

## Supplementary material for:

### **Reconstructing sedimentary processes in a Permian channel-lobe transition zone: an outcrop study in the Karoo Basin, South Africa.**

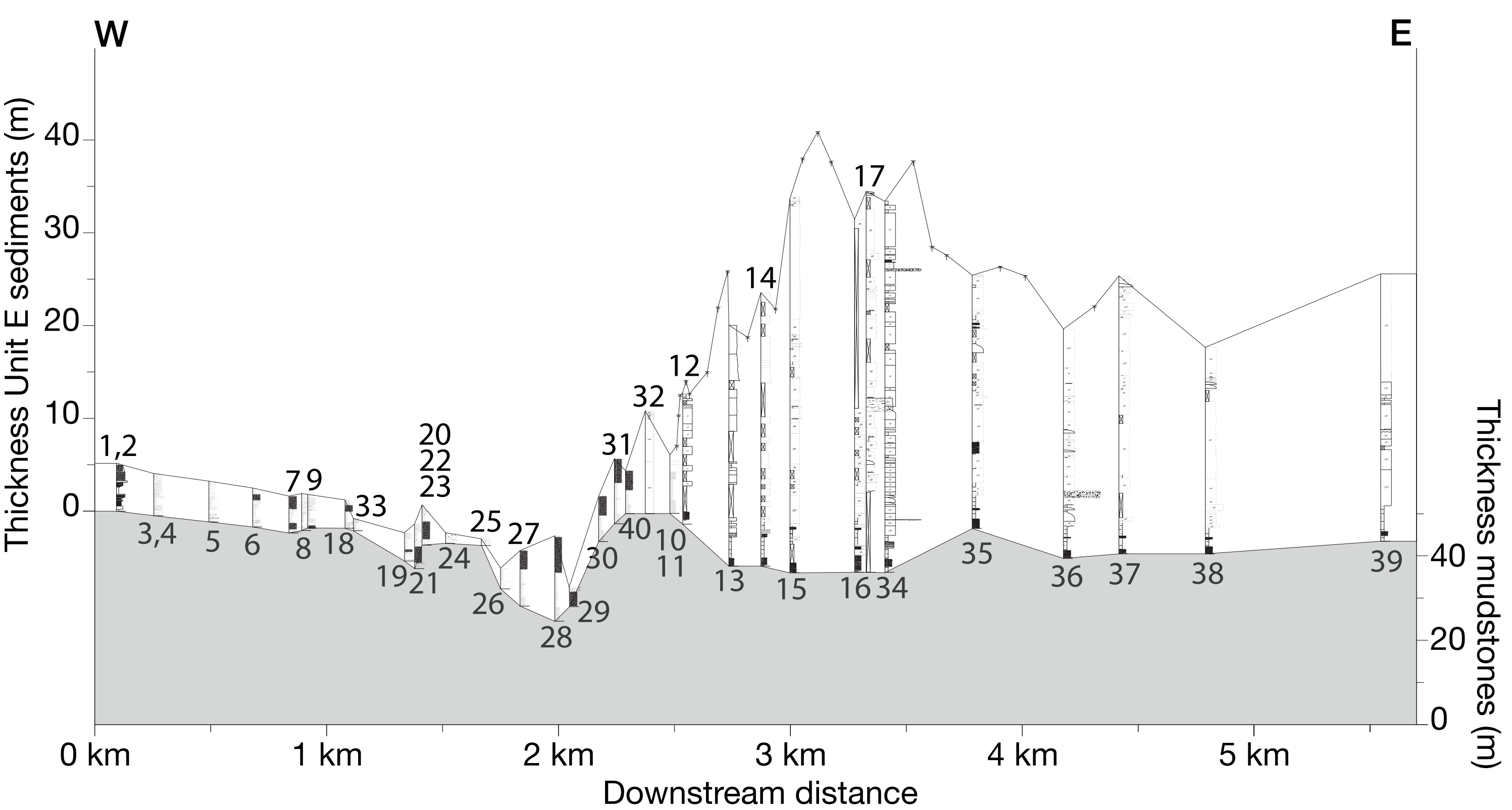
F. Pohl<sup>1</sup>, J.T. Eggenhuisen<sup>2</sup>, J. de Leeuw<sup>2</sup>, M.J.B. Cartigny<sup>3</sup>, H.L. Brooks<sup>4</sup>, Y.T. Spychala<sup>5</sup>

#### **Affiliations**
























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- <sup>4</sup> Department of Geological Sciences, Geological Engineering Queen's University, Kingston, Ontario, K7L 3N6, Canada
- <sup>5</sup> Leibniz University Hannover, Institute of Geology, Callinstr. 30, 30167 Hannover, Germany

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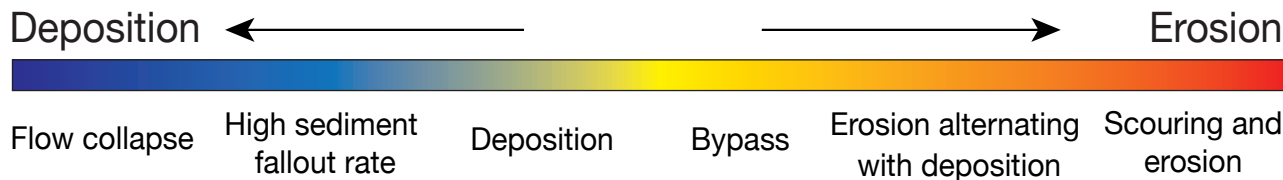
- **Location and overview of the sedimentary sections**
- **Legend**
- **40 Sedimentary sections**

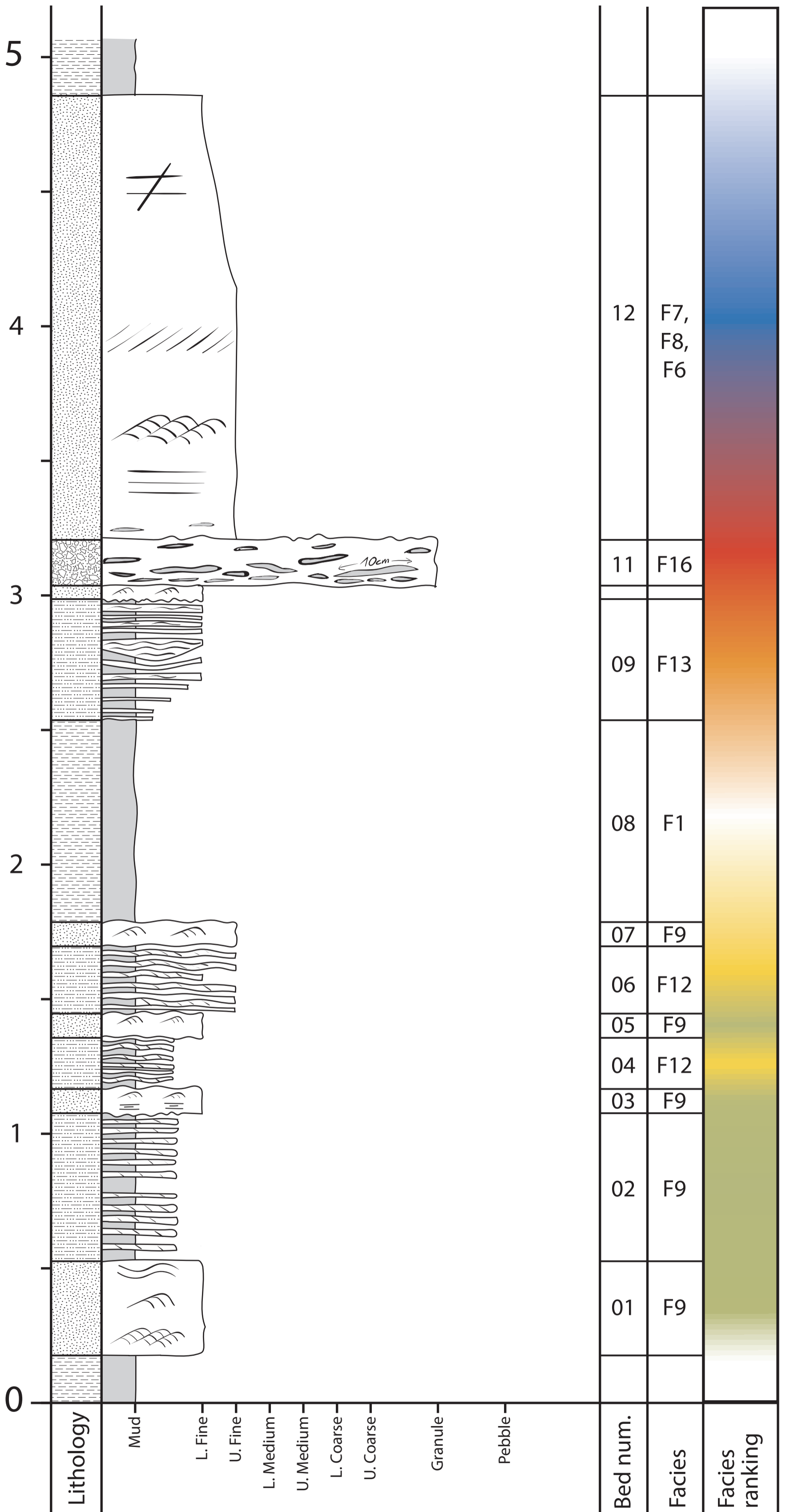


# Legend

	Mudstone		Structureless		Injectites
	Mud/sand alternation		Parallel lamination		Groove marks
	Sandstone		Parallel stratification		Flute marks
	Mudclast horizon		Wavy lamination		Loading
	No exposure		Cross bedding		Mudclasts
	Poorly exposure		Current ripple		Convolution
			Climbing ripple		Deformed sandstone clast
			Amalgamation		Lensoid packages
			Erosive horizon		

# Facies ranking scheme



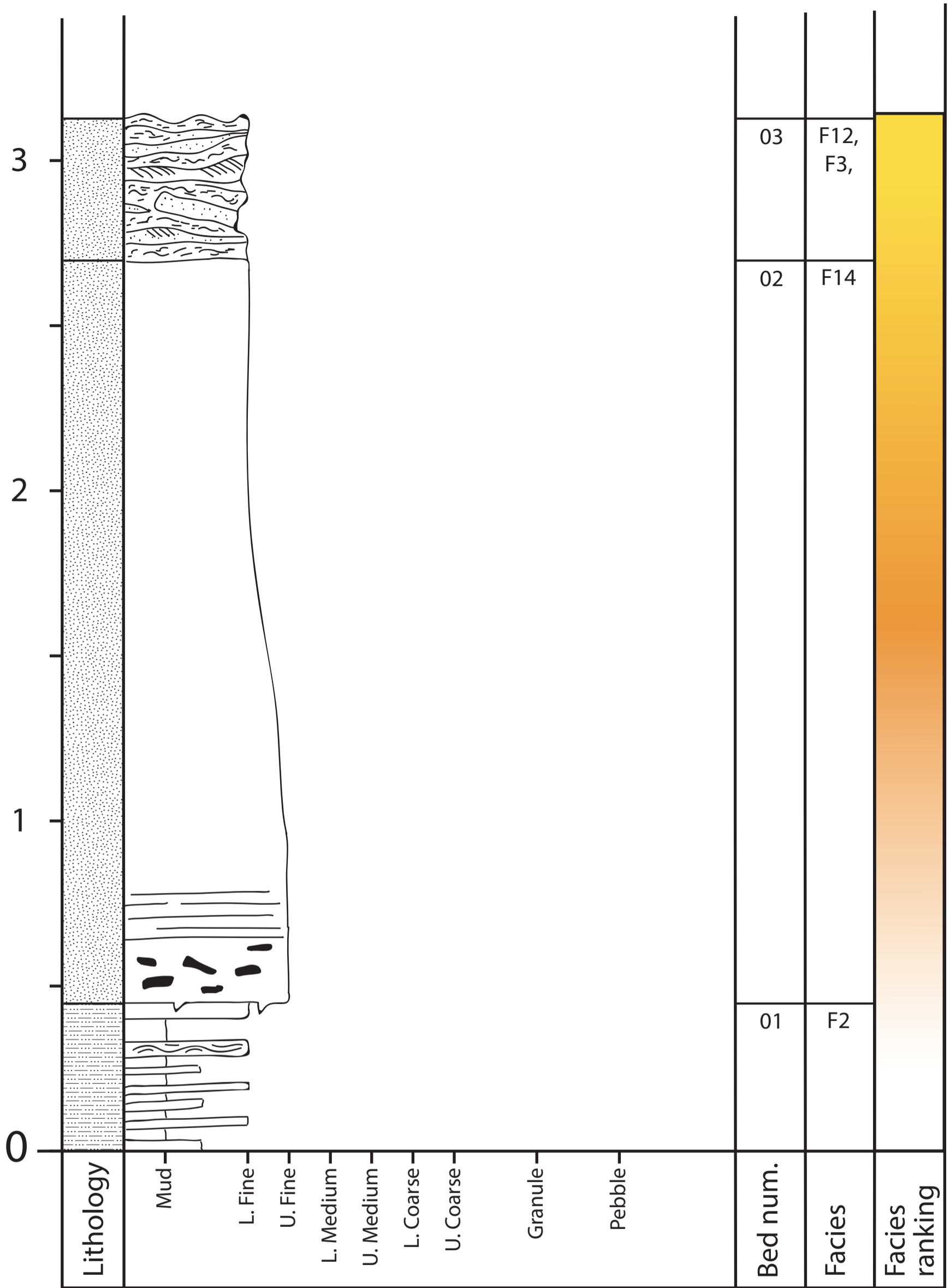


**Log Number: L 01**

Bedding: 355°/86°

GPS: 33°11'35.16"S    21°16'36.15"E

Distance from L01: 20 m

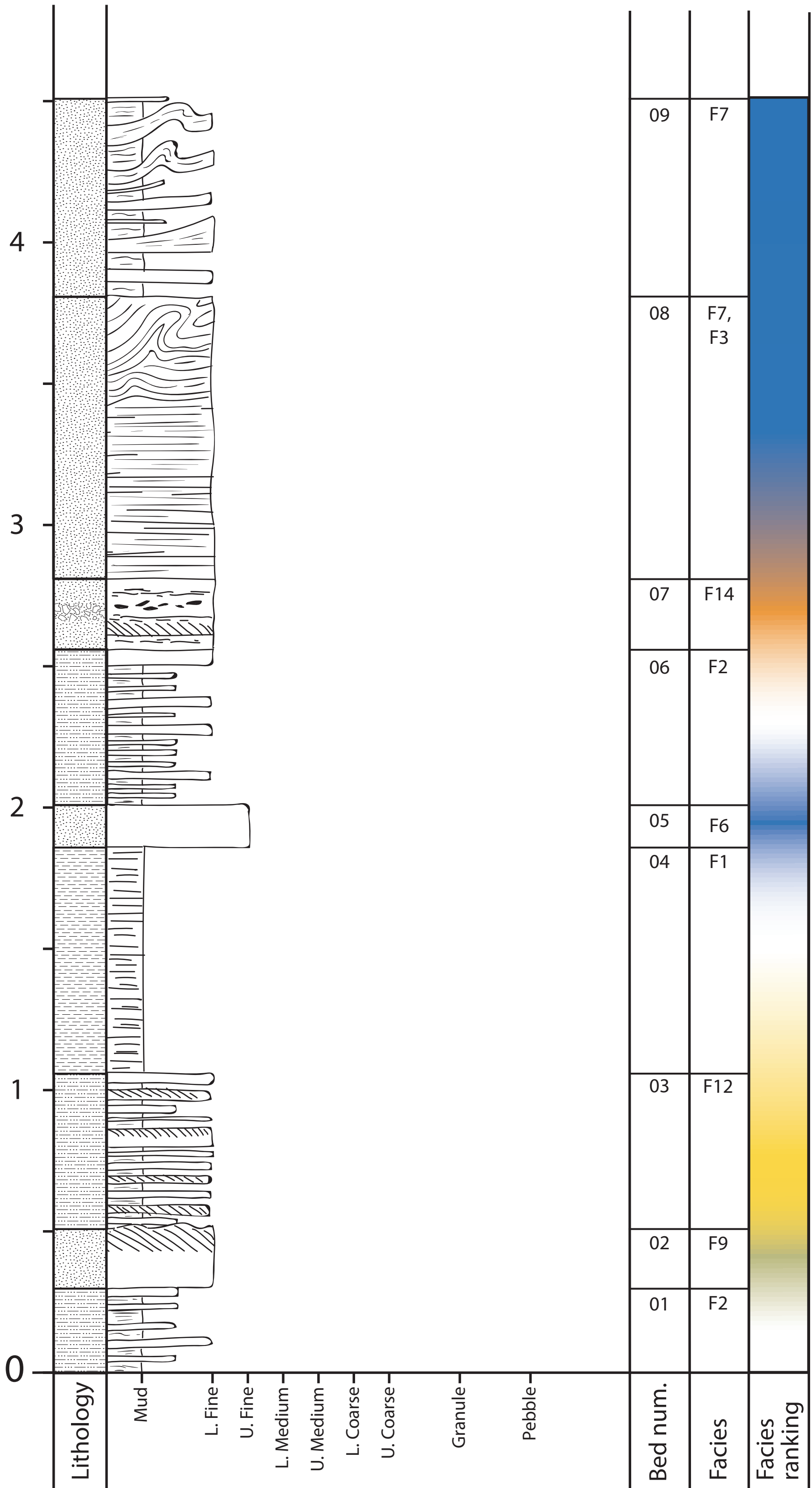


## Log Number: L 02

Bedding: 355°/86°

GPS: 33°11'35.16"S 21°16'36.15"E

Distance from L01: 20 m

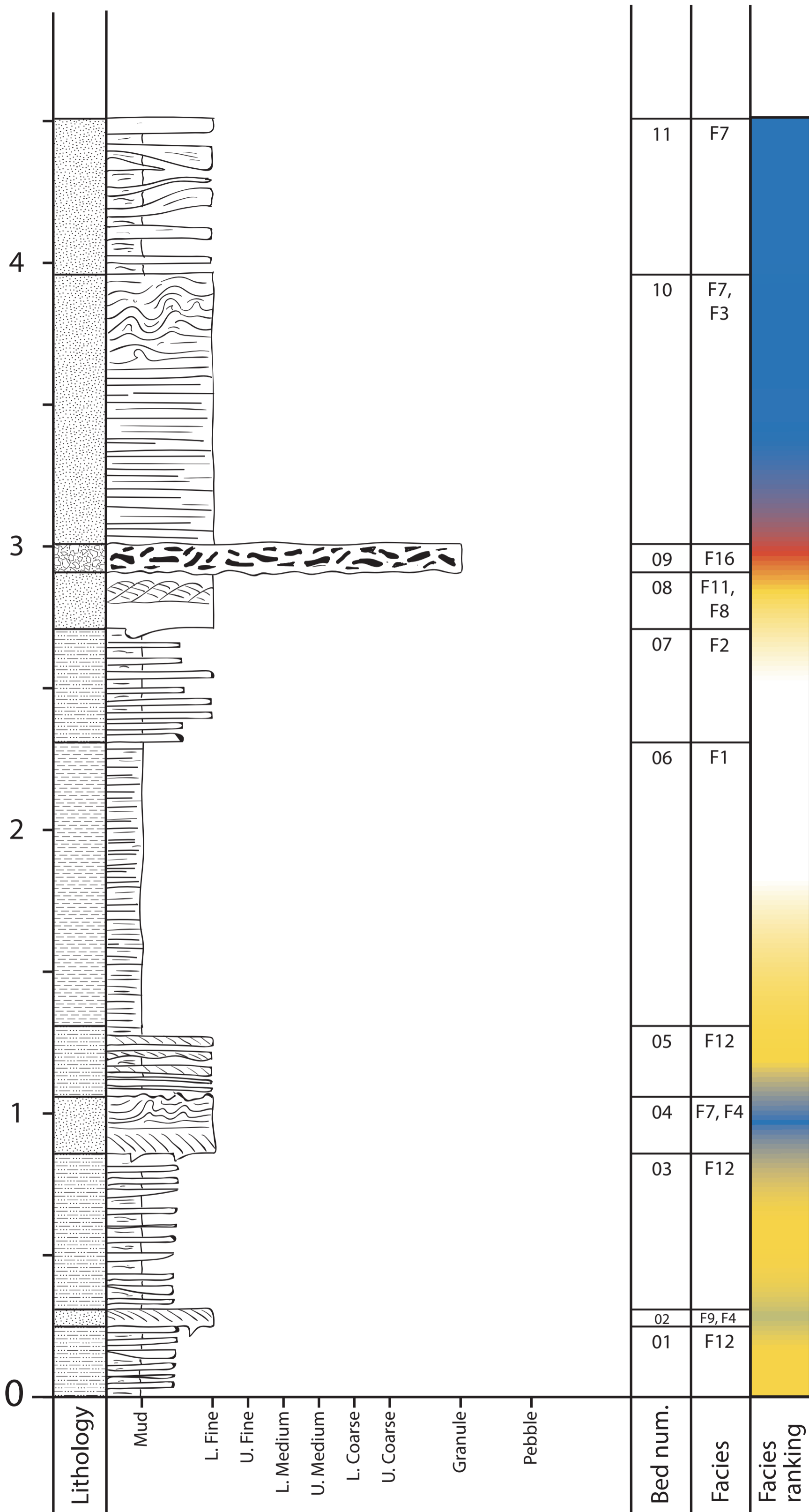


### Log Number: L 03

Bedding: 184°/90°

GPS: 33°11'34.92"S    21°16'42.45"E

Distance from L01: 164 m

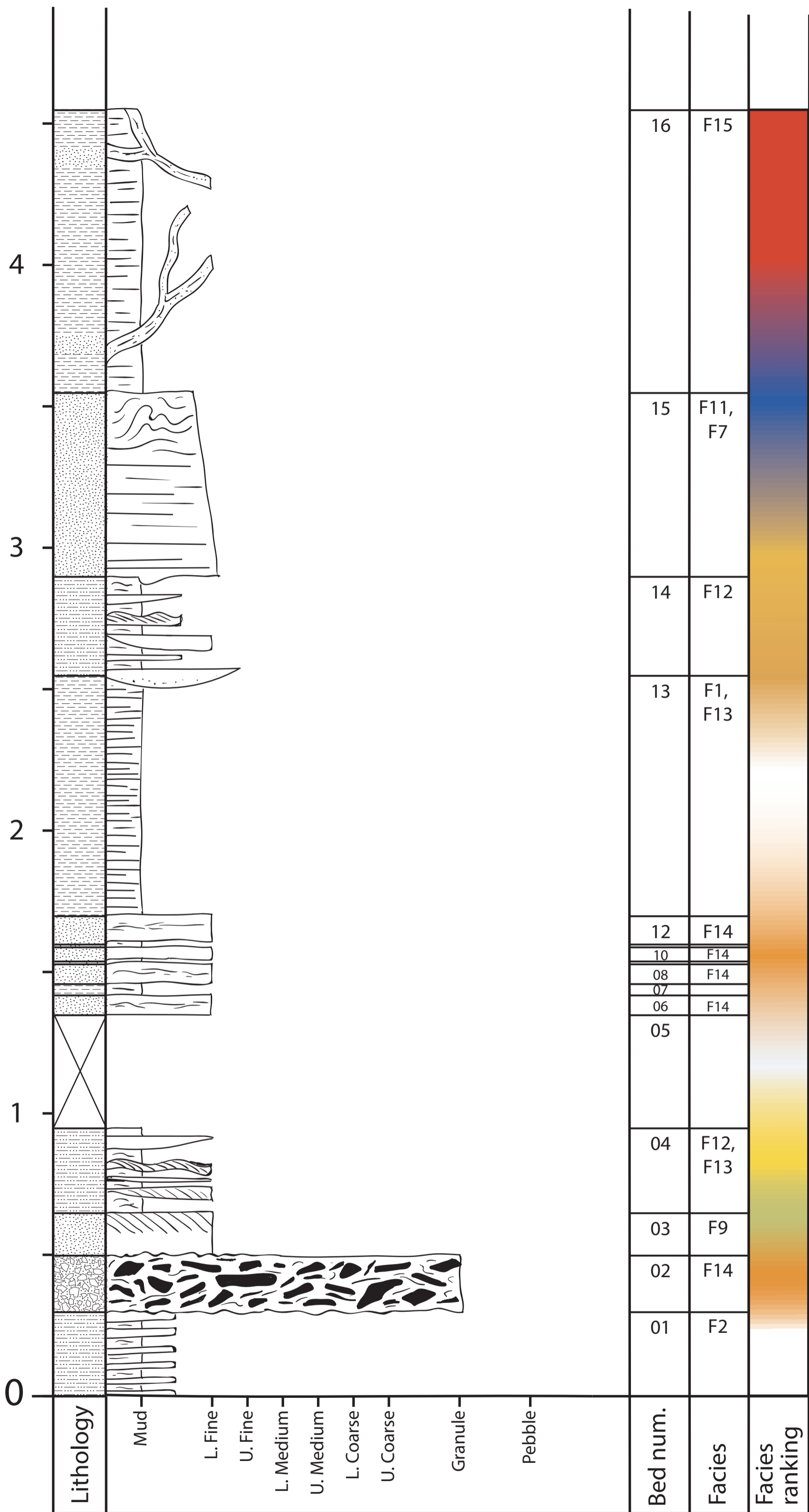


**Log Number: L 04**

Bedding: 184°/90°

GPS: 33°11'34.91"S    21°16'42.71"E

Distance from L01: 169 m

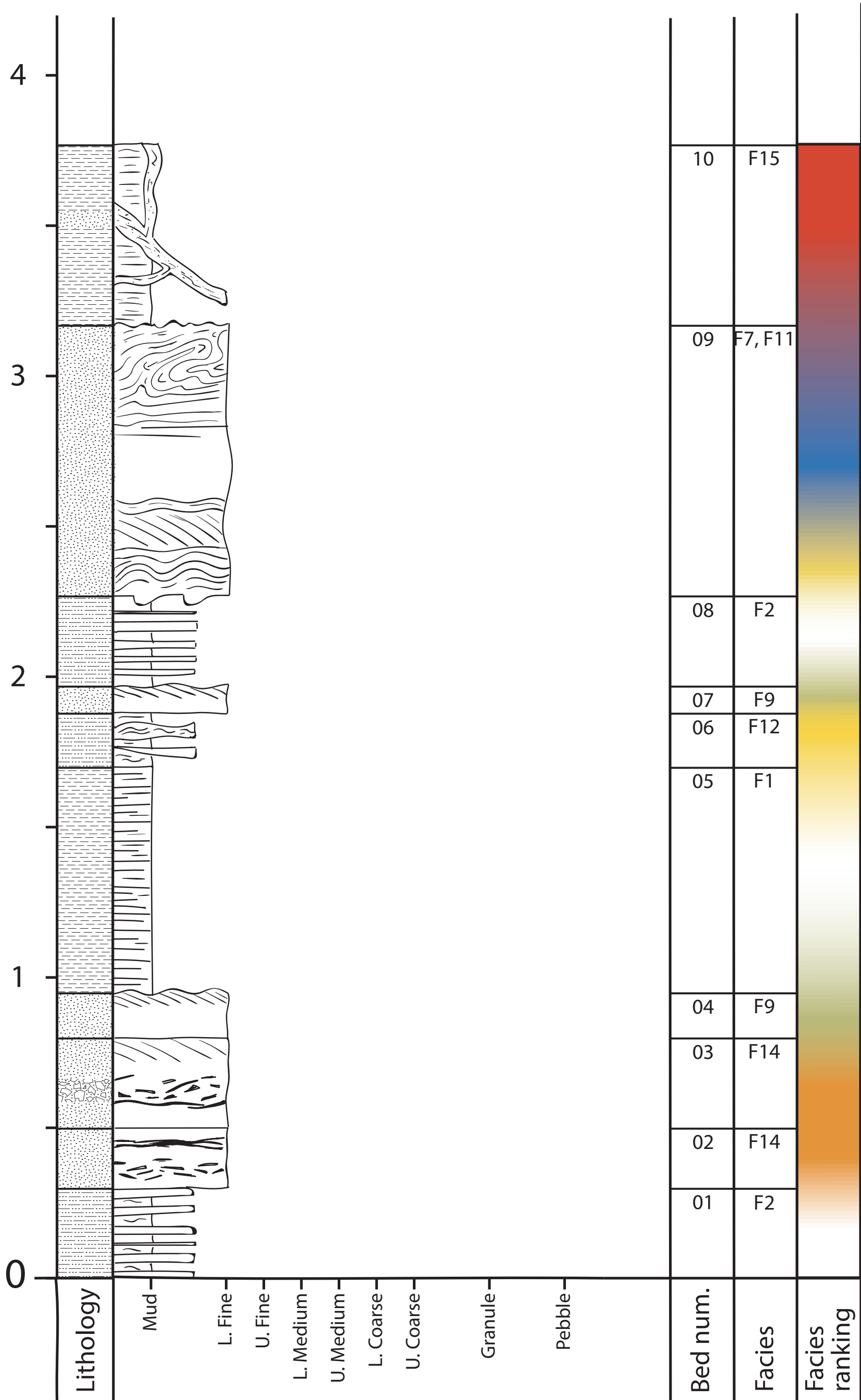


**Log Number: L 05**

Bedding: 003°/85°      GPS: 33°11'33.93"S    21°16'51.61"E

Distance from L01: 402 m

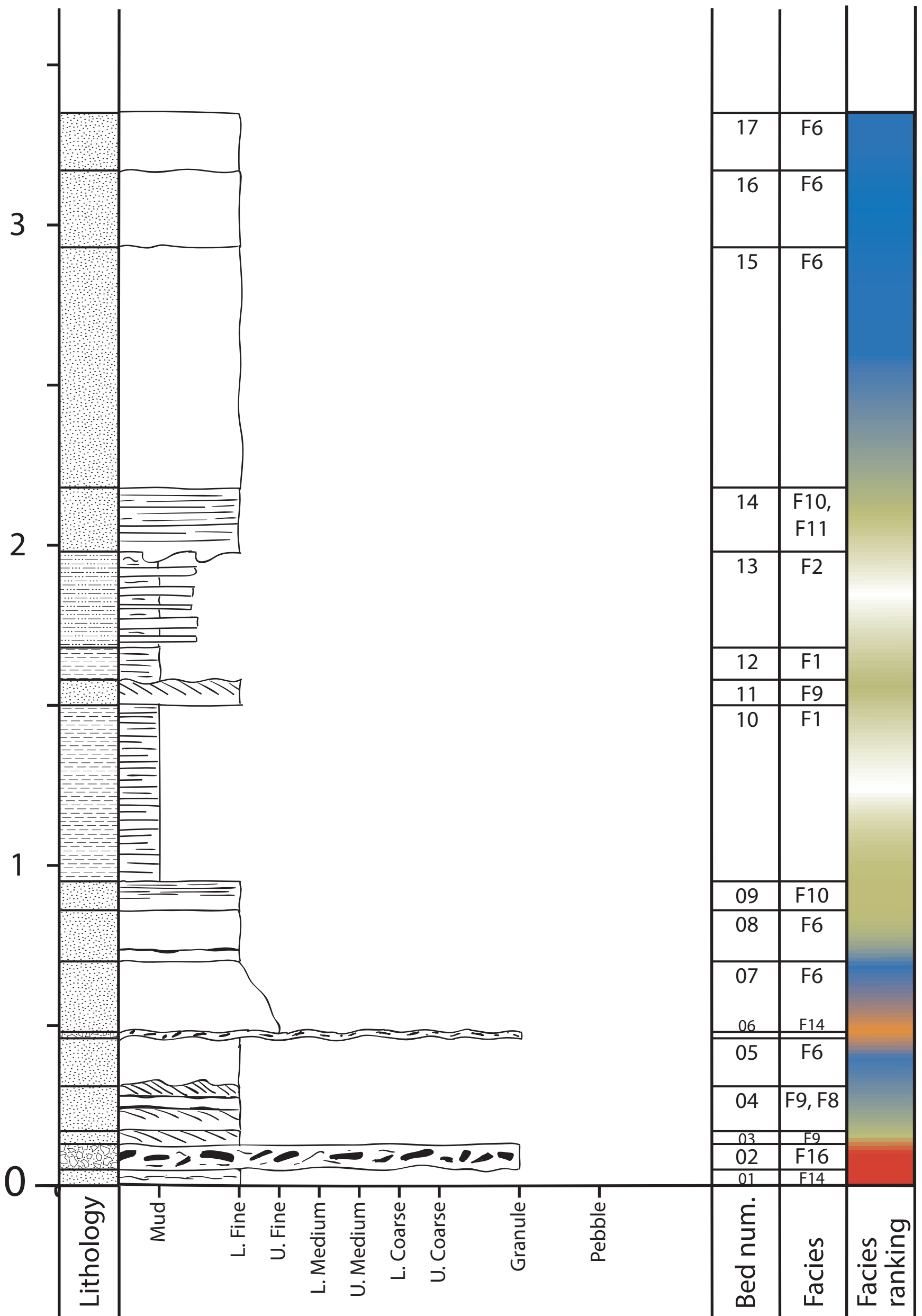




## Log Number: L 06

Bedding: 172°/72°      GPS: 33°11'33.30"S    21°16'58.90"E

Distance from L01: 593 m

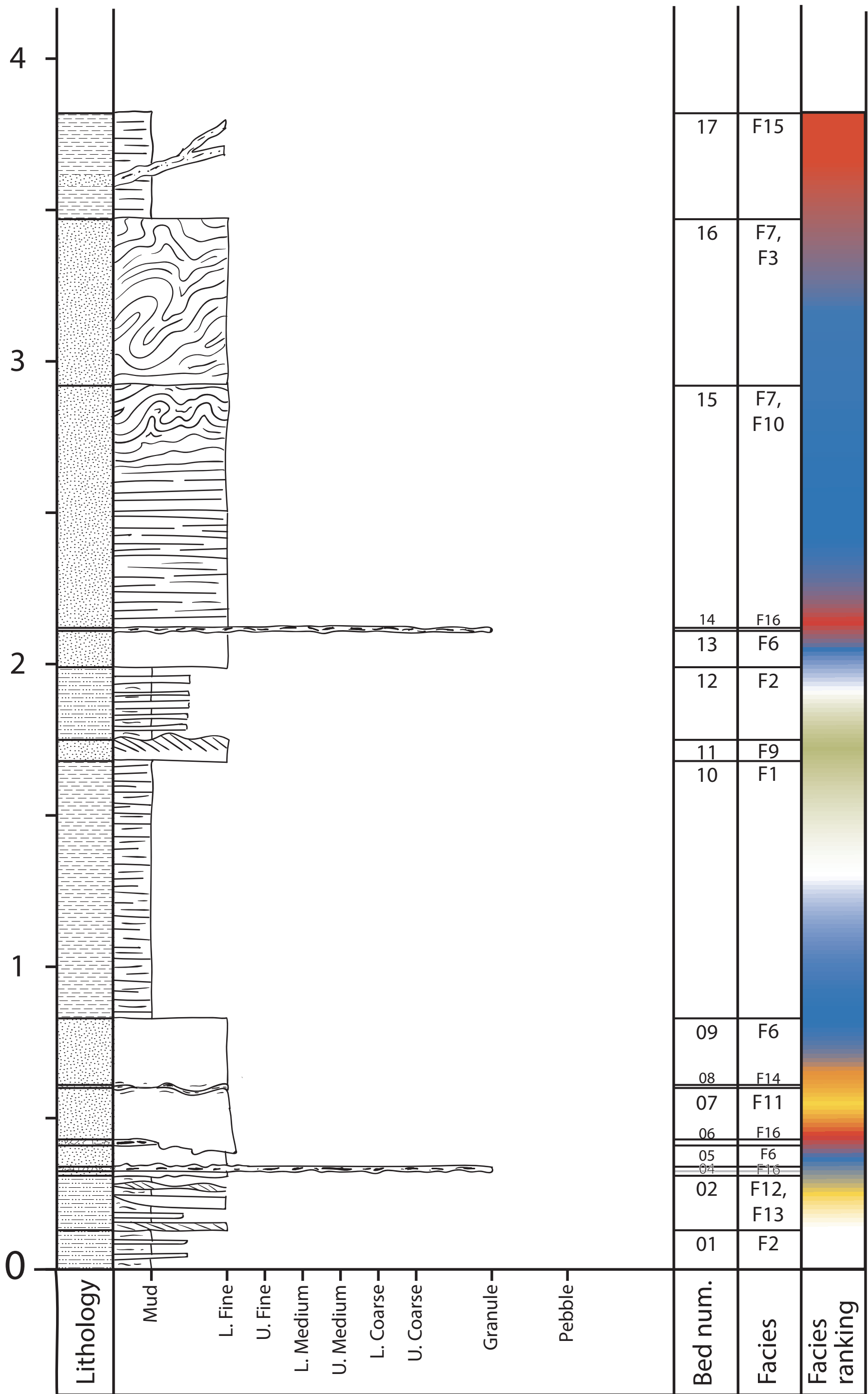


## Log Number: L 07

Bedding: 188°/87°

GPS: 33°11'32.68"S 21°17'4.94"E

Distance from L01: 751 m

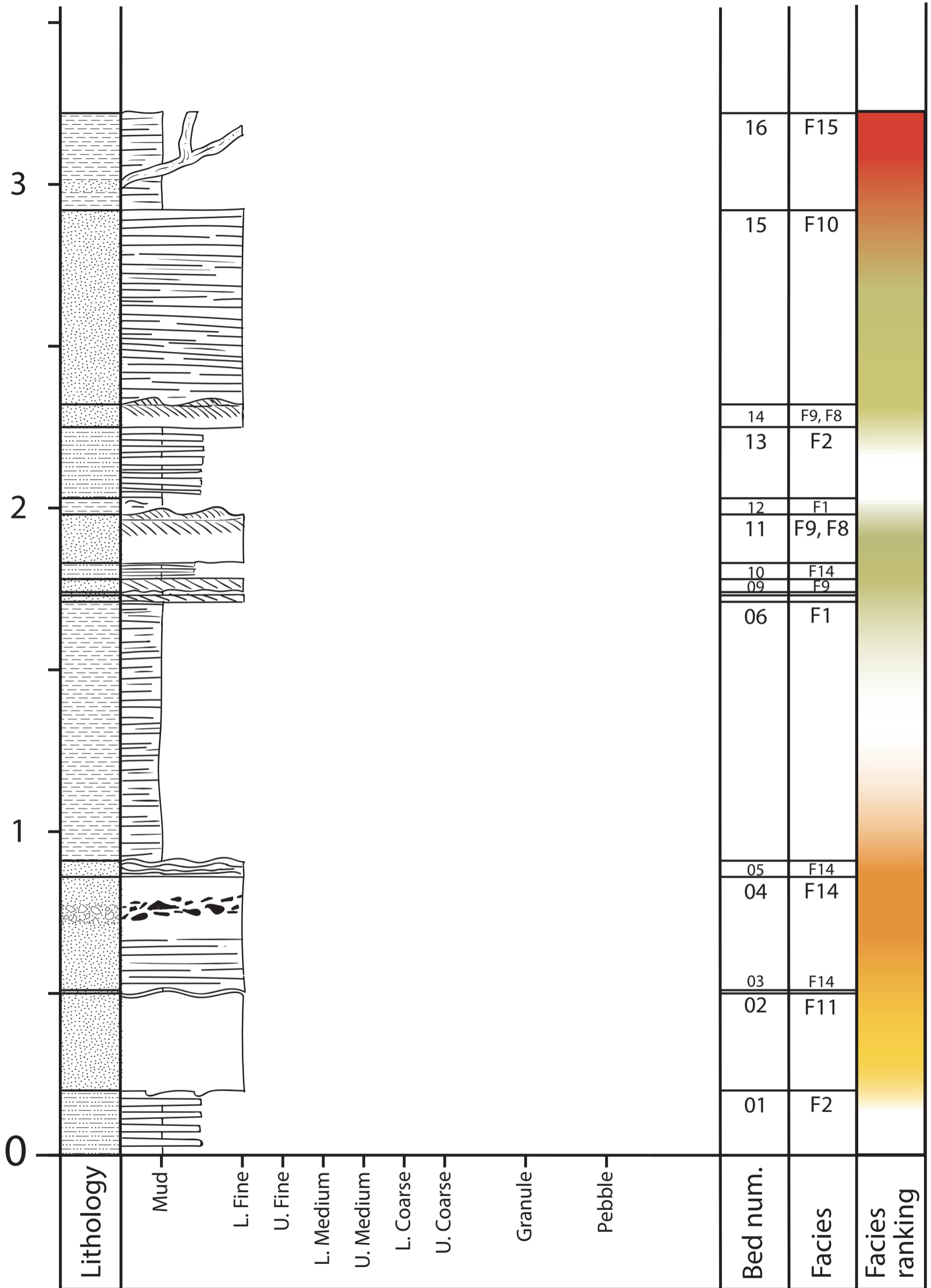


## Log Number: L 08

Bedding: 177°/87°

GPS: 33°11'32.54"S 21°17'7.05"E

Distance from L01: 806 m

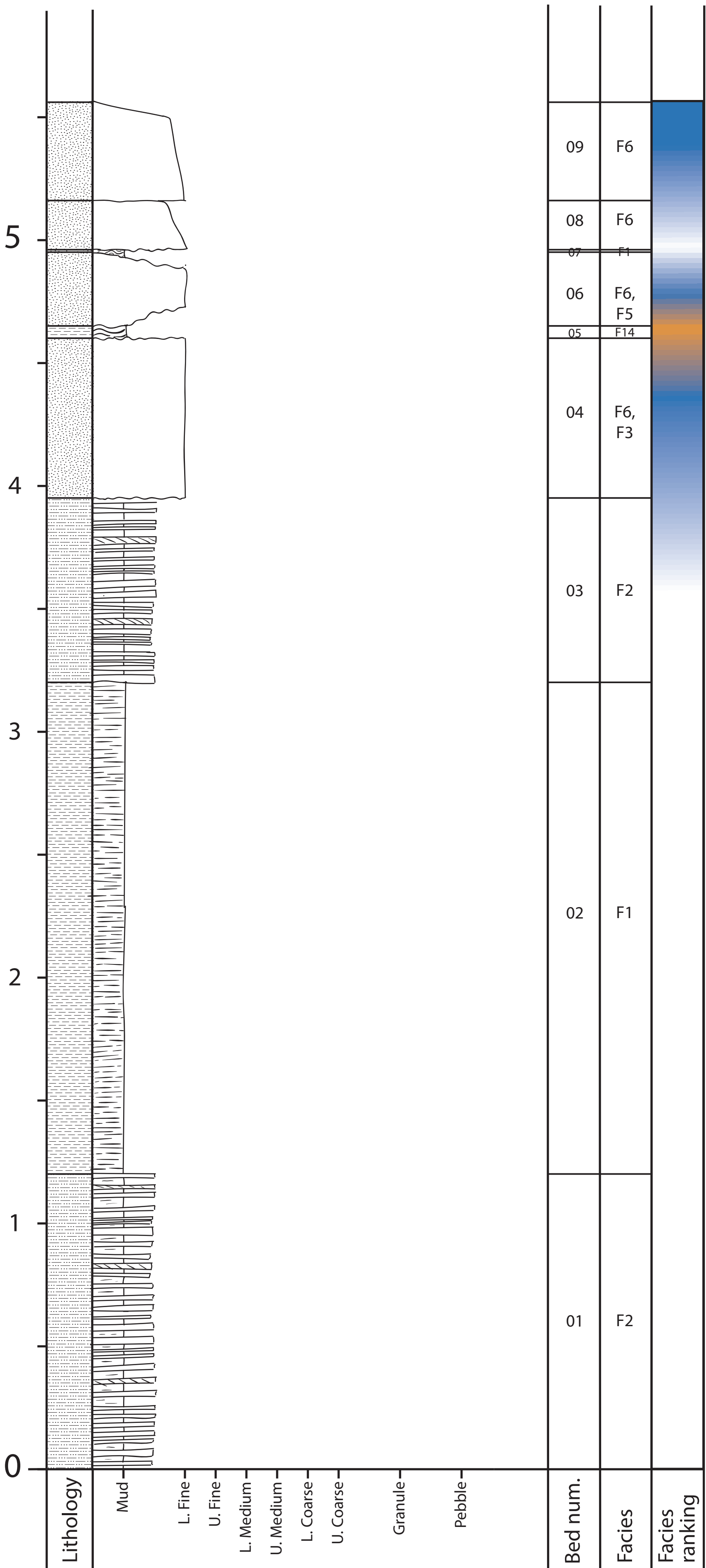


## Log Number: L 09

Bedding: 177°/87°

GPS: 33°11'32.43"S 21°17'8.08"E

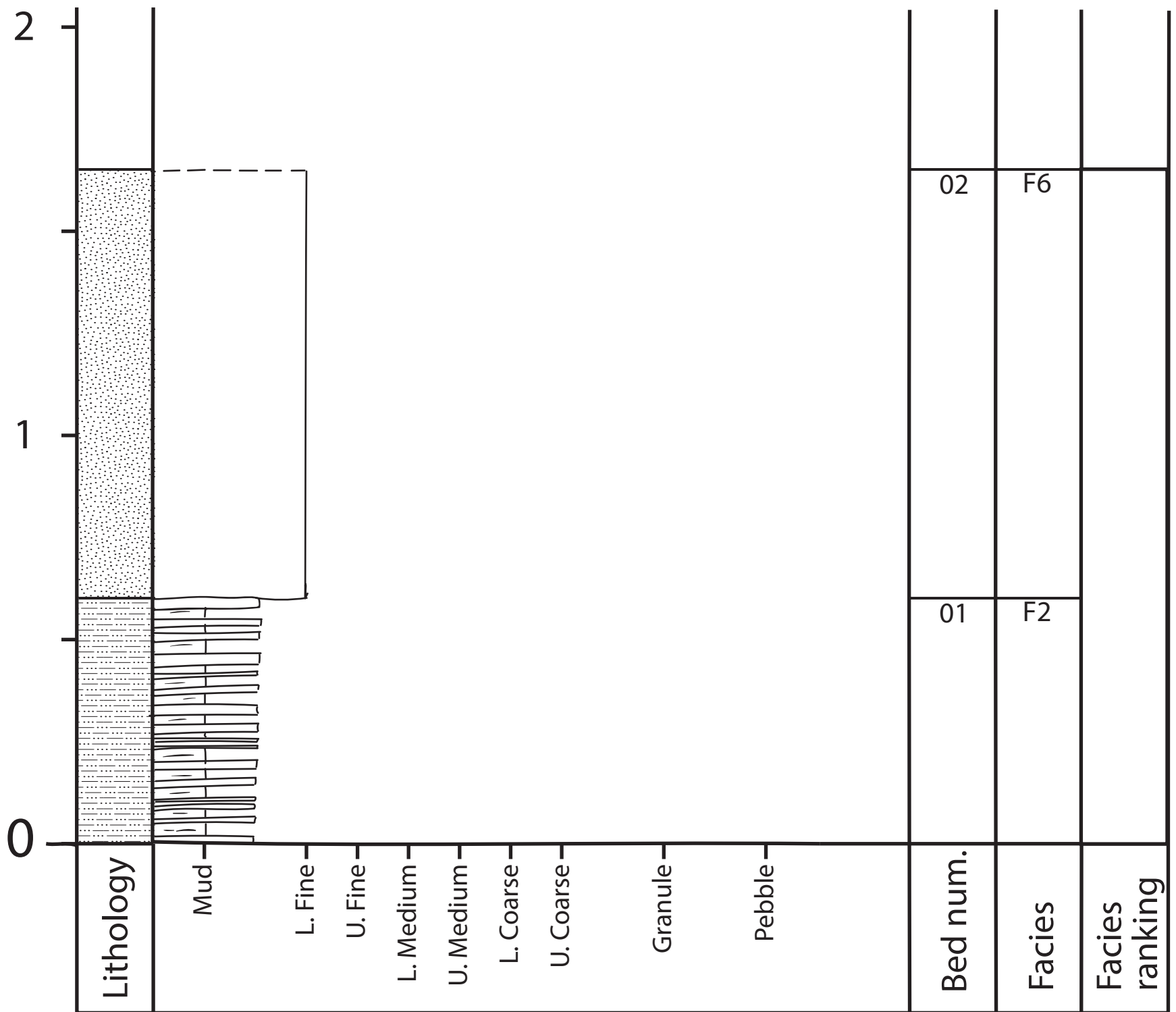
Distance from L01: 831 m



**Log Number: L 10**

Bedding: 005°/86°      GPS: 33°11'28.46"S    21°18'8.35"E

Distance from L01: 2398 m



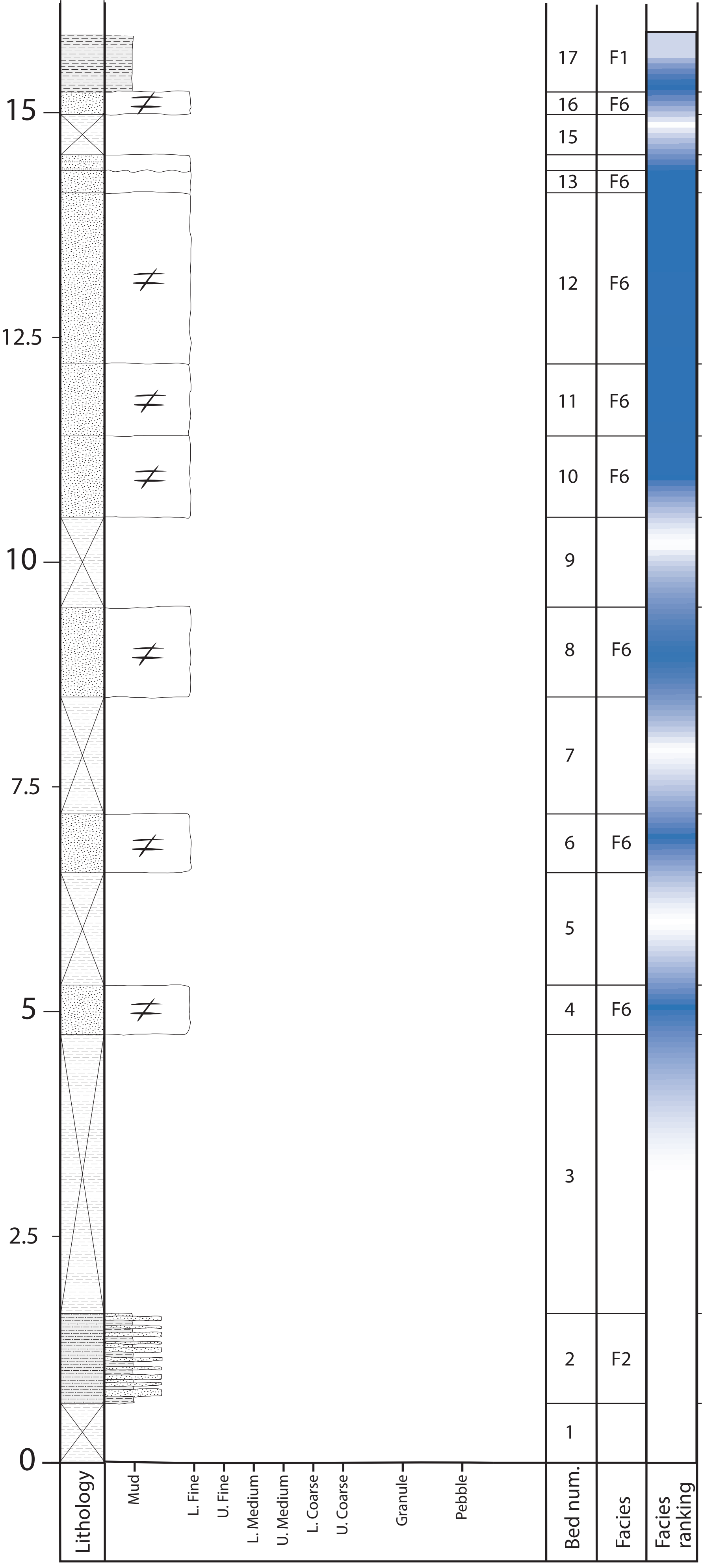
## Log Number: L 11

Bedding: 353°/75°

GPS: 33°11'28.46"S

21°18'8.35"E

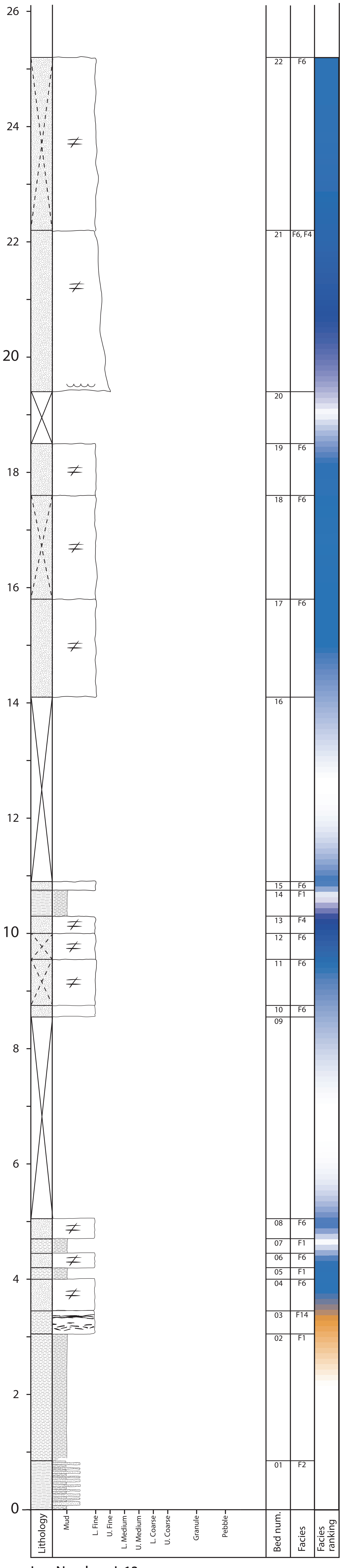
Distance from L01: 2388 m



**Log Number: L 12**

Bedding: 187°/77°      GPS: 33°11'28.74"S    21°18'10.52"E

Distance from L01: 1441 m

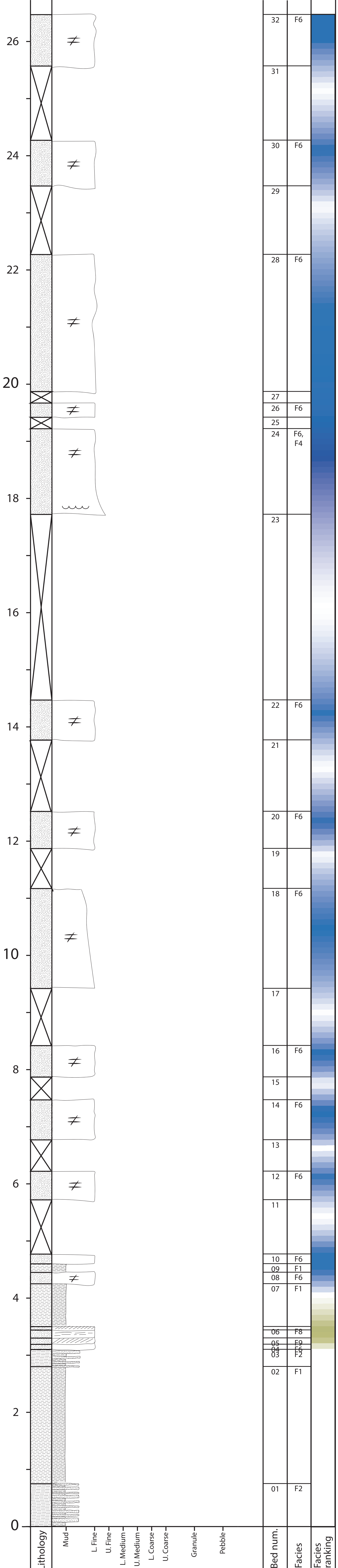


**Log Number: L 13**

Bedding: 180°/82°      GPS: 33°11'28.02"S    21°18'19.66"E

Distance from L01: 2691 m

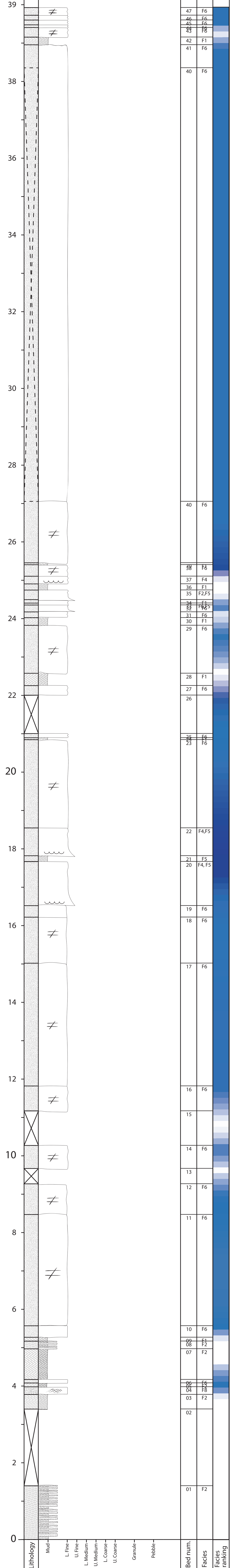




**Log Number: L 14**

Bedding: 175°/90°      GPS: 33°11'27.84"S    21°18'23.57"E

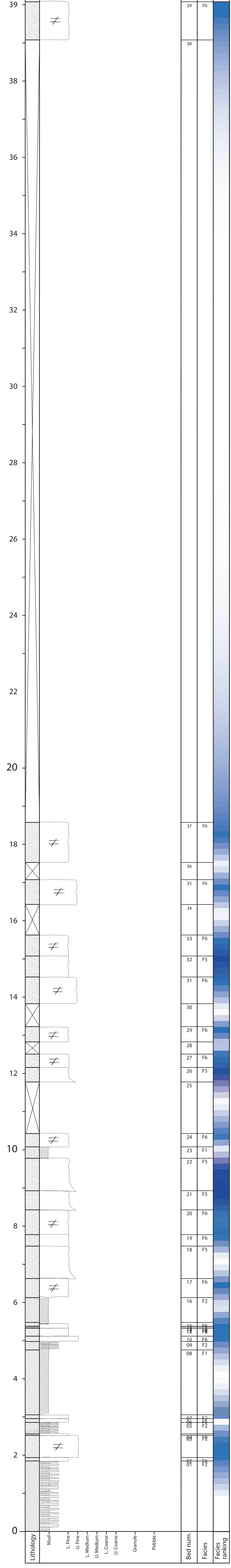
Distance from L01: 2801 m



**Log Number: L 15**

Bedding: 184°/85°      GPS: 33°11'27.77"S    21°18'28.40"E

Distance from L01: 2911 m

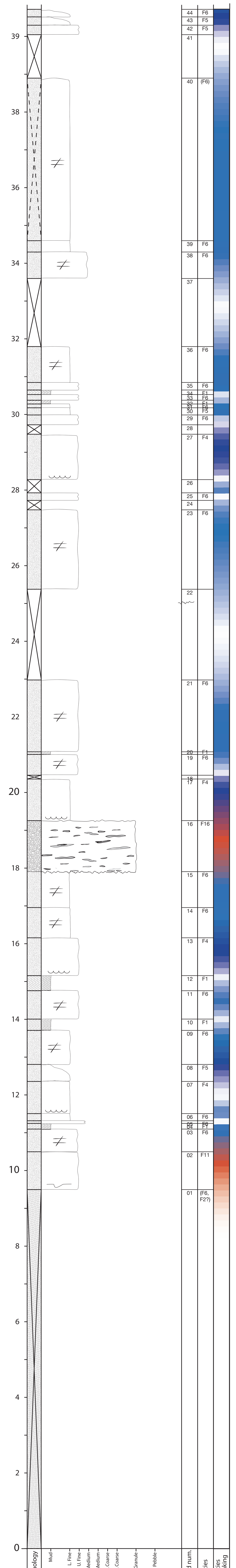


39	F6	
38		
37	F6	
36		
35	F6	
34		
33	F6	
32	F5	
31	F6	
30		
29	F6	
28		
27	F6	
26	F5	
25		
24	F6	
23	F1	
22	F5	
21	F5	
20	F6	
19	F6	
18	F5	
17	F6	
16	F2	
15	F6	
14	F6	
10	F6	
09	F2	
08	F1	
07	F2	
06	F6	
05	F2	
04	F6	
03	F6	
02	F6	
01	F2	

**Log Number: L 16**

Bedding: 000°/75°      GPS: 33°11'27.48"S    21°18'37.96"E

Distance from L01: 3166 m

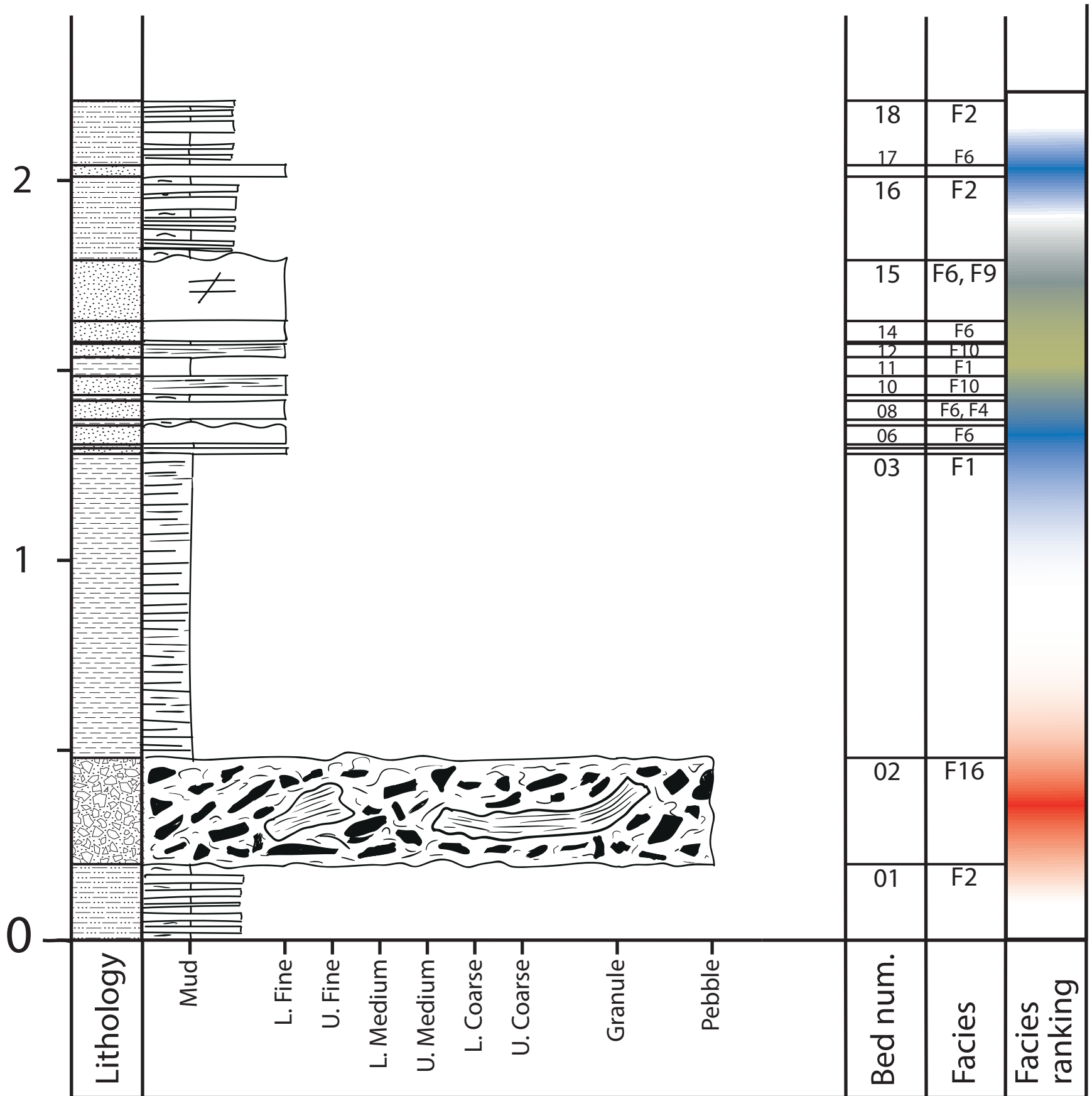


**Log Number: L 17**

Bedding: 189°/87°      GPS: 33°11'27.29"S    21°18'41.05"E

Distance from L01: 3243 m

Bed num.	Facies	Facies ranking
44	F6	
43	F5	
42	F5	
41		
40	(F6)	
39	F6	
38	F6	
37		
36	F6	
35	F6	
34	F1	
33	F6	
32	F1	
31	F6	
30	F5	
29	F6	
28		
27	F4	
26		
25	F6	
24		
23	F6	
22		
21	F6	
20	F1	
19	F6	
18		
17	F4	
16	F16	
15	F6	
14	F6	
13	F4	
12	F1	
11	F6	
10	F1	
09	F6	
08	F5	
07	F4	
06	F6	
05	F6	
04	F6	
02	F11	
01	(F6, F2?)	

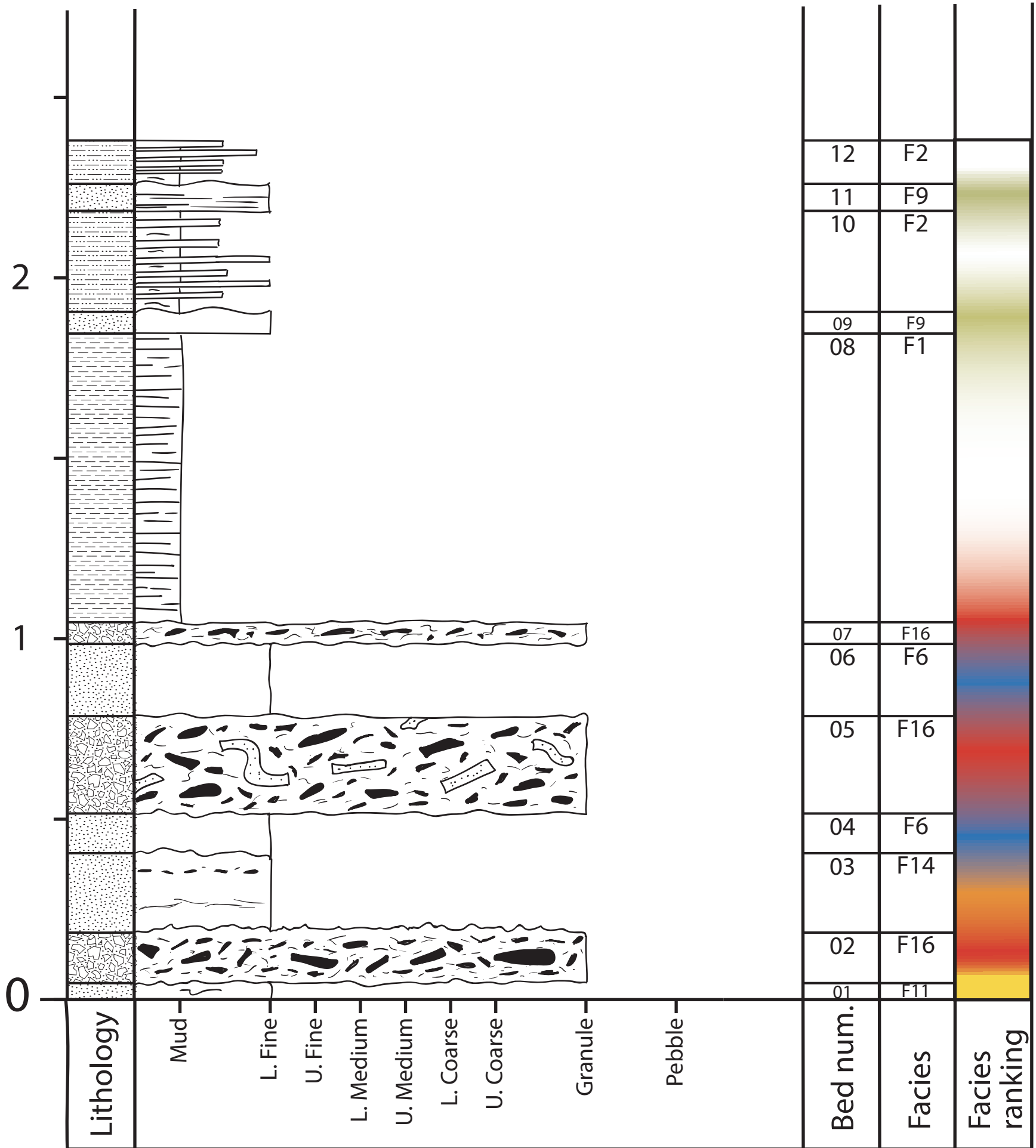


## Log Number: L 18

Bedding: 179°/78°

GPS: 33°11'31.75"S 21°17'14.25"E

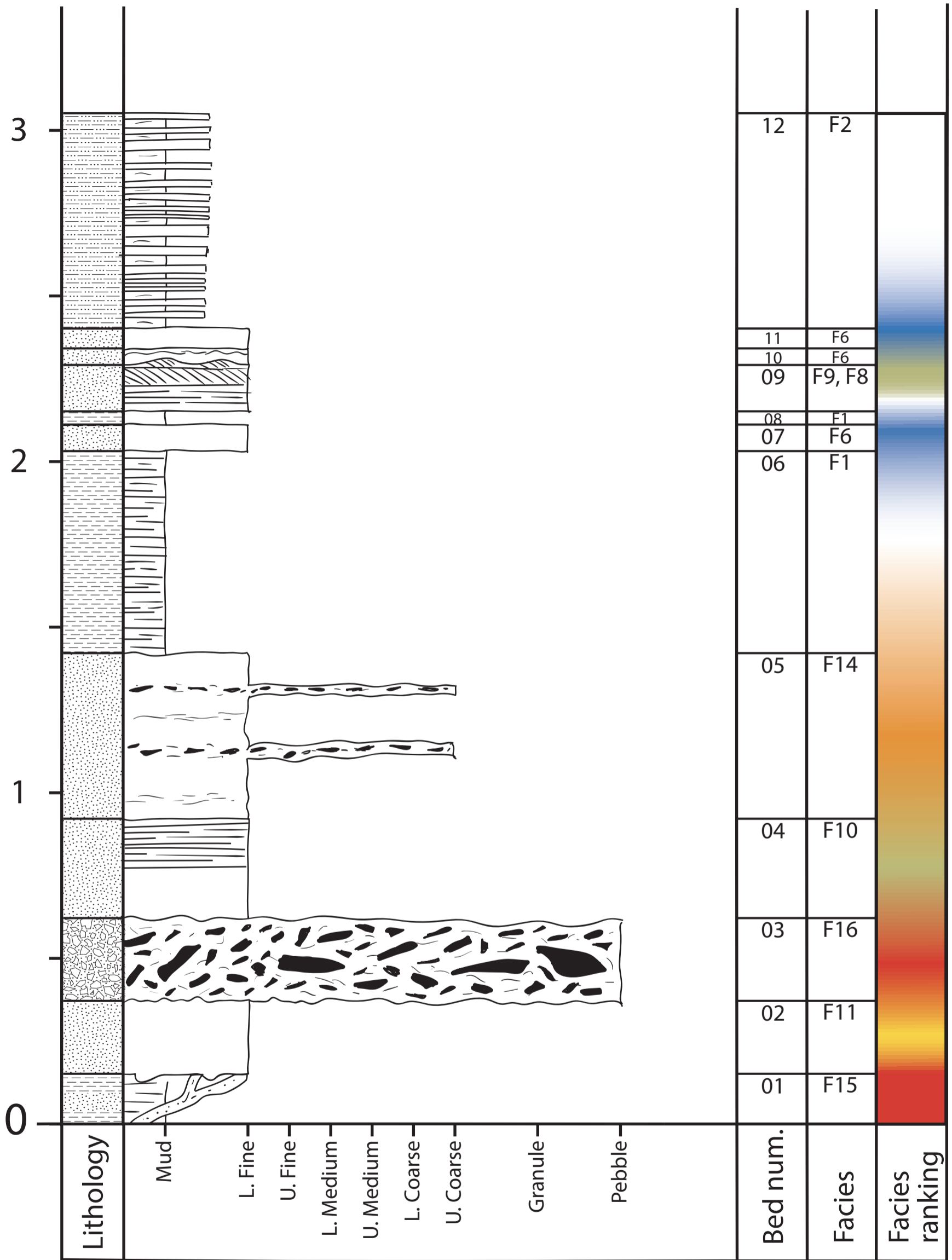
Distance from L01: 992 m



## Log Number: L 19

Bedding: 180°/87°      GPS: 33°11'31.41"S    21°17'24.19"E

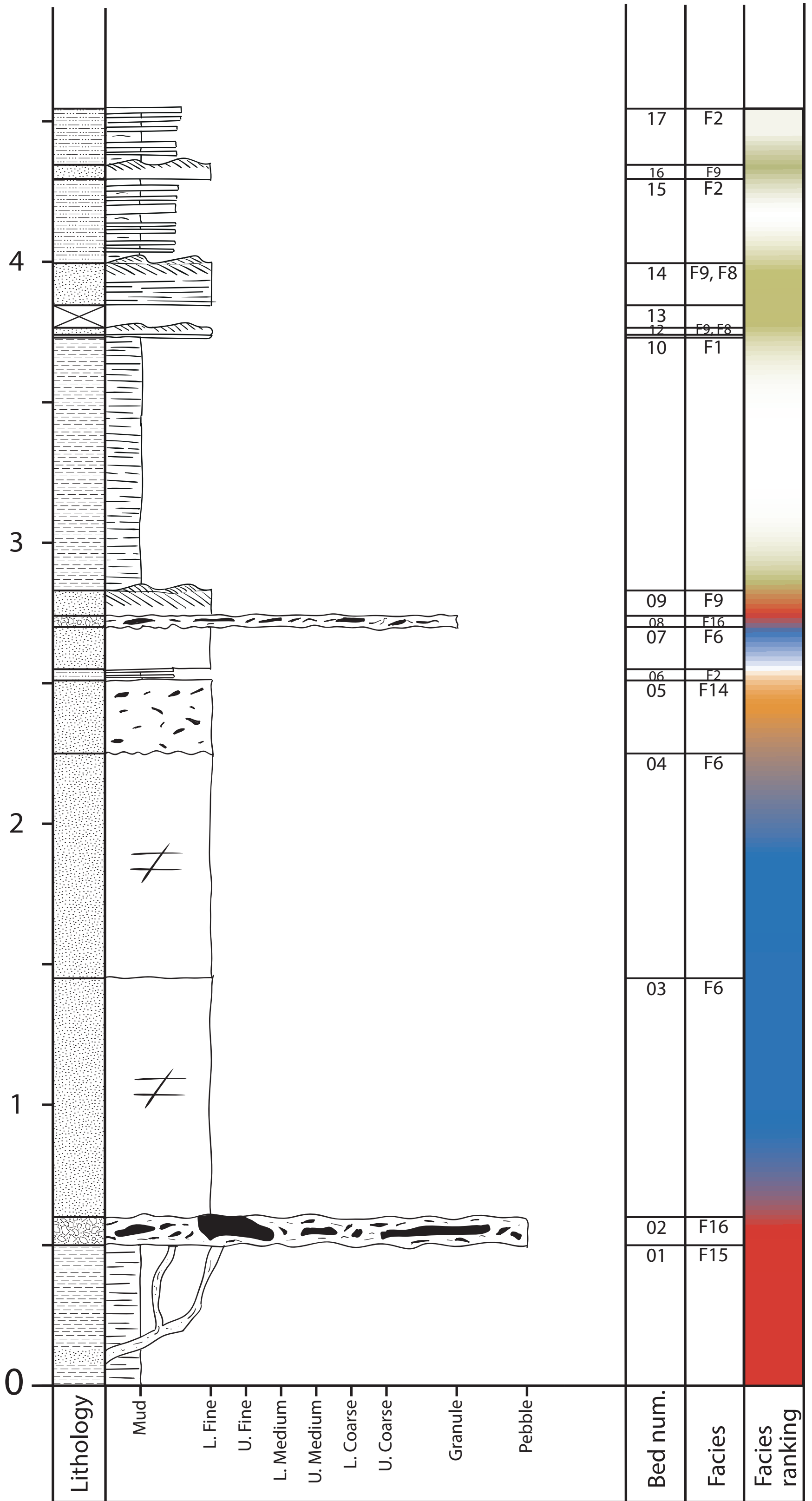
Distance from L01: 1251 m



## Log Number: L 20

Bedding: 180°/87°      GPS: 33°11'31.44"S    21°17'25.12"E

Distance from L01: 1272 m



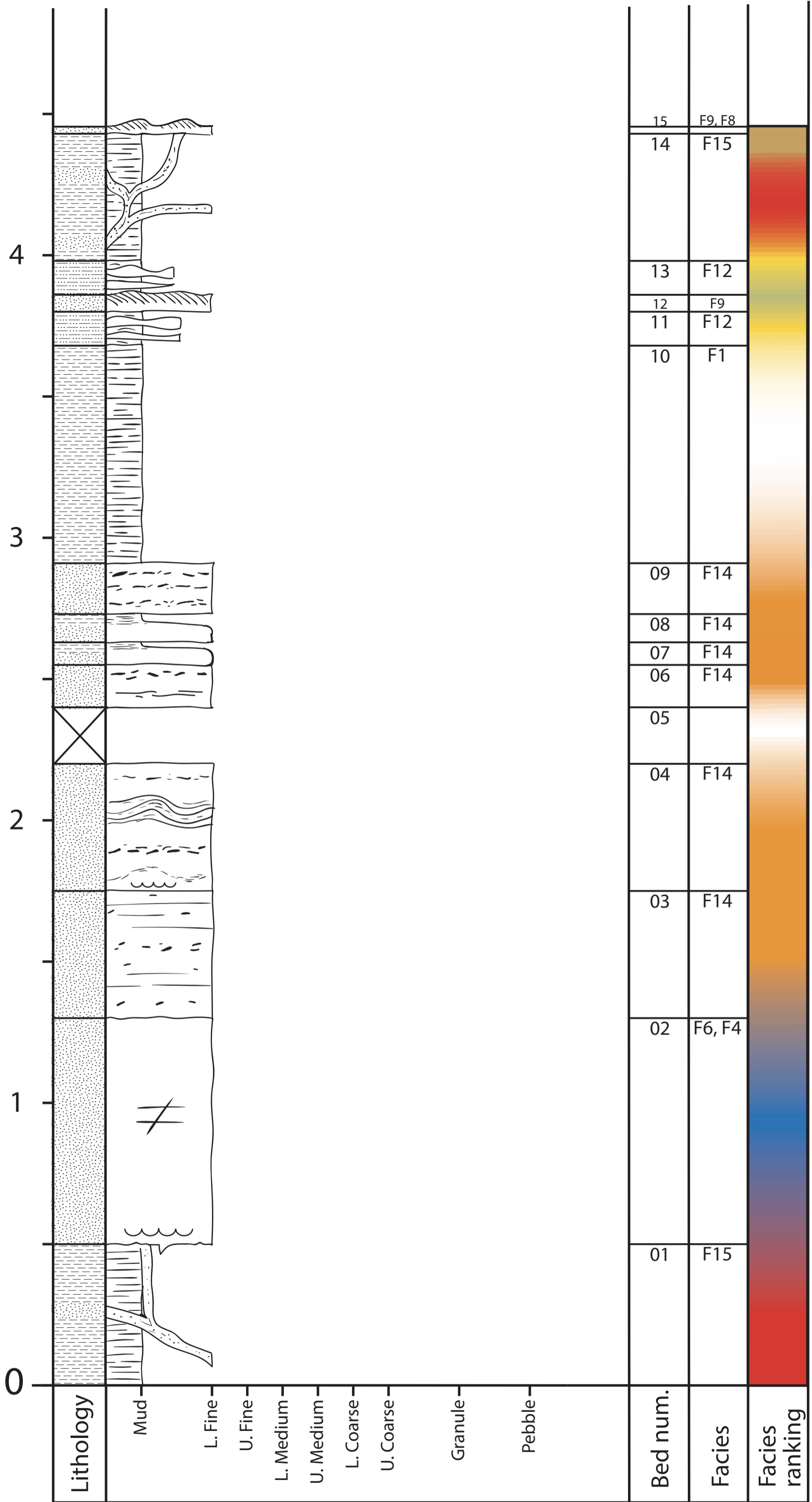
# Log Number: L 21

Bedding: 180°/87°

GPS: 33°11'31.45"S 21°17'25.87"E

Distance from L01: 1293 m

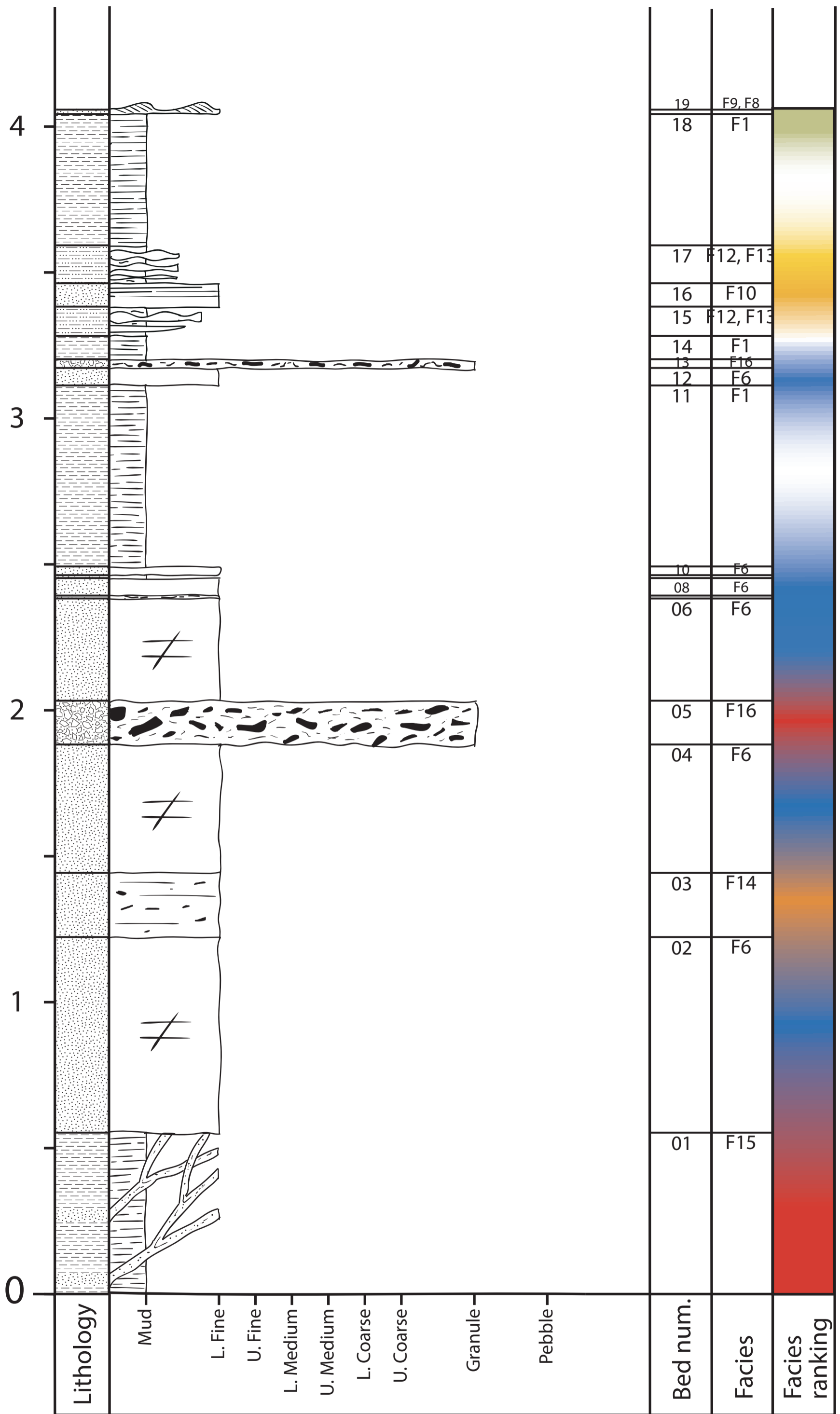




### Log Number: L 22

Bedding: 180°/87°      GPS: 33°11'31.38"S    21°17'26.50"E

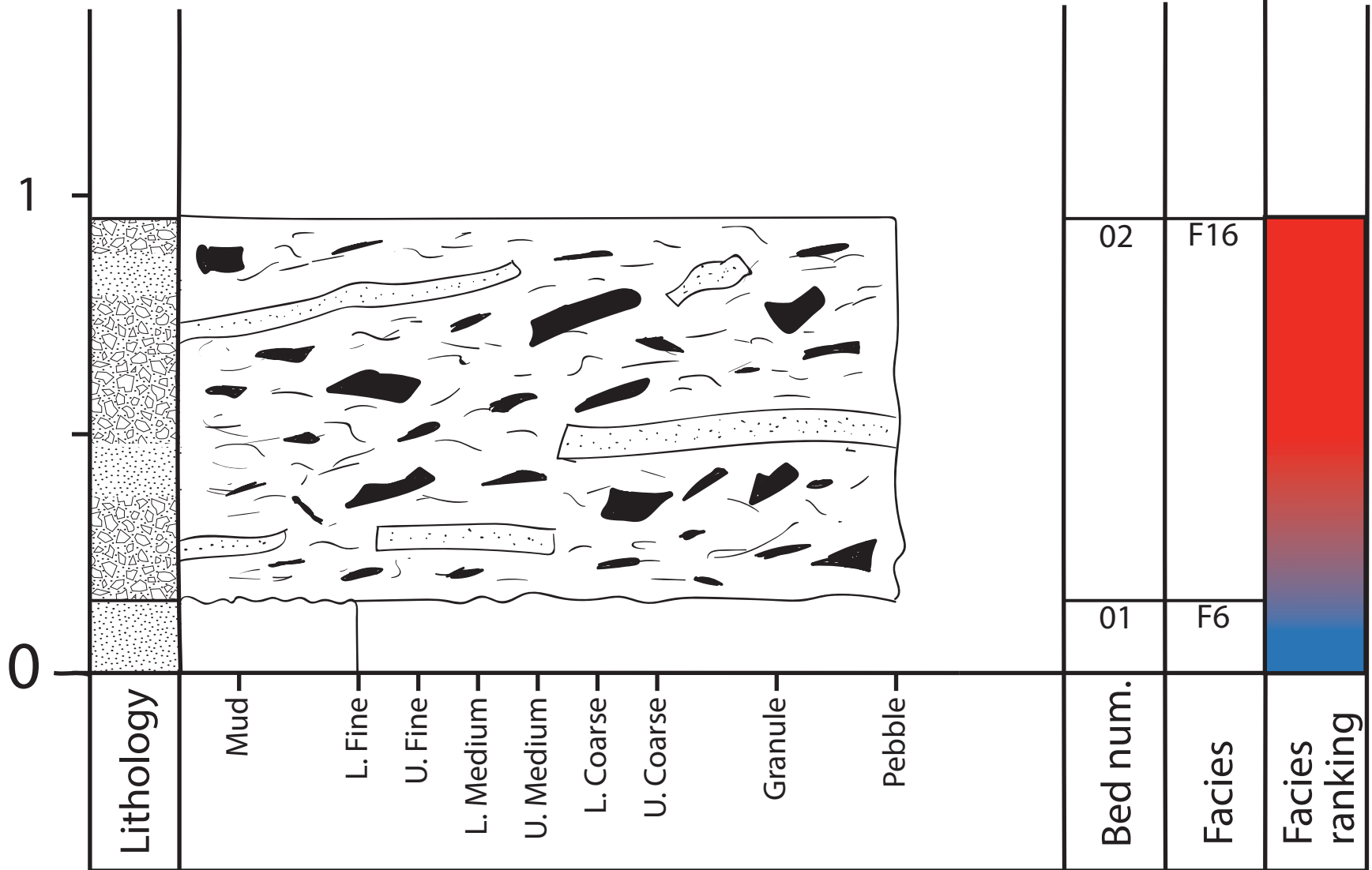
Distance from L01: 1309 m



## Log Number: L 23

Bedding: 180°/87°      GPS: 33°11'31.27"S    21°17'27.09"E

Distance from L01: 1325 m



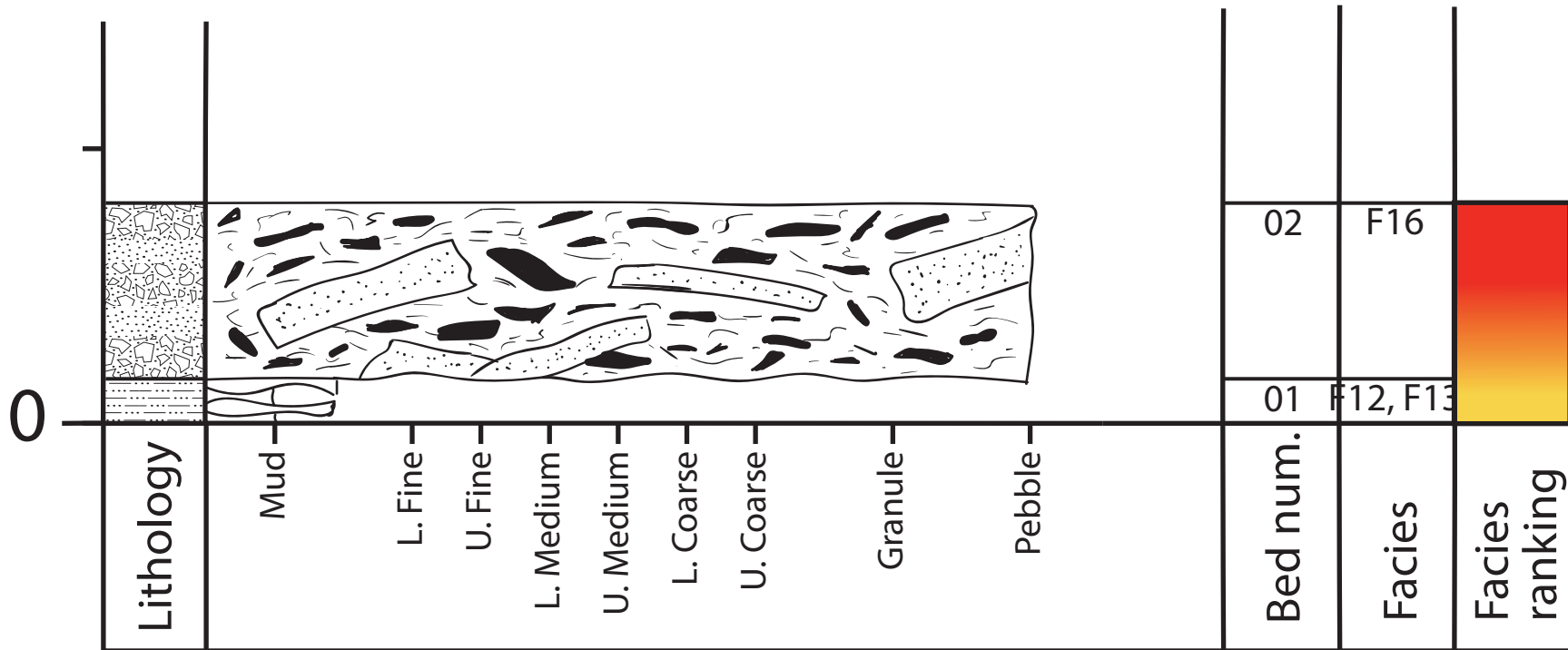
## Log Number: L 24

Bedding: 359°/77°

GPS: 33°11'30.78"S

21°17'31.03"E

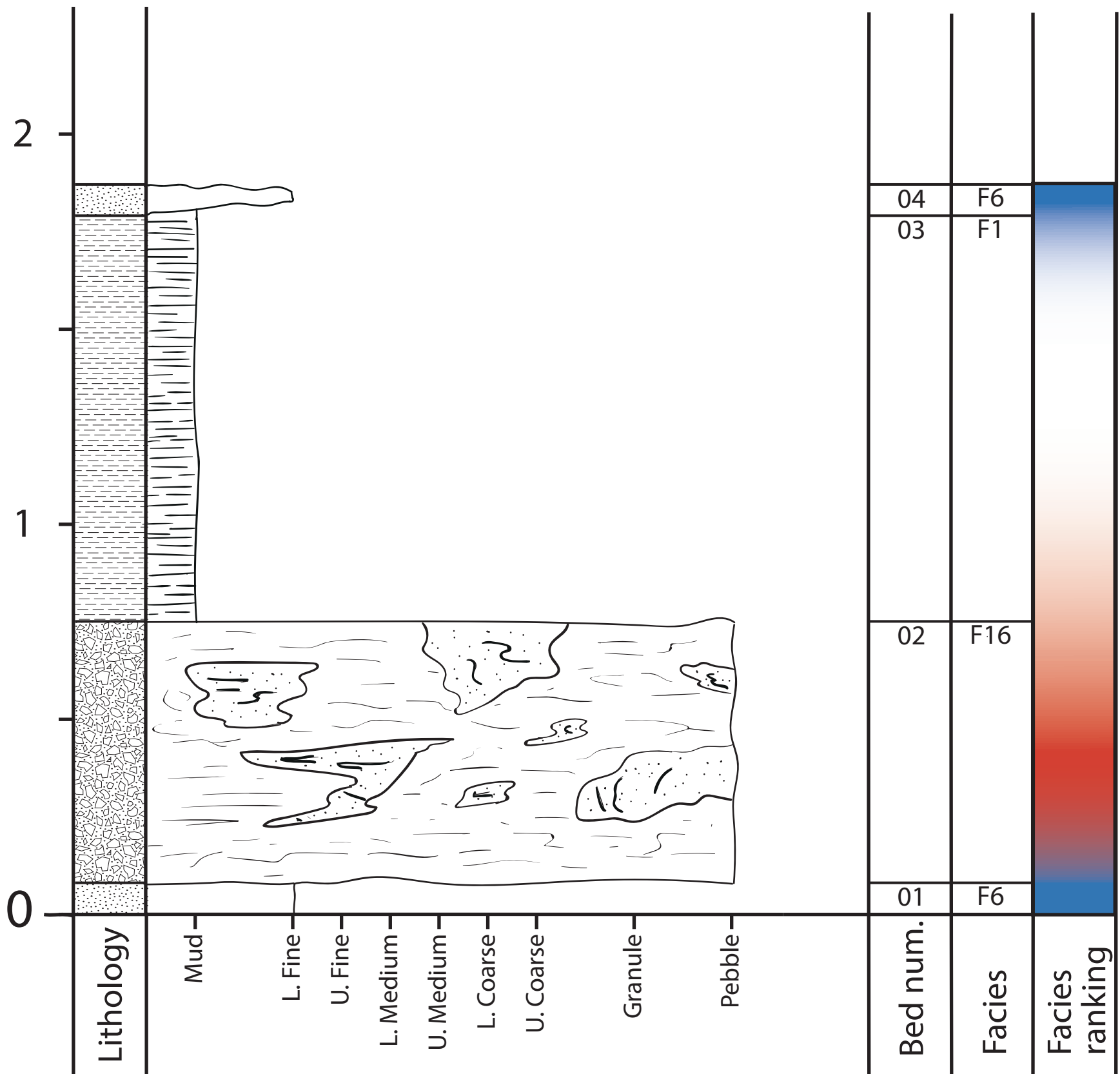
Distance from L01: 1427 m



## Log Number: L 25

Bedding: 185°/80°      GPS: 33°11'30.32"S    21°17'36.99"E

Distance from L01: 1582 m



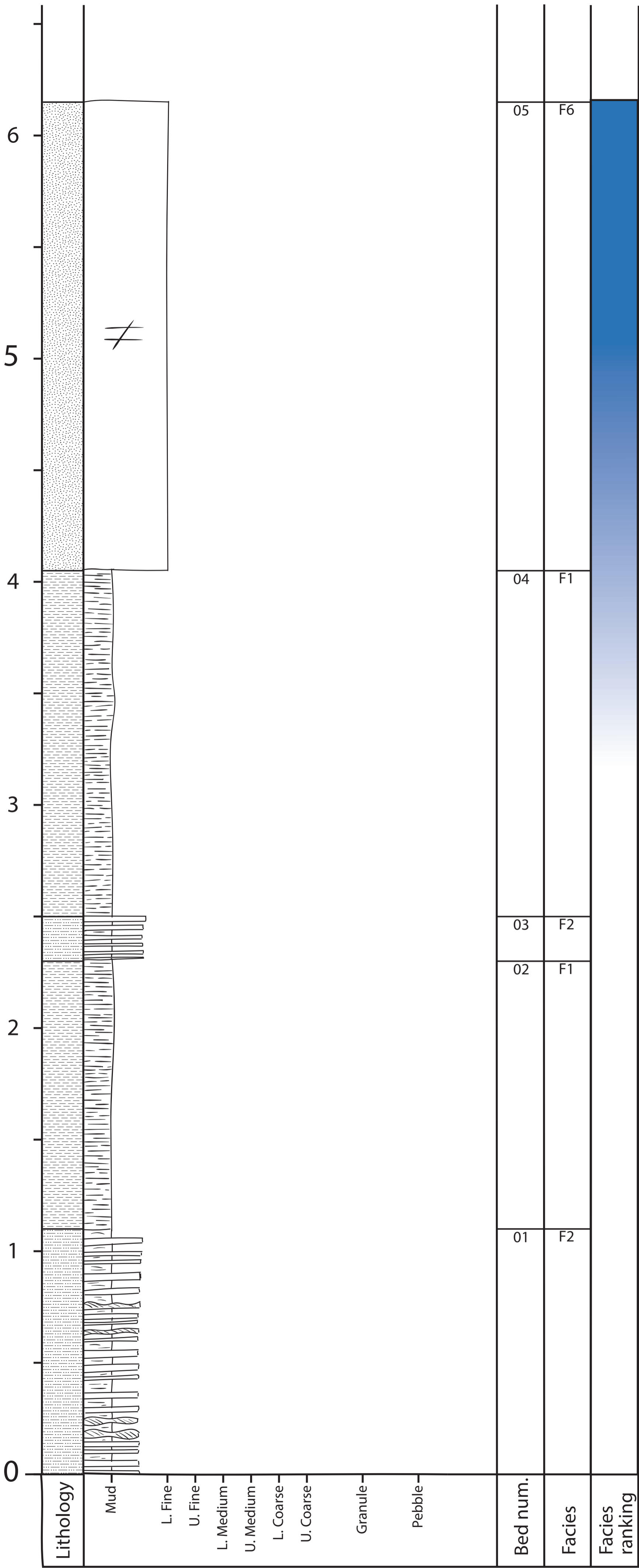
## Log Number: L 26

Bedding: 172°/82°

GPS: 33°11'30.16"S

21°17'40.19"E

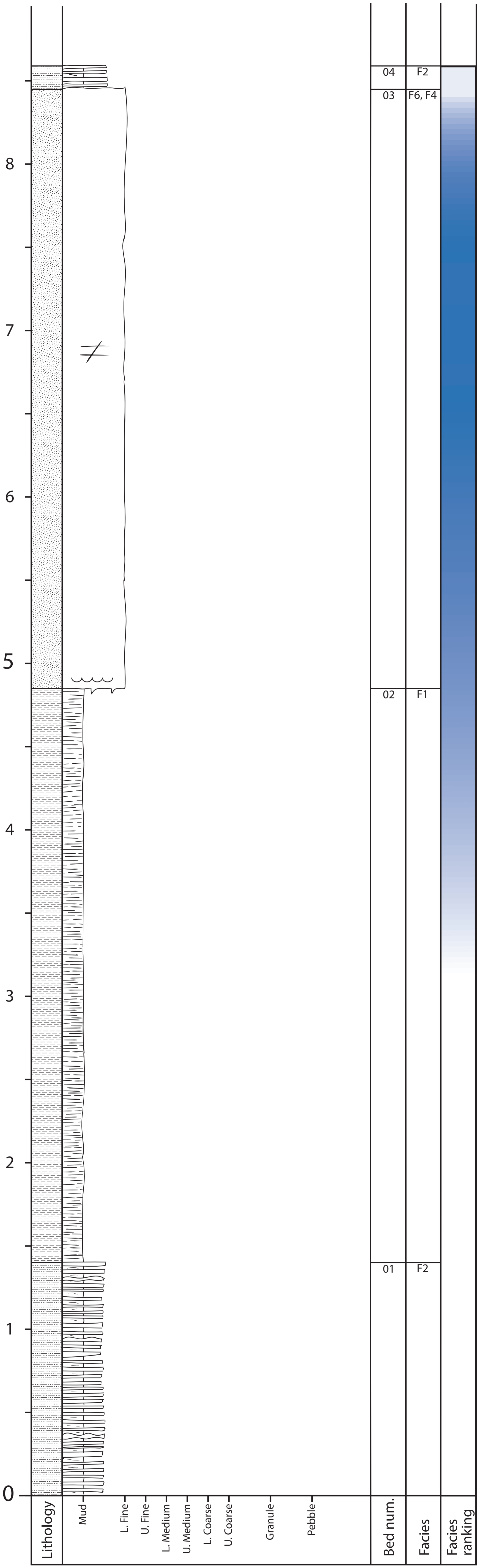
Distance from L01: 1667 m



**Log Number: L 27**

Bedding: 181°/82°      GPS: 33°11'30.31"S    21°17'43.40"E

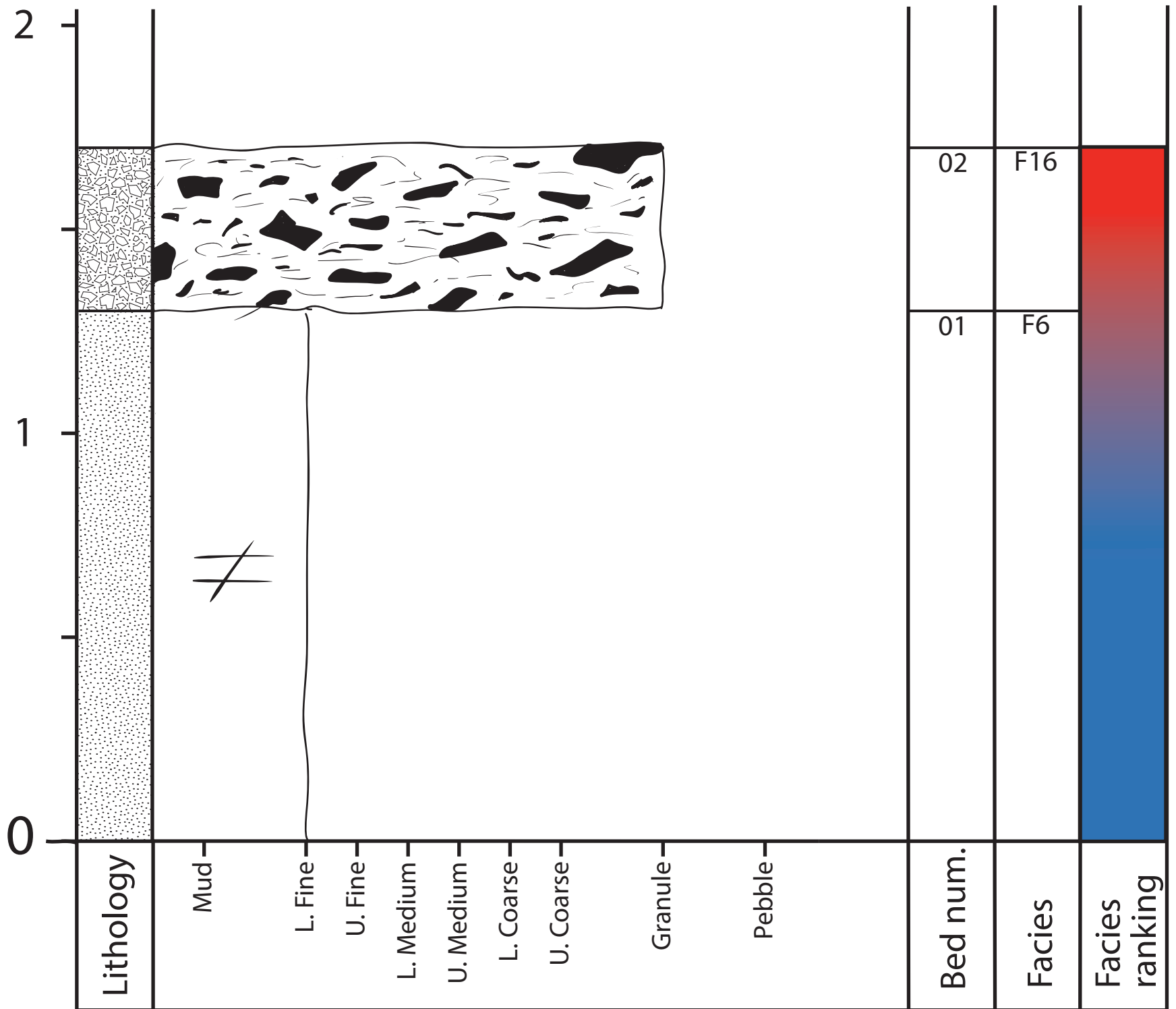
Distance from L01: 1747 m



**Log Number: L 28**

Bedding: 000°/75°      GPS: 33°11'30.34"S    21°17'49.17"E

Distance from L01: 1897 m



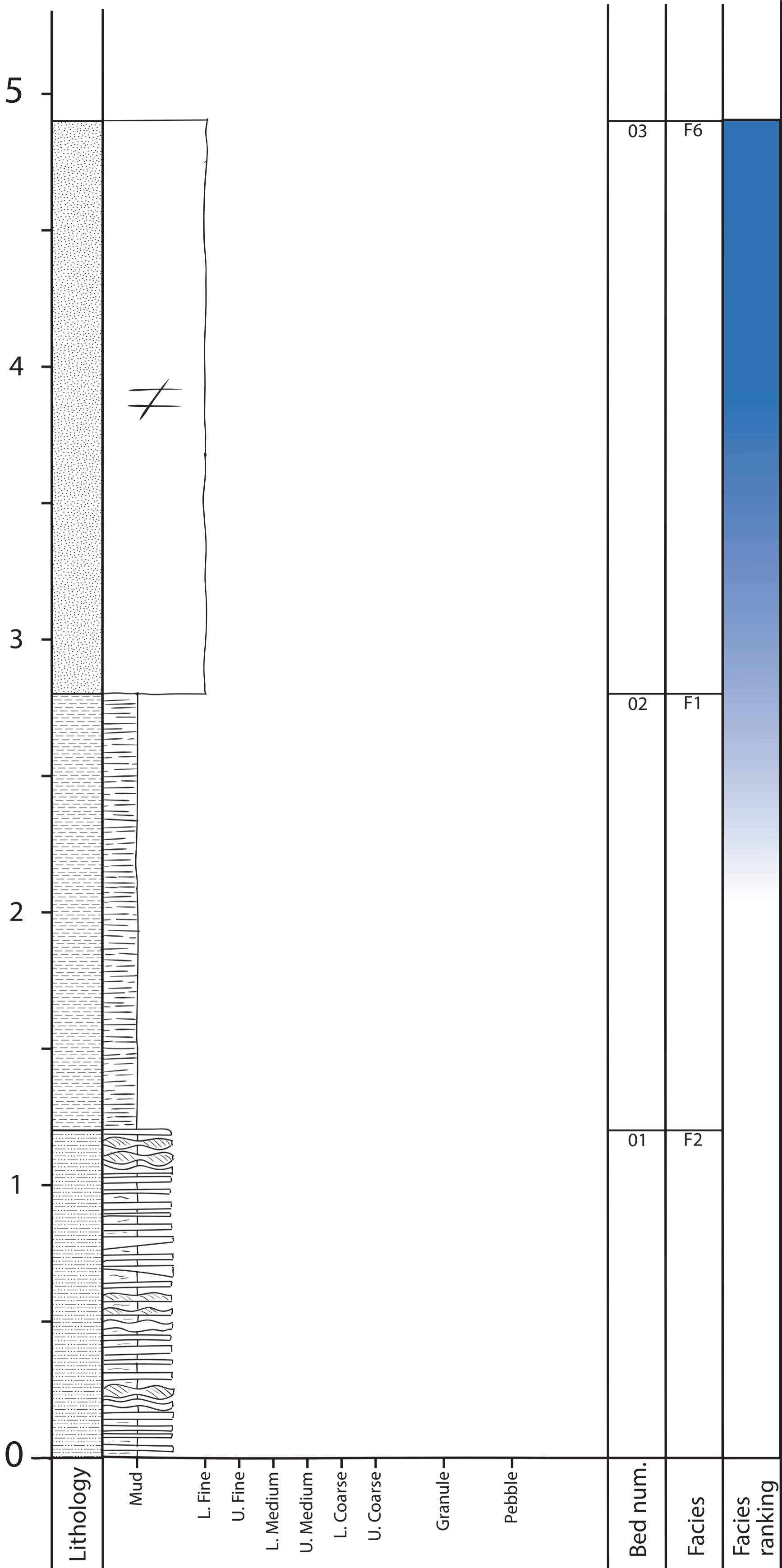
# Log Number: L 29

Bedding: ???°/??°

GPS: 33°11'30.04"S 21°17'51.61"E

Distance from L01: 1961 m

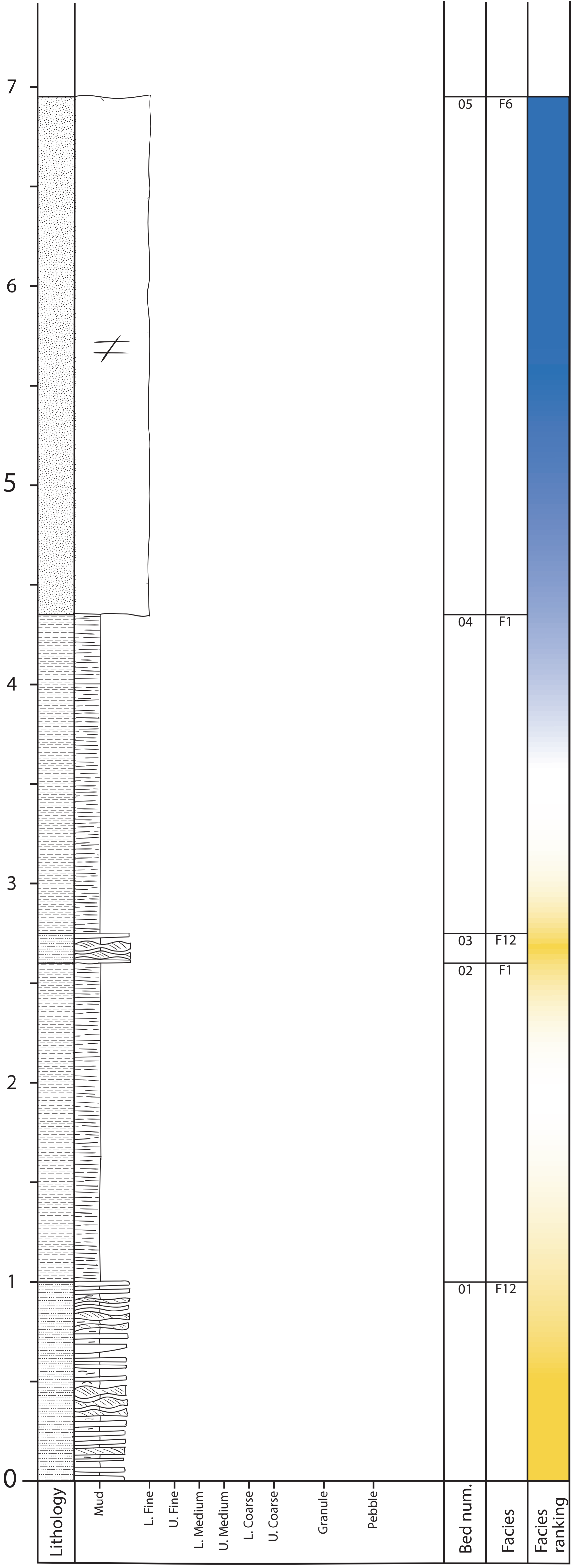




**Log Number: L 30**

Bedding: 174°/90°      GPS: 33°11'29.25"S    21°17'56.58"E

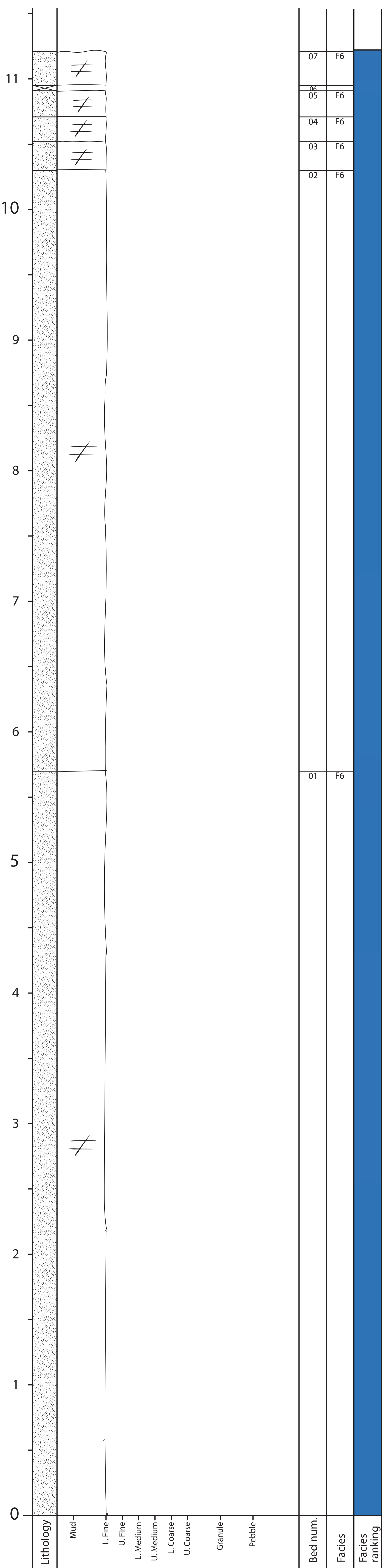
Distance from L01: 2090 m



**Log Number: L 31**

Bedding: 176°/80°      GPS: 33°11'28.96"S    21°17'59.23"E

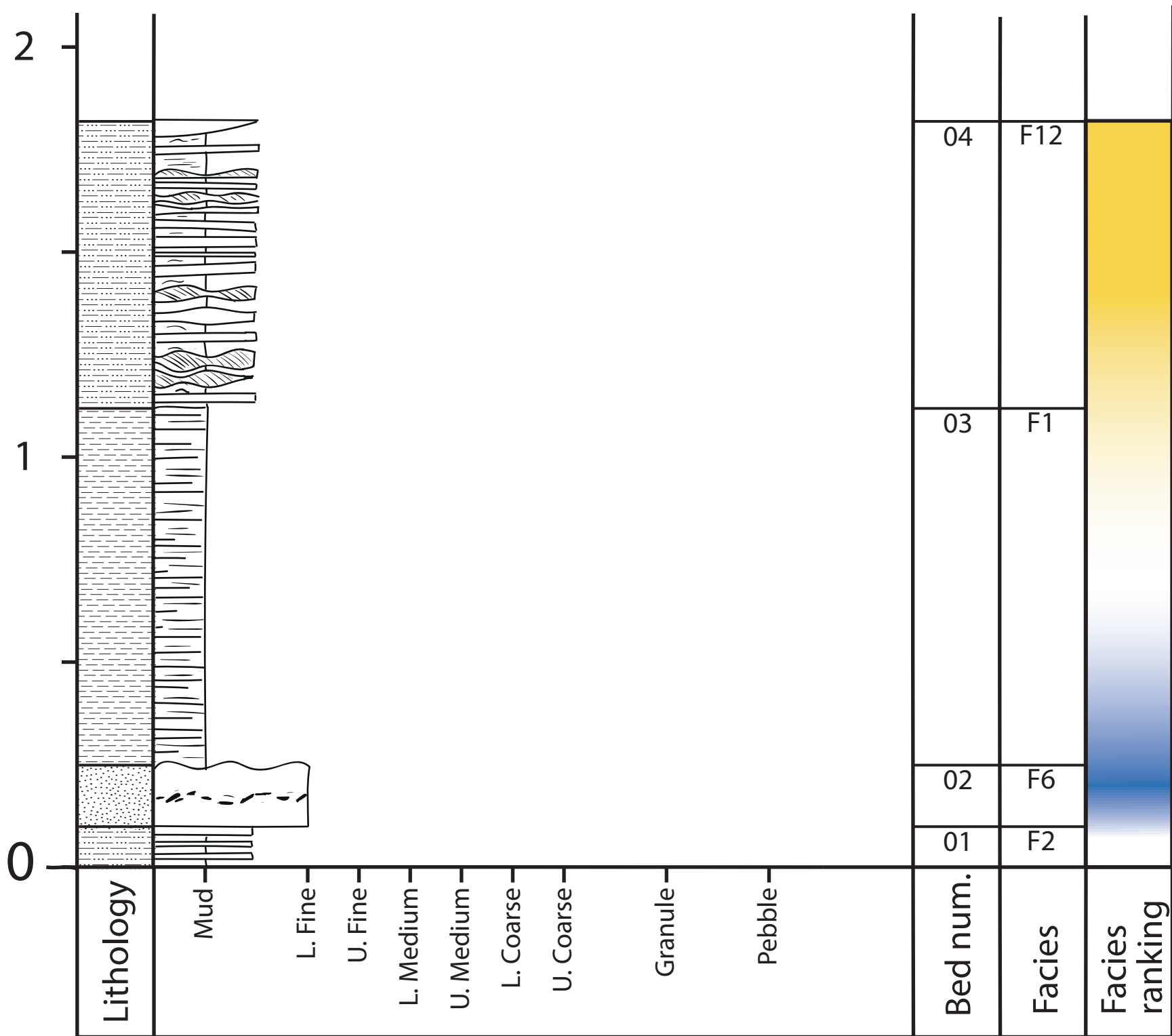
Distance from L01: 2160 m



**Log Number: L 32**

Bedding: 006°/87°      GPS: 33°11'28.78"S    21°18'4.24"E

Distance from L01: 2260 m

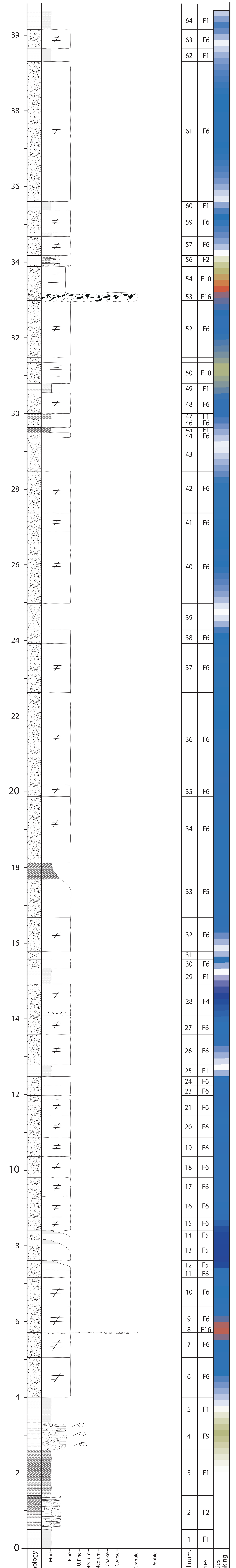


## Log Number: L 33

Bedding: 189°/72°

GPS: 33°11'31.74"S 21°17'15.64"E

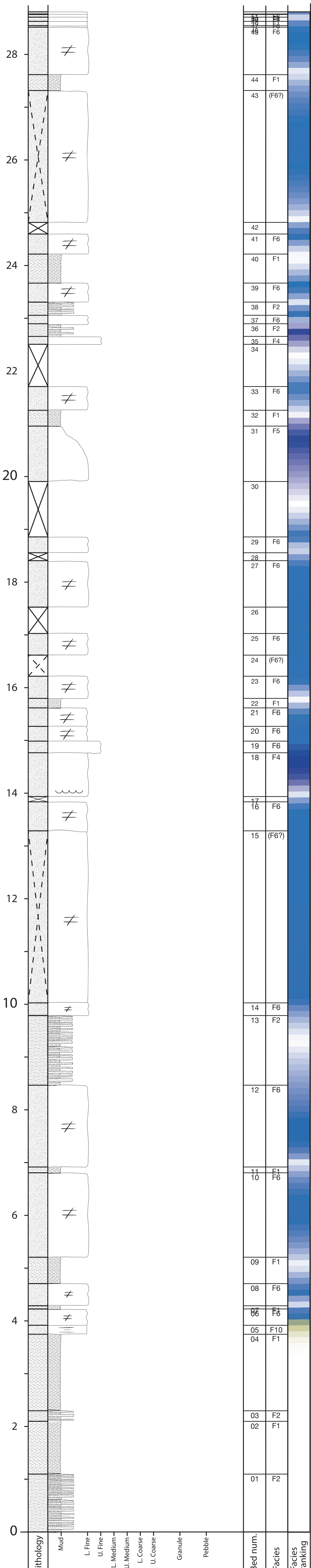
Distance from L01: 1028 m



**Log Number: L 34**

Bedding: 179°/85°      GPS: 33°11'27.15"S    21°18'44.18"E

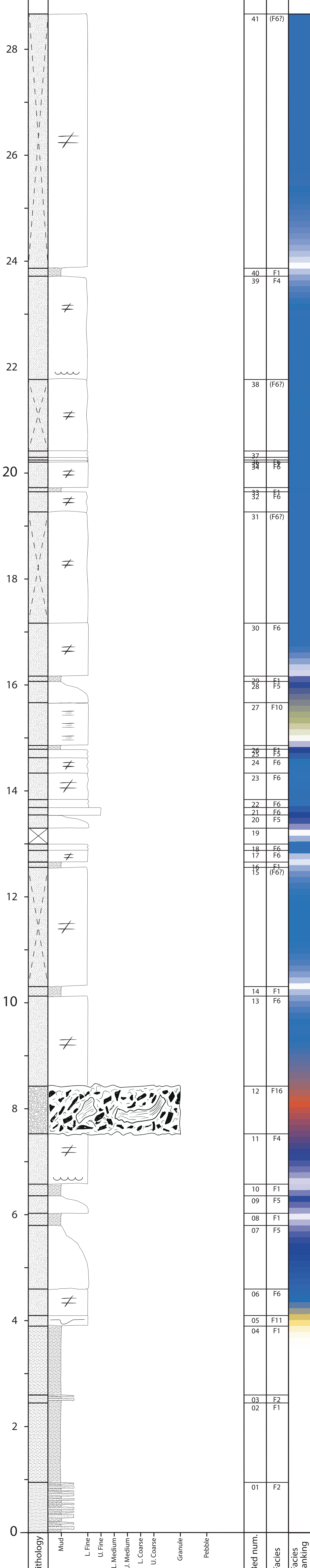
Distance from L01: 3325 m



**Log Number: L 35**

Bedding: 188°/85°      GPS: 33°11'26.60"S    21°18'58.77"E

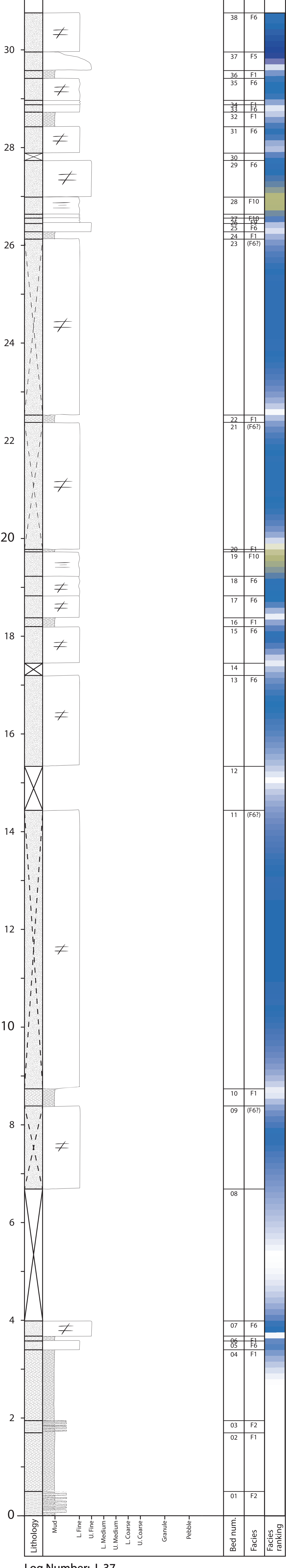
Distance from L01: 3713 m



**Log Number: L 36**

Bedding: 184°/85°      GPS: 33°11'26.36"S      21°19'13.92"E

Distance from L01: 4093 m

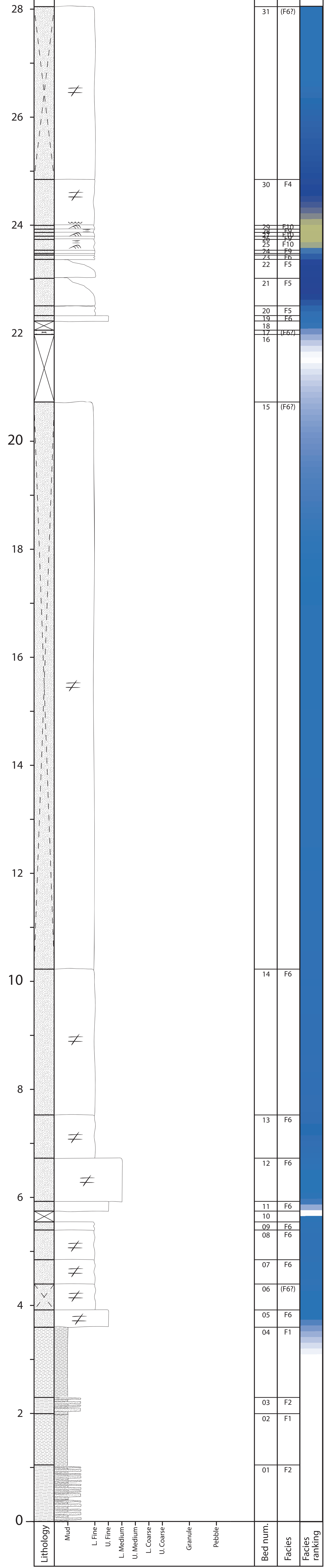


**Log Number: L 37**

Bedding: 174°/87°      GPS: 33°11'25.62"S      21°19'23.18"E

Distance from L01: 4331 m

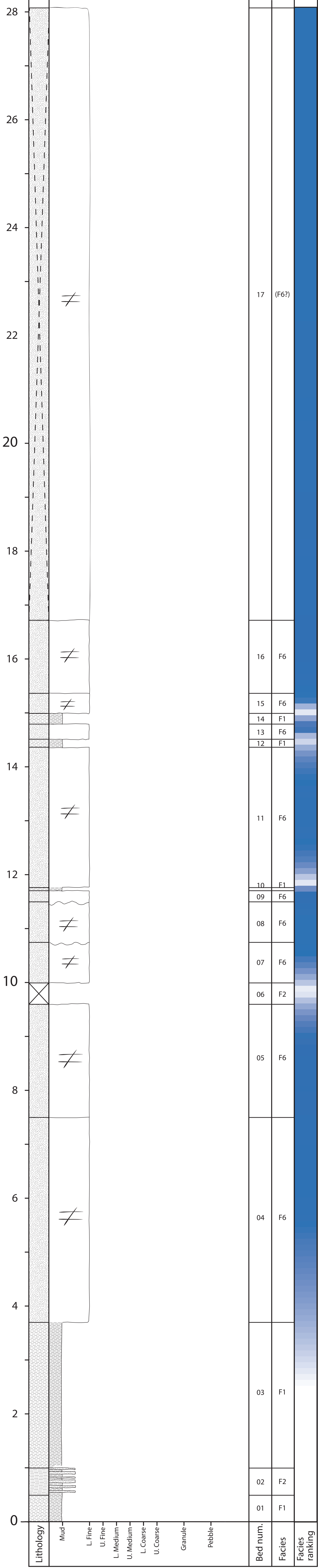




**Log Number: L 38**

Bedding: 010°/75°      GPS: 33°11'24.46"S      21°19'37.62"E

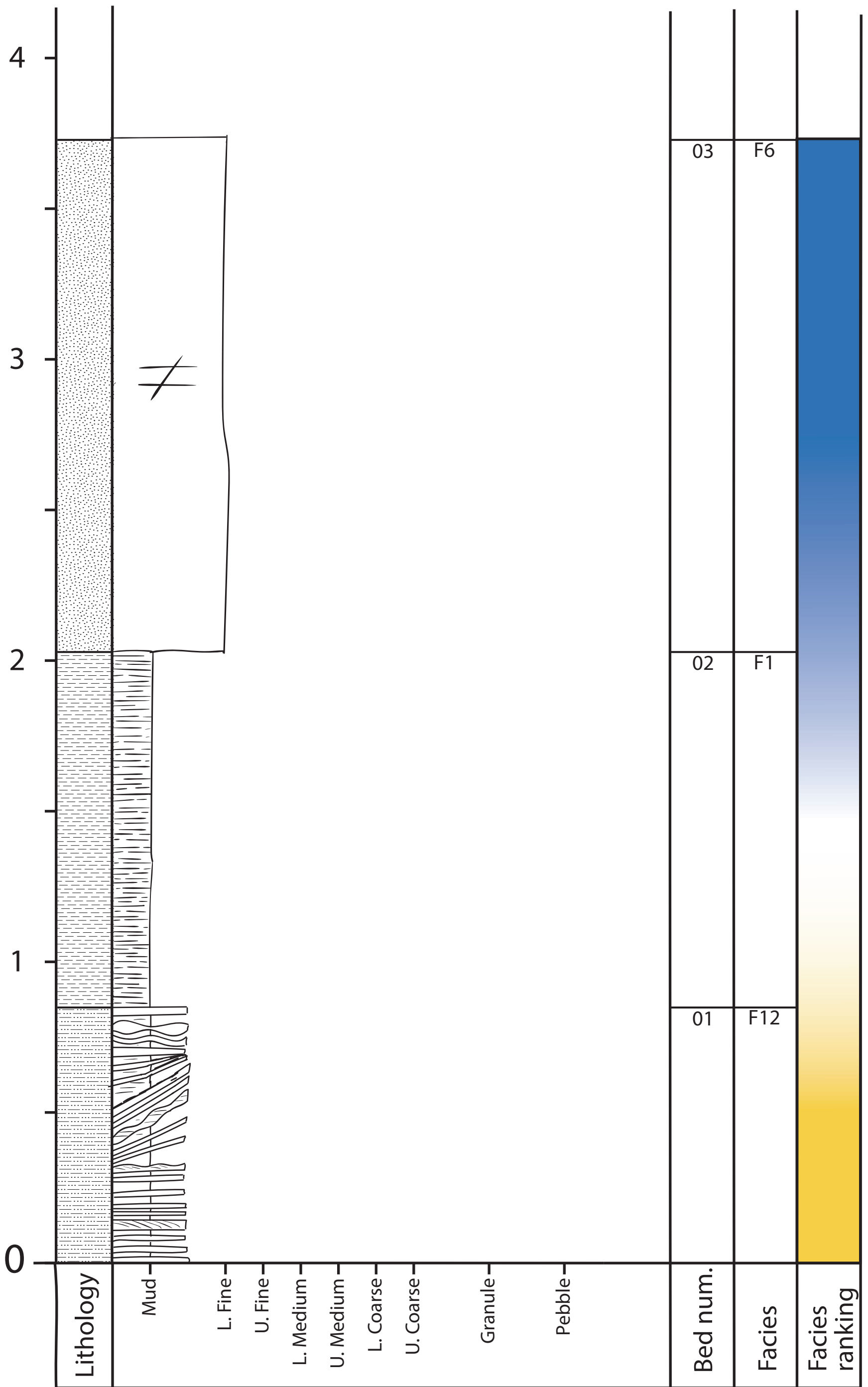
Distance from L01: 4719 m



**Log Number: L 39**

Bedding: 348°/87°      GPS:    33°11'22.62"S      21°20'8.44"E

Distance from L01: 5517 m



### Log Number: L 40

Bedding: 176°/80°      GPS: 33°11'29.11"S    21°17'58.37"E

Distance from L01: 2137 m