

v. fine grained; more irregularly
laminated w/ small stroms

still coarsely wavy to crinkly
return to v. thinly bedded

wedding becomes more
massive but still coarsely
laminated (wavy-crinkly)
v.f. grainstone

v. thinly bedded; v. finegrained carb.
no laminae

wee bit of rarer

crinkly wavy lamin.
the straight chips seem to cross-cut
Coarse laminations; Crinkly to wavy; still med
med. grained with chips

return to thin bedded; still
med. grained
definately (clear grains med.)

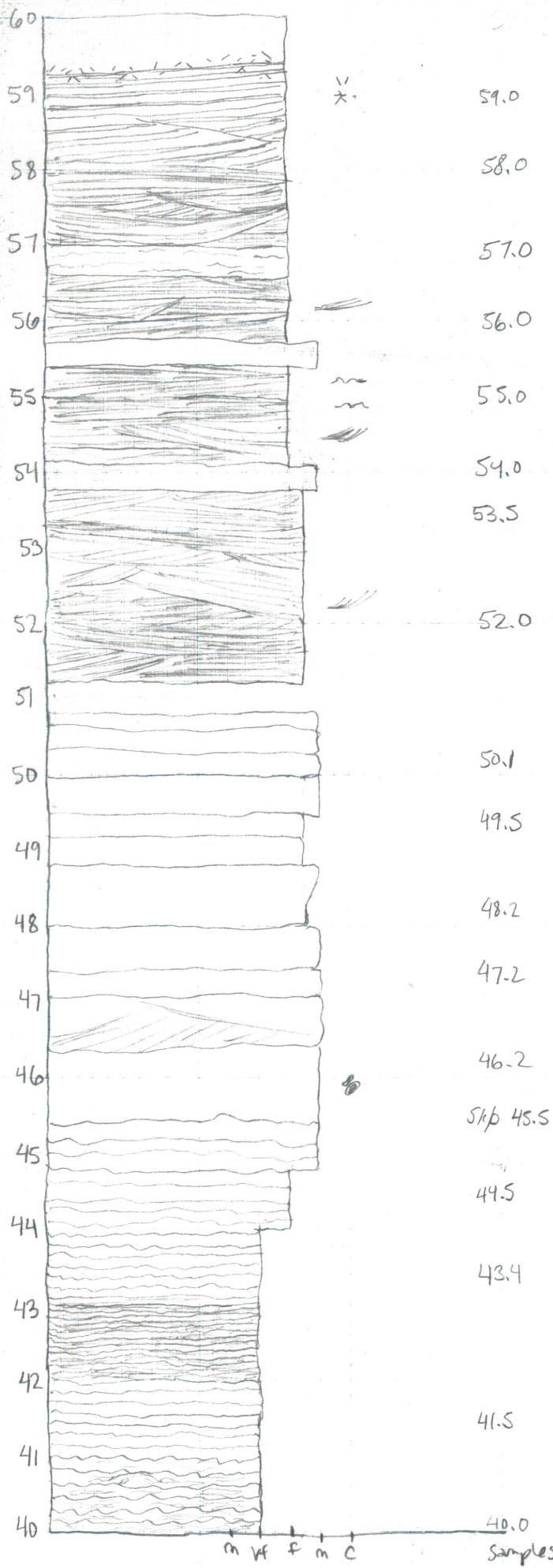
med. grained - possibly peloidal?
Not laminated; massive thick bedded

grain size inc. to med.
becomes thick bedded

bedding thm to med. w/ coarse
bedding style changes; grain size inc.

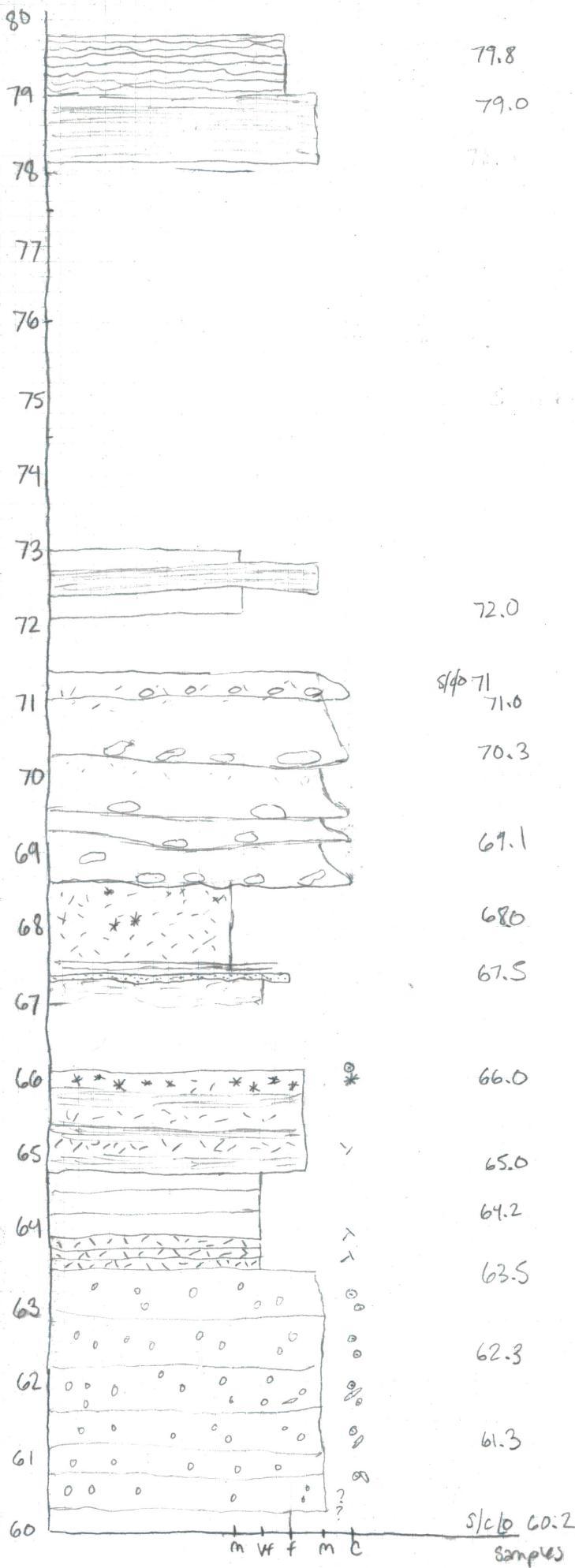
v.v.f. to mudstone grainsize same
bedding style as before

vt. grained; very thin bedded
crinkly to wavy bedding



v. thickly bedded; wavy, slightly coarsely laminated

with irregular laminations (coarse) v. fired grained thin irregular bedding



continue fine quartz grains
but carbonate grains fine instead of med.

fine quartz nuclei at larger
Coated carbonate grains
coarsely laminated

bit of cover

planar
med grainstone w/ laminations & possibly
micrite

(upt 166) photo
silica clasts as well as micrite clasts
medium grained - possibly bed
coated

with large (4-8 cm clasts of
yellow micrite)
multiple events with large micrite
clasts at base w/ just
med. grainstone w/ height.

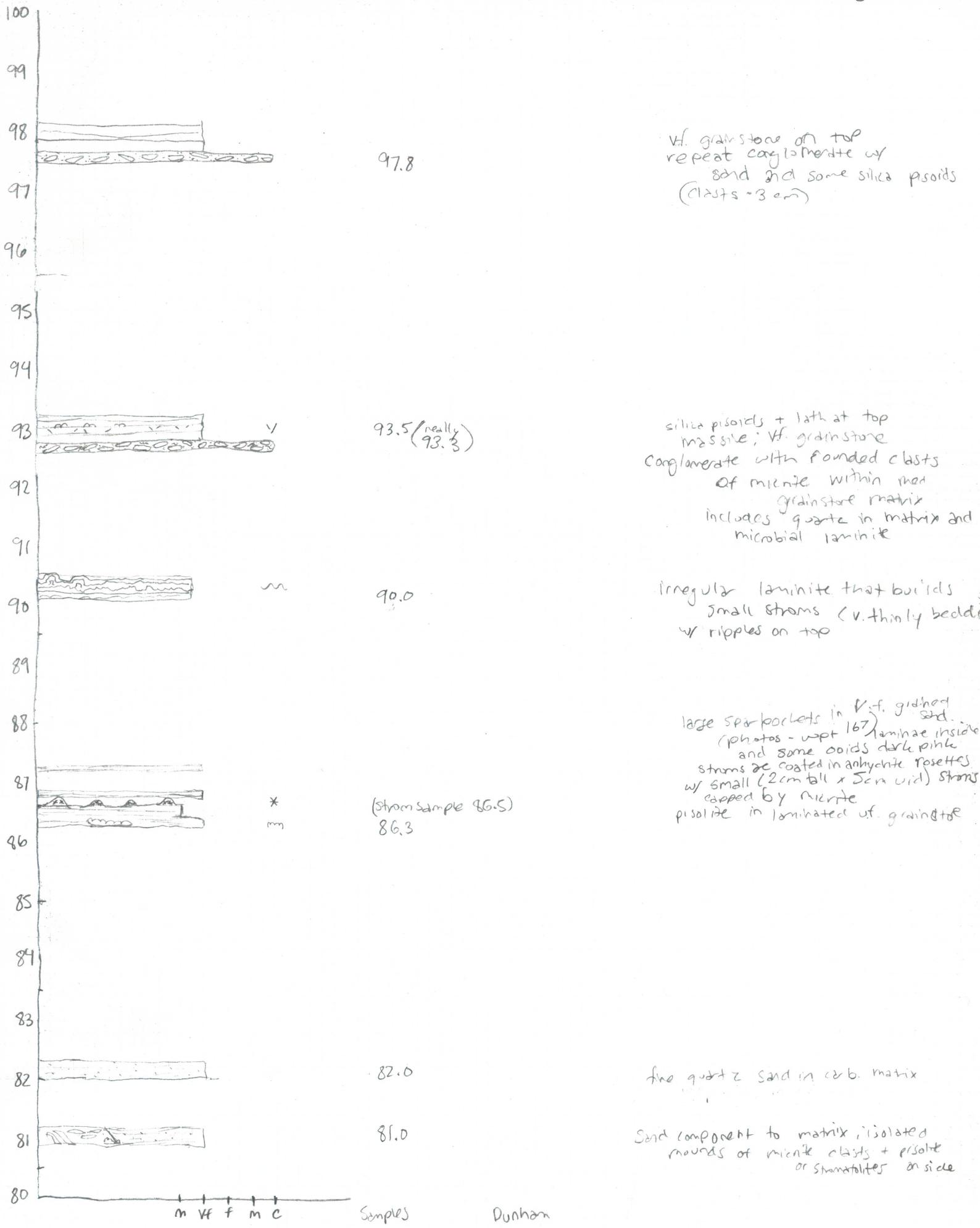
capped by micrite w/ laths
laminated micrite at base w/ fine grained beds
thin bed of poorly sorted quartz sand-carbonate
chert nodules; teepee interval?

true rosettes

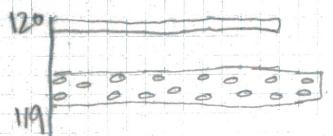
return of f to m. grainstone w/
intervals of laths

Continue med grained; ooids?
massive; vertically bedded

med. grained
possibly ooids and some intraclasts
recrystallization and weathering obvious
massive; fine grained to lf
upt 165 thickly bedded; some
vugs

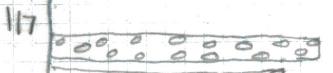


mudstone, massive

(6) 70 / 20 wpt 168
vuggy carbonate lf. grainstone

119.1

118



116.4



115.1



114.2

113

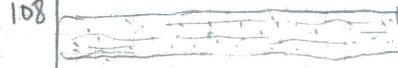
112



massive
vuggy, lf. carbonate oval
mudstone pale white
grainstone beds w/ med. ooids bed
in the middle.

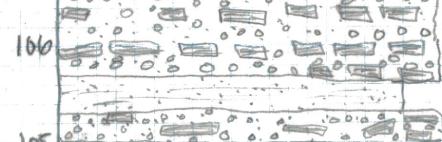
repeat sequence w/ ooids at
base to quartz on top → it
is possible the ooids are completely
silicified and becoming the quartz & the
on top of ooids v. coarse laminae

109



some silicified beds broken in place + cemented
towards top of bed
more med. grained red quartz
sandstone some silification
* hot qtz actually calcite
m. grainstone

108



med. grained red quartz sandstone
red w/ larger white
quartz pebbles

105

104

103

102

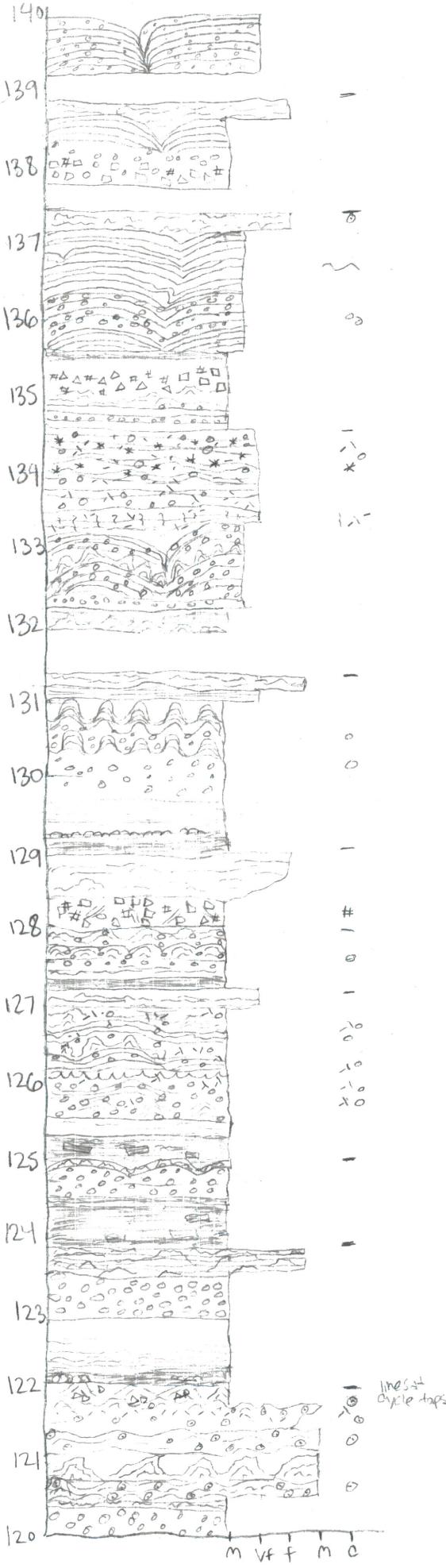
101

100

M VF F M C

Samples

Dunham



- 140
- 139.5
- 138.8 (slab)
138.6
- 137.2
- 136.8 + s.
Slab 135.6
- 133.2
- 132.6
- 131.0
- 129.6
- 128.3
- 127.4
- 126.4
- 125.8
- 124.7
- 123.5
- 122.7
- 121.8
Slab 120.8
- Samples
- Dunham
- very large! stroms (2m across x 2-2.5m tall)
laminar are 2-2.5m tall
cyclically
fine grained irregular laminitite
on top of stroms.
vuggy breccia
cover but looks like rock + float "pounds"
fine irregular laminitite oyster stone some
old pocket
rippled laminitite iron
silification cores in
v. large domal strom (1.5m tall) ^{wide}
breccia over & thinly bedded micrite

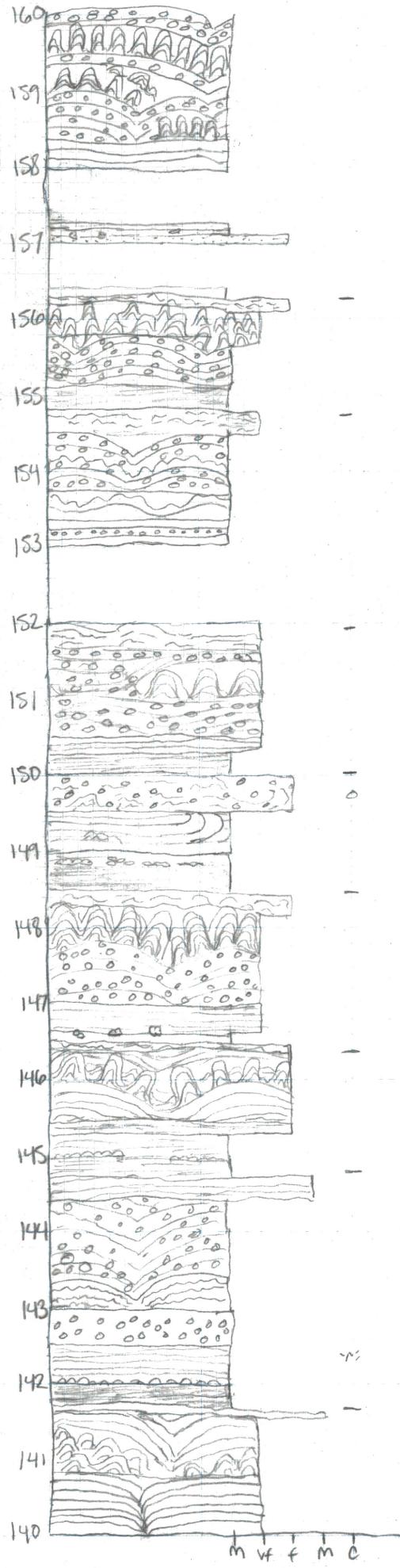
med. laminated w/ very low relief small
stroms; vuggy, rosettes; lambs.
? what are the vertical escape struct called?
med. laminated.
large domal stroms w/ small stroms
in the middle; the large stroms
v. fine foreslope at base into large stroms
v. finely laminated grey carbonates
steep?, precipitated, silified
silified and irregular laminitite
v. fine grainstones on top of
small columnar connected stroms

pisolite development of pisolites/
irregular laminitite; mud
part silified & then coarsens upward
to recalcified spar filled possibly steep?
vuggy top filled w/ spar
fenestral dolomites w/ fine irregular laminitite
microbial laminitite to massive
bases of paracong. always grey & flinty mud
* took day picture after storm at 121.0
and total at 126.0
looks like Sanwan - 1

prominent edge
upt. 16.9 moved slightly
(recrystallized)
irregular laminitite on top of
round fenestral mudstone on top of
finely laminated mudstone

grey
with v. finely bedded f. grainstone cap with
lenses and bands of f. grainstone in mudstone
found to oval vuggy/fenestral mudstone, filled
with laminated micrite into massive micrite
weathering + mudstone into laminated mud. w/ public
grey tepee top, one ooid sat very top
lambs at top, becomes irregularly laminated
some ooids and grains in mudstone

ooidal grainstone (med.) with wavy
irregular bedding (v. thin) that is
silified in places
which is finely bedded mudstone; it's
vuggy grainstone / ls.



Sample	Dunham	
159	159.0	small storms are getting taller more conical.
158	158.3	
157	157.3	* Where there are large storms there are large vugs; where there are small storms = no vugs
156	156.7	red fine grainstone capped by mudstone w/ pisoliths (sand)
155	155.6	
154	154.4	
153	153.5	large vugs; partial silification
152	152.0	silified irreg laminites in vf grainstone spor-filled vugs
151		abrupt contact w/ ruggy coarsely laminated w/ thinly bedded ls of grainstone mudstone
150	S/10 150.9	opt 170 possibly wavy kink within these beds (photo)
149	149.0 (of pisolite?)	grey mudstone w/ pisolite / oblong silicated grains (photos)
148	148.3	silified irreg. laminites (photos) upper storms more elongate & conical
147	147.8	vuggy large domal storms
146	146.7	Pisolite development grey mudstone silicated irreg. laminites on top (pisolite)
145	145.6	beautiful columnar storms growing from low domal mound laminated mudstone
144	144.7	mud drapes on laminae med. grainstone vuggy storms w/ coarse laminae
143	143.5	silified large vugs in mudstone not filled med. laminated
142	141.3	overlain by grey mudstone med. pink grainstone (v. thin 5cm)
141	140.7 140.7 (slab)	small storms (S) 38/34 being capped by larger amplitude laminations contains giganto-stroms
140		

136/82 172

photo of particularly tall
narrow strom.

Capped by smaller stroms w/ fine
laminae

laths come back in; more peaked
med. stroms w/ med. laminae.
also appear to have spar-filled
vugs (not open weathering out)

Silicified irreg. laminit. micrite
beds are contrasted

V. thinly bed; sometimes lamina
pisolite develop.

silicified irreg. laminit.

small conical stroms fine lamin.
interconnecting
vuggy mudstone
silicified irreg. laminit.
vuggy micrite
38/36

climbing ripples
wave rippled fine grained stone
alternating w/ micrite

Weypoint 171
Photos - stroms capped med. dunal
stroms; small not as calc.

V. thinly bedded grey mudstone
pisolite development
massive mudstone w/ layers
of spar-filled sandly fenestral

capped by pisolite developed
fine red quartz sand

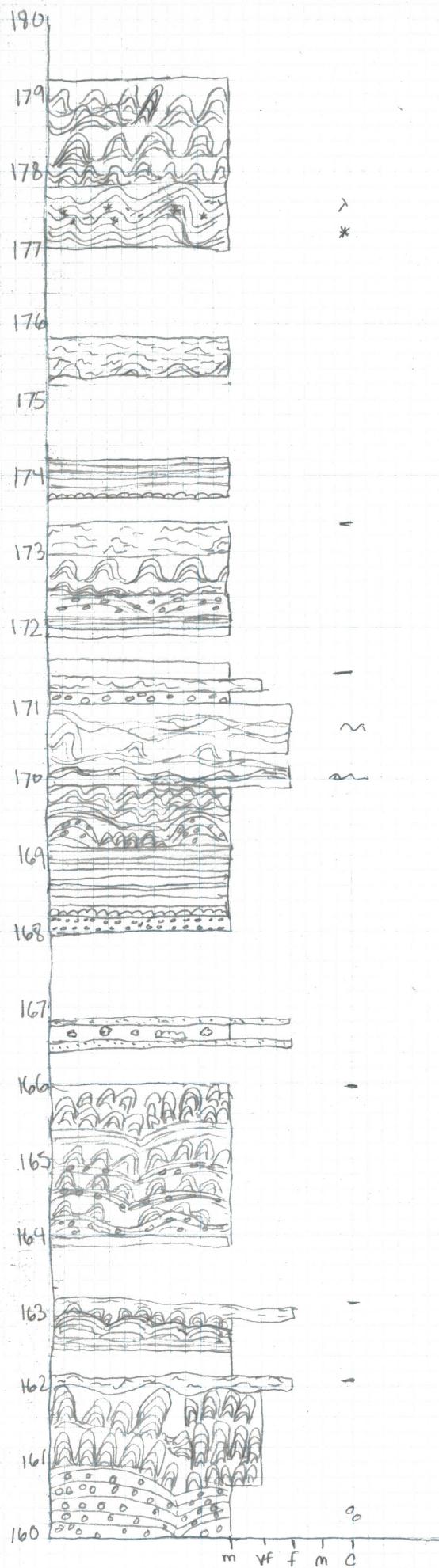
alternating conical stroms w/ large
nice egg carton surface (photo)
foramin.

silicified band at 163

partially silicified irreg. laminit. on top

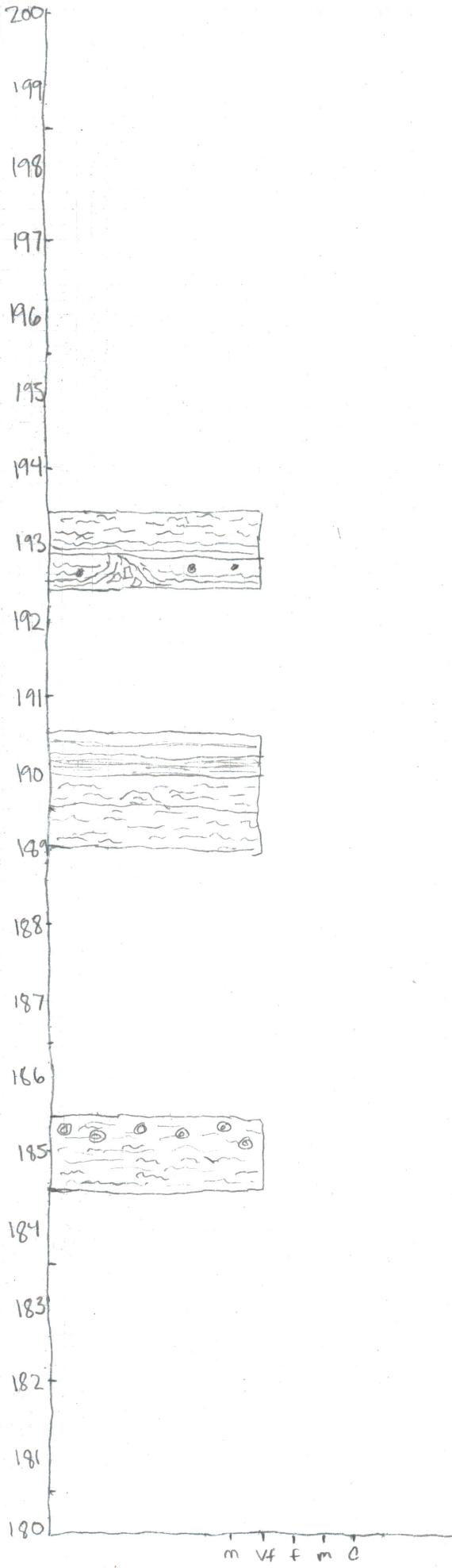


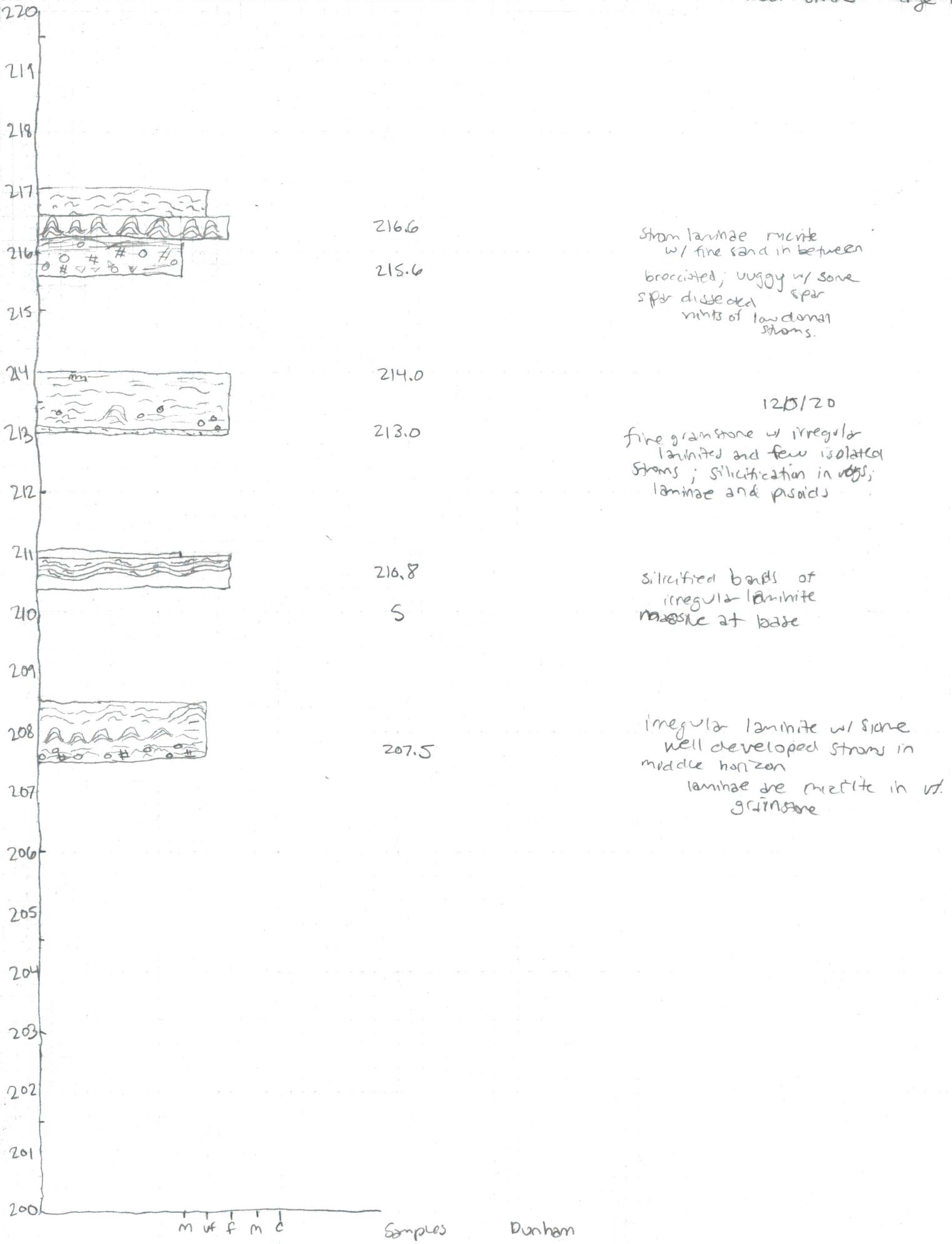
first time that crystal fins are preserved
in laminae is a possibility



Samples

Drahan





S

240

239

238

237

236

235

234

233

232

231

230

229

228

227

226

225

224

223

222

221

220

m v f m c

Samples

Dunham

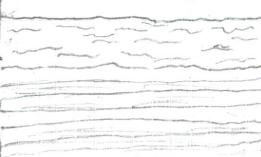


grey shale

Sandstone weathering brown

isolated mound of blocks
carbonate + ss.looks to be not in place
but it would be a very large
block to fall from upper cliff.

Sandstone weathering dark brown

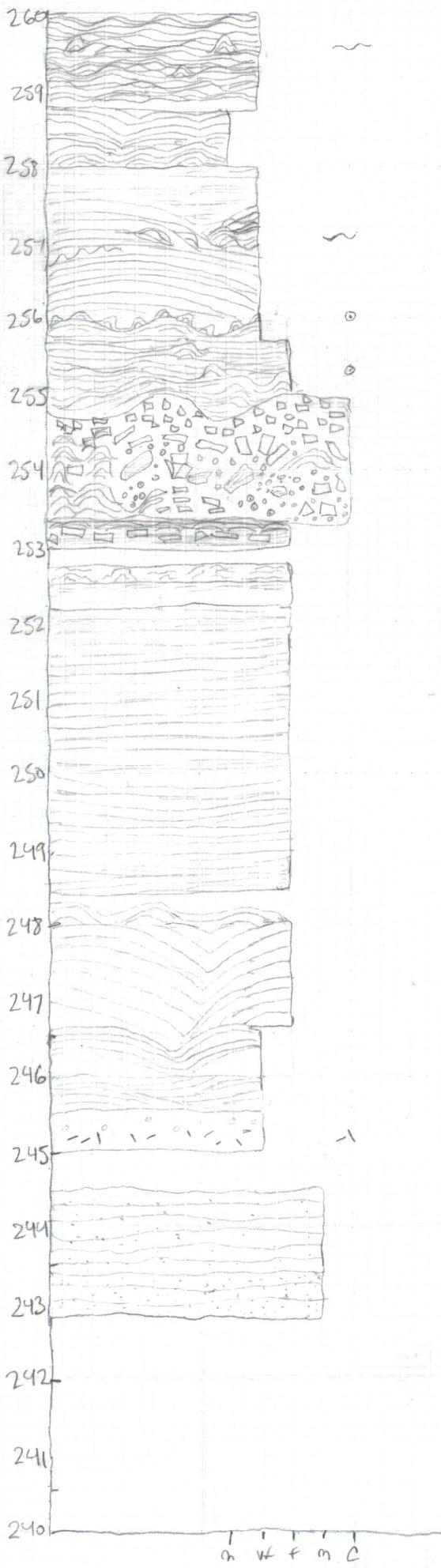


S/c/o 223

Pink vs. greenstone w/ irregular
silicified laminae in upper 1/3rd.

221.8

very thin bedded w/ planar coarse
laminae at base



climbing ripples sometimes
some stroms in rippled fine-grainstone.
some thin beds within

V. thickly bedded med. laminated
stroms in rippled fine-grainstone.
planar laminated fine-grainstone
climbing wave ripples

large domal stroms

varies laterally from med. to small stroms
some fine ooids
very fine to fine grained alternating laminae

gets finer clasts at top?

looks to be insitu. More or less
lateral. Some what variable in
height and intensity.

breccia w/ ooids in matrix.

stroms nucleating from top
pink bed w/ med. laminated planar stratif.

precipitation varies laterally (photos).

silicified at top more irreg. laminated
yellow bed massive up some small

at base w/ hints of
coarse laminae at top

ooid
grainstones poorly exposed

X-bedded. Hints of coarse laminae
in fine grainstone - looks
more like X-strat than stroms
but mostly planar.

visible grains
silicified; yellow weathering fine granular
smaller stroms.

very large more steeply dipping
med. laminae stroms (2m tall by
3m wide)

very low connected stroms.

thick bedding w/ tops white
coarse laminae looks like x-bedding

pink very fine grainstone/mudstone with
large (60) 144/26 dm thick laths.

waypoint 173

Prominent
sandstone bed - likely Sophie's
marker bed of Upper Shallow
You can see it for long distances

thin parting surfaces

Med. grains of rounded partc
in fine sand matrix



280.0

279.0

278.0

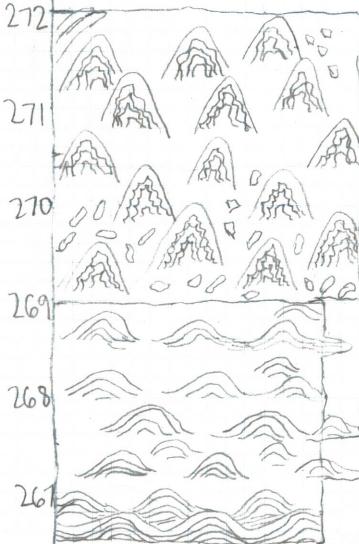
277.0

276.0

275.0

274

273



271.5

S 270.0

269.0

268
268.0 (Sample)

264.5

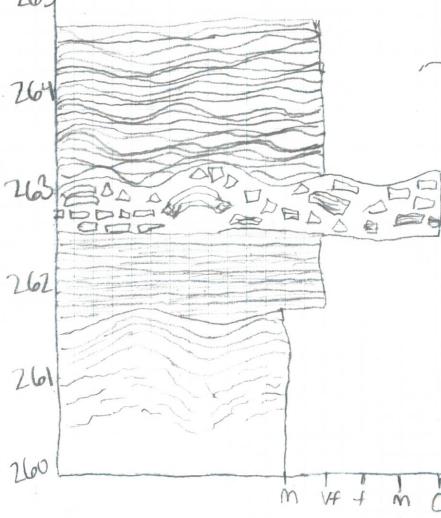
263.3

262.1

261.1

260.6

Samples



grey is more interconnected
grey in yellow f. grainstone matrix
directly
not as conical after

coarsely
laminated bed on lapping
stroms - fine grainstone
More yellow fill w/ grey spheres
with height

the grey spheres could be called
"clasted" but I think they are to
big and regular to be a thrombolite
? spherulites? diagenesis

isopachous stroms w/ f. grainstone
or precip?

breccia fill in between
w/ stroms forming low domes
breccia may have some isopac. in fill?

Wpt 177

axial planes weathering out
slightly larger towards top of hor
are composed
the conophyton laminae of small
first small conophyton joined spheres
with breccia fill (fine grainstone
matrix - visible grains)
w/ micrite clasts

small conophytons

v. fine grainstone to fine grainstone
look to rim base of conophyton
bioherm

isopachous med. laminated stroms
→ these are basically squat domes
at similar diameter to conophytons
above.

some cover but this interval
was difficult to sight b/c the dip
shallowed dramatically
ripples including climbing

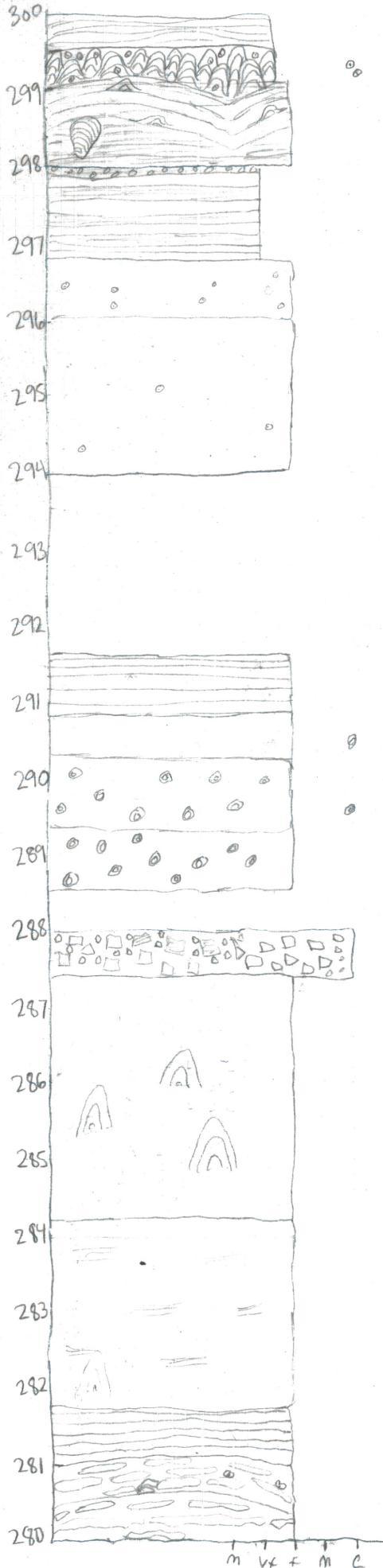
Wpt 176
S 90 / 19 5-77/20

thin bedded; v.f. grainstone w/
ripples

in-situ breccia w/ some stroms apparent
bedding slightly offset (one place)
more disrupted
thin bedded; planar med. laminae
with diff. grain sizes (m to v to f)
in laminae

regularly laminated and partially dolomitized
at top - micrite massive mud at base

Dunham



S 300
299.5 (+.5.)
299.2
298.5

tiny ooids
(s) dippings S
90/14
Wpt. 179

pink bed; thin bedded
base bumpy med. laminae large
domal stroms

296.2 (+.5.)

loose quartz; v. thickly bedded
Vf grainstone some
coated quartz grains? hollow or not

295.1

10% v.f. quartz sand
fine grained; thickly bedded but
of coarse laminae;

294.

possibly small coated
thinly bedded grains
weathering yellow

291.4

fine grainstone

290.2

wind polished

289.8

coated irregular grains
possibly oncrolite (med.) within
thick bedded fine grains of matrix

288.0

breccia at very top

287.2

waypoint 178 at good
example

286.5

or possible precipitated
botrytis?? more conophyton

Skt 285.7

it is very hard to see through
wind erosion but this
is a best guess.

284.5

? laminated? very hard to tell
but if you break it off it is
massive f. grainstone

weathering lumpy

283.5

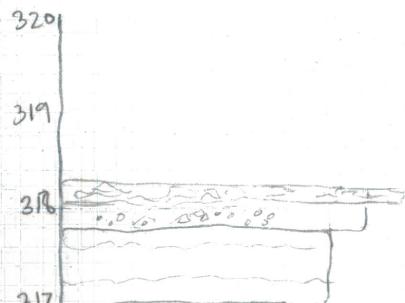
coarse laminae
thinly bedded; bumpy; fine sand grains
some small stroms
still some small grey spheres
grey w/ yellow f. matrix is
now more bedded

282.

281.2

Samples

Dunham



317.4

Westwing pink to orange.
v.fine grained
parting planes

S

314

313

312

311

310

309

308

307

306

305

304

303

302

301

300

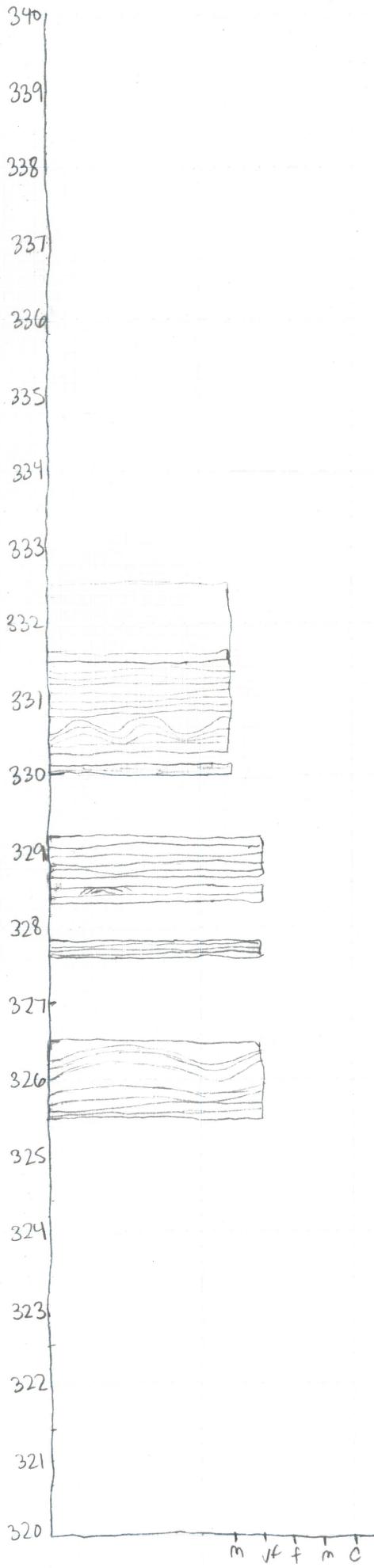
m v f m c

Samples S

Dunham

399-318 we measure in wl

o 90/15 even though
these beds appear to be
coming in with a strike
more like 50-70
we may have over estimated
meterage



331.4

330.5

329.1

327.8

326.4

Samples

Dunham

Wpt 181 Stopping section

the bedding appears to wave
some - there are more beds on
tops of this - vf. grainstones
the lower bed has large dolom.
stroms on top. Stopping for now
to come at this on my individ. days.

pink

v. thinly bedded; med. laminated
(S) 56/14

small stroms near base
red marlite; finely laminated

(DO)

185/10 wpt 180
thin bedded; vf. grainstone
v. thinly bedded; pink wavy
coarse laminae

pink; stromatolitic low dolom.
stroms; thinly bedded
med. laminated vf. grainstone

Sighting across road

→ beds on other side
seem shallower - most certainly
off