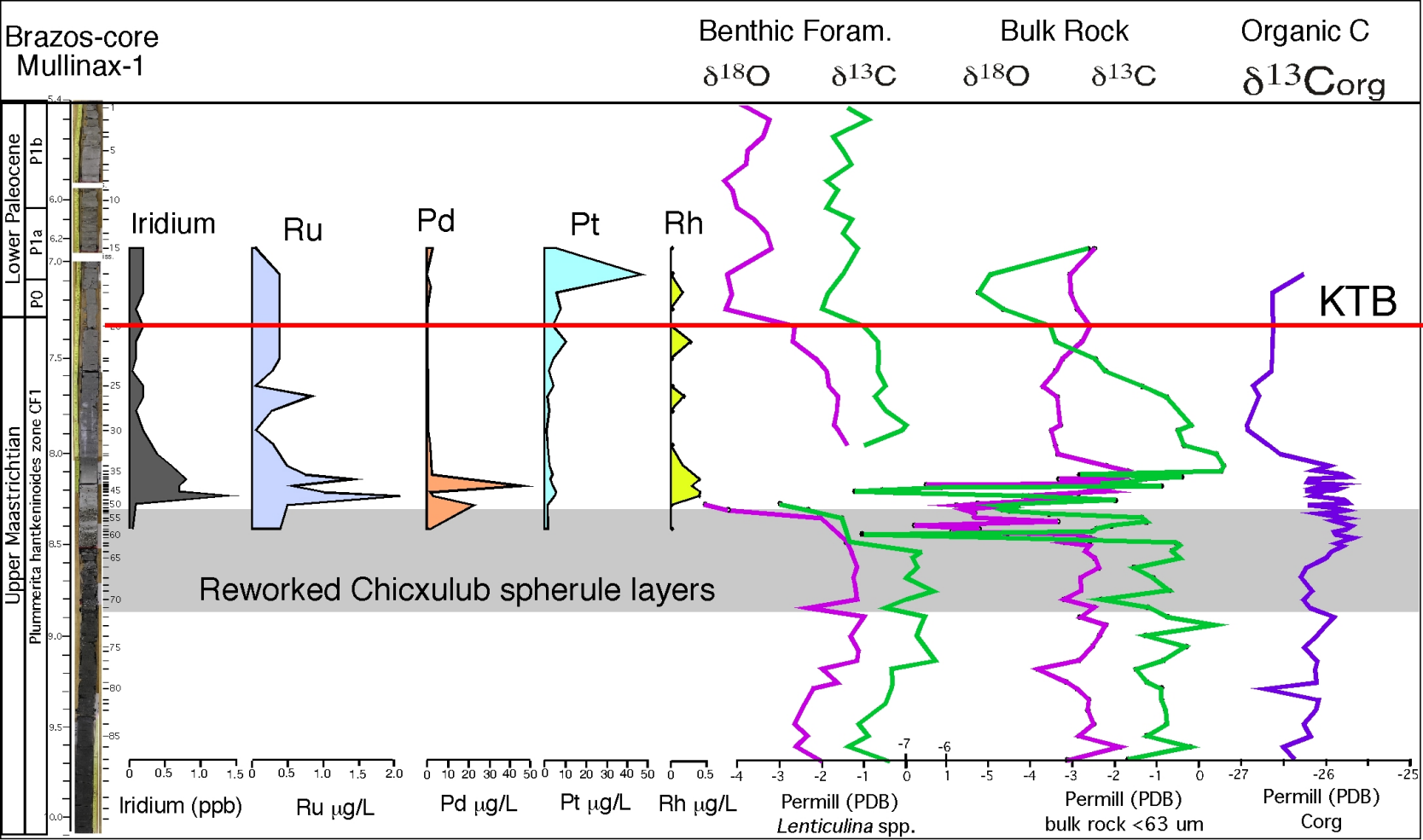
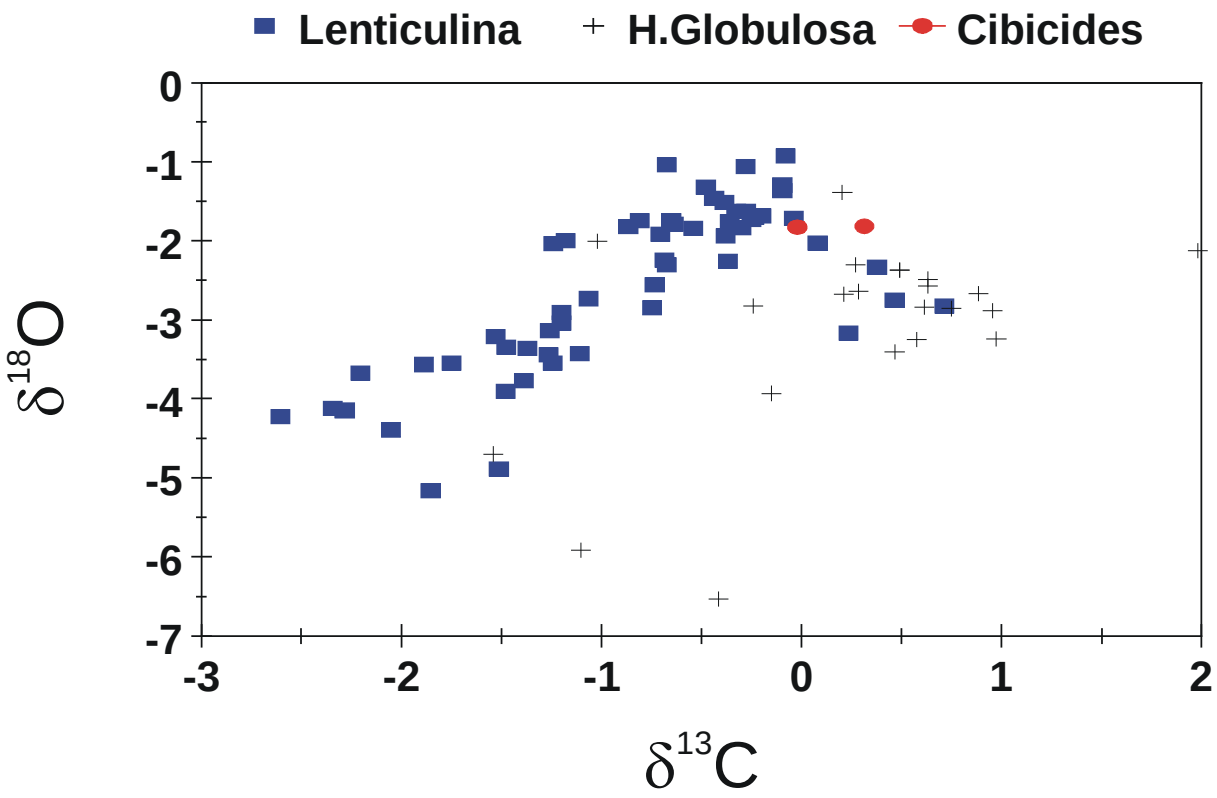
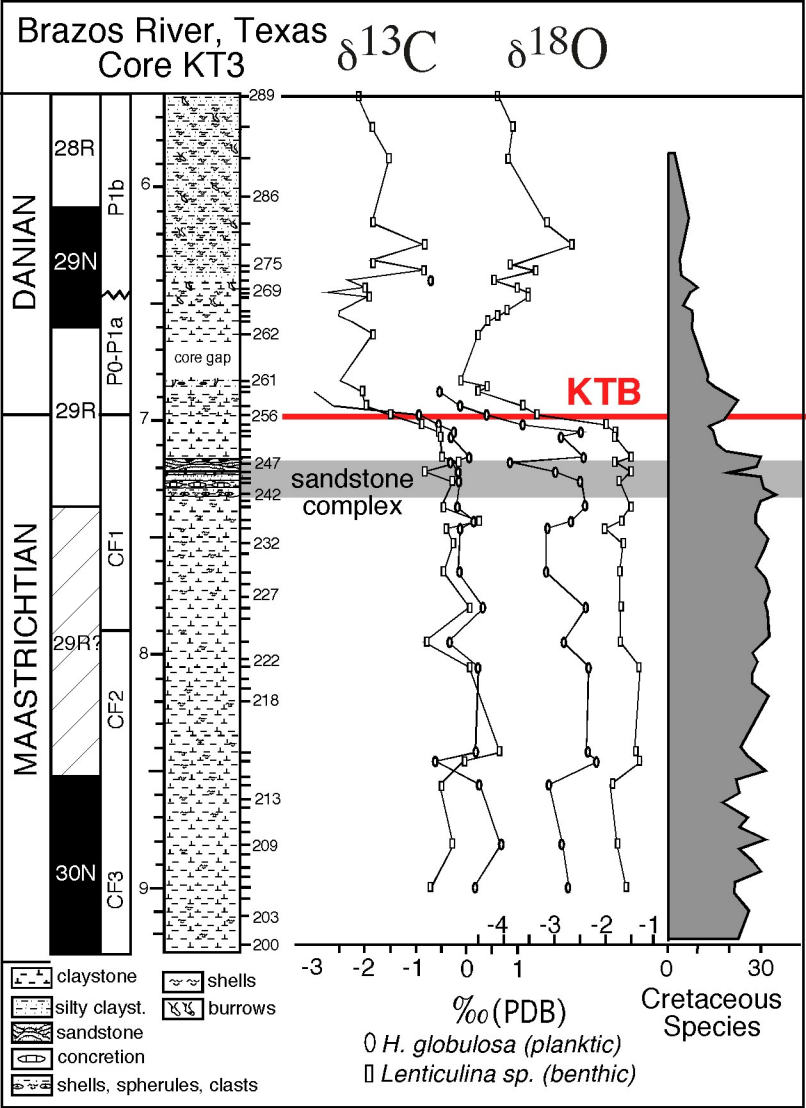
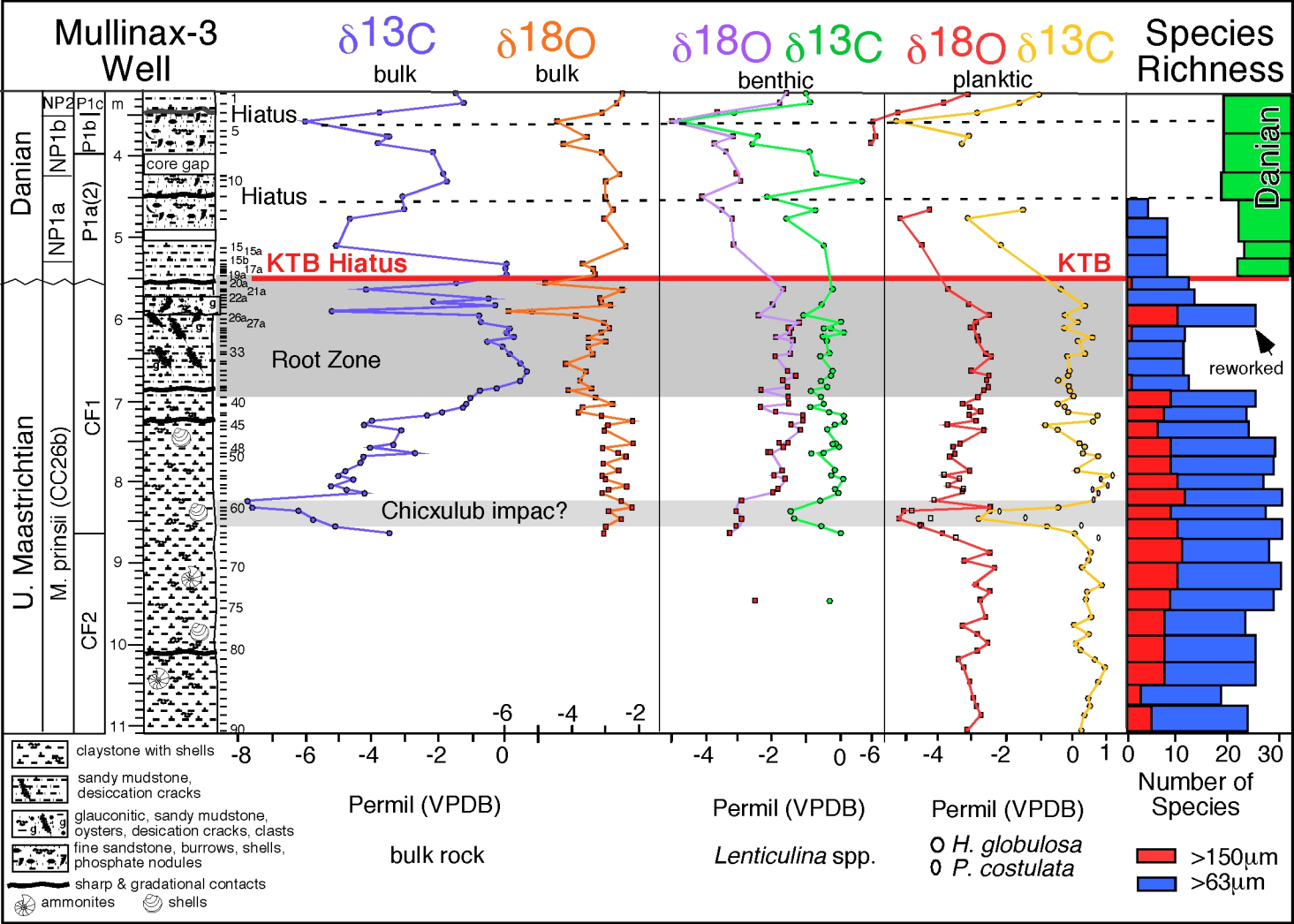
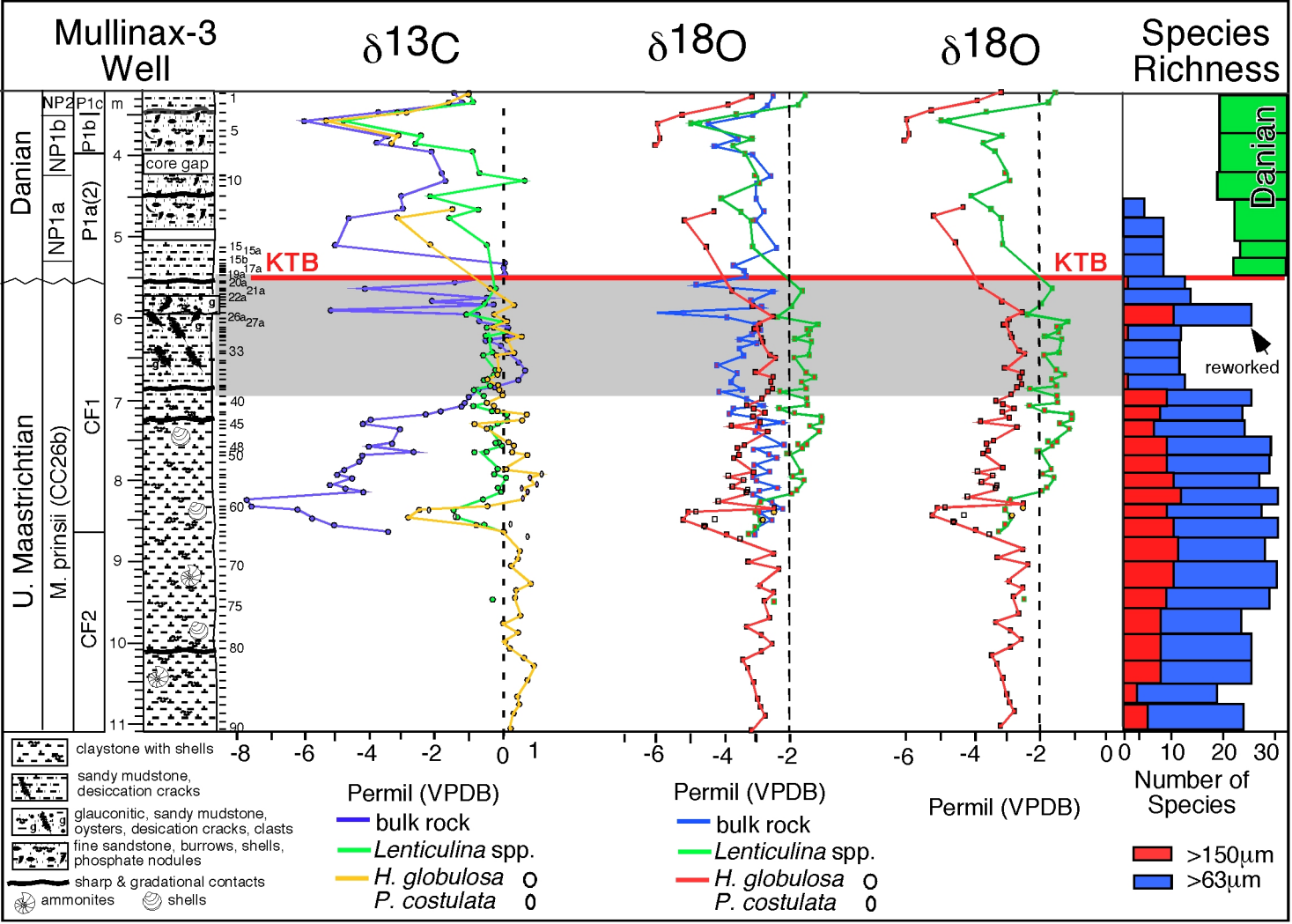

Brazos-core
Mullinax-1
Benthic Foram.
Bulk Rock
Organic C
δ18O
δ13C
δ18O
δ13C
δ13Corg
Lower Paleocene
P1b
P1a
P0
Upper Maastrichtian
Plummerita hantkeninoides zone CF1
Iridium
Ru
Pd
Pt
Rh
KTB
Reworked Chicxulub spherule layers
Iridium (ppb)
Ru μg/L
Pd μg/L
Pt μg/L
Rh μg/L
Permill (PDB)
Lenticulina spp.
Permill (PDB)
bulk rock <63 um
Permill (PDB)
Corg


Lenticulina
H.Globulosa
Cibicides
0
-1
-2
-3
-4
-5
-6
-7
-3
-2
-1
0
1
2
δ18O
δ13C


Brazos River, Texas
Core KT3
δ13C
δ18O
DANIAN
MAASTRICHTIAN
28R
29N
29R
29R?
30N
P1b
P0-P1a
CF1
CF2
CF3
core gap
KTB
sandstone complex
289
286
275
269
262
261
256
247
242
232
227
222
218
213
209
203
200
6
7
8
9
-3 -2 -1 0 1
-4 -3 -2 -1
‰ (PDB)
0 30
Cretaceous Species
H. globulosa (planktic)
Lenticulina sp. (benthic)
claystone
silty clayst.
sandstone
concretion
shells, spherules, clasts
shells
burrows


Mullinax-3 Well
δ13C bulk
δ18O bulk
δ18O δ13C benthic
δ18O δ13C planktic
Species Richness
Danian
U. Maastrichtian
NP2
NP1b
NP1a
P1c
P1b
P1a(2)
M. prinsii (CC26b)
CF1
CF2
m
core gap
Hiatus
Hiatus
KTB Hiatus
KTB
Root Zone
Chicxulub impac?
reworked
Danian
-6 -4 -2
-8 -6 -4 -2 0
-4 -2 0 -6
-4 -2 0 1
0 10 20 30
Permil (VPDB)
bulk rock
Permil (VPDB)
Lenticulina spp.
Permil (VPDB)
H. globulosa
P. costulata
Number of Species
>150µm
>63µm
claystone with shells
sandy mudstone, desiccation cracks
glauconitic, sandy mudstone, oysters, desication cracks, clasts
fine sandstone, burrows, shells, phosphate nodules
sharp & gradational contacts
ammonites
shells


Mullinax-3 Well
δ13C
δ18O
δ18O
Species Richness
Danian
U. Maastrichtian
NP2
NP1b
NP1a
P1c
P1b
P1a(2)
M. prinsii (CC26b)
CF1
CF2
m
core gap
KTB
KTB
reworked
Danian
claystone with shells
sandy mudstone, desiccation cracks
glauconitic, sandy mudstone, oysters, desication cracks, clasts
fine sandstone, burrows, shells, phosphate nodules
sharp & gradational contacts
ammonites
shells
Permil (VPDB)
bulk rock
Lenticulina spp.
H. globulosa
P. costulata
Permil (VPDB)
bulk rock
Lenticulina spp.
H. globulosa
P. costulata
Permil (VPDB)
Number of Species
>150µm
>63µm