

April 4, 1954  
Shreveport  
answered April 6, 1954

Judy May

(1)

Dear Henry:

On return from an Eagle Ford investigation

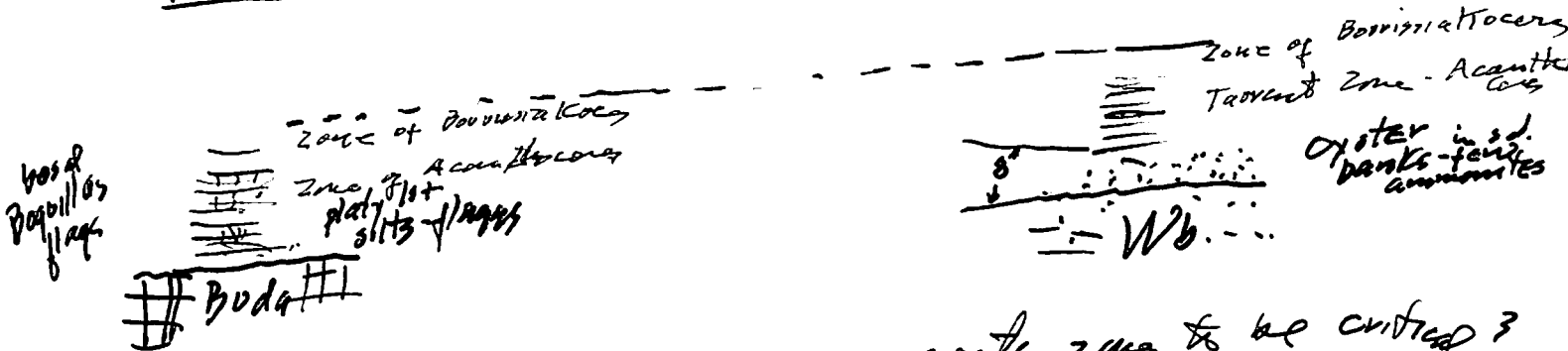
I found your letter - you should not be surprised -  
I write to all my friends when I get a chance.  
and in particular when I know that these  
friends know more than I do! Also it's a good  
way to be brighter + brighter - swabbing your academic friends  
of all their secrets! So will send you this note - have  
been working up plane table sections of the Big  
Bend Tertiary - so now have an excuse to sit him

About the Claiborne oysters - why did you think  
of this particular problem? It's the one I have been  
thinking about for the Eagle Ford from the Dallas  
area westward to the Big Bend. The situation  
is in reverse - Dallas + northward "oysters" south  
+ westward "No oysters" to speak of in the basal  
Eagle Ford.

Here roughly is the situation

Far-West

Dallas + south  
Dallas + north



Do you believe the ammonite zone to be critical?

(2) My personal interpretation is that the oyster banks  
 in and at { Dorothy  
 Webb miller  
 Venus miller } are sub of the basal

Eagle Ford, <sup>and not Woodbine.</sup> The "oysters" I recognize at these  
 three localities are { Ostrea solenensis  
 Ostrea carica ← \*  
 Exogyra ferox ← \*  
 Exogyra columbella

\* By Dr Stephenson - Exo ferox is a variant  
 of Ostrea solenensis - I don't believe it!

Anyhow in these three localities - above are clays + shales  
 with *Acanthoceras* - I have not seen the "Boraks" at these 3  
 localities - but too the south - yes!

*Ostrea solenensis* never really stratigraphically - never  
 seen such things in the Eagle Mts in a sandstone  
 1500 feet above the beds + overlain by clay with  
*Coelospira*. Dr's Stephenson + Reeside now note it  
 ranges up into beds of Austin age. wherever there is  
 the proper sd environment.

I have never found *Ostrea solenensis* in the Dexter  
 at Dexter - but in the Lewisville it is common.

If you believe fossils - the presence of "Boraks"  
 and *Acanthoceras* in far west Texas - so far -  
 always within 30 feet of the top of the beds.  
 - and south of Dallas "Boraks" + *Acanthoceras* are above  
 the lignitic shaly "Woodbine".  
 In west Texas there is a provincial.

③ ununiformity between the Buda + Eagle Ford - can be demonstrated in the field. On this speculation it is suspected that a minor disconformity - a short time break - exists between the E.F. + W. at Dallas at Dooty + the Webb inlier lignitic clays underlies the oyster shell banks - with a zone of congl. at Dooty - with material reworked from the underlying beds - brackish water beds below - marine oyster beds above.

The oysters "collectively" apparently liked a sandy bottom - very shallow waters - with wave action etc.

Now 5 miles from Dooty - S.W. at strawls place - its another picture. Interbedded flag - sly - and clay - its hard to pick a break. Ammonites of the Tarrant Cas at Dooty - acanthoceras + Foveosiceras) + a FEW typical Ostrea solenica + Exo calumella in the sly flag - no big sand banks at strawls place - are seen at Dooty - No oyster banks.

In far west Texas no oyster banks yet seen - the platy basal flag just above the Buda are full of small oysters - species? - but not in banks.

In far west Texas the flag of the basal Boquillas must have been laid down in marine waters with normal  $P_{40} + E_{10}$  - the silts of the basal Boquillas are reddish (films of iron oxide). I think the  $P_{40} + E_{10}$  of the waters in which the basal Eagle Ford was laid down were normal. It is my understanding that some ammonites were of boaters - other bottom inhabited but the "oysters" certainly were attached.

(4) If we could see the depositional feather edge of the "Bogus" maybe we could find oyster beds in far west Texas - but from Wadde Westward - always the "Borak" zone just above the Buda. Up on the Edwards platform an outlier of Eagle Ford was found - 50 miles + from the exposures at Wadde - still the typical Bogus with the "Boraks" in very silty clay.

I can't believe its Pt+En which control the distribution of oyster beds in the Eagle Ford - the other factors would be "bottom" "food" and "turbidity" (related to wind + wave action in part) - rate of "sedimentation" + kind of sediments + depth of bottom and maybe direction of currents - related to wind fetch. The underscored are the factors which I think might have some consideration. In the Eagle Ford of Dallas seem to rule out brackish water (with  $P_4$  below 7000)

Your reports of the Claiborne are beyond me - still knowing that present day oyster of the Gulf Coast inhabit bays + offshore areas - probably can accommodate themselves to varying salinities + temperatures + turbidities. Just as a guess - its the rate of sedimentation - but Ovisa sake! - combined with depth of bottom.

I think there exists a disconformity at the base of the Eagle Ford - to be followed at the surface + in the subsurface westward to far west Texas - from Austin. Northward from Austin to Dallas + northward Yes - tho' I do not put it where Dr. Stephen

(5) place the break - the "alunite" zone he uses - I can't see at all as a marker for evidence of a disconformity. I suspect that northward from Dallas what many geologists recognize as "Woodbine" in reality is an Eagleford facies

(facies = unlike laterally equivalent parts of a strat. unit)

The "oyster bands" in sd at the south end of I have Dallas - with the same grouping as at Dooty - I can visualize as local Eagleford oyster bands - to which interpretation no one agrees. Oysters apparently are where you find them - and only can oyster expert (such as one of my friends) would I believe! for a final analysis. The new dam will cover all of the present exposures with many feet of water. Better take a look at them.

We'll must get to my drafty table hope all goes well - saw Dan Ferry in Dallas - had a long talk with him - also visited the Maguire Lab - pretty fine.

Will be seeing you  
soon  
Roy

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