GSA Data Repository 2019361

Hammond, A.P., et al., 2019, The Aspen paleoriver: Linking Eocene magmatism to the world's largest Na-carbonate evaporate (Wyoming, USA): Geology, https://doi.org/10.1130/G46419.1

Figure DR1A-P: Study sites and measured stratigraphic sections in the Wasatch Formation, southern Wyoming.

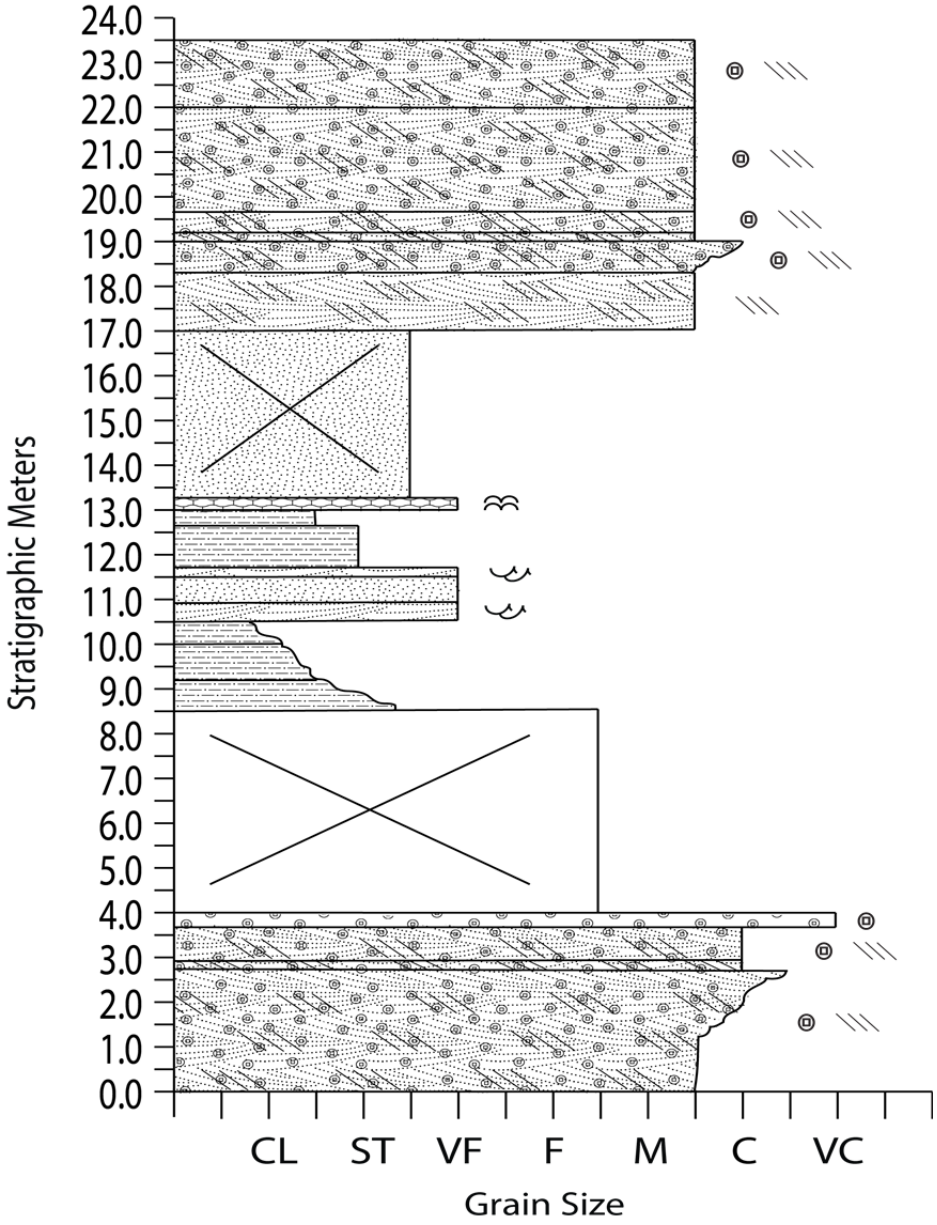
Measured stratigraphic sections:

Locality	Sample ID	Member	Latitude, Longitude
A. Cherokee Creek	CC	Cathedral Bluffs	41.01033°, -108.02724°
B. Hangout Ridge: #1	HOR	Cathedral Bluffs	41.09575°, -107.86373°
C. Hangout Ridge: #2	HOR	Cathedral Bluffs	41.09583°, -107.86384°
D. Hangout Ridge: #3	HOR	Cathedral Bluffs	41.09676°, -107.86500°
E. Hawk Ridge	(none)	Cathedral Bluffs	41.08458°, -107.86916°
F. McPherson Springs	MCP	Cathedral Bluffs	41.08605°, -107.94543°
G. Sand Creek Delta: #1	SDC	Cathedral Bluffs	41.09517°, -107.92923°
H. Sand Creek Delta: #2	SDC	Cathedral Bluffs	41.09565°, -107.92905°
I. Sand Creek Delta: #3	SDC	Cathedral Bluffs	41.09755°, -107.92999°
J. Sand Creek Delta: #4	SDC	Cathedral Bluffs	41.09311°, -107.92918°
K. Sand Creek Delta: #5	SDC	Cathedral Bluffs	41.09739°, -107.92973°

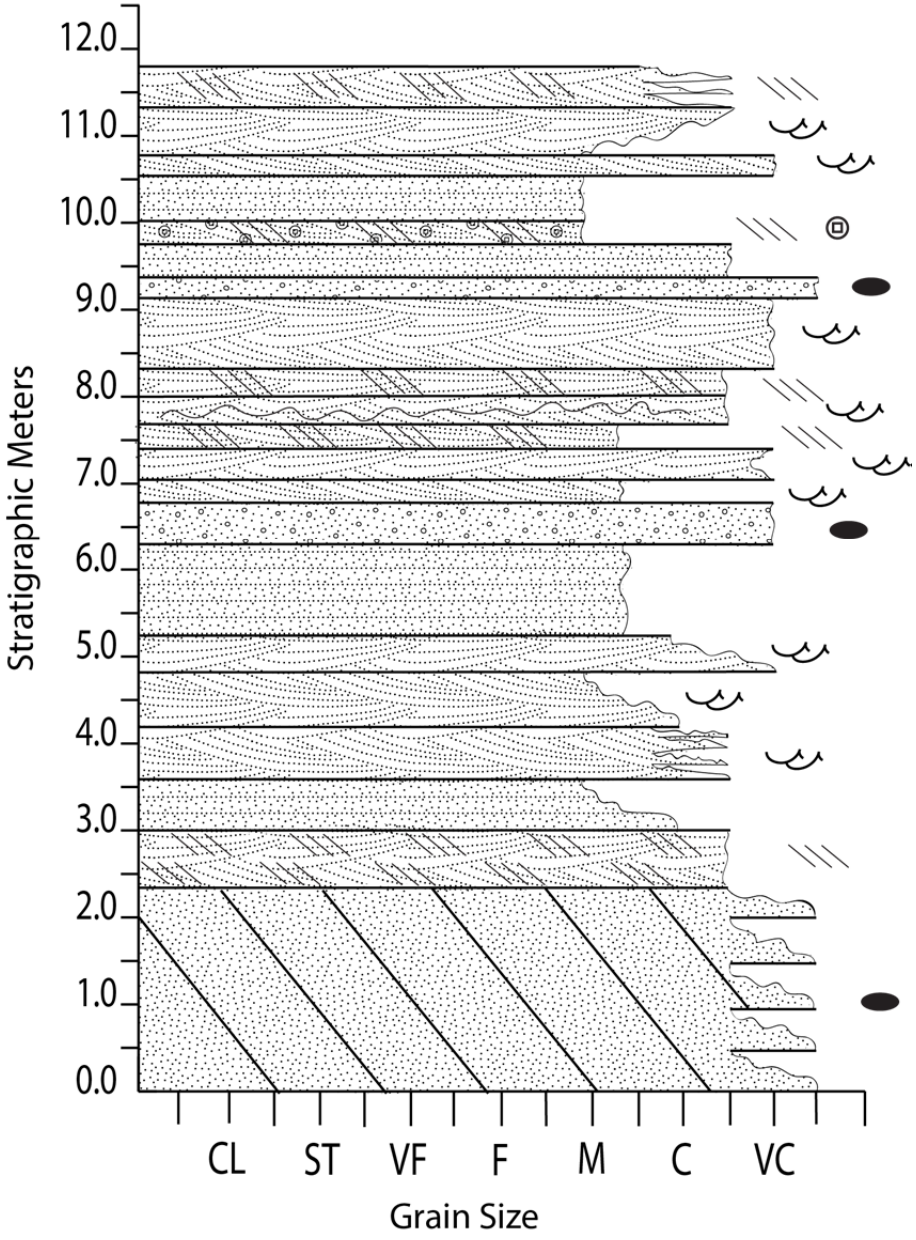
Other study sites:

L. Hangout Wash	(none)	Cathedral Bluffs	41.10846°, -107.88181°
M. Red Creek	(none)	Cathedral Bluffs	41.04498°, -107.86577°
N. Cowfeed Sandstone	(none)	Cathedral Bluffs	41.07309°, -107.95064°
O. Cannonball Ridge	(none)	Cathedral Bluffs	41.01608°, -108.03209°
P. County Road 148	CR-148	Main Body	41.00566°, -107.92300°

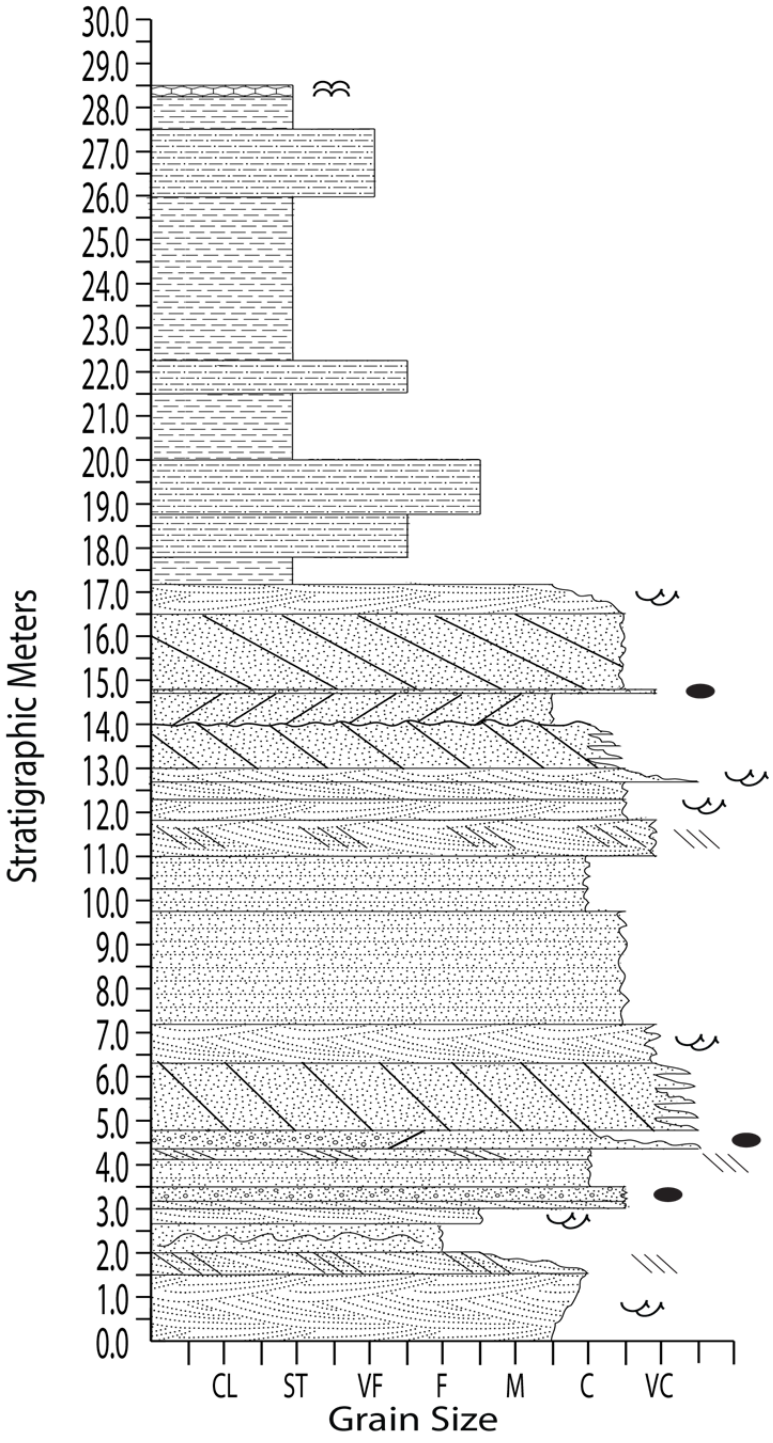
Cherokee Creek



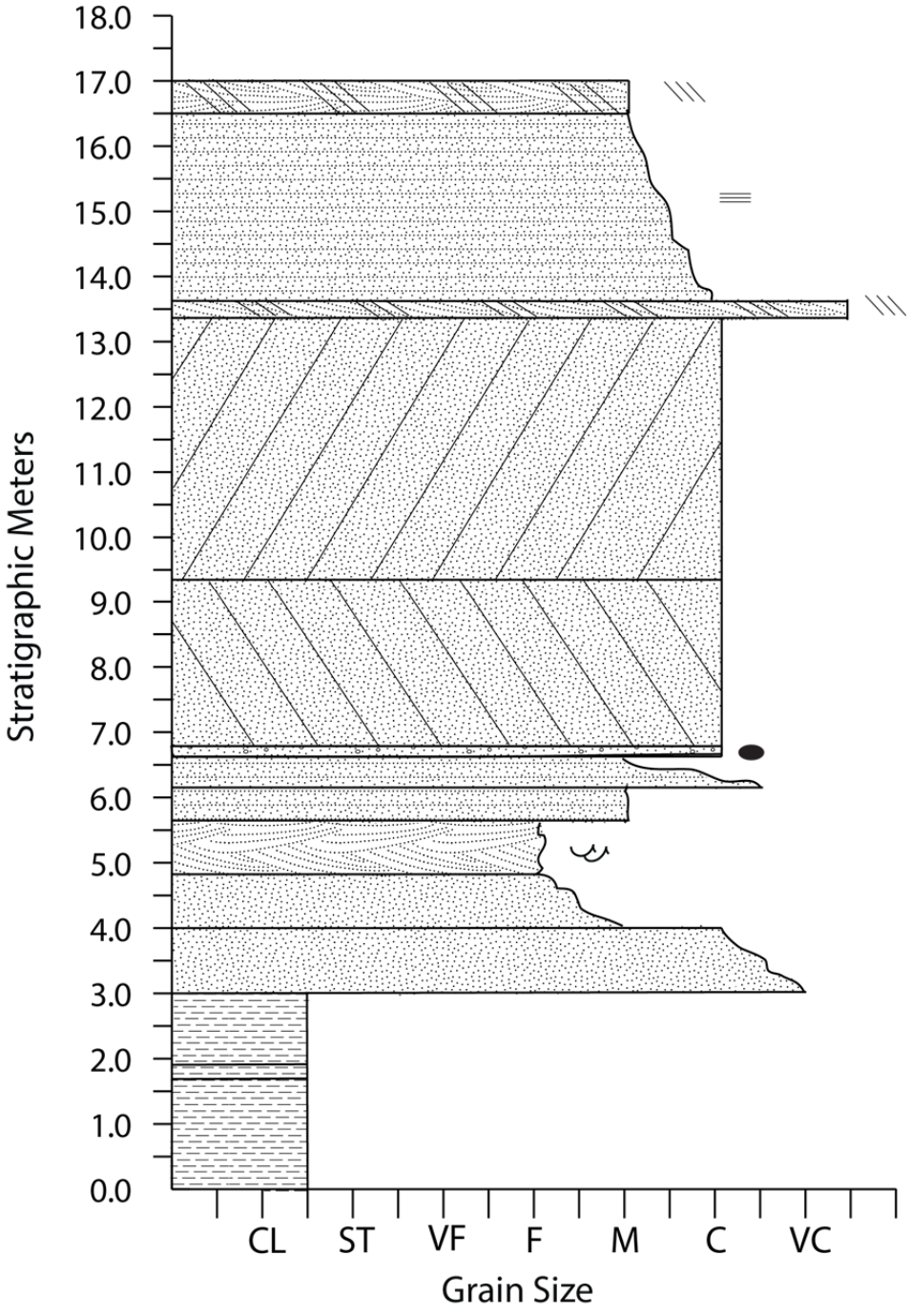
Hangout Ridge: #1



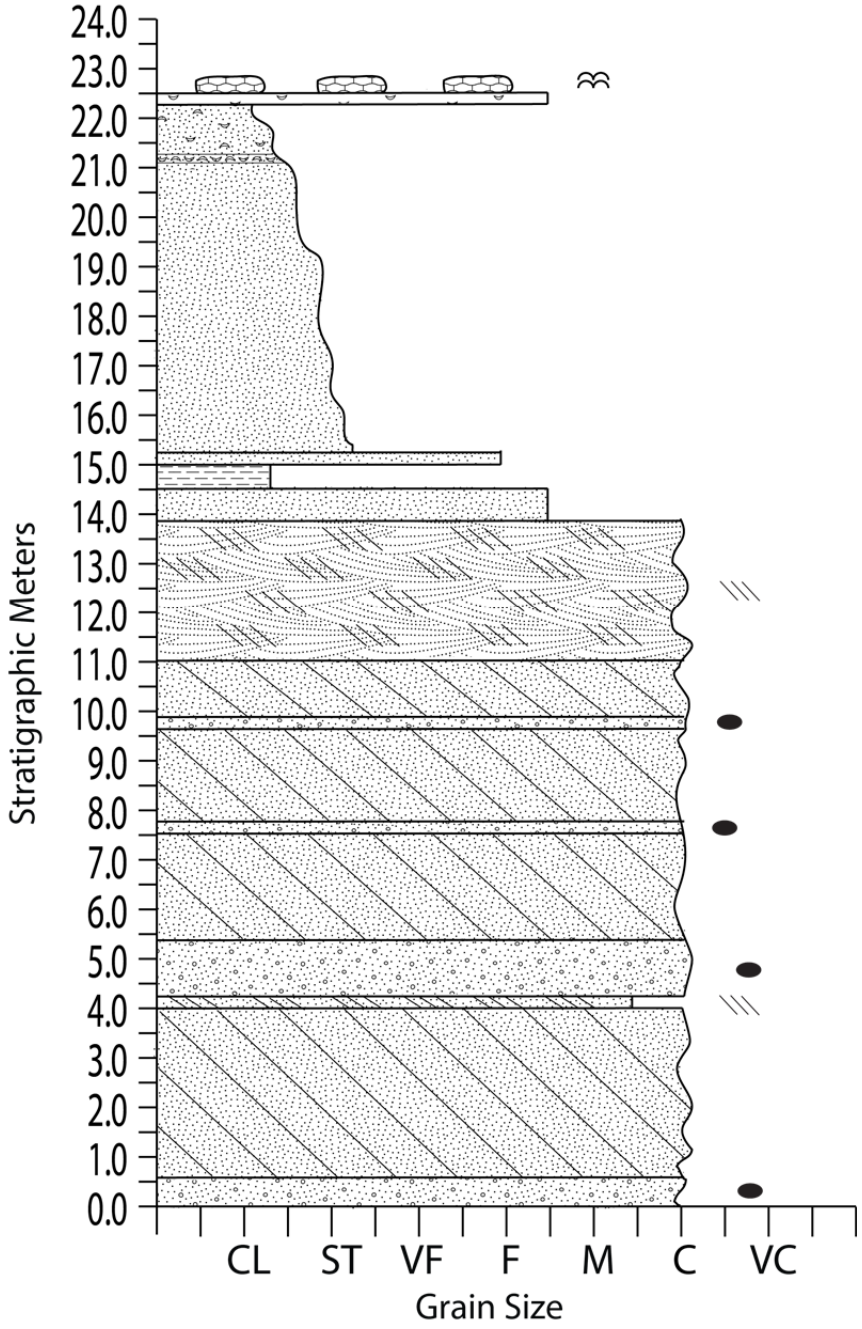
Hangout Ridge: #2



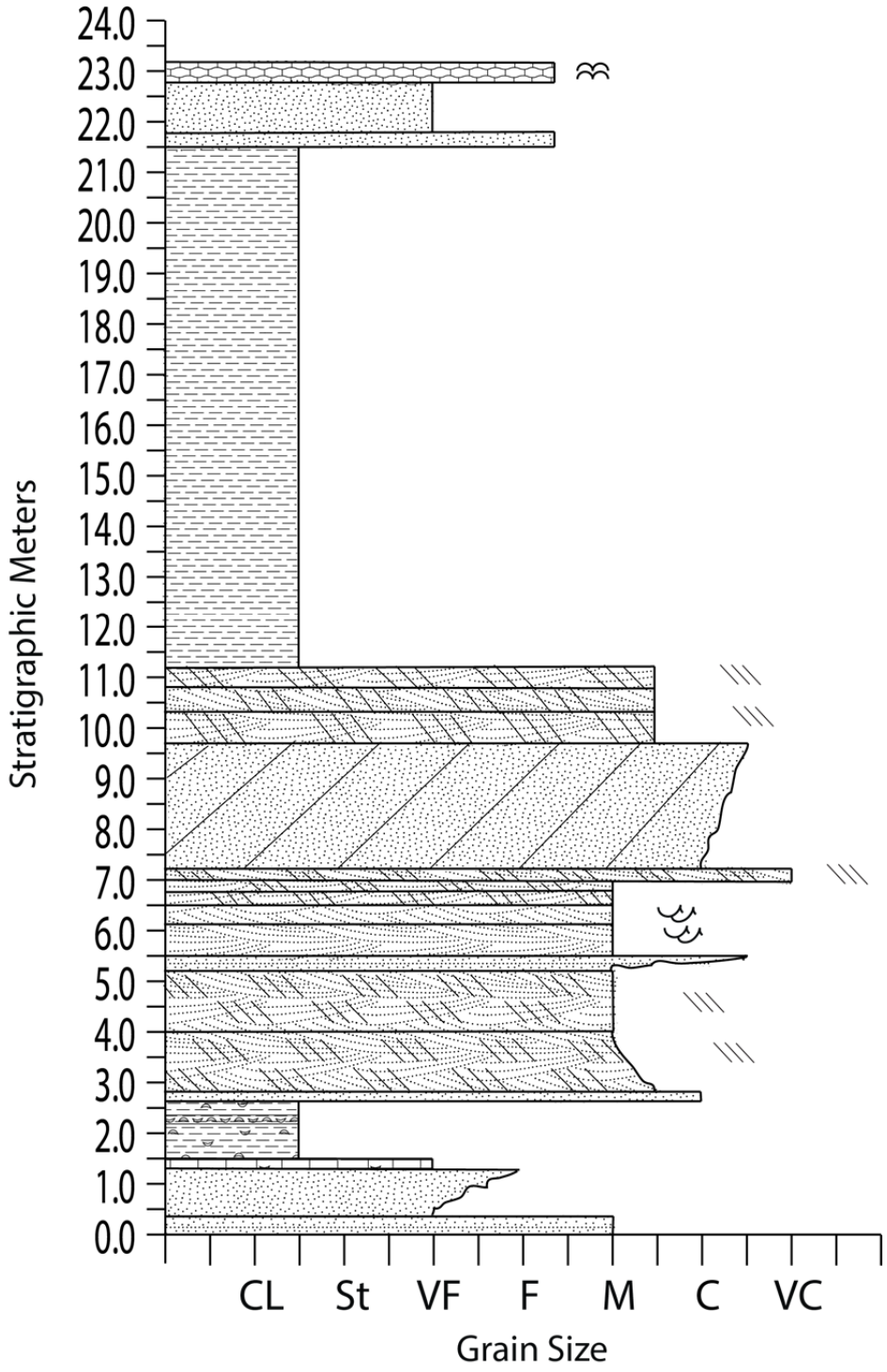
Hangout Ridge: #3

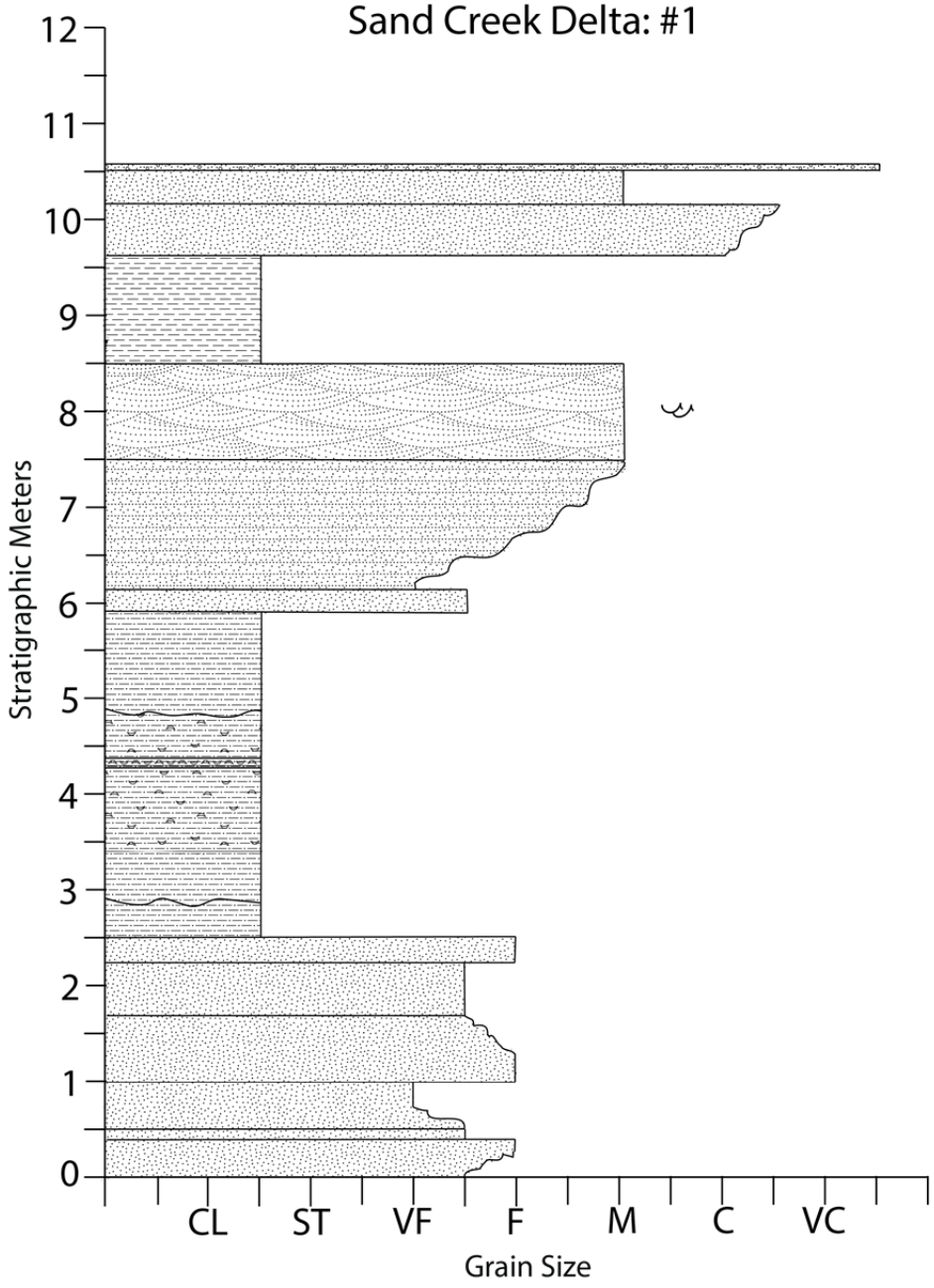


Hawk Ridge

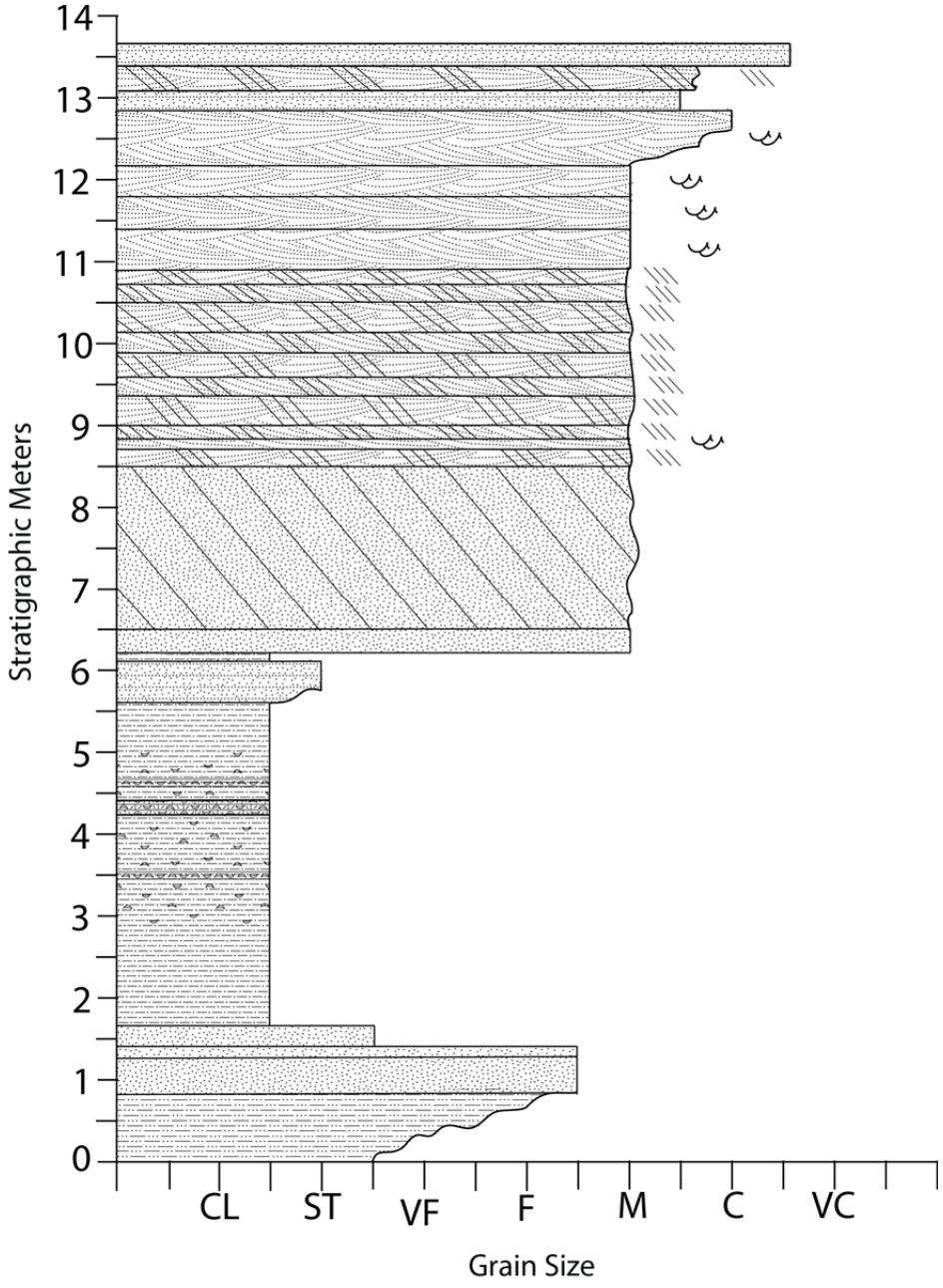

24.0
23.0
22.0
21.0
20.0
19.0
18.0
17.0
16.0
15.0
14.0
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Stratigraphic Meters
CL
ST
VF
F
M
C
VC
Grain Size

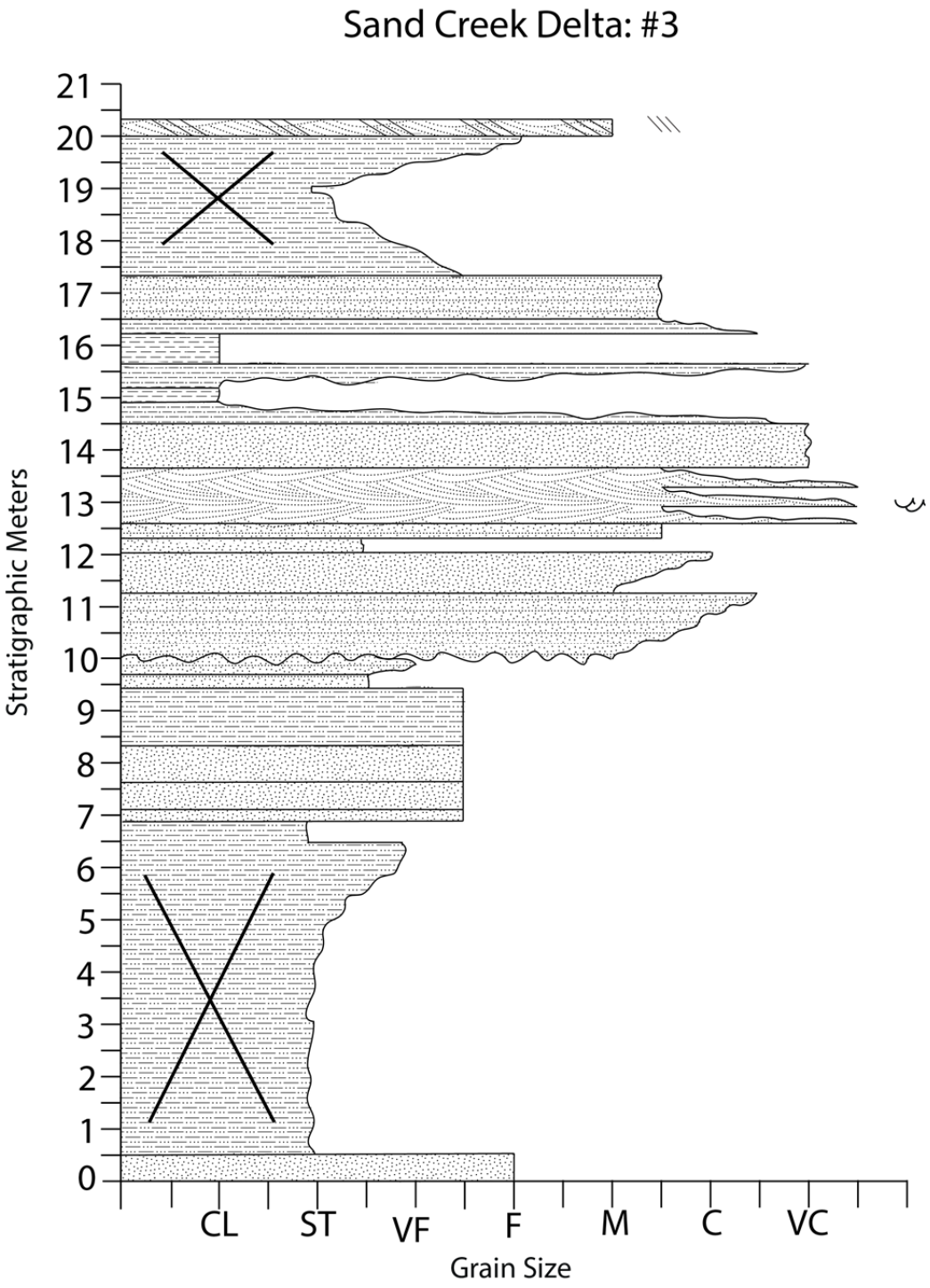
McPherson Springs



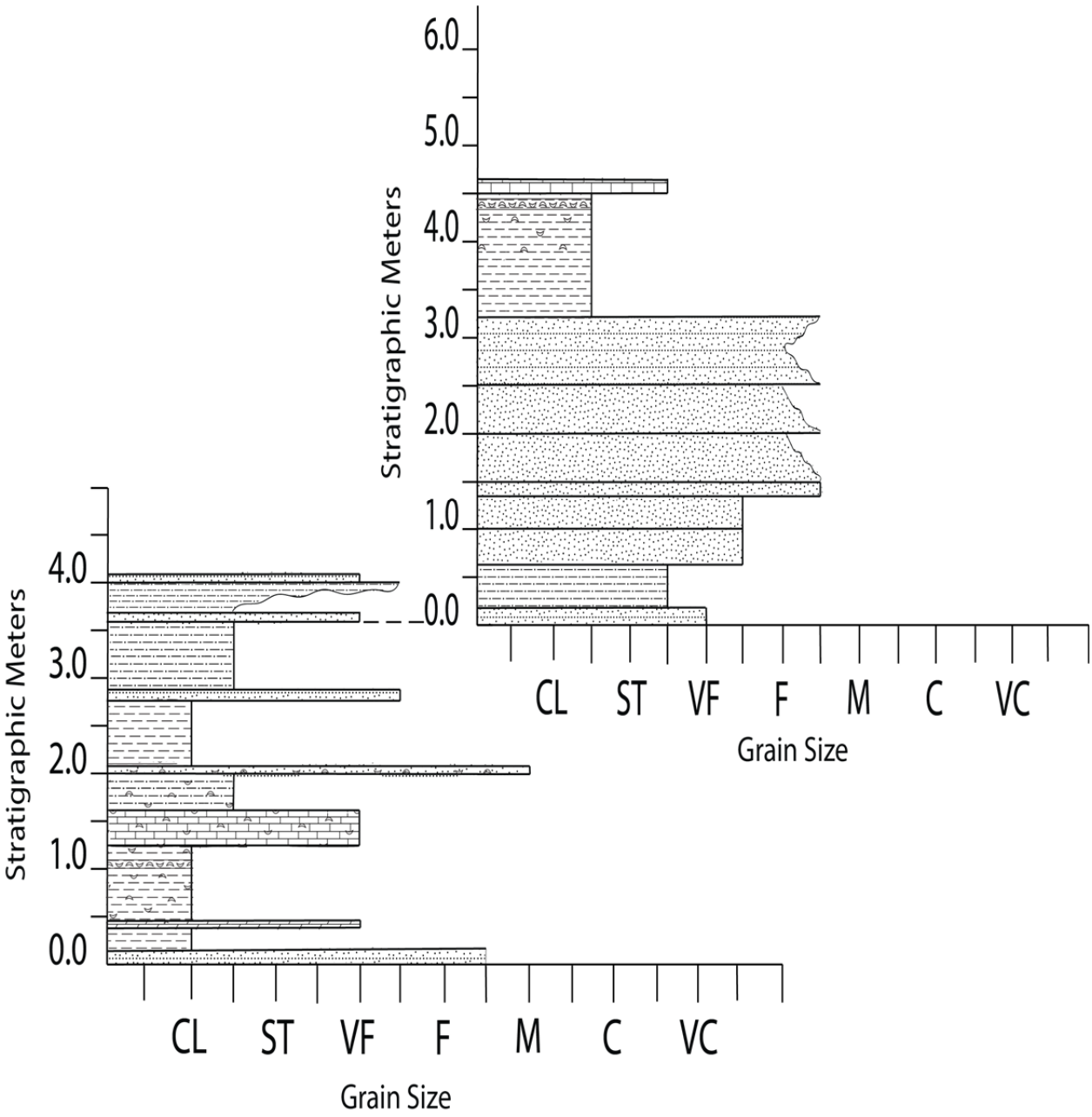

Sand Creek Delta: #1
12
11
10
9
8
7
6
5
4
3
2
1
0
Stratigraphic Meters
CL
ST
VF
F
M
C
VC
Grain Size

Sand Creek Delta: #2

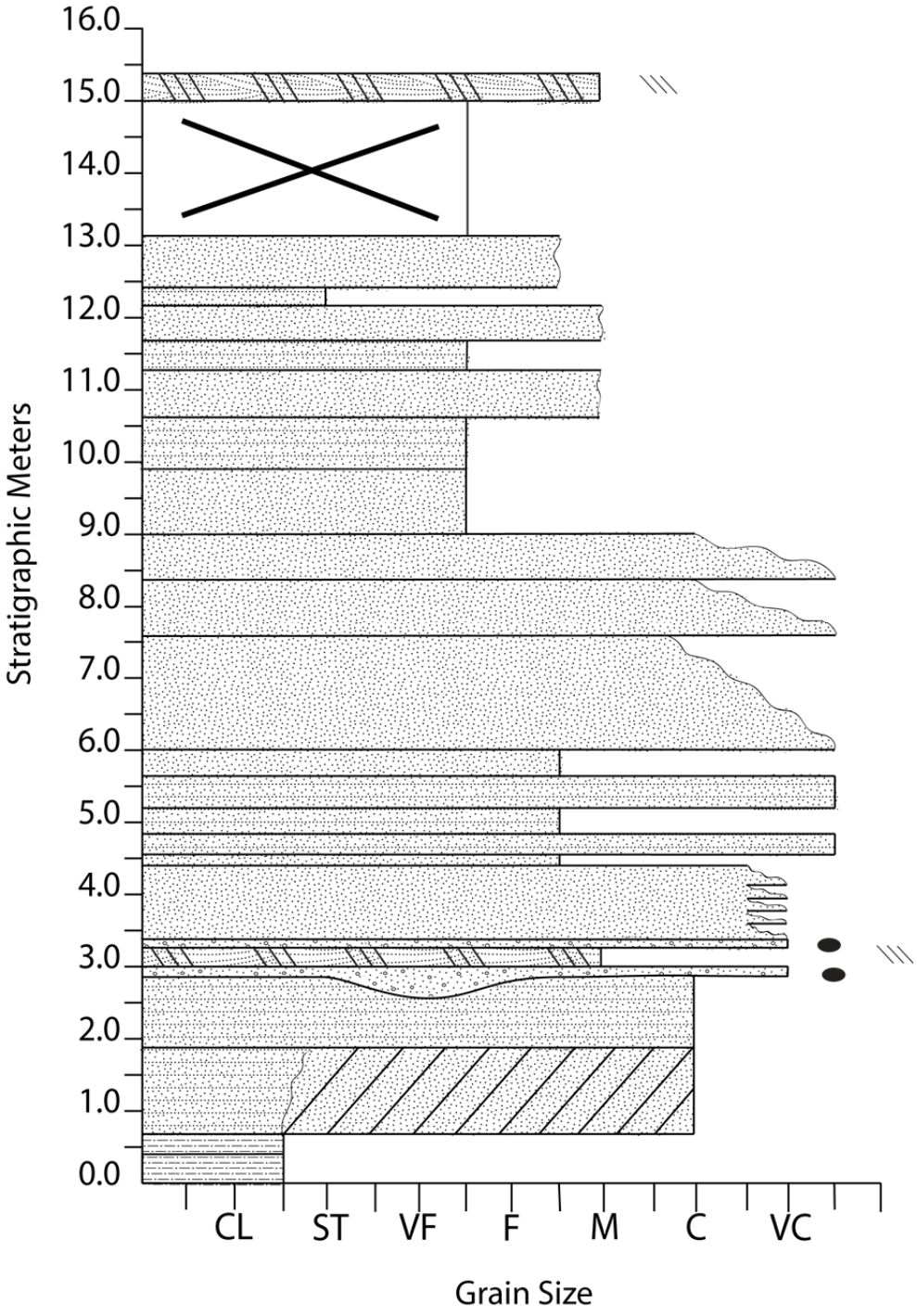



Sand Creek Delta: #3
Stratigraphic Meters
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
CL
ST
VF
F
M
C
VC
Grain Size
3

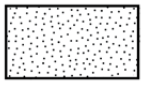
Sand Creek Delta: #4.1-4.2 (up and down stream)

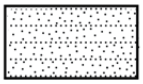


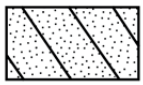
Sand Creek Delta: #5

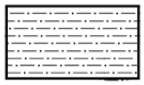


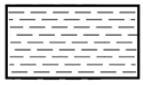
STRATIGRAPHIC LEGEND

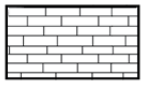

Massive sandstone or sand

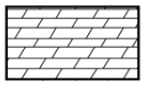

Bedded sandstone

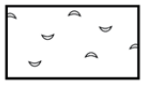

Lateral Accretions or Foresets

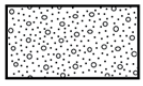

Silty sandy clay

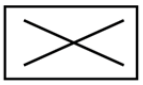

Clay or mudstone


Limestone


Dolostone


Ostracod fossils


Coarse channelfill


Scree/Alluvium


Trough Cross-beds


Planar Cross-beds


Concretions


Claystone Intraclasts


Stromatolites


Planar Laminations

Table DR1: Sandstone point-count data from the Wasatch Formation, southern Wyoming.

	County Road 148 (CR-148)	McPherson Springs (MCP)	Hangout Ridge (HOR)	Sand Creek Delta (CDC)	Cherokee Creek (CC)
$Q_{monocrystalline}$	172	171	206	205	200
$Q_{polycrystalline}$	9	23	19	5	6
Q_{tot}	181	194	225	210	206
Plag	15	17	13	28	4
K-feldspar	97	89	126	116	130
$Feldspar_{tot}$	112	106	139	144	134
$Lithic_{volcanic}$	6	12	14	6	14
$Lithic_{sedimentary}$	50	17	24	21	50
$Lithic_{metamorphic}$	4	6	13	6	6
$Lithic_{tot}$	60	35	51	33	70
Chlorite	8	3	9	13	6
Unidentified	10	7	5	6	2
Mica	49	1	1	23	16
Accessory	0	1	1	2	2
Total Count	420	347	431	431	436

Sandstone thin sections stained for potassium feldspar and plagioclase; see Ingersoll et al. (1984) for detailed description of point-counting methods.

Ingersoll, R.V., Bullard, T.F., Ford, R.L., Grimm, J.P., Pickle, J.D., and Sares, S.W., 1984, The effect of grain size on detrital modes: a test of the Gazzi-Dickinson point-counting method: Journal of Sedimentary Research, v. 54, p. 103–116.

Table DR2. Detrital zircon age data
2019361_Table DR2.xlsx