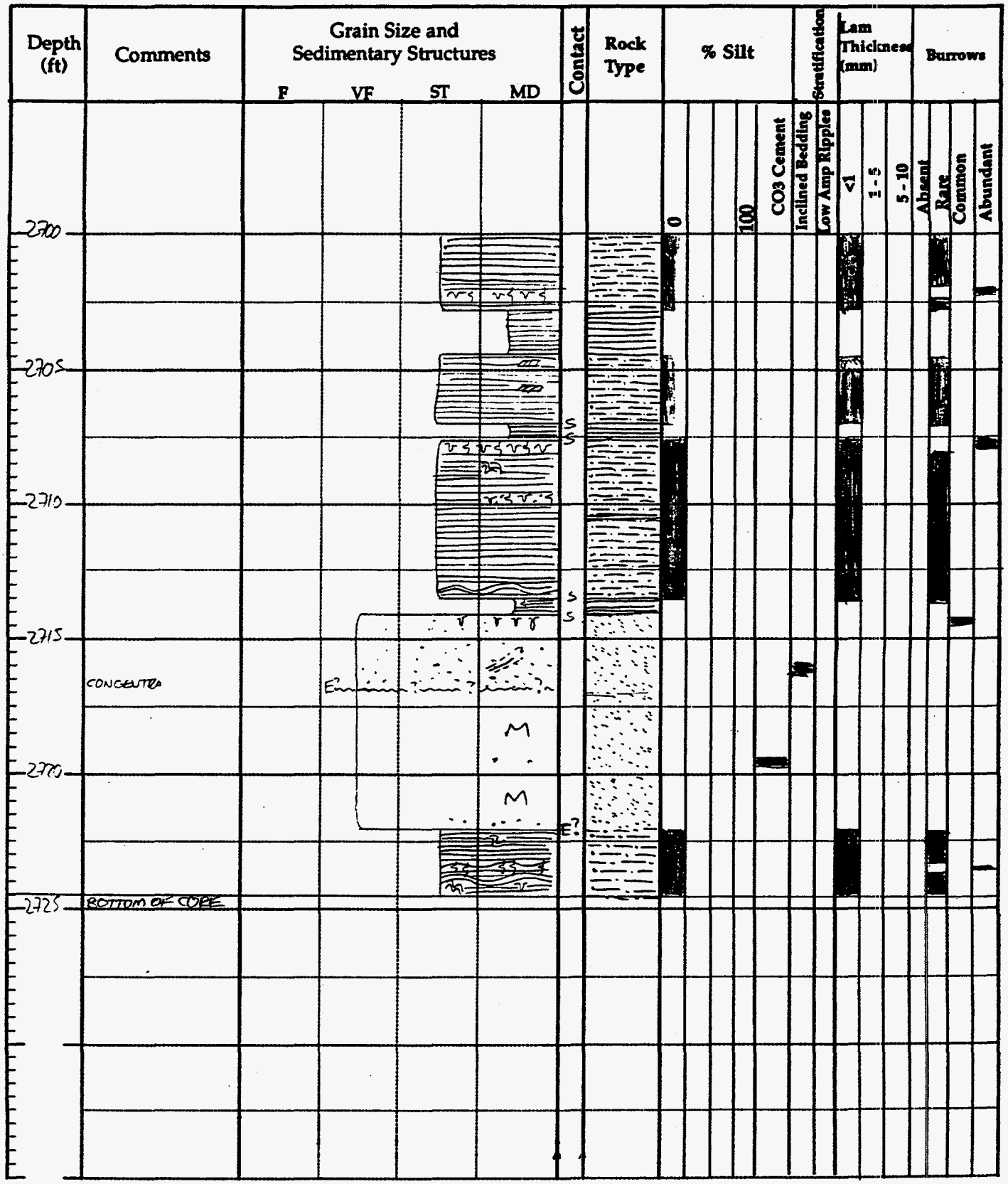
Well FQU-119/RAMSEY Core depth (+) 2669 (–) 2724.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/16/96



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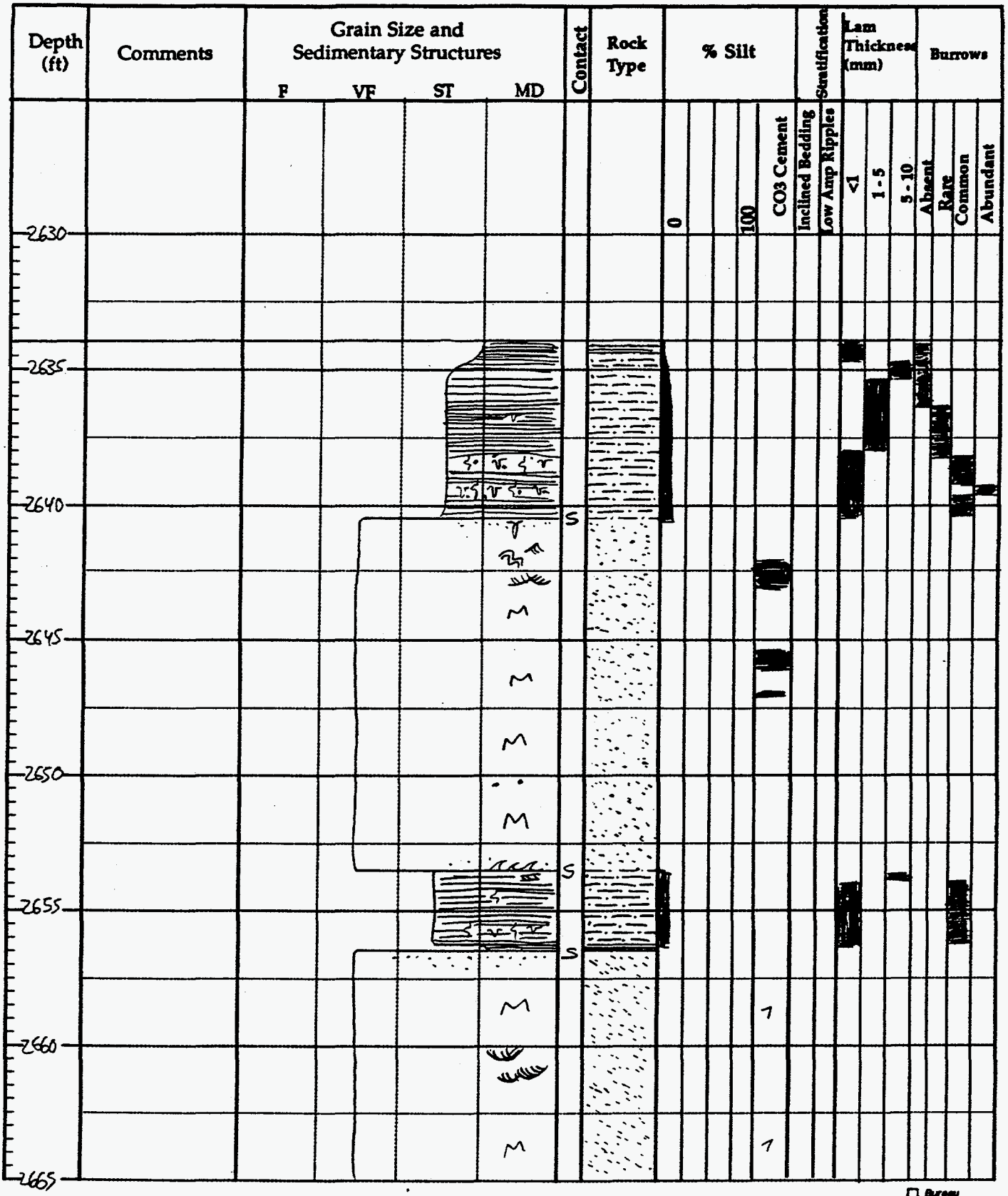
Well EGU-130/Ponse-/ 36-14 Core depth (+) 2634 (−) 2688 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jace Date 10/18/9

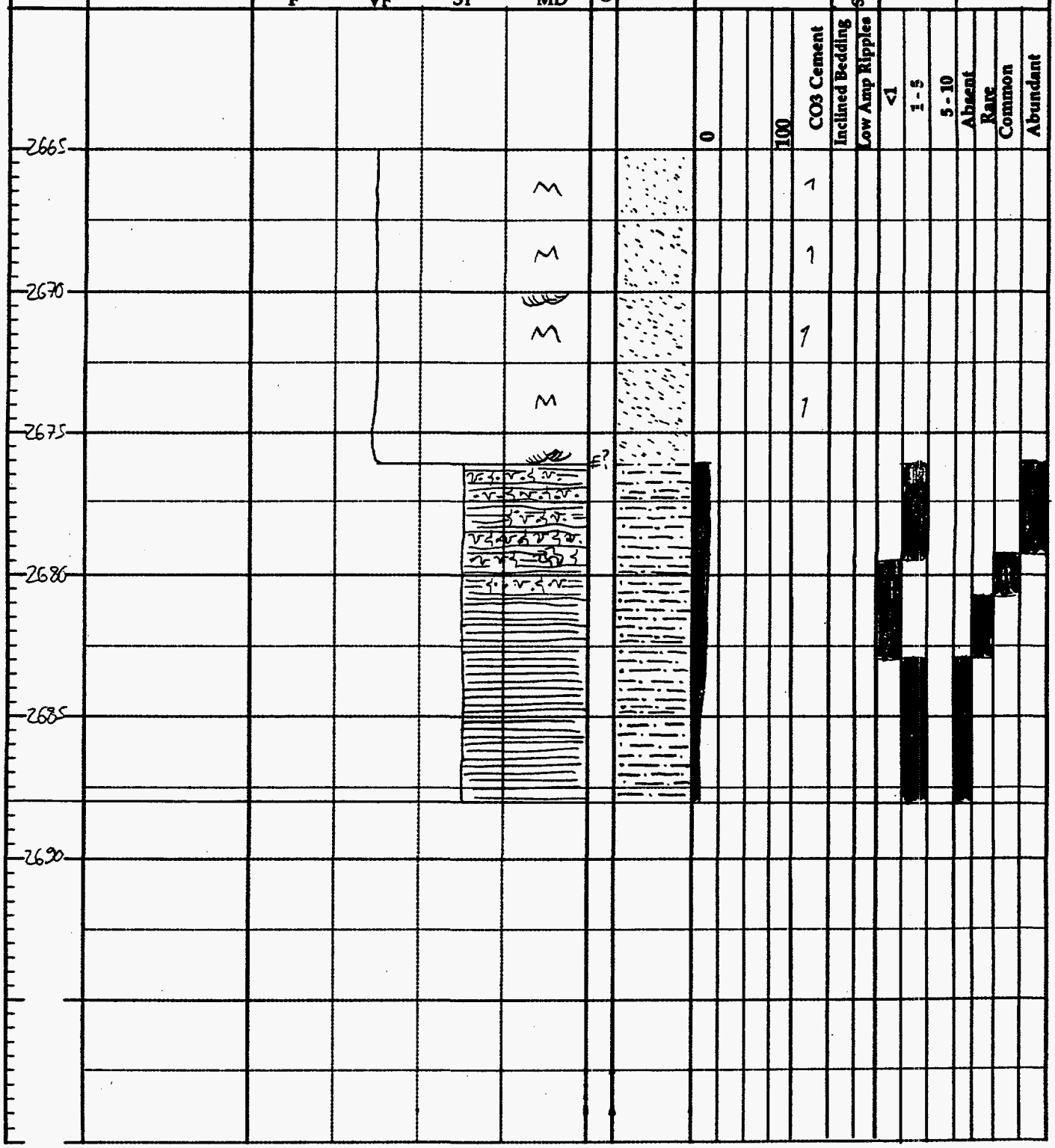


Bureau of Economic Geology

Well FGU-130 / RAMSEY 36-14 Core depth (+) 2634 (−) 2688 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/18/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures	Contact	Rock Type	% Silt	Stratification	Lam Thickness (mm)	Burrows
		F VF ST MD			0 100 CO3 Cement	Inclined Bedding Low Amp Ripples	<1 1-5 5-10	Absent Rare Common Abundant



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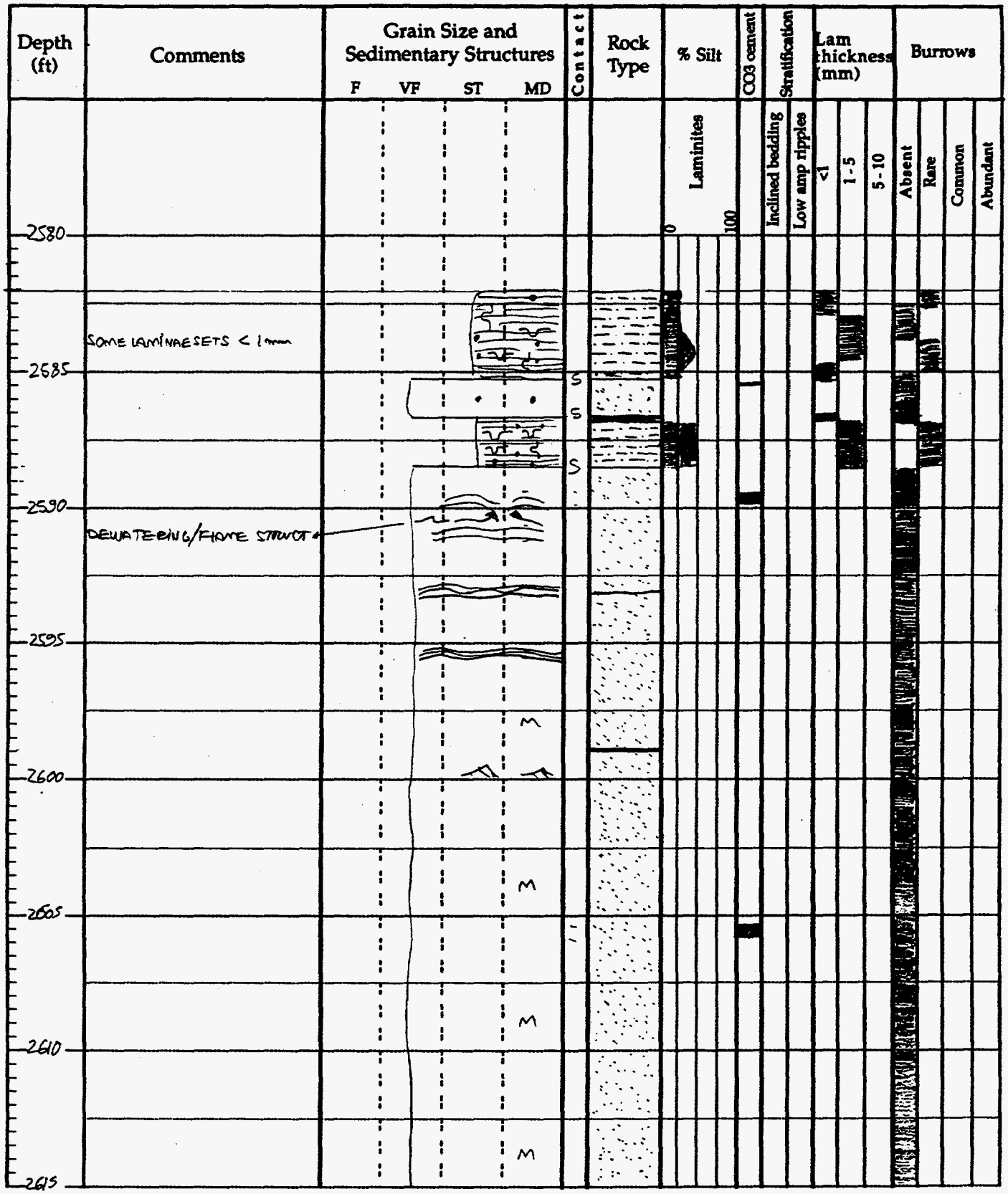
Well RAMSEY 36-6 (FGU-132) Core depth (+) 2582 (−) 2619 = 37' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date _____



Well Ramsey 36-3/FGU-133 Core depth (+) 2581 (-) 2633 = 52' Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/09

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2580									
2581	Top of core								
			S						
85		M							
		M							
2590		M							
		M							
95									
2600		M							
		M							
05		M							
		M							
2610		M							
2615									

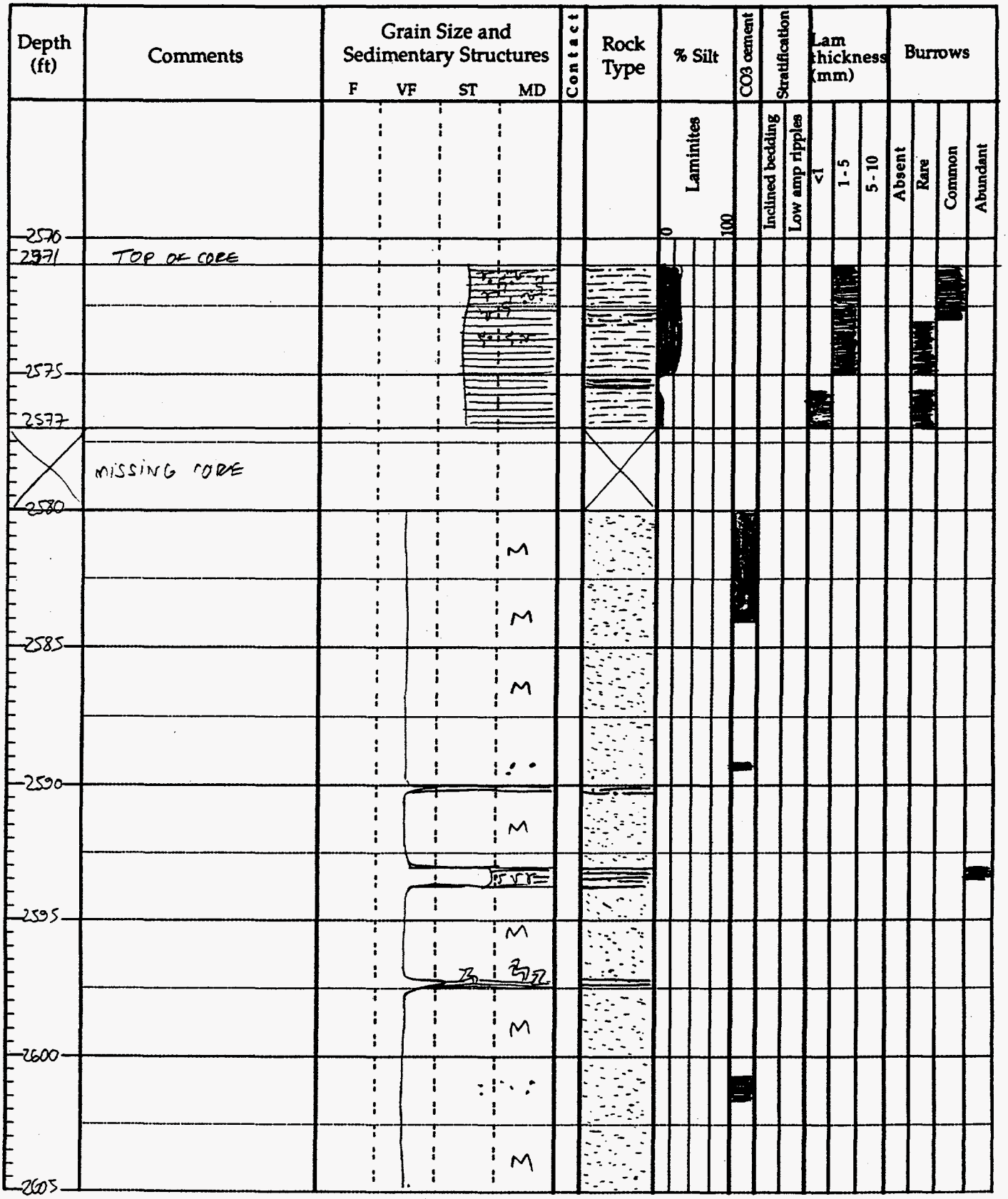
Well RANSE/ 36-3/FGU-133 Core depth (+) 2581 (-) 2633 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/09

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2615	2613-2619.5': 2 CORE BOXES MISSING								
20		M	S						
2625									
2630									
2633	BASE OF CORE								
2635									

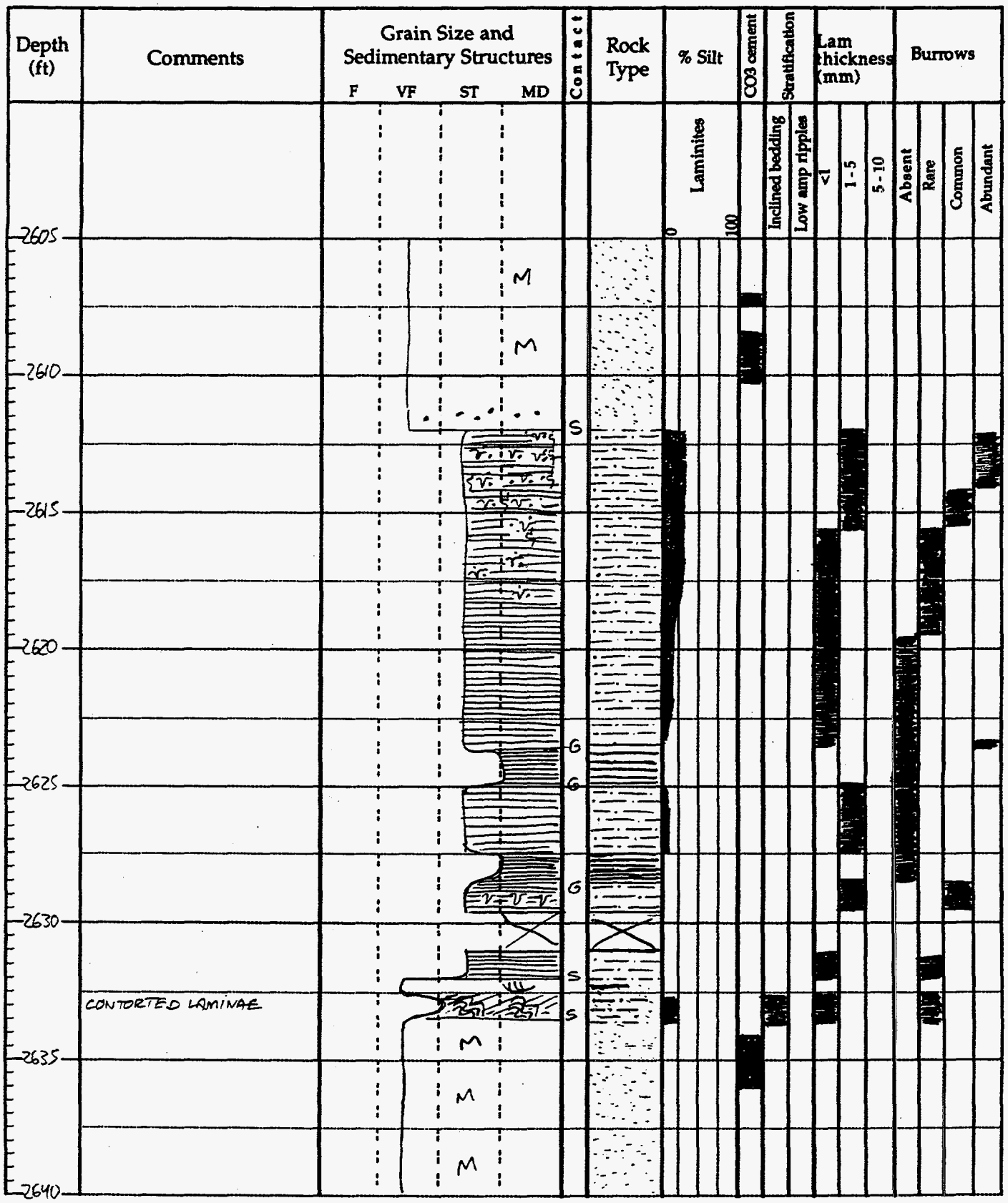
Well FGU-444/RAMSE, 36-5 Core depth (+) 2571 (−) 2644 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/10/96



Well FGU-144/RAMSEY 36-5 Core depth (+) 2571 (−) 2644 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/10/96



Well FGU-144/RAMSEY 36-5 Core depth (+) 2571 (−) 2644 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/10/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2640		M													
2645	BASE OF CORE-2644'														

Well FGU-143 Core depth (+) 2563 (-) 2593 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/26/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification	Lam thickness (mm)	Burrows
	CORES ARE 2" IN DIAM. - LAID OUT IN PAIRS IN 3' BOXES (IE, A BOX MAY HOLD UP TO 6' OF CORE) SOME BOXES CONTAIN 8' OF CORE				Laminites		Inclined bedding; Low amp ripples	<1; 1-5; 5-10	Absent; Rare; Common; Abundant
2560									
2563	TOP OF CORE								
2565		MD							
		MD							
2570		MD							
		MD							
2575		MD							
2580		MD							
		MD							
2585		MD							
		MD							
2590		MD							
2593									
	BASE								
2595									

Well RAMSEY 36-8 (FGU-145) Core depth (+) 2616 (-) 2658 = 42' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/07

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	GENERAL: THERE ARE 4' OF CORE REPORTED IN EACH 3' BOX.								
2615	TOP OF CORE								
2620		M	S						
2625		M	S						
2630		M							
2635		M							
2640	2641-2645': ~70% OF MATERIAL IN BOX IS LOOSE SAND	M?							
2645	UNEVEN CO_3 CEMENTATION	M	S S						
2650		M							

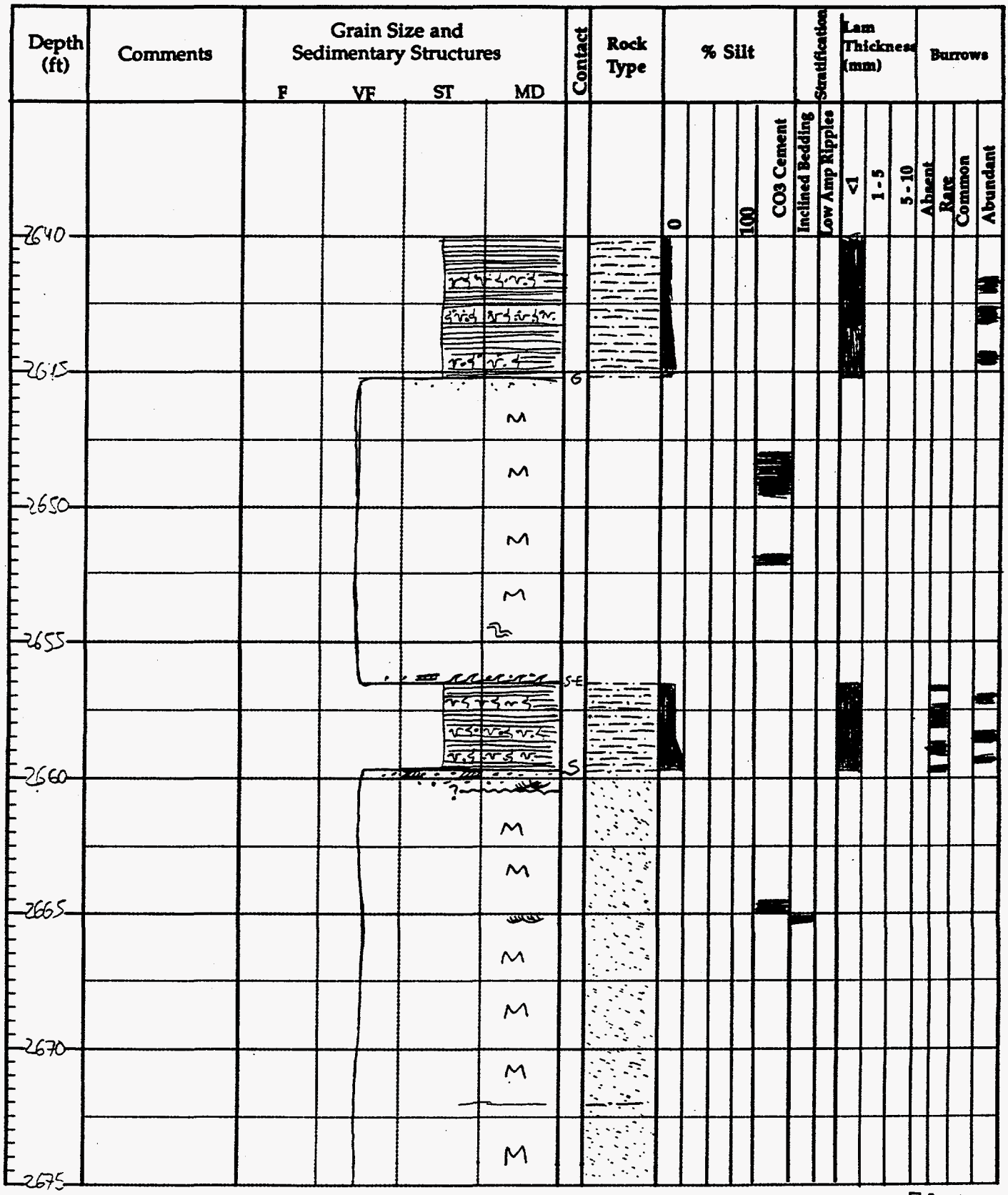
Well RONSEY 36-8 (FGU-145) Core depth (+) 2616 (−) 2658 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/02

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
2650	UNEVEN CO_3 CEMENTATION (IRREGULAR BANDS)	MD: M														
		MD: M														
2655		MD: M														
B 2658	FLAME STRUCTURE AT CONTACT BASE OF CORE		E													
2660																

Well FGU-146 / Ramsey / 36-12 Core depth (+) 2640 (−) 2685.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/17-18/95



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Well FGU-146/RAMSEY 36-12 Core depth (+) 2640 (−) 2685.5 = _____ Log depth ⓑ _____

Formation _____ Location _____ Logged by JOSE Date 10/17-18/95

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0, 100, CO3 Cement)	Stratification (Inclined Bedding, Low Amp Ripples)	Lam Thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2675		M						
		M	S					
2680	25mm VERTICAL BURROW AT CONTACT		S					
2685								
2690								

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Well Ramsey 36-11 (FGU148 Core depth (+) 2640- (-) 2714 = _____ Log depth @ _____

Formation Bell Canyon Location _____ Logged by Sigrid Date 7-24-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2640	TOP CORE								
1	Deep Rust colored laminae 1 to 5 mm thick in 2640-2640.8 interval								
2									
3	yellow colored 6mm thick set of laminae								
4									
2645									

Well Ramsey 36-11 (FGU 148) Core depth (+) (−) _____ = _____ Log depth @ _____

Formation Bell Canyon Location _____ Logged by Sigrid Date 7-24-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2645									
6	fines upward from lvf to silt to mm thick lutite. Sharp contact between lutite & laminite		G						
7									
8									
9		M							
2650									
1									
2									
3									
4			S						
2655			S						
6									
7									
8									
9	contorted lams 3mm thick lutite lam								
2660									
1									
2									
3		FS	L						
4			G						
2665									
6		M							
7									
8									
9									
2670									
1		M							
2									
3	missing core from 2672-2676								
4									
2675									
6									
7	Some faint lams								
8	Some carbonate cmt troughout								
9		M							
2680	well indurated								

Many 3ft core boxes were marked having 4ft of core

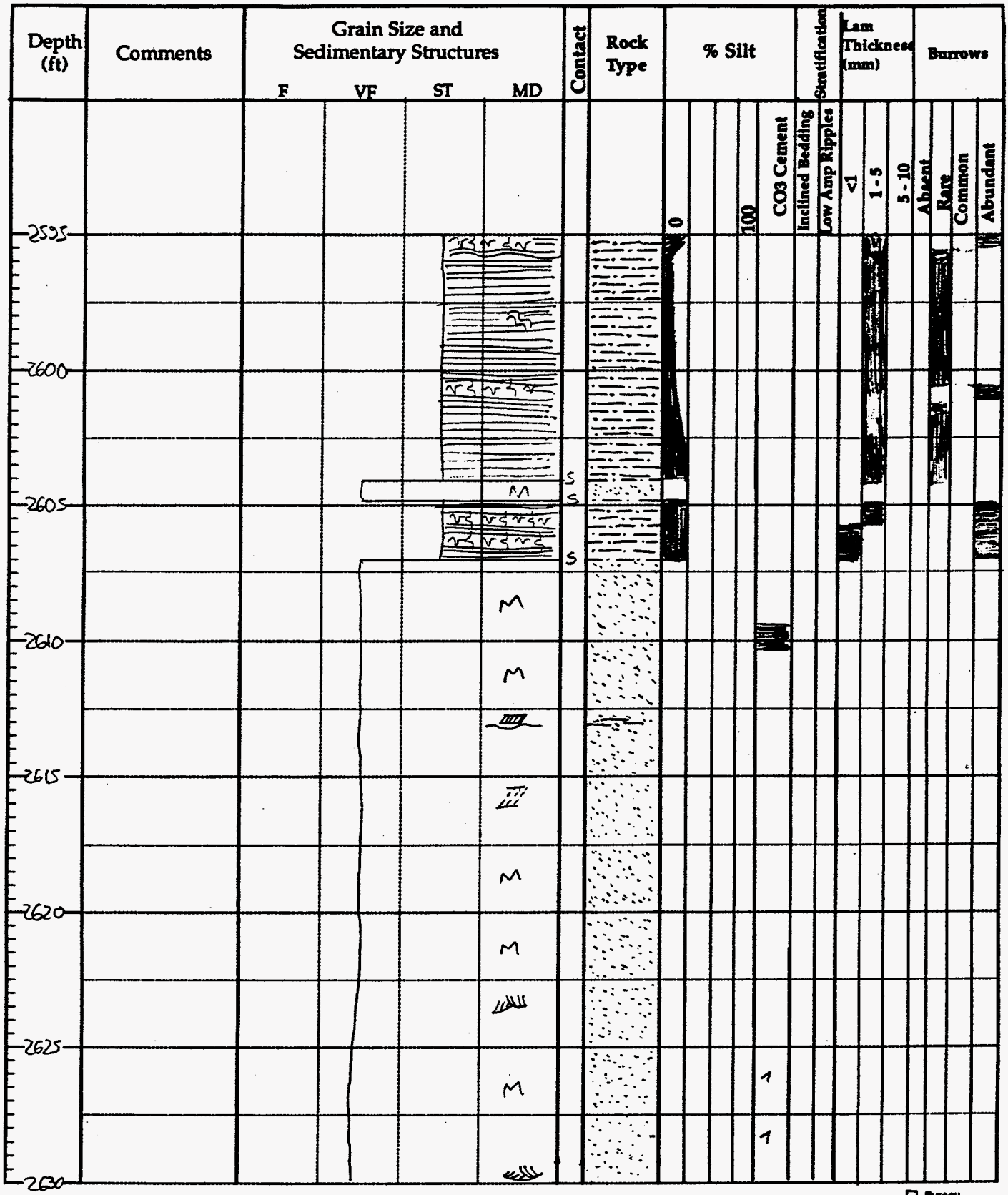
Well Ramsey 36-11 (FGU 148) Core depth (+) 2640 - (-) 2714 = _____ Log depth @ _____

Formation Bell Canyon Location _____ Logged by Sigrid Date 7-19-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2680									
1			S						
2	5 ft interval								
3	in 3 ft box.								
4									
2685									
6	varying amts of								
7	calcite cmt from								
8	2680.2 - 2683 ft.								
9									
2690									
1									
2									
3	cm. thick silt lams								
4	with abundant calcite cmt								
2695									
6									
7	5mm thick lam with abundant pyrite flakes at 2696.3 Rust color								
8	mud size grns.								
9									
2700									
1									
2	fining up to lutite at 2701.35		G						
3									
4		M							
2705									
6									
7									
8									
9		M							
2710									
1									
2			E						
3	Laminites look stirred up Is it abundant burrowing?		S						
4									
2715	BOTTOM CORE								

Well FGU-149 / RAMSEY 36-7 Core depth (+) 2595 (-) 2649 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/21/96



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Well FGU-149 / RAMSEY 36-7 Core depth (+) 2595 (−) 2649 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/21/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures	Contact	Rock Type	% Silt	Stratification	Lam Thickness (mm)	Burrows
		F VF ST MD			0 100 CO3 Cement	Inclined Bedding / Low Amp Ripples	<1 / 1-5 / 5-10	Absent / Rare / Common / Abundant
2630	PATCHY NON-CALCAREOUS CEMENT							
		M						
2635								
		M						
2640		M						
			S					
2645								
2650								

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Well FGU-170 Ramsey 34-5 Core depth (+) 2533 (−) 2554 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 10/17/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – 100)	CO3 Cement	Stratification: Inclined Bedding	Stratification: Low Amp Ripples	Lam Thickness (mm): <1	Lam Thickness (mm): 1 - 5	Lam Thickness (mm): 5 - 10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2530															
		ST, MD	S												
2535		MD													
		MD													
2540		MD													
		MD													
		MD													
2545	MISSING CORE														
		ST, MD	S												
2550		MD													
		MD													
		MD													
2555															

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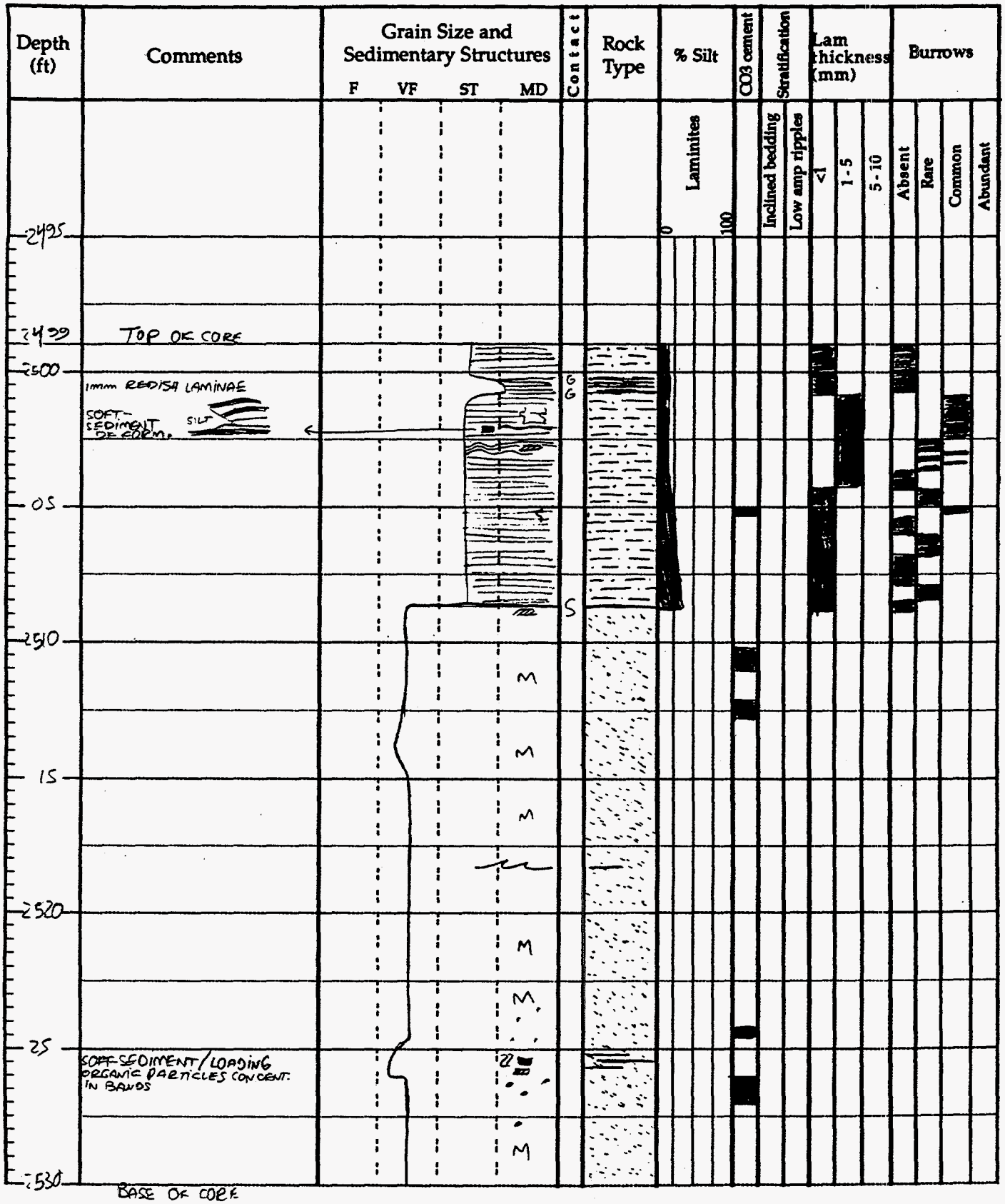
Well RAMSEY 34-6/FGU-184 Core depth (+) 2499 (−) 2530 = 31' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/08



Well Ramsey 34-8/FGU-18S Core depth (+) 2500 (−) 2530 = 30' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/07-08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	GENERAL: 4'-5' OF CORE REPORTED IN 3' BOXES.								
	TOP								
2500									
			S						
05		M							
		M							
2510									
	SOFT-SEDIMENT DEFORMATION	23? M							
		M							
15									
2520		M							
25	FLAME STRUCTURE	M							
		M							
2530	BASE OF CORE								

Well Ramsey 34-4 / FGU-189 Core depth (+) 2567 (−) 2618 = 51' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100) Laminites	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2565															
T 2567	TOP OF CORE														
2570			S												
2575		M													
	POSSIBLE TROUGH X-LAMINATION (OBSCURE)														
2580		M													
2585		M													
	SOFT-SEDIMENT DEFORMATION / CONTORTED														
2590															
2595	2593-2596: MISSING BOX														
2600		M													

Well Ramsey 34-4 / FGU-189 Core depth (+) 2567 (−) 2618 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2600															
		M													
		M													
2605		M													
	INTENSE BIOTURBATION		S												
2610	2609-2612: MISSING BOX														
	SOFT-SEDIM. DEFORMATION														
2615															
B 2618	BASE OF CORE														
2620															

Well RAMSEY 34-2/FGU-190 Core depth (+) 2548 (−) 2608 = 60' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
	GENERAL: 3' BOXES CONTAIN 4' OF CORE															
2545																
T 2548	TOP OF CORE															
2550		MD	S													
		MD														
2555		MD														
		MD														
2560		MD														
		MD														
2565		MD														
2570	2568-2576': 2 CORE BOXES MISSING															
2575																
		MD														
2580		MD														

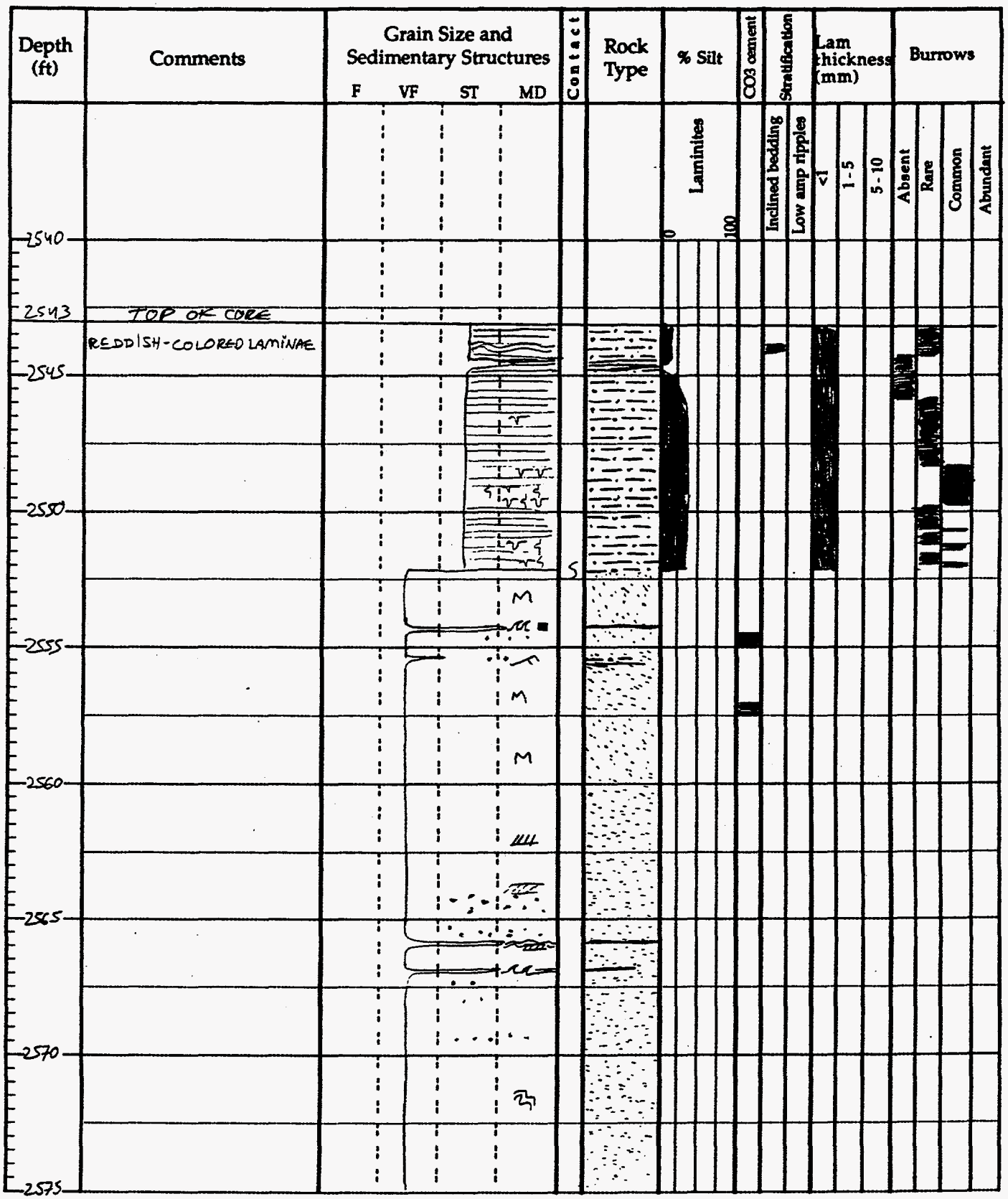
Well Ramsey 34-2/FGU-190 Core depth (+) 2548 (−) 2608 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2580															
2585															
2590															
2595			S												
2600															
2605															
2608'	BASE OF CORE														
2610															

Well Ramsey 38-1 (FCU-200) Core depth (+) 2543 (-) 2595.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/23/96



Well Ramsey 38-1 (FGU-200) Core depth (+) 2543 (−) 2595.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/23/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2575		M													
		M													
2580	COULD BE VIEWED AS MEGA-RIPPLE BEDDING														
		M													
2585		M													
		M													
2590	SLIGHTLY CALCAREOUS IN SILTY LAMINAE		S												
2595															
2600															

Well Ramsey 38-4 (FGU-220) Core depth (+) 2582 (-) 2632 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/23/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2580									
2582	TOP OF CORE								
2585			S						
2590									
2595	3x2 cm CLAST, WITH SOFT-SEDIMENT DEF. AROUND IT								
2600									
2605									
2610	RIPPLES SHOWING POSSIBLE CURRENT REVERSAL								
2615									

Well Ramsey 38-4 (FGU-220) Core depth (+) 2582 (−) 2632 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/23/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
2615															
2620															
2625															
2630															
2632	BASE OF CORE														
2635															

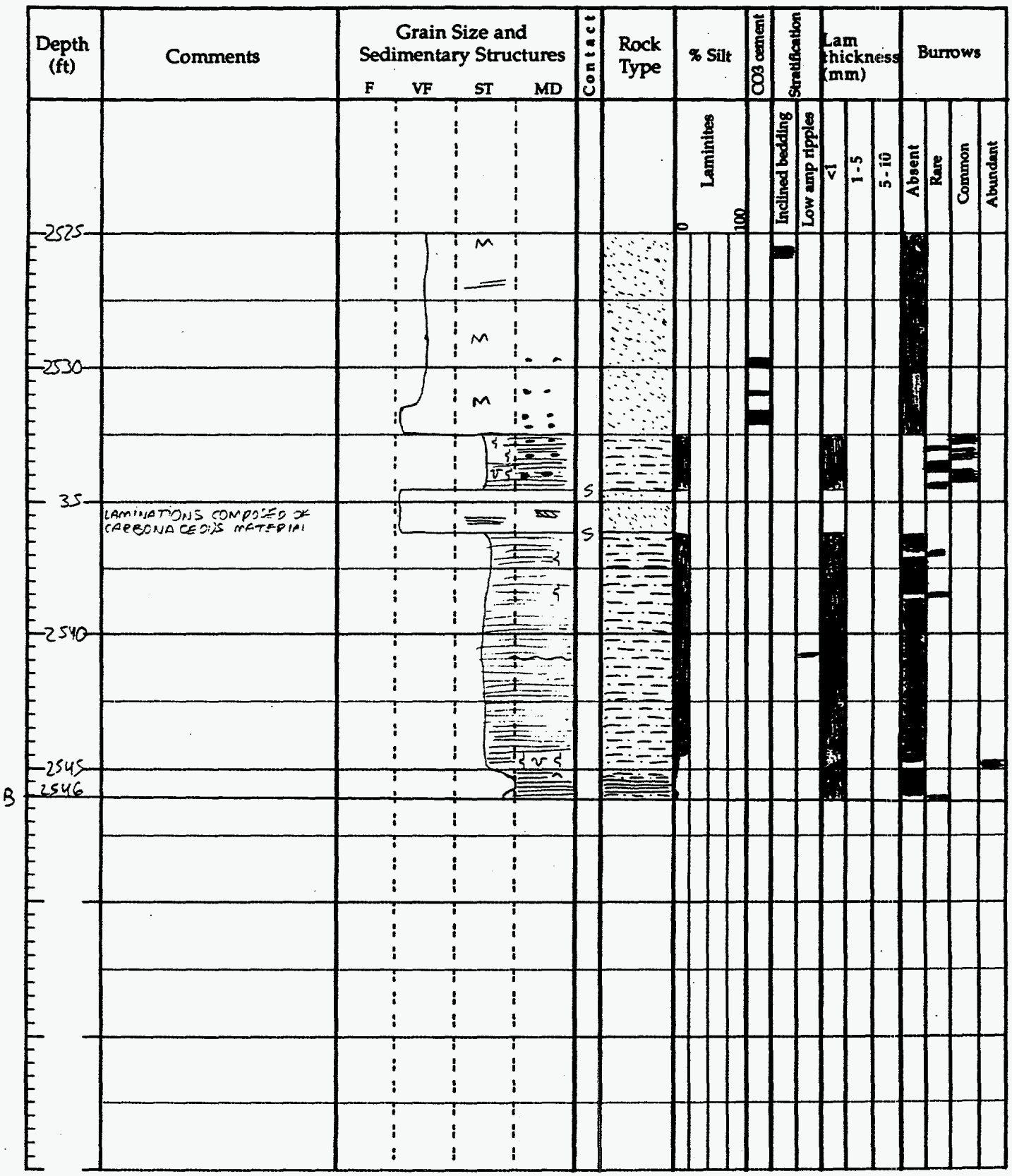
Well RAMSEY 38-8(FGU222) Core depth (+) 2494 (−) 2546 = 52' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/06

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – 100)	CO3 cement	Stratification	Lam thickness (mm)	Burrows
	GENERAL: BEWARE OF POSSIBLE MISPLACED INTERVALS. CHECK WITH GR-LOG.				Laminites		Inclined bedding; Low amp ripples	<1; 1-5; 5-10	Absent; Rare; Common; Abundant
2490									
T 2494									
2495									
			S						
2500									
05	SOFT-SEDIMENT DEFORMATION								
2510									
	SOFT-SED. DEFM.								
15									
2520									
2525									

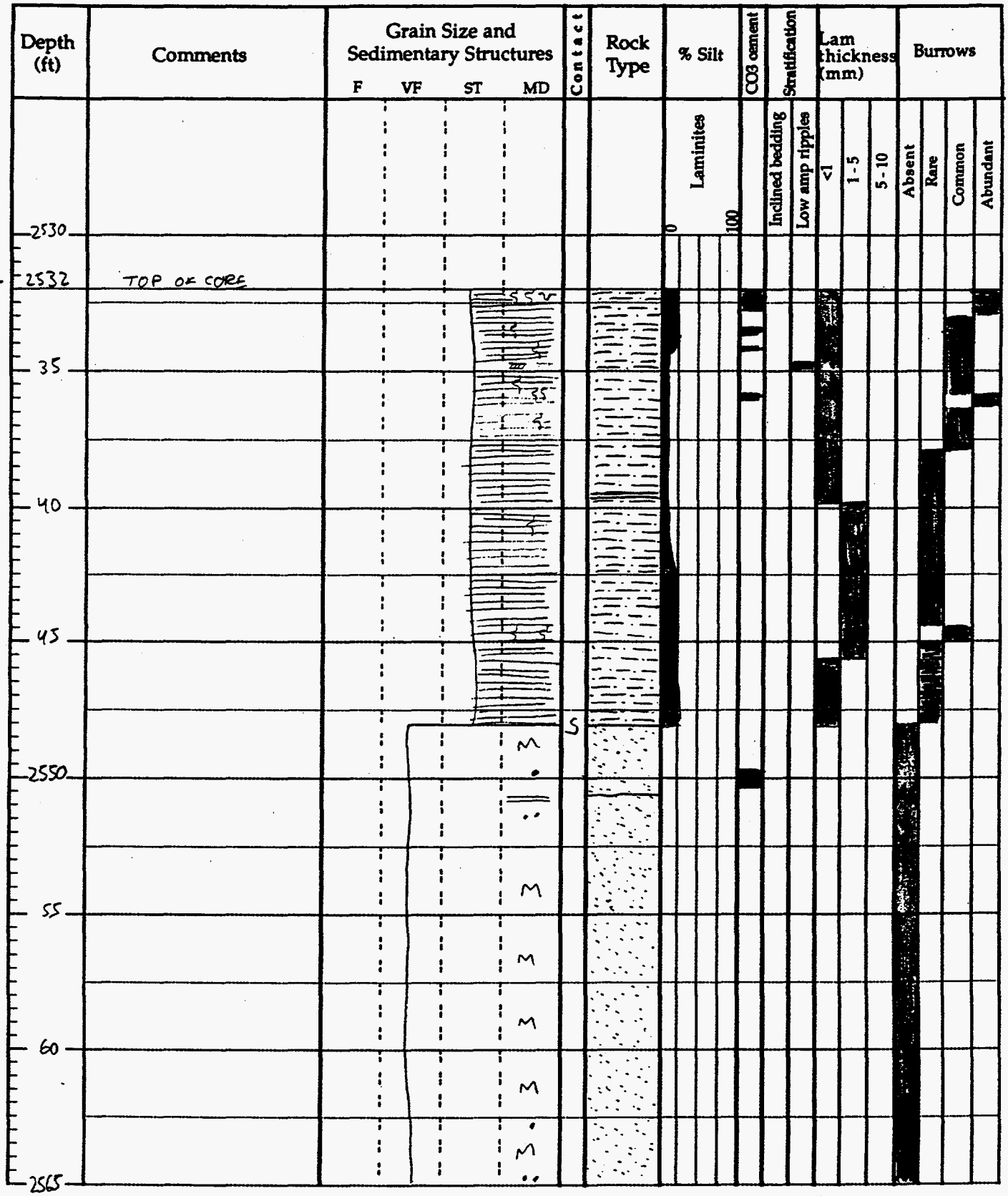
Well RAMSEY 38-8 (FQU 38-8) Core depth (+) 2494 (−) 2546 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOE Date 08/06



Well Ramsey 38-7 (FGU-228) Core depth (+) 2532 (−) 2583 = 51' Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/07



Well RAMSEY 38-7 (FGU-228) Core depth (+) 2532 (−) 2583 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/07

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2565																
		?														
70		M														
		M														
		?														
2575	2575-79' BOX: CONTAINS BAG OF SANDSTONE FRAGMENTS															
		M														
	ROUND SILTSTONE CLAST SOFT-SEDIMENT DEFORMATION		S													
2580																
2583																
B	BASE OF CORE															
2585																

Well Ramsey 38-6 (FGU 230) Core depth (+)(−) 2575-2635 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Ingrid Date 10-16-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – 100)	CO3 Cement	Stratification: Inclined Bedding	Stratification: Low Amp Ripples	Lam Thickness (mm): <1	Lam Thickness (mm): 1-5	Lam Thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2575		Top core													
6															
7															
8	Anhydrite xtals at 79.6														
9															
2580															
1															
2															
3	3cm thick calcite layer at 83.4														
4	Interlaminated Gypsum/calcite condensed		S												
2585	Sections at 86.25, 86.5, 87.45, 88.4, 88.75, 89.45														
6															
7															
8	4.5cm thick calcite layer at 89.2														
9			S												
2590															
1															
2															
3	3mm thick interlam gypsum/calcite layer														
4			S												
2595	at 2593.62, Pyrite also present														
6															
7															
8															
9															
2600															

Bureau of Economic Geology

Well Ramsey 38-6 (FGU 230) Core depth (+)(-) 2575-2635 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Sigrid Date 10-14-96

Depth (ft)	Comments
2600	
1	
2	some oxidizing in lams between 2602.7-2605
3	
4	fault
2605	
6	
7	
8	
9	cm size pyrite nodules
2610	
11	
12	approx. 2 ft. ~~of core missing~~ in 2611-2614
13	
14	
2615	
6	
7	wispy contorted lams
8	contorted lams
9	wispy lams
2620	
1	
2	
3	
4	
2625	
6	
7	
8	mm size organic clasts abundance increases upward into loaded contact between sd & lam
9	
2630	
1	
2	
3	
4	
2635	

Grain Size and Sedimentary Structures: F, VF, ST, MD

Contact

Rock Type

% Silt: 0, 100

CO3 Cement

Stratification: Inclined Bedding, Low Amp Ripples

Lam Thickness (mm): <1, 1-5, 5-10

Burrows: Absent, Rare, Common, Abundant

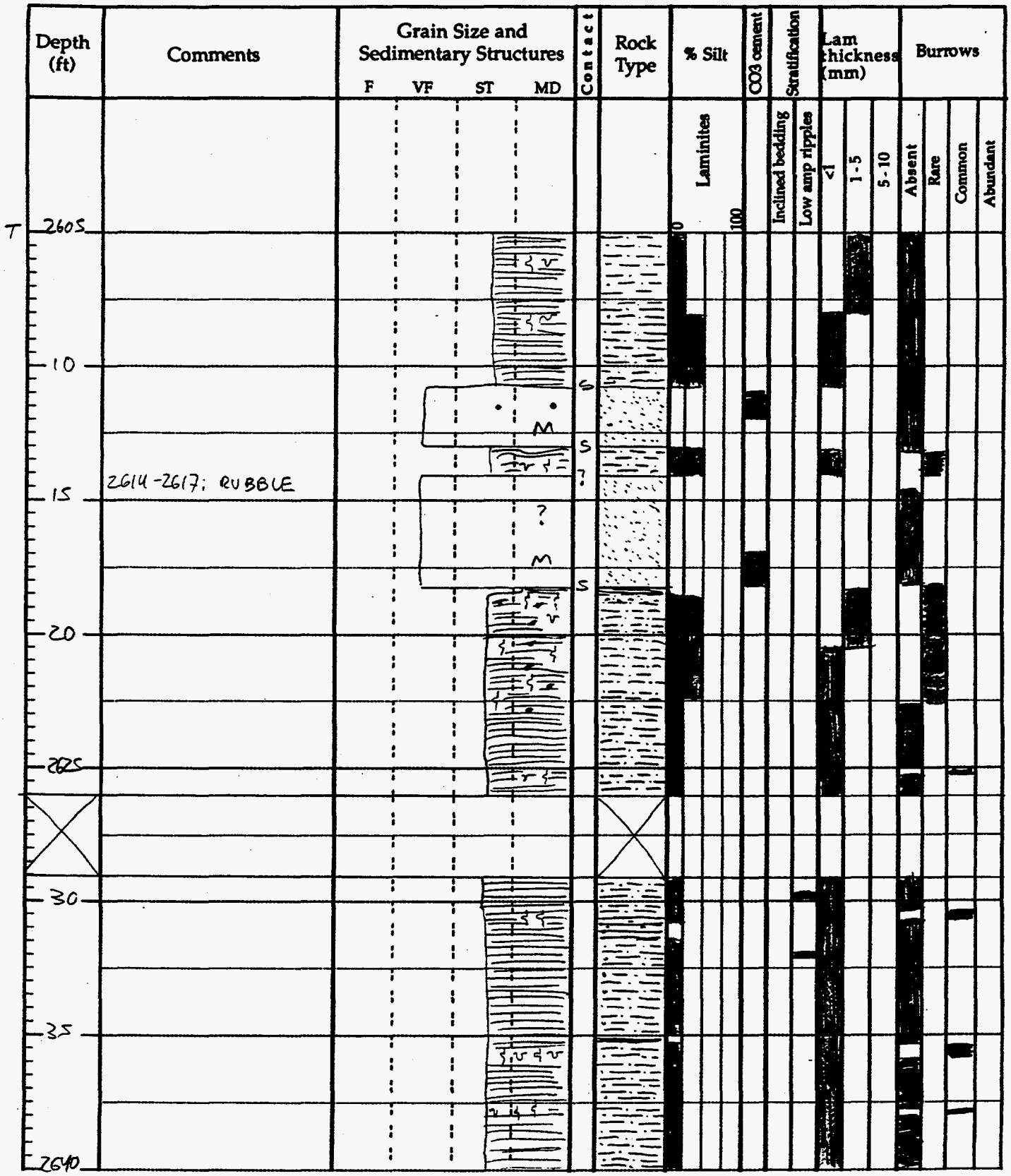
Bottom core

Bureau of Economic Geology

FGU 235

Well Ronsey 38-10 Core depth (+) 2605 (−) 2663 = 58' Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 07/16



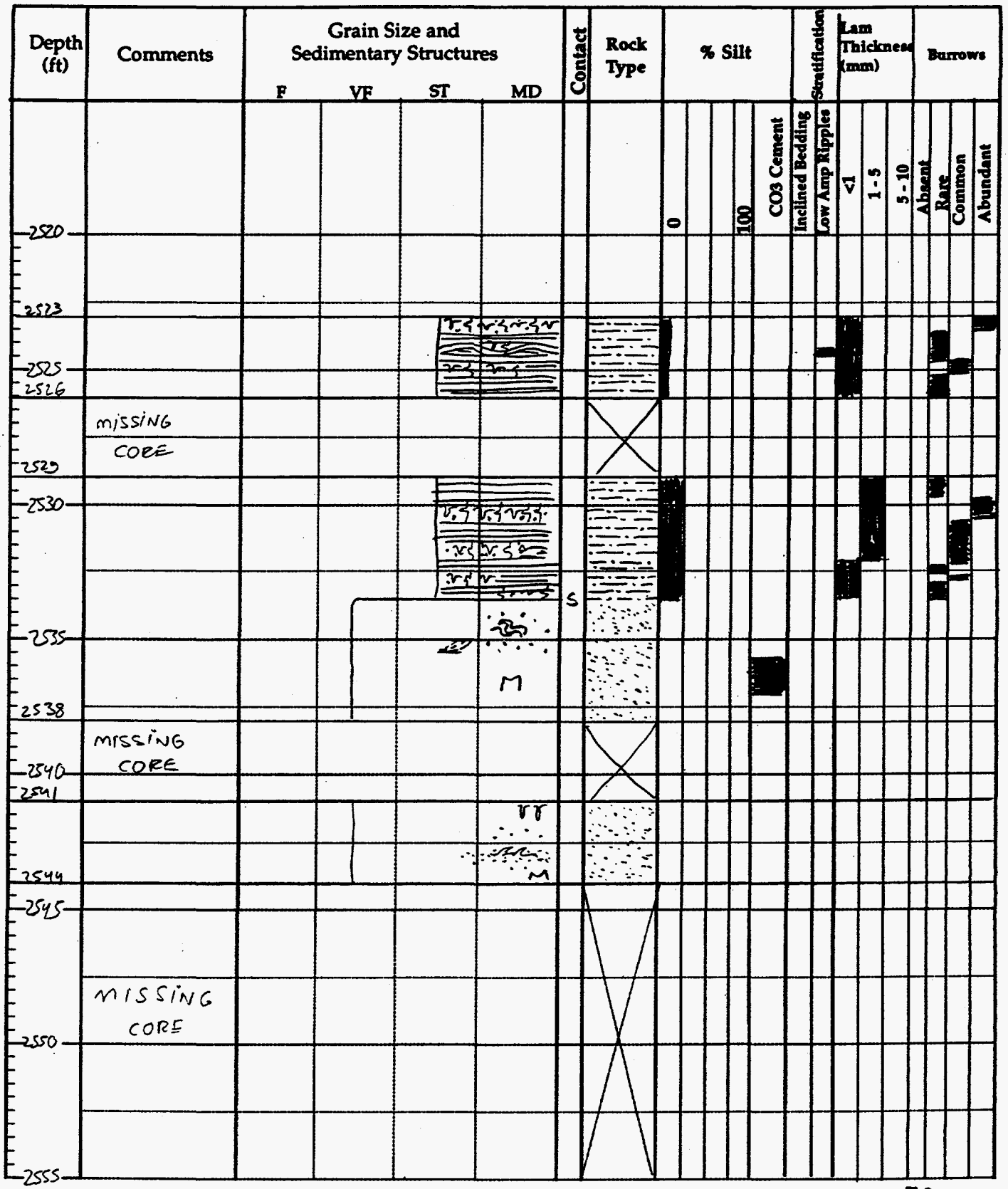
Well RAMSEY 38-10 Core depth (+) 2605 (−) 2663 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 07/16

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2640	SOFT-SEDIM. DEF								
	BALL & PILLOW/SOFT-SED. DEFORM								
	SLIGHTLY CALCAREOUS								
45									
2650									
	SOFT-SED. DEF.								
55	IN PIECES								
	CONVOLUTE/SOFT SED. DEF.								
60									
B 2663									
2665									

Well RAMSEY 38-11 / FGU-237 Core depth (+) 2523 (−) 2583.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/22/96



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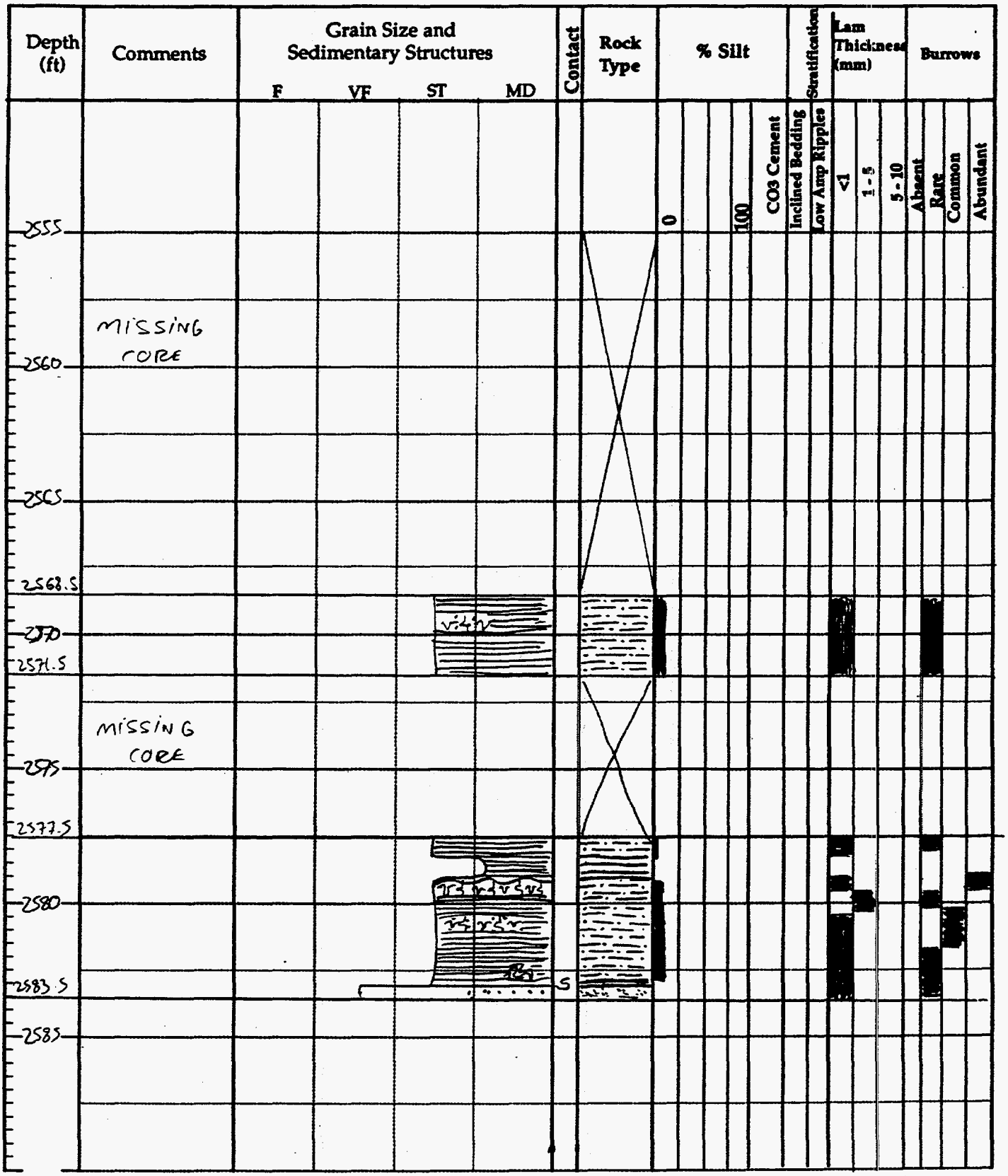
Well Ramsey 38-11 / FGU-237 Core depth (+) 2523 (−) 2583.5 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 10/22/96



Bureau of Economic Geology

Well Ramsey 38-12 (FGU 244) Core depth (+)(−) 2559.2600 = _____ Log depth @ _____

Formation Ramsey Location Culberson Co. TX Logged by Sigrid Date 10-4-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2559				Top Core					
2560									
1									
2									
3									
4									
2563									

Well Ramsey 38-12 (FGU 244) Core depth (+)(−) 2559 - 2600 = _____ Log depth ⓓ _____

Formation Ramsey Location _____ Logged by Sigrid Date 10-3-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2565									
6									
7			S						
8	Organic clast from 2568-2569.5		S						
9									
2570	some wispy lams thru 2571.		S						
1	1-5 mm size organic clasts								
2									
3									
4									
2575									
6									
7									
8									
9									
2580									
1	interval 2581-2590 is very friable								
2									
3									
4									
2585									
6									
7									
8									
9									
2590									
1									
2									
3									
4									
2595									
6	subtle lams at 95-95.6								
7									
8			S						
9	no bioturbation 25 mm below sand/laminite contact								
2600									

Bottom core

FGU 245

Well RAMSEY 38-16 Core depth (+) 2593 (-) 2651 = 58' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 07/16

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification	Lam thickness (mm)	Burrows
2590									
T 2593									
95									
	SOFT-SED DEFORM.								
2600	MOSTLY CO_3-CEMENTED		S						
	FLAME STRUCTURE		S						
05									
10									
15									
20	MISSING CORE OR BOX								
2625									

Stratification: Inclined bedding; Low amp ripples

Lam thickness (mm): <1; 1-5; 5-10

Burrows: Absent; Rare; Common; Abundant

Well RAMSEY 38-16 Core depth (+) 2593 (−) 2651 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 07/16

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2625			S						
	2626-2632: 6' OF CORE IN 3' OF BOX! CHECK CALCAREOUS INT. AGAINST MICROLOG FOR DEPTH CALIBRATION	M							
30		M							
		M							
35		M							
			S						
40	SILTY MUDSTONE, BLACK,		C S						
		M							
45	MISSING INTERVAL OR BOX								
2650									
2651									

Well Ramsey 38-13 (FGU 249 Core depth (+)(-) 2411-2414 2557-2591 = _____ Log depth @ _____

Formation Ramsey Location Culberson Co. Tx Logged by Sigrid Date 10-7-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2565															
6															
7		Top Core 1													
8															
9	friable ss 2568.5-71.0	M													
2570															

Note - 3 ft boxes were labeled with 4 ft core/box

Well Ramsey 38-13 (FGU 249) Core depth (+) 2567-2591 (−) 2611-2614 = _____ Log depth @ _____

Formation Ramsey Location _____ Logged by Sigrid Date 10-7-96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2570		M													
2575	some calcite cmt present 2575-2579.	M													
2580															
1															
2															
3															
4		M													
2585															
6															
7															
8	wispy lams present at base of calcite cmted zone	M													
9															
2590															
1		Bottom Core 1	S												
2															
3															
4															
2595															
2610															
11				Top Core 2											
12	9mm thick lutite at base of laminite interval		S												
13		M													
14		Bottom core 2													
2615															

Well Ramsey 38-14 (FGU-256) Core depth (+) 2592-2614 (–) 2644-2662 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/23/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2590															
	TOP OF CORE														
			S												
2595															
2600															
2605															
2610															
			S												
	BASE OF CORE														
2615															
	2614'-2644': MISSING CORE														

Well Ramsey 38-14 (FGU-256) Core depth (+) 2592-2614 (-) 2644-2662 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/23/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
	4' OF CORE IN 3' BOXES														
2640															
2645															
2650															
2655															
2660															
	BASE OF CORE														
2665															

Well Ramsey 46-6 (FGU-266) Core depth (+) 2545 (−) 2599 = 54' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/13

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2545	~2' OF BROKE MATERIAL		?						
	~1.5' OF BROKEN MATERIAL								
2550									
	2551-2557': MISSING CORE BOXES								
2555									
2560									
	2560-2563': MISSING CORE BOX								
2565	FAINT RIPPLES		E						
2570									
2575									
2580			G						

Well Ramsey 46-6 (FGU-266) Core depth (+) 2545 (−) 2599 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/13

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2580															
			G												
			S												
2585															
	SMALL-SCALE TROUGH X-LAMINATION		S												
	2587-2590: MISSING CORE BOX														
2590	VERY FAINT LAMINATIONS, OF CARBONACEOUS MATERIAL														
2595		M													
		M													
2599		M													
	BASE OF CORE														
2600															

Well RAMSEY 46-11 (FGU-262) Core depth (+) 2543 (−) 2597 = 54' Log depth @ _____

Formation _____ Location _____ Logged by JOE Date 08/13

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
	GENERAL NOTE: THERE ARE 4' OF CORE IN EACH 3' BOX															
2540																
2543	TOP OF CORE															
2545		M														
2550		M														
2555		M														
2560		M														
2565		M														
		M														
		M	S													
2570																
	2570'-2589.5': MISSING CORE															

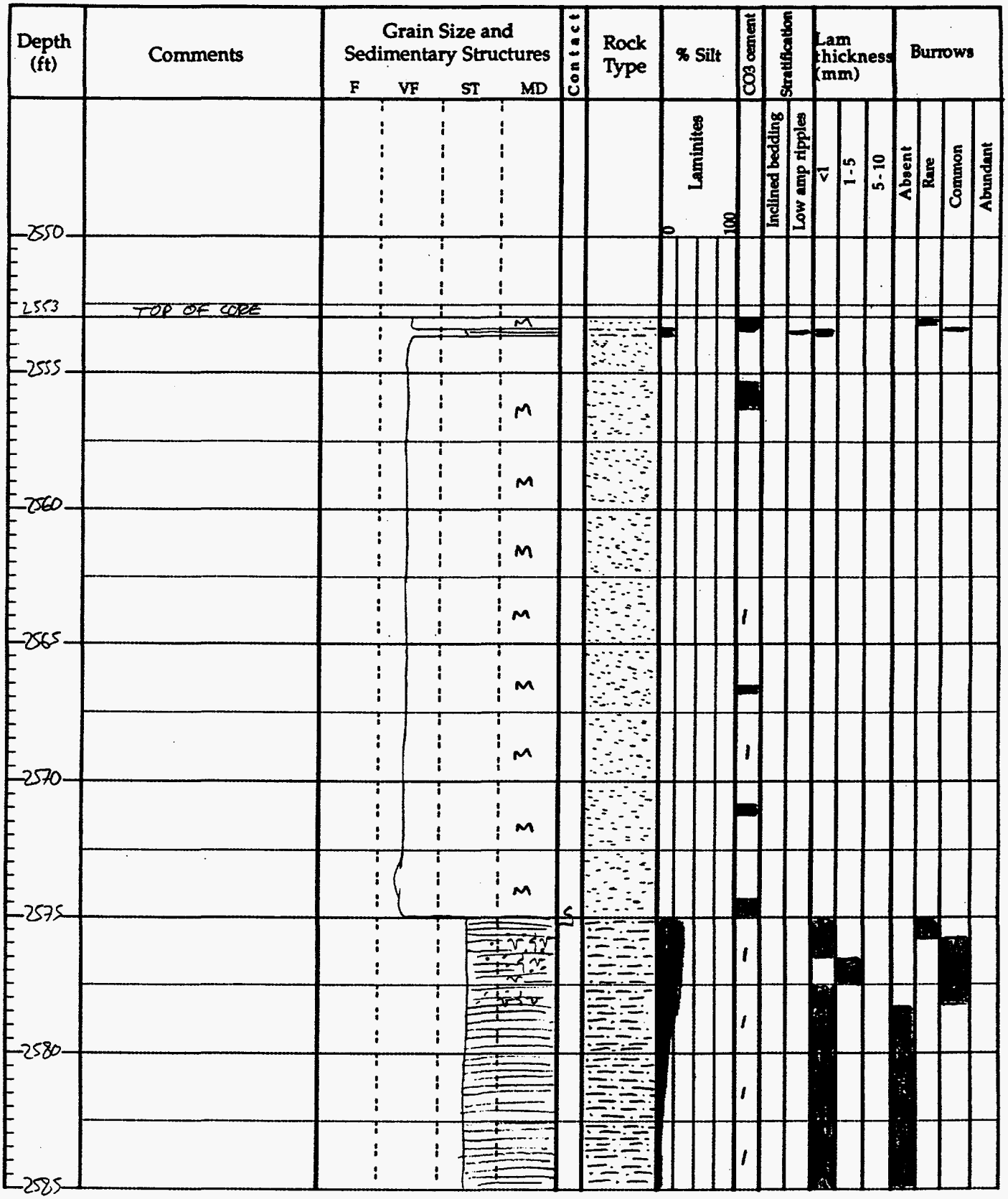
Well Ramsey 46-11 (FGU-262) Core depth (+) 2543 (−) 2597 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/13

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO_3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2585															
2590															
		M													
		M													
2595															
2597		M													
	BASE OF CORE														
2600															

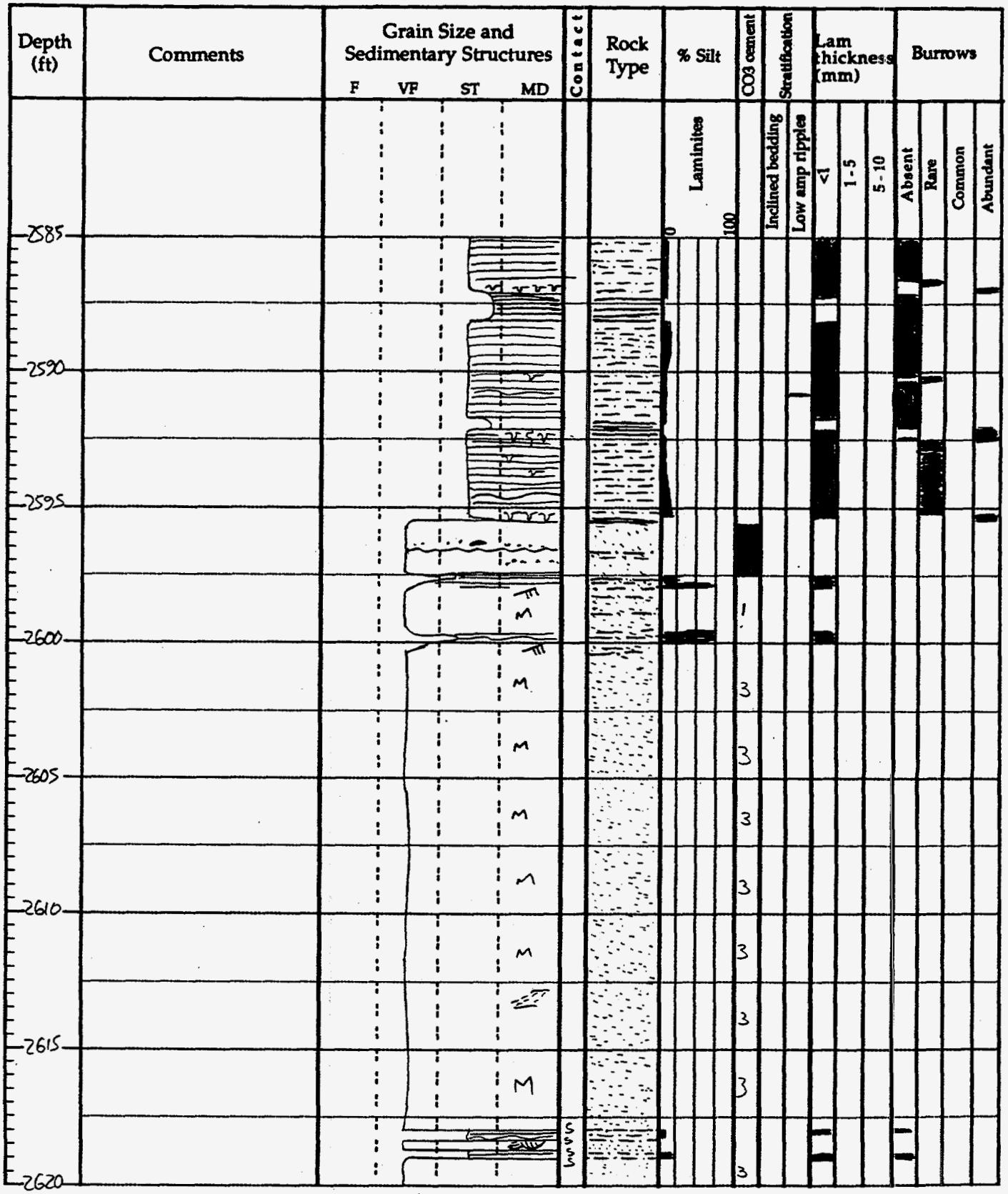
Well RAMSEY 46-7/FGU-270 Core depth (+) 2553 (−) 2661 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/16/96



Well RAMSEY 46-7/FGU-270 Core depth (+) 2553 (−) 2661 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/16



Well RAMSEY 46-7 / FGU-270 Core depth (+) 2553 (−) 2661 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/16

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Stratification	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
2620																	
2625																	
2630	INTERVAL SHOWS NO VISIBLE STRUCTURES, AND IS MODERATELY CALCAREOUS																
2635	BURROWS ARE CALCAREOUS																
2640																	
2645																	
2650																	
2655																	

Well RAMSEY 46-7/FGU-270 Core depth (+) 2553 (−) 2661 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/16

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2655																
	DARK BANDING, PROBABLY DUE TO CONCENTRATION OF CARBONACEOUS MATERIAL	M					1									
	SLIGHTLY CALCAREOUS	M					1									
2660							1									
2661		M														
	BASE OF CORE															
2665																

Well Ramsey 46-4 / FGU-272 Core depth (+) 2571 (−) 2625 = 54' Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/15

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
2570																
2571	TOP OF CORE															
			S													
2575		M														
		M														
2580		M														
		M														
2585		M														
		M														
2590	FAINT RIPPLES	M														
		M														
2595		M														
		E?	E?													
2600																
2605																

Well RAMSEY 46-4/FGU-272 Core depth (+) 2571 (−) 2625 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/15

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2605									
2610	2610-13': MISSING BOX								
2615			S						
2620	2619-2622: MISSING BOX								
2625	BASE OF CORE	M							

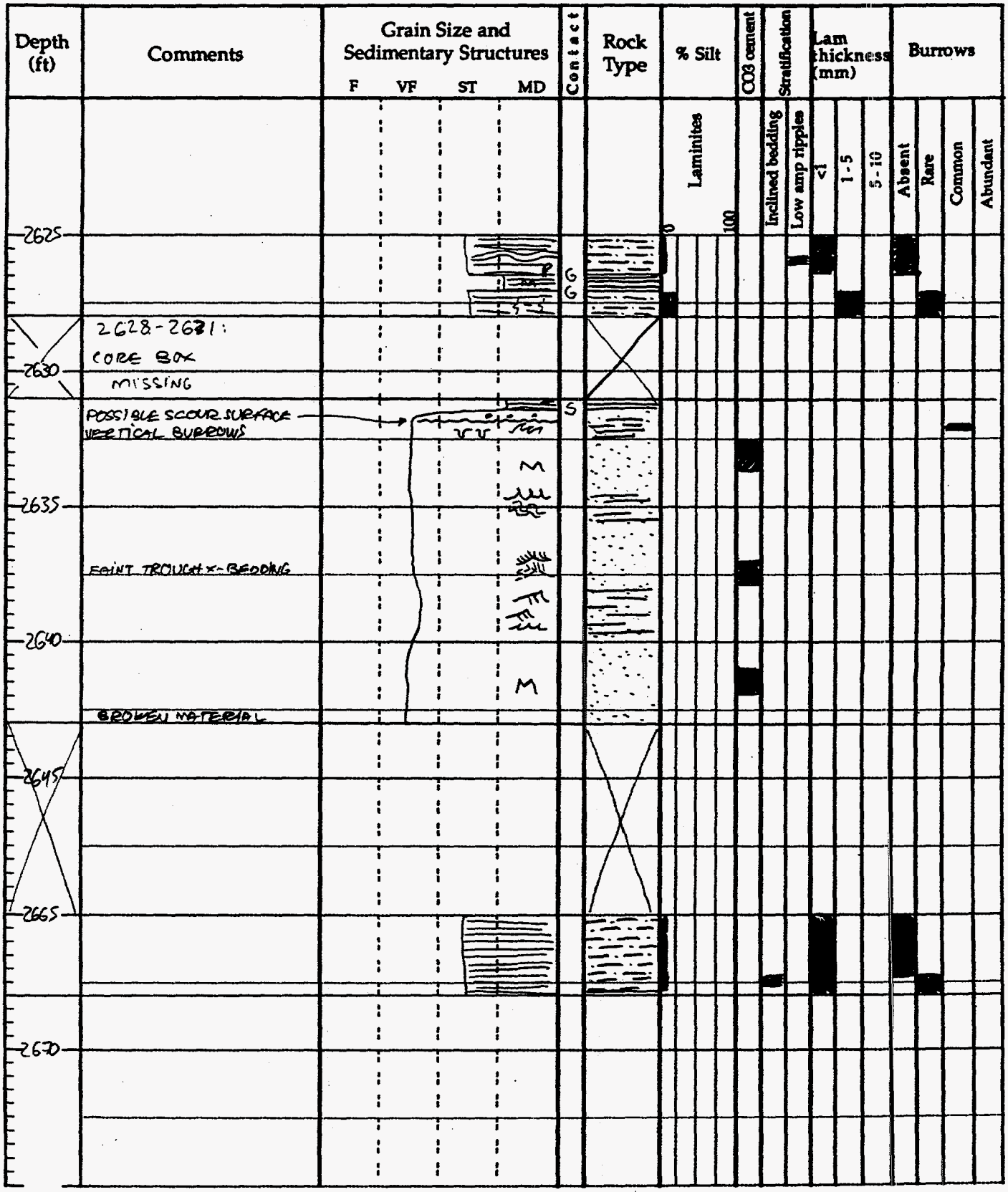
Well Ramsey 46-1 (FGU-281) Core depth (+) 2590 (-) 2645/65-68 = 58' Log depth @ ___

Formation ___ Location ___ Logged by JOSE Date 08/13

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	GENERAL NOTE: SOME 3' CORE BOXES REPORT 4' OF CORE								
2590									
2593	TOP OF CORE								
2595									
2600									
2605									
2610			S						
2615	2613-2616: CORE BOX MISSING								
2620									
2625			S						

Well _____ Core depth (+)(−) _____ = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____



Well RAMSEY 19-47/FGU-291 Core depth (+) 2675 (−) 2713 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/10/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – 100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
	GENERAL: 4' OF CORE REPORTED IN 3' BOXES				Laminites				
2675	TOP OF CORE								
	6' REPORTED IN 3' BOX	M							
		M							
2680			S						
	MISSING CORE								
2685		M							
2690	MISSING CORE								
2695			S						
		M							
2700		M							
		M							
2705		M							
		M							
2710		M							

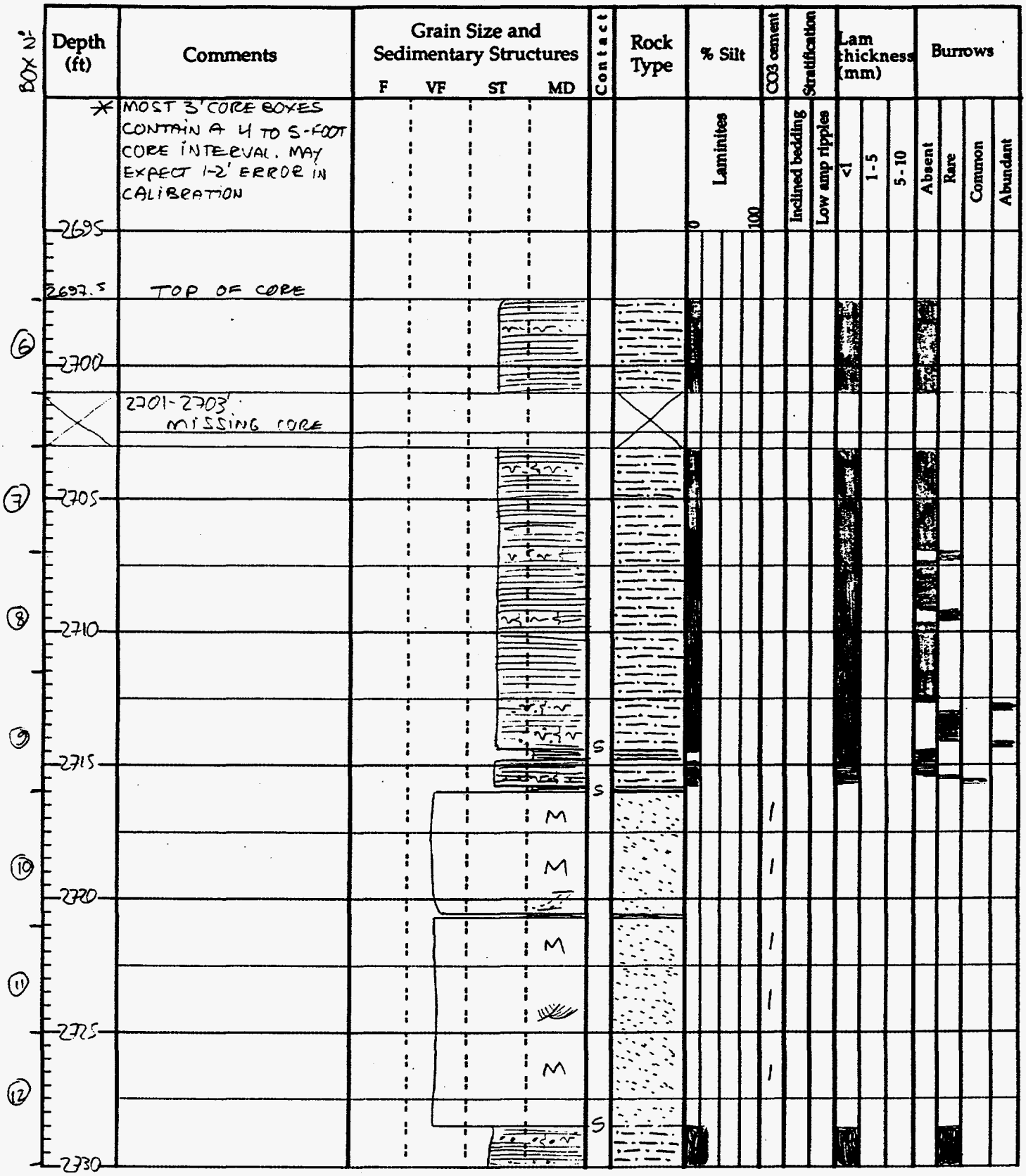
Well Ramsey 13-47 / FGU-291 Core depth (+) 2675 (−) 2713 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Joe Date 10/10/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
2710			S												
	BASE OF CORE @ 2713'														
2715															

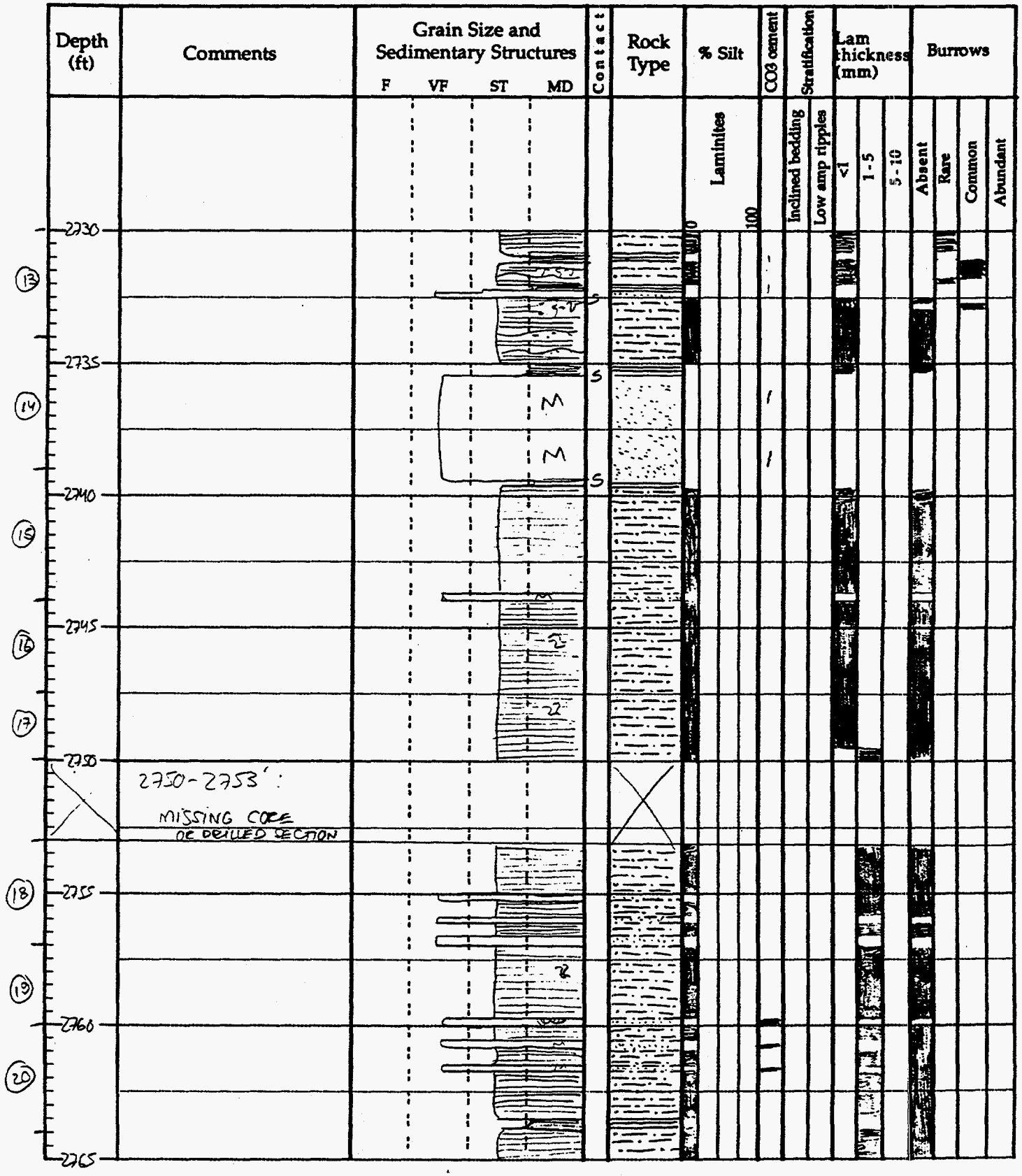
Well Ramsey 24-1 (FGU-292) Core depth (+) 2697.5' (-) 2888 = _____ Log depth @ _____

Formation _____ Location _____ Logged by José Date 08/26-28/96



Well RAMSEY 24-1 (FGU-292) Core depth (+) 2697.5' (−) 2888 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/26-28/96



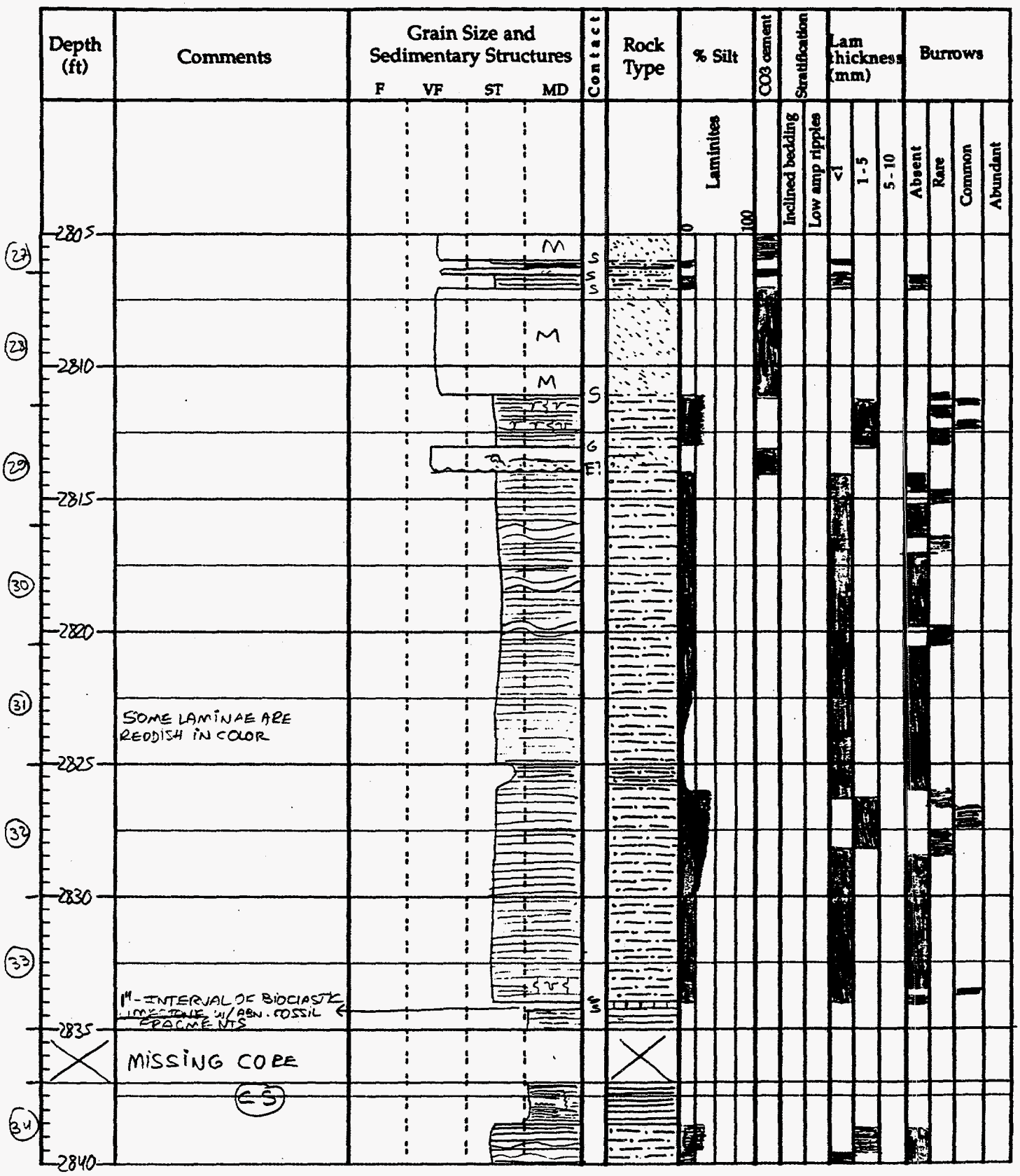
Well RAMSEY 24-1 (FGU-292) Core depth (+) 2697.5' (−) 2888 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/26-28/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2765									
21									
2770									
22									
2775									
23									
2780									
24									
2783									
25									
2785	2783-2797': MISSING CORE								
2795									
25									
2797									
26									
2800									
27									
2805									

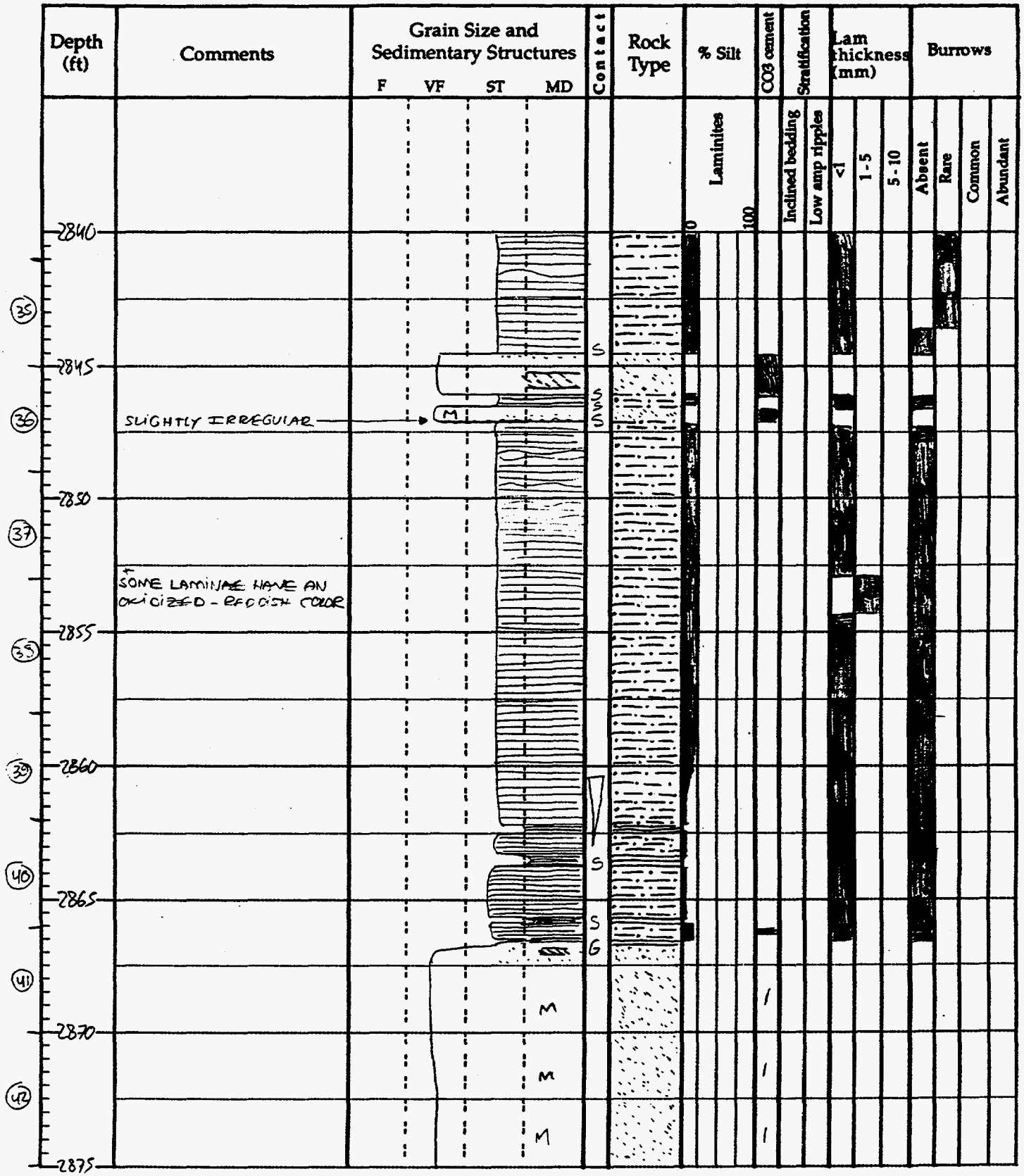
Well RAMSEY 24-1 (FGU-292) Core depth (+) 2697.5 (−) 2888 = _____ Log depth _____

Formation _____ Location _____ Logged by JOSE Date 08/26-28/96



Well RAMSEY 24-1 (FGU-292) Core depth (+) (−) 2697.5 / 2888 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/26-28/96



Well Ramsey 24-1 (FGU-292) Core depth (+) 2697.5 (−) 2888 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/26-28/91

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
2875															
(43)															
		M				1									
		M				1									
2880															
(44)															
						1									
2885															
(45)															
						1									
2888	BASE OF CORE														
2890															

Well FGU-306 Core depth (+) 2686 (−) 2746 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminat. – 100)	CO_3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam Ranges (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2685									
← 86 →	Fine laminated siltstone, with many Rip-up clasts of clay,								
	small size (1-2 mm), organic rich. (Flakes).		S						
2690	The contact is not								
	present but looks sharp.								
	Massive Sandstone very fine grained,								
	poorly cemented, locally very friable.								
2695									
	some Layers of highly cemented with carbonate.								
2700									
	Contact is apparently erosive. Below contact, fine laminated siltstone,		E						
	slightly bioturbated by horizontal burrows, some vertical.		S						
2705	Massive and very								
	friable sandstone.		S						
	Fine laminated siltstone upper contact is								
	sharp, lower is gradual and fining upward,		A						
2710	Massive sandstone								
	with some organic flakes toward Top.								
2715	Soft Deformation								
	structure (Flame structure) in a friable sandstone								
2720									

Well FGU-306 Core depth (+) 2686 (-) 2746 = _____ Log depth @ _____

Formation _____ Location _____ Logged by _____ Date _____

Depth (ft)	Comments	Grain Size and Sedimentary Structures: F	VF	ST	MD	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification: Inclined bedding	Low amp ripples	Lam Ranges (mm): <1	1-5	5-10	Burrows: Absent	Rare	Common	Abundant
2720																		
	Very fine grained, massive sandstone																	
	Compact, Not cemented																	
2725																		
2730																		
	Soft sediment deformation, about																	
	1.5 inches thick, formed by contorted bedding and wavy																	
2735	laminations, with many rip-up clasts organic rich.																	
	Contact is gradual																	
2740																		
	Fine laminated siltstone, locally bioturbated. Many																	
	organic rip-up clasts.																	
2745																		
2746																		

Well EGU-318 Core depth (+) 2470 (−) 2518 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 10/11/96

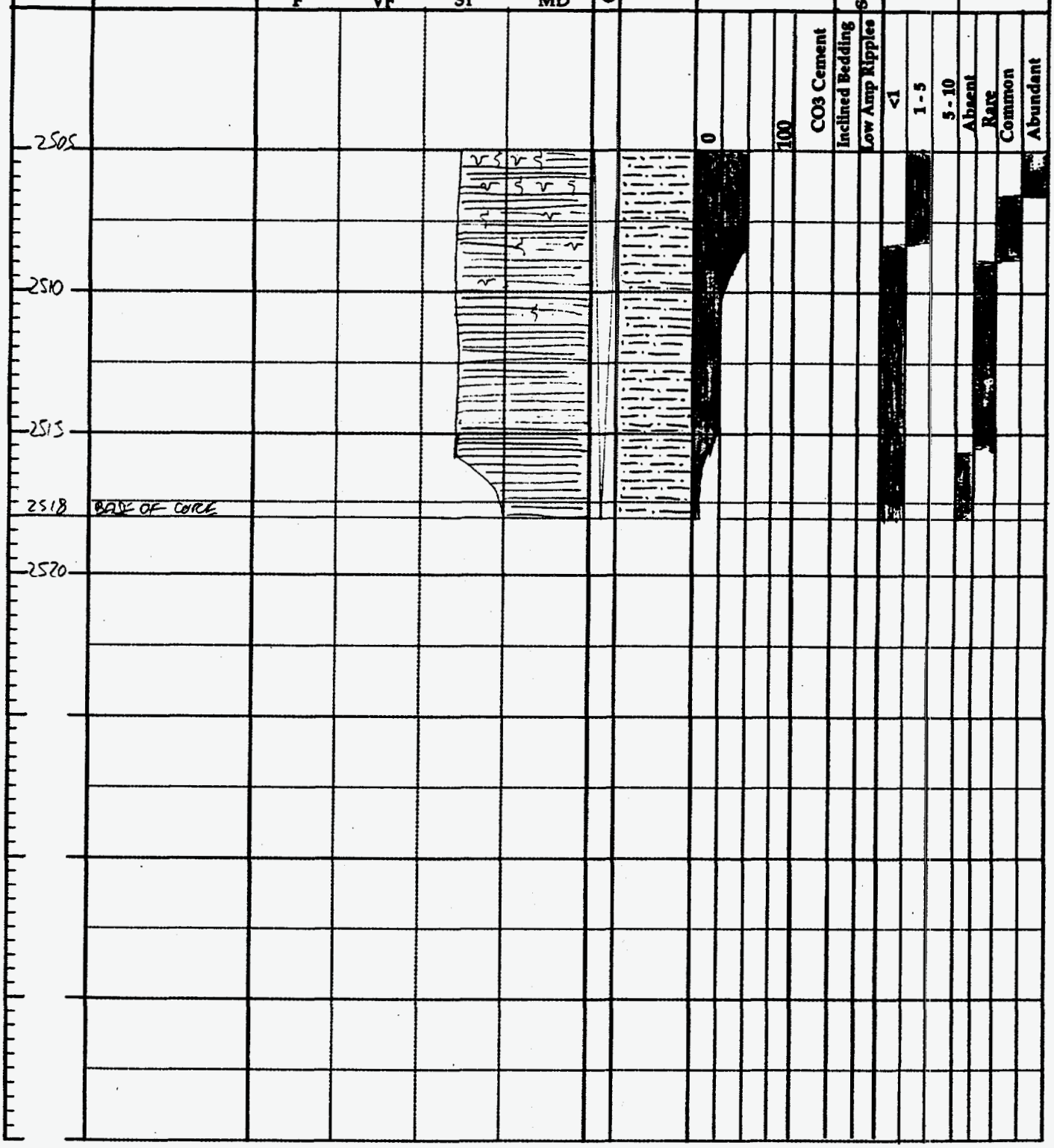
Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2470									
2475									
2480									
2485			E?						
2490									
2495									
2500			G						
2505									

NEED TO FINISH
J.C. 10/11

Well FGU-318 Core depth (+) 2470 (–) 2518 = _____ Log depth ⓜ _____

Formation _____ Location _____ Logged by JOSE Date 10/16/91

Depth (ft)	Comments	Grain Size and Sedimentary Structures	Contact	Rock Type	% Silt	Stratification	Lam Thickness (mm)	Burrows
		F VF ST MD			0 100 CO3 Cement	Inclined Bedding Low Amp Ripples	<1 1-5 5-10	Absent Rare Common Abundant
2505								
2510								
2515								
2518	BASE OF CORE							
2520								



Bureau of Economic Geology

Well FORD WEST / RAMSEY 14-3 Core depth (+) 3552 / (−) 3587 = 35' Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	CO3 cement	Stratification	Lam thickness (mm)	Burrows
	NOTE: ROCKTYPE DENOTED BY ▒ INDICATES LAMINATED VF TO SILTY SS				Laminites		Inclined bedding; Low amp ripples	<1; 1-5; 5-10	Absent; Rare; Common; Abundant
3550									
T 3552	TOP OF CORE								
		M							
3555			S						
	ALTERNATING BANDS OF SLIGHT CO_3 CEMENTED (LIGHT GRAY)	M							
		M							
3560									
3565	SLIGHT CO_3 CEMENT					I			
		M							
3570		M							
			S						
	NOTE: SANDIER THAN GERALDINE WELLS: LAMINATED VF/ST SANDSTONES								
3575									
	LENTICULAR								
	PROBABLY BEST DESCRIBED AS HETEROLITHIC, WITH >50% SLT								
3580									
3585									

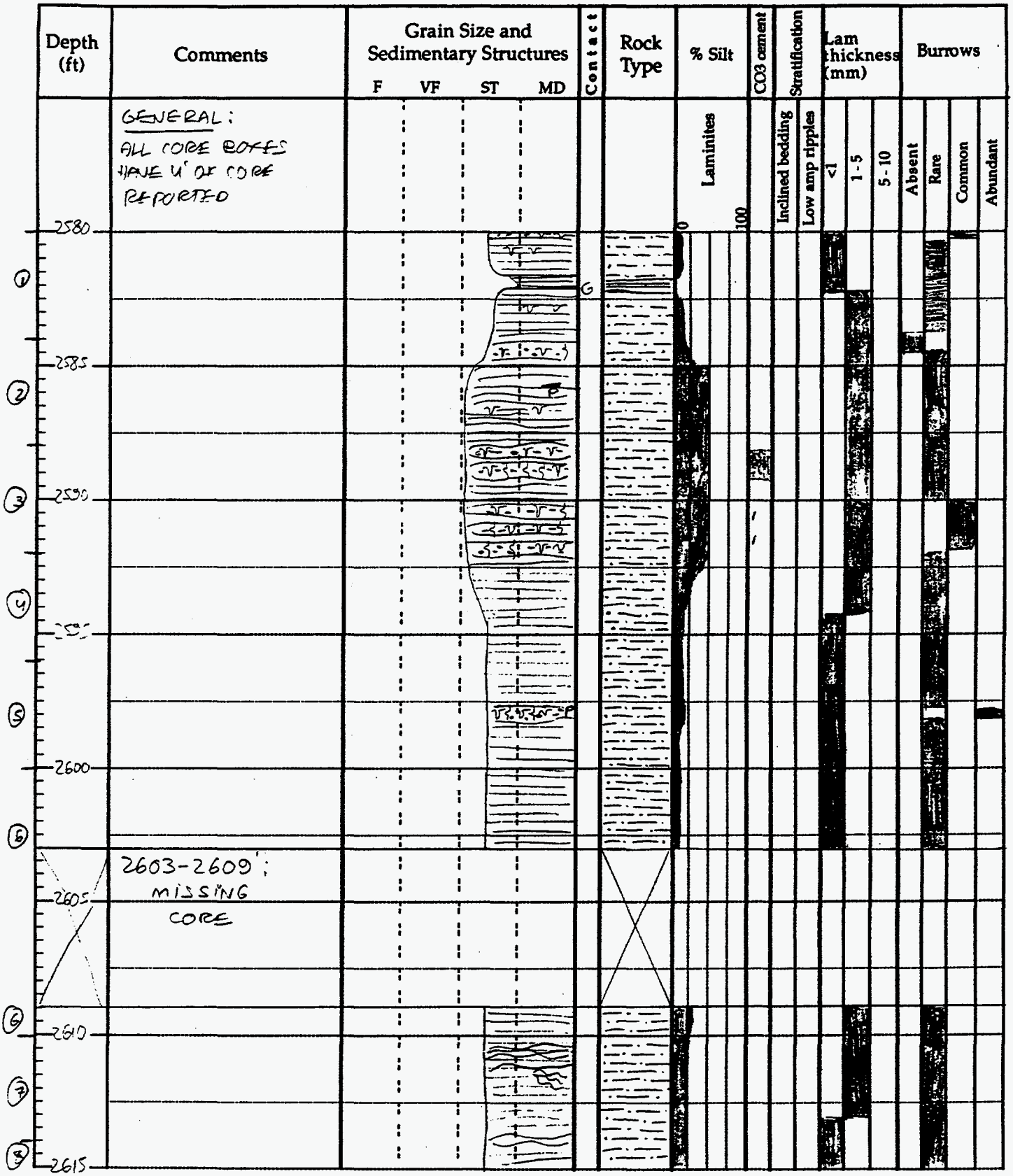
Well RANSEY 14-3 Core depth (+) 3552 (-) 3587 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 08/08

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0 – Laminites – 100)	CO3 cement	Stratification: Inclined bedding	Stratification: Low amp ripples	Lam thickness (mm): <1	Lam thickness (mm): 1-5	Lam thickness (mm): 5-10	Burrows: Absent	Burrows: Rare	Burrows: Common	Burrows: Abundant
3585	SAME AS ABOVE														
3587	BASE OF CORE														
3590															

Well Ramsey 22-1 Core depth (+) 2580 (−) 2630 = _____ Log depth @ _____

Formation _____ Location _____ Logged by JOSE Date 09/19/96



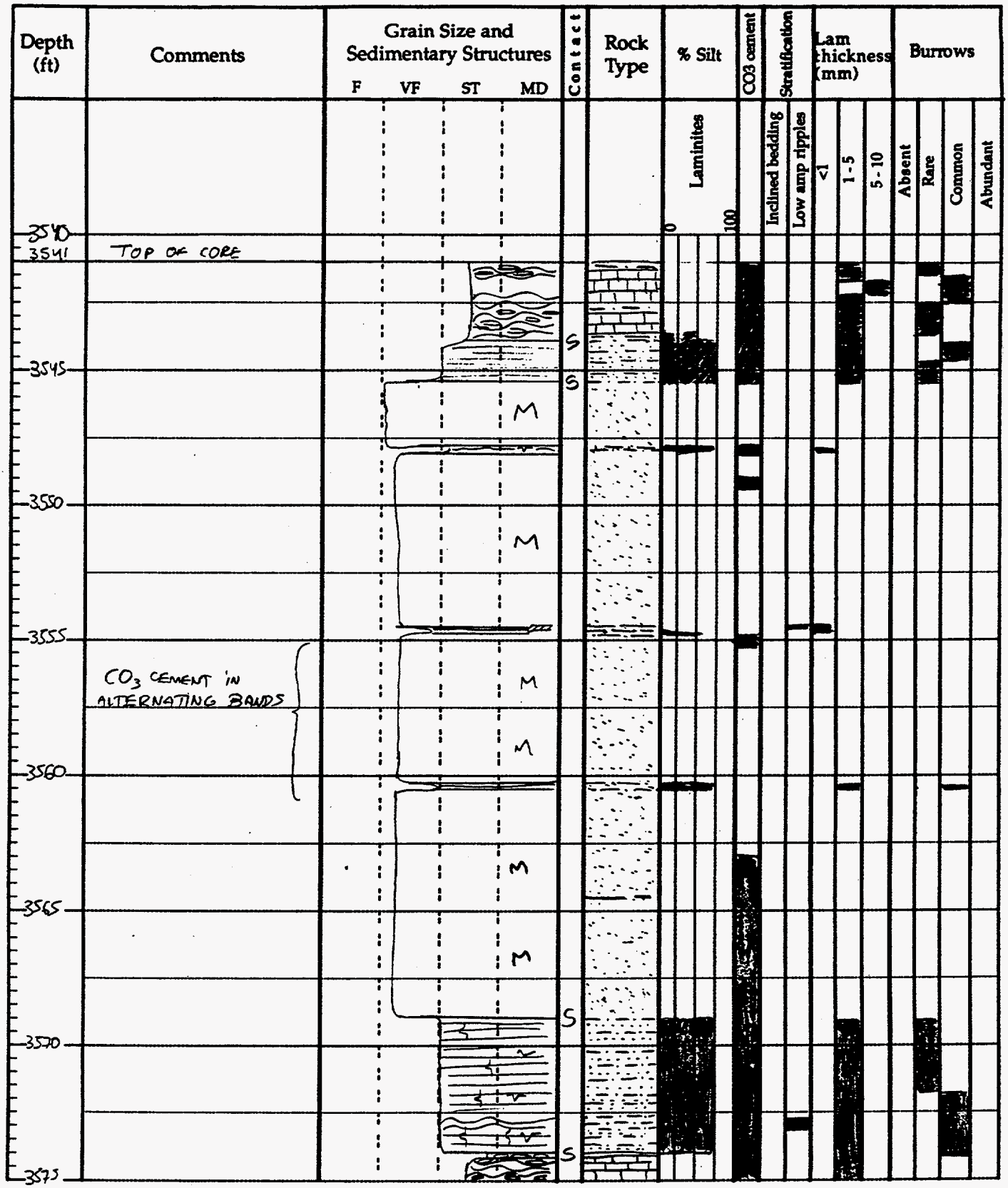
Well Ramsey 22-1 Core depth (+) 2580 (–) 2630 = _____ Log depth ⓟ _____

Formation _____ Location _____ Logged by JOSE Date 09/19/95

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
2615									
8									
9									
2620									
10									
2625									
11									
2630									

Well RANSEY 22-3 Core depth (+) 3541 (−) 3598 = 57' Log depth @ _____

Formation _____ Location FORD-GERALDINE Logged by JOSE Date 08/15



Well Ramsey 22-3 Core depth (+) 3541 (−) 3598 = _____ Log depth @ _____

Formation _____ Location _____ Logged by Jose Date 08/15

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (Laminites 0–100)	CO3 cement	Stratification (Inclined bedding, Low amp ripples)	Lam thickness (mm) (<1, 1-5, 5-10)	Burrows (Absent, Rare, Common, Abundant)
3575									
3580									
3585									
3590			S S						
3595									
3598	BASE OF CORE								
3600									

Well CONOCO RAMSEY 22-11 Core depth (+)(−) 3552' = 3552' Log depth @ _____

Formation PCC Location FORD WEST FIELD, CULBERSON CO., TX Logged by DICKERSON Date 6/28/96

Depth (ft)	Comments	Grain Size and Sedimentary Structures (F, VF, ST, MD)	Contact	Rock Type	% Silt (0–100)	Laminites	CO3 cement	Inclined bedding	Low amp ripples	Lam thickness (mm) <1	1-5	5-10	Burrows Absent	Rare	Common	Abundant
3550																
3552 TOP	THIN (1 mm) LAMINAE WISPY DISCONTIN.; HORIZONTALLY BURROWED; LAMINAE IN SETS THAT DECREASE UPWARD FROM 8-10 mm AT BASE TO 5 mm THICK AT TOP		G				3			✓					✓	
3555	FRIABLE, BIMODAL	G/A	S				3				✓				✓	
3560		G/A					1									
		G/A					1									
3565	2-CM LAYER – MORE ORGANIC MATTER, CALCAREOUS W. THIN DARK LAMINA W/ FLAME STRUCTURE		C				3	GI								
3570	2-4 mm ORGANIC INTVL., GENTLY INCLINED LAM., SHALE BREAK ON LOG (SUBTLE)		S S				1	GI								
	CALCAREOUS ABOVE 3 TO 4 mm DARK LAMINAE ZONE W/ LOAD STRUCTURE						3			✓						
3575	3576.7 – BIMODAL LVF SD, SLT; A FEW FINE DARK CLASTS; RIPPLED; DARK MATERIAL W/ COARSEST (LVF) SAND		S				3		✓							
	INCR. GYP. OR ANHYDRITE BLEBS (4-5 mm DIAM); PACKETS OF LAMINAE THICKEN DOWNWD. FR. 5-7 TO 15-18 mm	G/A G/A	S								✓					
3580	V. FINE SHELL FRAGMENTS, WISPY DISCONT. LAMINAE, H. BURROWS; G/A FOLLOWS LAMINA; INDIV. LAM ~ 1 mm	G/A G/A G/A					3				✓ ✓				✓	
BOTTOM	NOTE: G/A = GYPSUM OR ANHYDRITE BLEBS/PATCHES															