

FLA-JEF-07-1

- 12-40 | lt tan, micro, hard, fairly tight, foss, nodular ls  
 40-70 | do
- 70-100 | wht tan nodular, micro, ind, porous, chly ls matrix w/ abund micro foss. Almost a microquartz  
 100-30 | do this is a microquartz
- 130-50 | Mbrng, vt-micro, hard, dense, fairly tight dol w/ widely scatter small vugs  
 150-252! | N.S.
- 252-80 | tan, micro, hard, tight, dense dol
- 80-10 | buff, micro, ind, porous, chly ls matrix w/ abund micro foss & major amt of repl. by wh  
 soft Anh. Some oil stain. This is microquartz matrix dol  
 1010-40 | do
- 1040-70 | do some sparry calcite repl. also
- 1010-00 | do but less anh than above
- 1100-30 | buff-off wh, micro, ind, porous ls matrix w/ 80% v-small fossils (microquartz) w/  
 scatter, sparry calcite repl. In oil stain
- 1130-60 | do
- 1160-90 | do
- 1190-20 | do no fine ch't chips
- 1220-50 | do no ch't
- 1250-80 | do some repl. by wh, micro, soft Anh. Good oil stain
- 1280-10 | Gray-tan, ind, porous ch matrix w/ abund micro foss. Some repl. by brng fossils dol  
 & wh, micro, soft Anh.

- 1370-00 | Is an iron w/ iron dross → a brn, v. finely, hard, fairly dense ddt
- 1400-30 | do Tr, w/ C-micros. soft ash
- 1430-60 | do but ddt is v. porous & no ash
- 1460-90 | do Is, dk-brn ch. w/ many blk inclusions
- 1490-20 | Cray-tan: brn, mng, ind, porous, v. ch. Is matrix of v. abundant micro-foss. Some ddt is  
A brn f-M finely, hard, porous ddt. Is, dk-brn ch. w/ many blk inclusions
- 1520-50 | do but ch. is more siliceous
- 1550-80 | do but ch. about 10% Fully dolic. Is
- 1580-10 | do
- 1610-40 | do
- 1640-70 | Cray-tan, mng, ind, porous, v. ch. Is, highly ddt. Rel. is cray-tan, M. matrix  
Tr. ch. as above
- 1670-00 | do
- 1700-20 | do 5% ch.
- 1720-30 | M.S.
- 1730-60 | do Some oil STAIN
- 1760-90 | do
- 1790-20 | do
- 1820-50 | do
- 1850-80 | Cray, porous, ind, foss, dolic ch. 5% dk-brn ch. chips & blk inclusions. Also  
ch. has replaced conc of ch.
- 1880-10 | do Tr, glauc

- 2000-30 | do only slightly argillaceous
- 2030-60 | do
- 2060-90 | do but ch is tan-buff-brn & is dolie
- 2090-20 | do ch is 15%
- 2120-50 | do
- 2150-80 | do
- 2180-10 | do
- 2210-40 | buff, <sup>lt grey</sup> ind, porous, argill chyls <sup>and</sup> ss M-vd brn ch + chips
- 2240-70 | do Tr. glauc & microfoss
- 2270-00 | do
- 2300-30 | do no glauc
- 2330-60 | do
- 2360-90 | do
- 2390-20 | do
- 2420-50 | lt grey, mic, ind, porous, argill, chyl, slightly foss ls Tr. lt-dk grey & lt-dk brn ch + chips
- 2450-80 | Crny, ind, porous, slightly dolie, slightly glauc pel ch
- 2480-10 | do ch is 15%
- 2510-40 | do
- 2540-70 | of-f wh- crny, soft, porous ch
- 2570-00 | do foss. Tr. pyr & E. prisms
- 2600-30 | wh-lt grey, soft, porous, foss ch Tr. pyr, E. prisms & grey-brn ch
- 2630-60 | do ch is 10%

- 2750-80 | ch + Tr. I. prisms + 5% ch + as above
- 2780-10 | do but 10% ch, Tr. pyr. + 20% I. prisms
- 2810-40 | wh. Itary, soft, porous, loss ch w/ 30% I. prisms Tr. pyr + brown-gry ch + chips
- 2840-70 | ch w/ 10% I. prisms, 5% ch + Tr. pyr
- 2870-00 | Itary, porous, wh. porous, ch, dol. loss to w/ abund I. prisms. Tr. pyr
- 2900-30 | Cray, soft, porous, highly loss ch w/ abund I. prisms. Cr. pyr Tr. brown-gry ch
- 2930-60 | do
- 2960-90 | do
- 2990-20 | do
- 3020-50 | do
- 3050-80 | do
- 3080-10 | do
- 3110-40 | do
- 3140-70 | do few I. prisms
- 3170-00 | ch w/ Tr. pyr, I. prisms + as above Calc sh, brown pyr, loss
- 3200-30 | tan, soft, porous, highly loss, dol. ch w/ Tr. pyr + ch. Abund I. prisms
- 3230-60 | do dol is tan, uferals
- 3260-90 | Itary, soft, porous, highly loss, gray ch w/ abund. I. prisms Tr. pyr
- 3290-20 | do
- 3320-50 | ch as above + Tr. pyr
- 3350-80 | do
- 3380-10 | do

3500-30 | do + Tr. ~~optimal?~~ sid  
 3530-60 | do no ~~optimal~~ sid  
 3560-90 | ch as above + lt buff, ufgr, ind, paros, ny, arg, calc ss Tr. pyr  
 3590-20 | do  
 3620-50 | buff, ufgr, arg, calc, ind, mic, paros ss Tr. pyr & 1 piece diabase  
 3650-80 | do no diabase  
 3680-10 | sd as above  
 3710-40 | do Tr. pyr  
 3740-70 | do  
 3770-00 | lt gr, ufgr, vws, SR & lz sd Tr. pyr  
 3800-30 | sd w/ Tr. siderite, pyr ~~calc~~  
 3830-60 | lt gr, ufgr, friable, paros, glaucophane <sup>calc</sup> gl ss Tr. siderite  
 3860-90 | lt gr, f-M gr, PS, SR & lz sd Tr. pyr, siderite  
 3890-20 | do  
 3920-50 | clean-orange-wh, Cgr, fws, SR & lz sd Yel-wh shales  
 3950-80 | do  
 3980-10 | do  
 4010-40 | clean-wh-orange-yel, Cgr, ws, SR & lz sd  
 4040-70 | do C-NG grn  
 4070-00 | do 1 piece of rose & lz ~~Tr. of fsp~~  
 4100-30 | Clean-orange-yel, Cgr, ws, SR & lz sd Tr. sid, pyr ~~of fsp~~ fsp  
 4130-60 | Clean-orange-yel-wh, Pgr, fws, SA & lz sd Tr. sid, pyr ~~of fsp~~ fsp 1 piece of rose

4220-50 | sd as above + a few pieces of multicol gtz. Tr. pyr, rose gtz, musc.

4250-80 | clear-yel-orange, Mqny, fws, SR gtz sd. Tr. fsp, sid; wh-pink-grny, many hard, dense ls nodules, musc

4280-10 | do

4310-40 | do

4340-70 | do but sd is PS + lt grny, ind, porous calc siltst

4370-00 | do no ls nodules

4400-30 | clear-yel-orange, Mqny, WS, SR gtz sd. Tr. sid, pyr, fsp, musc | piece rose gtz

4430-60 | wh-clear, Mqny, WS, SR gtz sd. Tr. fsp & | piece rose gtz, musc

4460-90 | do + Tr. pyr & multicol, many hard, dense ls nodules.

4490-20 | wh-yel, Mqny, WS, SR gtz sd. Tr. pyr, fsp, ls nodules, musc | piece rose gtz

4520-50 | do no rose gtz. Tr. sid

4550-80 | clear-orange-yel, fgrny, WS, SA gtz sd. Tr. fsp, musc

4580-10 | sd + abund wh-red mottled, many hard, dense ls nodules. Tr. fsp, pyr

4610-40 | do no pyr but Tr. musc

4640-70 | wh-yel-orange, fgrny, WS, SA gtz sd. Tr. ls nodules, fsp, musc

4670-00 | do no musc. Sid is PS

4700-30 | lt grny, hard, dense, many calc siltst + clear-yel-orange, fgrny, PS, SA gtz sd  
Tr. sid & wh mottled, many hard, dense ls nodules. Tr. pyr

4730-60 | siltst + clear-yel, Mqny, WS, SA gtz sd. Tr. fsp, rose gtz

4760-90 | do

4790-20 | siltst + wh-clear, Mqny, fws, SR gtz sd. Tr. fsp, sid nodules

1910-40 | Multicool. VC-Mgmt, PS, WR-SR & 1/3 sd Tr. Multicol, ~~multicol~~ dense 1/2 modules

& Itqn mcrA, - Tr. rock? & state

1940-70 | clear-why Mgmt, WS, SR & 1/3 sd Tr. multicol 1/2 modules & state

1970-00 | do Some connect ed here. Also Tr. rose & 1/3 & 1/2 sd

Section 1-2S-3E  
Jefferson County, Florida  
Elev: 51' D.F.  
Date: August 1949  
By: E. R. Applin

- 2540-50 Lt grnsh gy sl mica cal clay w/abdt forams, species dominated by Globorotalia velascoensis & Globigerina triliculinoidea. Age - Tamesi. Paleocene.
- 2550-60 Like the preceding.
- 2560-70 Top U. Cret. Taylor. Wh chky ls w/some cavings of mat & many forams from above. Inoc frags & frags of other bivalves fairly common. Microfauna mainly caving from overlying Tamesi. Age Upper Cret.
- 2570-80 Materials as above. Inoc frags common. Some specimens of Cibicides harperi & Stensioina americana. Finely broken-calcitic mat. composed mainly of inoc frags, prisms and foram frags abdt in chk.
- 2580-2640 No change.
- 2640-50 Mat & fauna as above, some specimens of Planulina taylorensis noted.
- 2650-60 Chk w/many inoc frags, some cavings of marl from the Tamesi & many forams from that formation, a few frags of other mat from higher depth. Some Taylor forams.
- 2660-2700 No change.
- 2700-10 Washed spls mod small, contains some frags of chk as above. Inoc frags & abdt cavings from Tamesi and some cavings from higher depths. Globotruncana fairly common. Chk prob softer than above & washing out leaving mainly cavings of more resistant materials & some forams from drlg depth mixed w/Tamesi species.
- 2720-30 Materials as above, many forams, common species present, several species of Globotruncana. Planulina texana, several species of Robulus and a few specimens of Globorotalia umbilicata & Gumbelina sp. Forams caving from Tamesi still common. (See #13 on slide for Cret forms).
- 2730-60 No change.
- 2760-70 Like the above w/a few frags of soft gy cal sh which prob represents mat being drld.
- 2770-80 Sple again mod large & composed mainly of wh chk w/some cavings of Tamesi & other formations from high depths. Some inoc frags & forams as listed from 2720-30'.
- 2780-90 Sple mainly wh chk w/some frags of the soft gy cal sh & cavings. Inoc frags common. No marked change in microfauna.
- 2790-2840 No change.
- 2840-50 Washed sple again mod small composed of some frags of wh chk & many frags of the gy grn cly sh of the

Globotruncana sp.  
Gumbelina  
Robulus  
Planulina

2860-90  
2890-2900

Some cavings as above. Inoc frags present, but less abdt. Some thin vein-like strks of pyrite in the sh. Common microfauna, a small Anomalina, Globigerina, Gumbelina reussi, Globotruncana (sev species).

Like the preceding. (2880 on Schl.)  
Approx top Austin. / Mod small washed sple of soft gy sh as above & lt gy marly sh. Inoc frags common & some frags of other bivalves, some pyrite nod. Specimens of Pseudogaudryinella capitosa common & many specimens of Globigerina, Gumbelina reussi, Anomalina sp. (small form) Globotruncana & a few specimens of Globorotalia umbilicata. (See #14 on slide).

2900-10

Like the preceding, but few specimens of Pseudo-gaudryinella, some specimens of Kyphopyxa present. Mod small washed sple of gy marly sh, numerous Inoc frags, some pyrite nod & many forams. Globigerina, Gumbelina reussi, Globotruncana & a small species of Anomalina the dominant forms; some specimens of Globorotalia umbilicata. Several Ostracods including several specimens of Cythere semiplicata (common in U. Austin).

2920-30

Cut of lt gy marl, Inoc frags & forams. Fauna as above. Specimens of Globorotalia umbilicata fairly common.

2930-40

Mat & fauna as above, also fairly numerous frags of a crm colored ls composed mainly of fragmental calcitic mat (Inoc prisms & frags & calcite mold of macrofos & microfoss frags). Inoc frags abdt.

2940-50

Like the preceding.

2950-60

Soft gy marly sh. Many Inoc frags, many forams, fauna composed mainly of Globotruncana marginata, Globigerina sp, Gumbelina reussi and a small Anomalina sp. Some spec Globorotalia umbilicata. Some cavings. Several species of Ostracods common in Austin also present.

2960-70

Like the preceding.

2970-90

No change.

2990-3000

Like the above w/the addition of <sup>Oligostigina</sup> some frags of a wh chky ls w/abdt minute globular bodies as characteristic of the ector tongue of the Austin chk. (See #15 on slide).

3000-10

Sple composed mainly of soft dk gy sh, numerous Inoc frags, forams & some Ostracods as listed (2950-60'). A few frags of chky ls-of several types noted in preceding sps; some cavings from Tamesi.

3010-20

Like the preceding.

3020-3170

No change.

3170-80

Mod small washed sple of gy marl sh as above, some Inoc frags & numerous forams. Small Globigerina - Gumbelina strongly dominant & specimens of Globorotalia umbilicata common. Some species of Globotruncana marginata, a few specimens of Planulina cf. austinana. (See #16 on slide)

3180-90

Like the preceding.

B. SPANNOVITIS  
K. CAMPANIFORMIS  
P. CAMPANIFORMIS  
CYTHERA  
BAIRDI  
GLOBOROTALIA

a thin zone  
of chky ls  
containing some  
fragments of  
Oligostigina in 2990.

Oligostigina  
2.50

P. CAMPANIFORMIS  
K. CAMPANIFORMIS  
BAIRDI  
CYTHERA

3210-20  
3220-30  
3230-40

Like the preceding w/some frags of chk (prob caving).  
Like the preceding.  
Cut of gy marly sh & some frags of brnish-gy lt "speck" marly sh, some Inoc frags & forams as above. A few frags of sev types of chk (prob caving).

3240-90  
3290-3300

No change.  
Mod small washed sple, composed largely of flaky frags of a dk brnish gy sh which is sl lt spotted & contains some shreds of carb mat & some small frags of fish remains. Forams common in sple, assemblage same as in preceding spls.

3300-10

Mod small washed sple of soft gy marly sh & some frags of the dk brnish gy sh as in preceding sple. No change in fauna.

3310-20  
3320-30

Like the preceding.  
Materials as above. Fauna also closely similar with Gumbelina & small Globigerinas strongly dominating. Some specimens of Neobulimina? sp & an occasional specimen of Valvulineria infrequens. Fauna characteristic of L. Austin Near base (See #17 on slide).

V. M. Penna OK

3330-40  
3340-50

Like the preceding.  
As above w/Neobulimina? sp very common in fauna, some Globotruncana present & some specimens of several species of small Anomalinas. Gumbelina & small Globigerinas abdt as above.

3350-60  
3360-80  
3380-90

Like the preceding.  
No change.  
Mod small washed sple of gy sh & many frags of gy, marly, lt speck sh. Abdt forams. Globigerina and Gumbelina abdt as above but Glob mod large & many specimens of Globotruncana marginata, Neobulimina? sp rare. Age basal Austin.

3390-3410  
3410-20

Same. H. Austin Eagle Ford.  
Top of E.F. 3400<sup>+</sup> per Schlumberger. Cut - a mixture of sh as above & many frags of flaky gy grn sh, some frags of fine grnd cal lt grnish gy ss somewhat mica & sl glauc.

3420-25

Core #1. Top: Flaky gy grn sh w/irreg partings of lt gy very fine grnd mica, argil & sl glauc ss. Forams abdt - composed of Globigerina sp. Gumbelina moremani & reussi, Hastigerinella moremani, Gyroldina depressa? var., some specimens of Planulina eaglefordensis (for type lith see #18 on slide) & Valvulineria infrequens.  
Mid: Sd strkd gy grn sh as above. No change in fauna.  
Bot: Dk gy-grn flaky sh. Fauna abdt, species same as listed for top of core w/Valvulineria infrequens very common & an increase in specimens of Planulina eaglefordensis. A few small specimens of Globotruncana also present, a few Ostracods, some frags of fish bones.  
A few thin sd lenses in this sh (see slide on personal

P. Planulina eaglefordensis  
Anomalinas  
Globotruncana  
Valvulineria  
Hastigerinella  
Gyroldina  
Gumbelina  
Neobulimina  
Ostracods  
Fish bones

3435-45

(personal  
cut)

3445-51

*APK*  
*Ammobaculites*  
*etc.*

3450-60

3460-70

3470-80

3480-90

3490-3500

3500-10

3510-20

3520-30

3530-40

finely sdy clay sh. Some frags of fos bivalves present. Mat is finely & sparsely glauc, bright blue-grn glauc, mica is colorless.

Bot: Grn sh as above, irreg & highly strkd & splotted w/lt gy argil mica siltstone.

Core 3. Top: Like the bot of preceding core. Washed sple shows an abundance of finely granular irreg shaped brn siderite? nods. A characteristic of some phases of E. Ford.

Bot: Like the top.

Core 4. Mod hd lt gy very finely & highly sdy & somewhat mica ls w/many frags of fos bivalves, some frags of fish bones, small Echinoid spines, a few Ostracods & numerous specimens of Valvulineria infrequens. (See slide from personal cut). The ls is a thin lenses in a soft lt gy very fine grnd, argil & mica ss which has abdt frags of fos bivalves & some fish bone mat.

Mid: Lt grn sh gy, very finely & highly sdy & mica clay w/some grn sh strks. Fish bone frags & small frags of carb mat present & some pyrite molds of small Gastropods. A few Ostracods & numerous specimens of arenaceous species of forams. Ammobaculites cf. fragmentarius, Ammobaculites sp. (See slide of personal cut).

Bot: Gy grn flaky sh & thin lenses of very fine grnd lt gy mica & sl finely carb ss as above. Frags of fish bone, a number of Ostracods, Cytheridea sp & forams as in middle of core. (See slide on personal cut).

Cut of flaky frags of the E. Ford gy grn sh & abdt caving from the overlying Austin brn sh gyish & some forams representing various depths in cut & Paleocene section. Like the preceding, also a small amt of fine sd & some frags of fish bones.

Sh as above, also numerous frags of lt gy mica silt & sl carb siltstone & very fine grnd argil ss. Some frags of fos bivalves, fish bones & some forams (from various horizons). A few specimens of Planulina eaglefordensis. Some small irreg shaped, grn crystalline siderite? nods. Sple mainly sh w/about 10% very fine sd. A few shell frags (pos caving), some fish bone frags & a few siderite? nods as above. Forams comparatively rare, mainly caving from Tamesi.

Like the preceding.

No change.

Small washed sple of flaky gy-grn sh. Some irreg shaped small siderite? nods as above, a few frags of fish bones & a few forams (mainly caving from Tamesi).

Like the preceding.

Sh as above & 50% very fine lt gy ss & frags of lt gy mica & argill ss & a few frags of a crm colored, hd, finely & highly sdy ls w/some embedded shell frags

- bones, a trace of fine sd. A few forams (Non-diagnostic & caving).
- 3560-70 Mod small sple of the flaky grn sh & about 50% lt gy mica, sl & very finely glauc & somewhat finely carb siltstone & extremely fine grnd ss. Some frags of this mat hd & highly cal. A few fish bone frags & siderite? nod.
- 3570-80 Like the preceding.
- 3580-90 Mod small washed sample of gy-grn sh & a few frags of ss.
- 3590-3600 Sh as above & about 10% very fine qtz sd, some mica siderite? & a few fish bone frags. A few fish bone frags. A few arenaceous species of E. Ford forams, a few species of Planulina eaglefordensis.
- 3600-10 Sh as above & about 25% very fine sd & mica argil & cal very fine grnd lt grnish gy ss. Some fish bone frags, a few shell frags, small irreg shaped siderite? nod & a few forams (caving & non-diagnostic).
- 3610-30 Like the preceding.
- 3630-40 Pos. alternative top of Woodbine Some shale as above & about 75% mod hd, mica very fine grnd lt gy & lt brnish gy argil & cal ss. Colorless & some brn & grn mica present. Some phos fish bone mat & some carb mat present. Ss is finely glauc. Some lense of dk brn-gy flaky sh.
- 3640-50 Like the preceding.
- 3650-60 Like the above, phos mat much more abdt & ss frags more coarsely glauc & more micac brn mica common. Some thinly flaky dk gy sh present.
- 3660-70 Sple about 50% cal lt gy mica very fine grnd sd & ss as above & 50% flaky grn sh w/a few frags of flaky dk brnish gy sh & some mod large phos nod.
- 3670-80 Not at Woodbine? E.R.A. Cut of dk brnish gy, irreg highly lt "speck" sh & mod hd tan, very fine grnd cal & mica ss, frags often platy, prob indicating ss thinly lenticular w/ "speck" sh. Bot ss & sh show small frags of crushed fos mat, frags of fish mat, some small frags of carb mat & some forams. Forams free in sple apparently mixture from several depths (Some cavings of gy grnish).
- 3680-90 "Speck" sh frags, strongly predominate in washed sple. A few frags of the tan ss as in preceding and some cavings of gy grn sh present. Some phos nod & some brn frags of Inoc & many specimens of a large species of Globigerina apparently washing from the "speck" sh, also a few specimens of Planulina eaglefordensis, a few Gumbelinas.
- 3690-3710 Same.
- 3710-20 Sple mod small composed of frags of dk brnish gy "speck" sh as above & numerous frags of thinly flaky dk gy micac sh. A few frags of ss as at 3670-80' etc., & some cavings of gy grn sh. Some phos fish bone frags, some Globigerina sp & other forams-apparently still washing from the

7, 8, 19, 21  
3740-50

Handy MONTANA  
Lenses only  
(V.I.M.)  
THIS IS C.  
cf. PROOCALYPS-  
Burr of

3750-66

3760-80

3780-90

3790-3800

3800-10

3805-10

3810-20

3820-27

3827-37

A m  
1-2-1911

& prob coming from thin partings in the sh. Some frags of fish bones. Forams similar to above & mainly caving, some specimens of Ammobac. agrestis & Reophax cf. incompia also present. Age Woodbine (L & M Atkinson). Lith as in preceding, marked increase in number of specimens & species of Woodbine forams present. Species present: Marsonella sp., Ammobaculites advenus, Ammobaculites agrestis, Ammobaculites junceus, Reophax incompia, Reophax sp., Saccamina? sp., Globorotalia marginaculata, Globigerina (?may be caving) & a few Ostracods including Cythereis cf. roanokensis (See #21 & 22 on slide).

Like the preceding. Occasional small frag of carb mat in the flaky dk gy sh.

No change.

Materials as above, no Woodbine forams noted.

Small sple of sh as above & some frags of a lt gy fine grnd argil & glauc ss w/some embedded frags of phos mat. Free sd from ss about 50% of sple.

Mod large washed sple of lt gy, glauc fine to mod fine grnd qtz ss & loose sd from same & about 20% flaky frags of dk gy sh similar to that noted in preceding. Some caving. Phos nod & some frags of fish scales in ss, which is also somewhat micac.

Core #5. Top: Lt gy, sl argil, glauc & mica, very fine grnd soft ss.

Bot: Like the top, a few flaky frags of sh, prob from very thin lenses.

Core #6. Top: Soft gy, micac & glauc, very fine grnd ss w/a few very thin lenses of gy sh.

Mid: Ss as in top, a few frags of Ostrea-like fos bivalves.

Bot: Ss as in mid of this core, some shell frags, phos nod & small frags of carb mat.

Core #7. Top: Soft ss as above & very thin partings of dk gy, flaky sh. A few minute forams in sh.

Mid: Soft, lt gy, glauc & mica & sl carb very fine grnd qtz ss. A trace of the dk gy flaky sh.

Bot: Like the middle.

Core #8. Top: Dk gy flaky, sl mica & carb sh w/numerous thin partings of very fine grnd, glauc, soft lt gy ss. pyrite also common. Very minute forams noted in sh.

Mid: Dk gy flaky sh w/thin highly sdy to silty partings, micac & glauc. Some phos nod. Minute specimens of Globigerina & some other calc forams in the sh & numerous specimens of Trochammina rainwateri, Ammobaculites plummerae, Ammobaculites sp. (small, prob young forms not determined). Several Ostracods including some specimens of Cythereis cf. roanokensis. Fauna Woodbine in age. (See slide on personal cut).

3830-30 1/2' of Core #8: Lt gy, glauc & mica argil ss. Sd is fine to mod cse w/occas coarse grns. Some gy sdy mica

(Approx  
L. Cret)

*ATC  
L111*

Mid: Soft gy, mica (mainly brn mica) say, argil siltstone, some thin lenses of the olive gy, carb mudstone as in top of core. (For lith types see #24 on slide).

Bot 1": Soft lt gy, mica (mainly colorless, a little gy) argil fine to mod fine grnd roughly ang qtz ss.

Washed sple of top portion of same core: mudstone as described-washed leaves a residue of fine ang qtz sand, abdt mica flakes (colorless, brn, grnish gy), abdt frags of carb mat & pyrite nod, some irreg shaped nod of a brn translucent mineral (not determined).

3847-57

Core 10. Top: Soft, gy, argil & mica fine roughly ang qtz ss, mica colorless & gy & grnish gy.

Another sple of top 1½' of this core, soft highly argil & mica grnish gy very fine grnd, sl chloritic? ss.

Bot 1½': Mica sd similar to top but not as well sorted. sd grns roughly ang & in part dull or etched mod fine grns common.

3857-65

Core #11. Top: Lt gy, mica, argil ss. Sd grns poorly sorted, very fine to cse, roughly ang to sub-ang qtz mica, colorless & gy & grnish gy. A few pink tinted grns & a few frags of micaceous shell mat. *nacraeus*

3rd foot: Grnish gy, argil mica sd. Sd as above in character, a few grns of feldspar.

Bot: Lt grnish gy argil sd similar to preceding, but much less micac.

3865-75

Core #12. Rec. 5'. Top: Lt grnish gy, mica & highly sdy shaly clay. Sd poorly sorted, fine to cse qtz w/a few grns of feldspar. Mica colorless & gy & gy grn. Some pyrite & some chloritic? mat present. A few worn frags of shell mat & a few phos nod.

Top 3': Bluish grn, silty to very finely sdy highly mica clay sh. Lith see (#25 on slide).

Bot: Lt grnish gy, argil, highly mica, somewhat pyritic mod soft ss. Sd very fine to mod fine.

Bot 2': Gy grn, mica, highly silty clay.

3875-85

Core #13. Top: Lt grnish gy, highly argil & mica. Sd poorly sorted, very fine to mod cse.

Top 2': Dk red, sl gy mottled mica sh & lenses of gy-grn highly argil, mica sd or high sdy clay (for red lith see #26 & 27 on slide).

Mid: Dull dk red, gy grn mottled, mica & highly silty clay w/a thin strk or pebble of highly sdy yellow & wh & pink strkd cal ss (See #28 on slide).

Bot: Lt grnish gy highly mica & highly & finely sdy clay. Mainly cavings.

3880-90

3890-3900

Fine to cse qtz sd & a few grns of feldspar (at least 50% of sple cavings of sh & ss & siltstone from the U. Cret.

3900-10

Fine clear qtz sd w/some cse grns & a few frags of lt  
also a few frags of the red silty sh described

*Base  
P. 111  
S. 111*

*111  
CONY 5A005*

*UNH11-26 SS,  
UNH11-26*

- 3/2930-40 large flakes of mica (colorless). A few frags of the dull red silty sh & cavings of sh from U. Cret depths. Some pink tinted & yellow tinted qtz grns present. Mainly cse to mod cse qtz sd w/many lt pink & yellow tinted grns. Some feldspar. About 10% sh cavings.
- 3940-50 Like the preceding w/very cse (small pebble sized grns common).
- 3950-60 Almost entirely fine to very cse qtz sd w/some pink & yellow tinted grns. A few grns of feldspar.
- 3960-70 Sd as above averaging sl finer grnd & some frags of ss of same char, little cmt.
- 3970-4000 Same.
- 4000-10 Sple mod small, composed of very fine to mod fine sd (gen char as above) mica & frags of reddish, gray & yel, mica & argil ss (schl~~er~~ suggests a shaly interval about 3985-4000').
- 4010-20 Mod small sple of fine to cse sd, a few frags of mottled red sh & cavings of sh & other mat about 25%. A few sdy pink stained lime nod. s.
- 4020-30 Sple larger, fine to very cse qtz sd w/some pink & yellow tinted grns & a few grns of feldspar, a few small frags of red sh & about 10% obvious cvgs.
- 4030-40 Similar to preceding. Sd grains fine to very cse, pink & yellow tinted grns fairly common, some of these feldspar which is more abdt than in preceding spl. s.
- 4040-50 Sd as above, sl finer & w/only a small amt of feldspar.
- 4050-70 Mainly fine to very cse qtz sd, some pink & yellow tinted grns, a few grns of feldspar & a few frags of the ss showing the poorly sorted char of sd & small amt of cmt. common.
- 4070-80 Mod small sple of sd as above, a few frags of mustard colored sl silty & mica sh & about 25% cvgs.
- 4080-90 Very fine to very cse sd like preceding in char, many very small frags of red sh & about 20% cvgs.
- 4090-4100 Large sple mainly fine to very cse qtz sd, many yellow & a few pink tinted grns. A few grns of feldspar & a few blk grns (obsidian?). A few small frags of red & mustard colored sh & some large flakes of colorless mica; about 10% cavings.
- 4100-20 Like the preceding.
- 4120-30 Sd as above & a number of frags of pink, somewhat ferruginous fine to mod fine grnd argil & mica ss, some frags of red & of mustard colored sh; about 10% cvgs.
- 4130-40 Fine to mod cse qtz sd w/many yellow & some pink tinted grns. Many small frags of red sh & a few of mustard colored. A few sl pink stained lime nod. s. Some cvgs.
- 4140-50 Like the preceding. Smaller sple prob indicating some red sh breaks in sd & ss.
- 4150-60 Mod small sple, fine to cse, often red stained sd, numerous frags of red & blue grn highly micac & sdy clay. Amber colored grns of feldspar fairly common.

4180-90

Sd as above, many yellow & a few pink tinted grns. A little mica, a few frags of pink ss & a few of red & mottled sh. Some feldspar.

4190-4200

Sd, some mica as above & some frags of the dk red, finely mica, typical L. Cret red sh (See #29 on slide).

4200-10

Fine to very cse Qtz sd, some feldspar, many yellow tinted & some pink tinted grns, about 5% frags of red & some pink tinted grns, about 5% frags of red & some mustard & gy mottled clay. A little mica & some cmt frags of ss. Some cvgs.

4210-20

Like the above, a few sdy pyrite nods.

4220-30

Sd & some sh frags as above, a few frags of wh ss in which sd is poorly sorted & there is little cmt, some mica.

4230-40

Like the preceding, but only a few ss frags.

4240-50

Sd as above, red & mustard mottled sh frags about 10%, some mica. A few pink stained lime nods.

4250-60

Sd as above & a few sh frags, numerous frags of wh, cal ss in which grns poorly sorted yellow grns less common in sd.

4260-70

Like the preceding, also about 10% small frags of red, mustard mottled sh.

4270-80

Fine to cse sd (fine to mod fine grns dominant), some mica & about 50% frags of red, sl mustard mottled clay sh, many pink, white & yellow stained lime nods. A few frags of wh ss.

4280-90

Like the preceding.

4290-4300

Similar to the above, about 50% cvgs from U. Cret.

4300-10

No change.

4310-20

Fine to cse Qtz sd (some very cse grns), some stained lime nods, a few frags of mottled sh, a little mica, some cvgs.

4320-30

Sd & some mica as above, some pink & yellow tinted grns. A few frags of ls & a few lime nods.

4330-40

Sd & some mica as above, about 25% small frags of red-mustard mottled clay sh. Some pink stained lime nods.

4340-50

Sd & mica as above, about 20% sh & some frags of ss, some pink stained lime nods (for char. ss frags see #30 & 31 on slide).

4350-60

Like the preceding.

4360-70

Fine to cse Qtz sd, some feldspar & mica as above, a few frags of mottled sh. Cvgs abdt.

4370-80

Sd & some mica as above, about 20% small frags of red sl mottled sh. A few lime nod.

4380-90

Mod small sple fine to mod cse sd (in char as above). Some mica & about 50% small frags of red, sl mustard mottled clay sh. A few frags of pink & yellow mottled ss & a few stained lime nods.

4390-4400

Fine to cse sd & some mica like the preceding in char, a few frags of ss & about 10% red & mottled sh. A few lime nods.

4400-10

Like the preceding.

*Red Brn Mic  
Swing SH*

*White ss  
RELATIVELY  
UNCONSOL*

- 4430-80 Like the preceding.  
4460-70 Sd & some mica as above, about red somewhat gy & yellow mottled sh. Some pink I. nod. s.
- 4470-80 Fine to mod cse roughly ang qtz sd, some colorless mica, some yellow tinted qtz & a little feldspar. A few pink stained lime nod. s. A few frags of red sh.
- 4480-90 Similar to above, but about 10% red sh.
- 4490-4500 Mod large washed sple. Sd & some mica as above & 50% small frags of dk brnsh red clay sh.
- 4500-10 Sd some mica & about 20% red sh, some lime nod. s.
- 4510-20 Like the preceding.
- 4520-30 Fine to cse subang to roughly ang qtz sd. Mod fine grns dominant. Some colorless mica, some yellow & pink tinted qtz & feldspar. A few lime nod. s, a few frags red sh.
- 4530-40 Sd & mica as above & about 50% small frags of dk brnsh red clay sh. Some pink stained lime nod. s.
- 4540-50 Like the preceding.
- 4550-60 Mod small sple. Sd at least 50% frags of dk brnsh red, finely mica clay sh. Some stained lime nod. s.
- 4560-80 Like the preceding.
- 4580-90 Mod small washed sple about 75% frags of dk brnsh red, finely mica, sl gy & dull yellow mottled red clay sh. Many red stained lime nod. s, about 25% mod fine sd as above (prob cvg).
- 4590-4600 Like the preceding.
- 4600-10 Sple larger, about 50% sd & 50% sh (red yellow mottled).
- 4610-20 Small washed sple 75% sh, 25% sd, some pink n ods.
- 4620-60 Like the preceding.
- 4660-70 Mod small sple, sd, some mica & about 50% sh. Stained lime nod. s fairly common.
- 4670-80 Sd (prob cvg) & 75% red, sl mottled sh, some lime nod. s.
- 4680-90 Like the preceding.
- 4690-4700 Small washed sple. Sample mainly red sh, some lime nod. s, a little sd & mica & cvgs from U. Cret.
- 4700-30 Like the preceding.
- 4730-40 Sh about 25% sd, some lime nod. s & cavings.
- 4740-50 Fine to cse somewhat etched, sub-ang qtz sd-mod cse grns common, many yellow & some pink tinted grns, a little mica. Similar to above, but sd averaging cser grnd.
- 4750-60 Sd as above & about 5% red sh, some stained lime nod. s.
- 4760-70 Like the above, sd grns averaged mod cse to cse.
- 4770-4830 About 50% fine to cse sd as above & 50% red sh. Some stained lime nod. s.
- 4830-40
- 4840-50 Fine to very cse qtz sd, some feldspar.
- 4850-60 Sd sl finer than preceding, about 10% red sh.
- 4860-70 As above, about 5% sh. Some lime nod. s.
- 4870-90 Sd & about 10% sh.
- 4890-4900 About 75% red clay sh, 25%-some stained lime nod. s.
- 4900-10 Sd & 50% sh.
- 4910-20 Fine to cse sd like the preceding in char. About 25% sh. A few grn tinted lime nod. s.

- 4740-70 as above. Some pink stained lime nod. Sd as above & about 10% small frags of red brn, bluish grn mottled sh.
- 4950-60 Sd as above & about 10% small frags of red brn, bluish grn mottled sh.
- 4960-70 Fine to cse qtz sd mod cse grns dominant. Sd is roughly angular, sl etched, some yellow tinted grns, a little feldspar, a few blue grn cal & sdy pebbles. A trace of red sh, some lime nod.
- 4970-80 Sd as above, many cvgs, about 10% red sh.
- 4980-5020 Like the preceding.
- 5020-30 Sd as above & 50% frags of brnish red-mustard mottled sh. Numerous lime nod.
- 5030-40 Like the preceding.
- 5040-50 Fine to cse sd mainly sl etched clear qtz, a little feldspar & a few frags of wh ss (poorly sorted sd, little cmt. Numerous lime nod, some wh, some red stained, some cal fine grnd reddish ss nod.
- 5050-60 Sd as above, a few lime nod about 10% red sh.
- 5060-80 Like the preceding.
- 5080-90 Sd as above & about 50% dk brnish red, yellow grn mottled mica clay sh. Some wh & some stained lime nod.
- 5090-5100 Like the preceding.
- 5100-10 Fine to cse, sub-angular, sl etched clear qtz sd. A few grns feldspar. A trace of red sh.
- 5110-20 Mod small sple, about 50% sd & 50% red somewhat mottled sh.
- 5120-30 Fine to mod cse sd like preceding in char. A few lime nod. A trace of red sh. A little mica.
- 5130-40 Fine to cse sd as above. A few frags ss, lime nod, fairly common.
- 5140-50 Mat as above & about 25% small frags red sh.
- 5150-60 Sd, lime nod (some of pink & sdy ls) & about 10% sh.
- 5160-70 Like the preceding.
- 5170-80 Sd & some lime nod as above, trace of red sh, some mica.
- 5180-90 Like the preceding.
- 5190-5200 Sd as above & about 10% red sh.
- 5200-10 Sd as above, some sdy lime nod. Trace of sh.
- 5210-20 Sd as above & about 10% frags of sh mainly grnish blue & mustard mottled w/a little red (See #39 & 40 on slide) sh is mica & irreg silty.
- 5220-30 Sd some mica & some lime nod as above. A trace of sh.
- 5230-40 Sd & some lime nod as above, about 20% red sh.
- 5240-50 Mod small sple. Sd, some lime nod & about 50% red sh. Some mica as in all the sple.
- 5250-60 Small washed sple, some red sh, mainly cvgs from U. Cret.
- 5260-70 Sh, sd & abdt cvgs.
- 5270-80 Like the preceding.
- 5280-90 Fine cse sd (same char as in preceding sple), about 50% frags of red, red brn & sl mottled sh, some lime nod.
- 5290-5300 Sd as above & many frags of wh, yellow & sl pink mottled sd ls & hd cal ss (pos nodular).

*13. Ancon & Lower Cret. S.H.*

- 5320-30  
colored sdy ls pebbles.
- 5330-40  
Fine to mod fine sd, about 10% sh frags, some lime nods as above & some frags of lt tan & varicolored, mod fine grnd hd cal ss & sdy ls (poss lime concentrations in a multicolored ss yellow, wh, pink).
- 5340-50  
Like the preceding.
- 5350-60  
Mod small sple, mainly fine frags of red sh & some frags of fine grnd, cal & argil wh & sl tinted ss & sd (nodular?) ls. Ss is mica & sl chloritic?
- 5360-70  
Mat as above & 25% fine to mod fine sd. The
- 5370-80  
Like the preceding.
- 5380-90  
Sple about 1/3 fine to mod fine qtz sd, 1/3 small frags of red & grnish yellow mottled clay sh & 1/3 rd wh, many grnish yellow & some reddish tinted frags of mat varying from a dense ls to a highly sdy ls to cal ss. Some mica & some chloritic mat present in the more sdy frags.
- 5390-5400  
Like the preceding.
- 5400-10  
Fine to cse sd, about 25% brnish red somewhat mottled clay sh, numerous frags of lt gy & some lt brn cal ss, some sdy brn ls frags & reddish brn ls nods.
- 5410-20  
Mats as in preceding but sh frags about 50%.
- 5420-30  
Similar to preceding. Sh about 75% of washed sple.
- 5430-40  
Like the preceding.
- 5440-50  
Mod small sple, mainly dk brnish red sh & about 25% sd. A few lime nods & a few frags of wh & reddish ss.
- 5460-5550  
Like the preceding.
- 5550-60  
Mod small sple of 50% dk brnish red sh, 25% fine to mod fine qtz sd & 25% frags of lt reddish ss (somewhat mica, fine to mod fine grnd, many yellow tinted grns, highly to poorly cal). Some red stained & a few yellow stained lime nods (in part, sdy).
- 5560-80  
Like the preceding.
- 5580-90  
As above, some increase in porportionate amt of ss frags.
- 5590-5600  
Mod small sple of red sh & sd as above, about 5% red & red stained lime nod. A few frags of ss.
- 5600-10  
Like the preceding.
- 5610-20  
Sple larger, sh & sd as above & about 25% frags of ss & reddish brn claystone & ls nods, in part sdy, some mica as in all the L. Cret spls.
- 5620-40  
Like the preceding. Spls again mod small.
- 5640-50  
Mod small sple, about 75% dk brnish red, finely mica sh, 25% fine to mod fine sd, some frags of ss & brnish red & wh, sdy ls nods & frags of red nodular claystone, some mica.
- 5650-60  
Mod small sple about 50% red sh & 50% sd & small frags of ss. A few ls nods.
- 5660-70  
Sple sl large, increase in amt of sd & size of sd grns.
- 5670-80  
About 50% fine to mod cse qtz sd & 50% red sh. A few ss frags & lime nods.

- 5710-20  
5720-50  
5750-60
- 5760-80  
5780-90
- 5790-5800
- 5800-10  
5810-20  
5820-30
- 5830-40  
5840-50
- 5850-60
- 5860-5900  
5900-10
- 5910-20  
5920-30  
5930-40  
5940-50  
5950-60  
5960-70  
5970-80
- 5980-90  
5990-6000
- 6000-10
- 6010-20
- Like the preceding. Washed spls small.  
Mod small sple, about 75% sd & small frags of fine to mod fine grnd loosely cmtd ss. A little mica & some grn grns in ss. A few lime nod.  
Like the preceding, larger spls.  
Mod small washed sple of red sh 50%, Sd 50%, a few frags of ss & a few lime nod.  
Mod large sple, fine to cse sd qtz & some feldspar. Quartz somewhat etched. About 20% red sh, a few frags of ss & a few lime nod.  
Like the preceding.  
As above, sd & about 10% sh.  
Mod small sple, mainly brick red sh, about 25% fine to mod fine sd. Some ss frags, a few lime nod.  
Like the preceding.  
Mod large sple fine to mod fine sd (like all preceding in char) about 10% red sh. A few mottled red-gy etc lime nod.  
Mod small washed sple 50% sd, 50% red sh, a few frags of ss, a few stained lime nod.  
Similar to the above-sh-75%-sd about 25%.  
Mod large sple of fine to mod fine red stained qtz sd & small frags of loosely cmtd, somewhat mica red stained ss. A few lime nod.  
Sd & ss as above averaging sl cser grnd & lighter colored, about 20% very small frags of red sh.  
Sd & ss as at (5900-10'), about 20% small frags of the red sh.  
Small washed sple of fine grnd red stained sd & 10% very small frags of red sh & small red claystone.  
Mod small sple, fine to mod fine grnd, pinkish ss, sd & about 20% very small frags of red sh.  
Similar to above, about 50% sh.  
Mod large sple, 90% fine to mod fine qtz sd & about 10% small frags of red sh.  
Fine to cse qtz sd, some feldspar, many yellow & pink tinted grns, a few opaque blue grn grns & some small embedded nod of claystone & ls & sh in dif colors. A few lime nod. A trace of red sh. Sd very poorly sorted.  
Like the preceding. (See #43 & 44 on slide).  
Like the above, ss apparently very variable in size of grn & w/many small pebbles of various colors & type of mat. Sd finely conglomeratic in appearance. About 10% small frags of red sh.  
Cut of multicolored, mod cse grnd ss. Ss contains numerous small inclusions of red silty clay, some vari-colored red, grn & wh ls areas & pebbles, many grn chert? frags & small pebbles, some mica. Sd is poorly sorted.  
Small sample. Ss as above & 50% dul brnsh red, silty

*m muddled zone*

*43 2  
SS  
m muddled zone*

- 6050-60 Small sple about 50% small frags of red clay, 50% ss as above. Some mica.
- 6060-70 Like the preceding.
- 6080-90 Small sple, mainly red clay sh, some ss & many cavings.
- 6090-6100 About 50% ss & 50% red clay as above.
- 6100-10 About 75% ss & 25% clay, larger sple, some cavings.
- 6110-20 Multicolored fine to mod fine grnd cal ss w/many irreg inclusions or areas of dull red & some of blue grn silty to sdy clay & some sd red & pink & lt grn ls areas Ss is somewhat mica & has some lt grn & many peach colored grns.
- 6120-30 Like the preceding.
- 6130-40 No change.
- 6140-50 Ss as above & about 25% small frags of red clay sh.
- 6150-60 Like the preceding.
- 6160-70 Ss as above.
- 6170-80 Ss & about 50% small frags of red sh.
- 6180-90 Ss as above.
- 6190-6200 Ss as above & 50% fine grnd red ss & silty red clay red to pinkish ls areas common in ss.
- 6200-10 Small sple, like preceding in char.
- 6210-20 Multicolored ss w/red & some lt grn irreg silty clay & sdy ls areas, about 10% small frags of dull brnsh red claysh.
- 6220-40 Like the preceding.
- 6240-50 Similar to above w/some red clay sh & many cavings.
- 6250-60 Like the preceding.
- 6260-70 Multicolored ss as above & some red, sdy & mica clay.
- 6270-80 Ss as above & 50% dull dk red, sdy clay.
- 6280-90 Fine to mod fine grnd ss mainly qtz, some lime & clay inclusions & a few pebbles about 25% small frags of dk red clay sh.
- 6290-6300 Like the preceding.
- 6310-20 Ss as above.
- 6320-30 No change.
- 6330-40 Ss & about 50% small frags of red clay sh.
- 6340-60 No change.
- 6360-70 Small sple about 75% red clay sh, 25% ss.
- 6370-80 50% sh & 50% ss, many frags of the red sdy ls concentration.
- 6380-90 Fine to mod fine qtz ss w/a few colored grns & grn & peach colored) about 10% small frags of red clay sh.
- 6390-6400 Ss similar to preceding, but averaging cser (mod cse) grnd.
- 6400-10 Ss as above, some red & lt grn ls areas, about 25% small frags of red clay sh.
- 6410-20 Fine to mod cse grnd cal qtz ss, a few colored grns & many small frags & of dk brnsh red & some of lt grn clay, a little mica.

- 6470-80 ss & about 25% red sn.  
6480-90 Small sple, about 75% red clay sh, remainder frags of the ss & red mottled frags of the nod ls.
- 6490-6500 Ss as above & about 25% red clay sh.  
6500-10 Fine to mod cse, rounded to roughly ang qtz sd. Some red & dull mustard colored ls pebbles.
- 6510-20 Sd as above & many reddish & mustard colored pebbles.  
6520-30 Like the preceding, some grn sdy pebbles.  
6530-40 Fine to mod fine grnd, loosely cemented qtz ss, some red & a few lt grn areas of ls (sdy lime concentration) & red mica clay inclusions, some mica & feldspar.
- 6540-50 Ss as above & about 25% dull red clay.  
6550-80 Like the preceding. An occasional pebble.  
6580-90 > Very fine to mod fine grnd loosely cmtd ss, mainly qtz w/some sdy red to pink ls areas & many small red & a few lt blue-grn clay inclusions, about 10% small frags of brnsh red clay sh.
- 6590-6600 Like the preceding, an occasional large frag of fos chert. Fos in chert apparently Miliolids.
- 6600-10 Ss as at 6580-90'.  
6610-20 Sd & ss as in preceding & about 25% small frags of dk brnsh red clay.  
6620-30 Ss as above & abdt frags of hd red silty clay & red irreg sdy nodular ls.  
6630-40 Like the preceding.  
6640-50 Like the preceding & about 25% small frags of red clay.  
6650-80 As in preceding. An occasional pebble.  
6680-90 Small sple of ss w/sdy red ls inclusions as above, about 50% small frags of silty & mica red clay sh, some blue-grn shale also in very small frags.
- 6690-6700 Fine to mod fine grnd, red stained cal qtz ss. A few ls & hd red clay inclusions.
- 6700-10 Ss as in preceding, also many frags of the wh fine to mod cse grnd ss w/some small red clay & red ls inclusion, ss is cal & has some mica & a small amt of feldspar. One large frag of fos chert.
- 6710-20 Sple mainly fine grined, red stained qtz ss. Some frags of the wh (red spotted ss) described from preceding.
- 6720-30 Ss as in preceding & about 25% small frags of red sh.  
6730-40 Loose sd, red & wh ss, some red ls frags & 25% sh.  
6740-50 Sd & ss as above & 25% small frags of red & some of blue grn clay sh.  
6750-60 Loose sd, fine to mod cse; many frags of fine grnd red or pink stained qtz ss, some med & some grn frags of nod ls about 10% red & a little blue-grn sh.
- 6760-70 Ss as above & about 25% small frags of red clay sh. Some cvgs.  
6770-80 Fine to cse red stained sd, some frags of ss & a few lime nods as above, about 10% small frags red sh.  
6780-90 Small sple sd & ss as above & small frags of dull dk

- 6820-30 fine to cse sd & some frags of ss & of the vari- colored nod ls & 20% small frags of red & blue grn clay sh. Cvgs common. csg of other m
- 6830-40 Small sple. Mainly red stained argil ss & sdy clay
- 6840-50 Approx. top Triassic. Red clay sh irreg finely sdy, some cvgs.
- 6850-60 Sple mainly dk dull red clay sh, some sd & ss as above.
- 6860-70 Like the preceding.
- 6870-80 Red clay sh & about 50% fine grnd red stained ss, similar to that first noted at 6690-6700'. (See 45-47 on slide).
- 6880-90 About 50% sh as above & 50% fine to cse red stained qtz sd & ss. Some definite cvgs.
- 6890-6900 Sple about 75% red, finely gran. textured clay sh & 25% sd.
- 6900-10 Red, finely mica clay sh & some fine grnd arenaceous & cal ss.
- 6910-20 Sh as above & about 25% fine grnd red ss.
- 6920-30 Like the preceding. Ss may be partly cvg, but some frags show a high percentage of feldspar & are probably indiginous.
- 6930-40 Like the preceding, mainly sh, about 25% red ss.
- 6940-60 No change.
- 6960-70 Red sh as above, about 10% red sd & ss, a few frags of hd red ls w/calcite strks (may be from pebbles or hd areas in red ss).
- 6970-80 Like the preceding.
- 6980-90 Red sh as above & about 20% red stained sd & ss. (ss prob in part cvg). A few frags of red (nodular?) ls.
- 6990-7040 No change.
- 7040-50 Mod small sple, mainly red clay sh, about 20% - several types of red stained sd & ss, mod cse sd grns common; some frags of red (nodular?) ls & calcite, some cvgs.
- 7050-80 Like the preceding. Steady increase in percentages of rounded red stained sd grns.
- 7080-90 Mod cse & even grnd well rounded red stained sd (See #50 on slide).
- 7090-7100 Ss as above & about 25% red clay & frags of several types of red ss & a little red ls.
- 7100-10 Mod small sple of red sh & 50% mod cse red sd as above, a little ss, ls etc & obvious cvgs.
- 7110-40 Like the preceding.
- 7140-50 Mod cse to <sup>very</sup> cse well rounded red stained qtz sd, about 10% frags of several types of red sdy clay, red ss & ls.
- 7150-60 Sd as above & about 25% frags of red stained fine to mod cse grnd (poorly sorted ss).
- 7160-70 Like the preceding.
- 7170-80 Mod small sple, 50% red clay sh & 50% red sd, ss & sdy nod ls.
- 7180-90 Red sd & several types of red ss & about 25% clay. A frag of fine grnd red quartzite liess. quartzite.

*Handwritten notes:*  
 6880-90 *DR R-11*  
 6870-80 *SS*

*Handwritten notes:*  
 7090-7100 *Comp WP*  
 7090-7100 *10 sand, loose*

7230-50

7250-70

25% frags of several types of ls. A few frags of the very dk reddish clay sh, a little lt red sh.

Like the preceding.

About 75% frags of red stained ss & fine to cse well rounded red stained grns of qtz sd. 25% red sh including many frags of the very dk red sh w/small scattered particles of chert? as at 7200' etc. Some red stained sdy & calcitic ls frags.

7270-80

About 50% sd & ss, 50% sh (bright red & dk red as above). A few frags of red stained cal & sdy ls.

7280-90

About 75% sd & ss & 25% sh as above. A few frags ls.

7290-7300

Like the preceding. An occasional frag of chert.

7300-30

Mod small sple 75% red sh, 25% red sd & ss, some nod red ls. Some cvgs from much higher depths.

7330-60

Mainly sd & ss, about 10% sh, some red sdy ls frags, some cvgs.

7360-70

Mod large sple of red stained sd & ss, sd generally mod fine & subangular, some cse rounded grns. A few frags of red nodular? ls, an occasional frag of chert & of qtzi (apparently from pebbles). About 5% of sple sh.

7370-80

Like the preceding.

7380-7400

About 80% red sd & ss, 20% red sh. Some frags of the red nodular?, calcitic ls.

7400-30

Mainly sd & ss & some red ls frags.

7430-40

About 75% red sh, 25% sd & ss.

7440-50

Mod small sple about 50% sh, 50% sd & ss.

7450-70

About 75% red sh, 25% red sd & ss.

7470-80

About 75% red ss & sd & 25% red sh.

7480-90

50% sh, 50% sd & ss. Some lime nods as usual.

7490-7500

Small sple, mainly red sh.

7500-10

Red sh & about 20% fine grnd red ss & sd.

7510-40

Red sh & about 50% red ss & sd. Some cvgs. Small sple.

7540-50

25% sh, 75% sd & ss.

7550-70

Mainly red sd & ss, a little sh.

7570-7600

Red sh, about 25% red sd & ss.

7600-10

Mats as above, also a number of frags of a wh, platy finely sdy ls which may be indigenous (See #58 & 59 on slide).

*W.M. 76  
SS, with 1920*

7610-20

Like the preceding.

7620-30

Sple mainly red sh w/a small amt of sd & ss & a few frags of the wh ls described just above.

7630-60

Like the preceding.

7660-70

Sple mainly red sh. Frags of a hd, dull purplish red sh fairly common (See #60 on slide). Some frags of this sh show an abundance of small circular areas.

*P.M.P. w  
SH*

When sh is moistened.

7670-80

Sple of red & dull purplish gy sh w/many frags of an (altered?) grnish gy finely & highly red-brn spotted hd sh (See #13 thru 18 on slide #2). Some frags of a lt. or grn clay sh.

*P.M.P. w SH  
Cry spotting*

7710-20	red sh & diabase as above.
7730-40	Sple about 75% diabase 25% red sh.
7750-60	Mainly diabase (See #28 to 31 on slide #2).
7760-80	Like the preceding.
7782-89	Diabase.
7789-91	"
7791-94	"
7790-7800	" & cavings.
7820-30	Diabase and some red & purplish sh (sh cvg?).
7830-40	Like the preceding.
7840-50	<u>Pre-Triassic</u> . Hd red & purplish sh, some frags w/small irreg lt grn patches, some diabase & some hd lt grn sh (?). (See #32 thru 36 on slide #2). Some diabase.
7850-60	Like the preceding (See #36 thru 40 on slide #2). This red sh has a sharp conchoidal cleavage.
7860-70	About 75% diabase & 25% sh from various higher depths.
7870-80	Like the preceding.
7880-90	Mainly diabase.
7890-7900	Like the preceding.
7900-10	Diabase, several types of red sh, cvgs & numerous frags of a wh, fine even grnd, quartz ss (See #49-55 on slide #2).
7909-11	Core. Wh quartzitic ss & qtzitic as noted in preceding.
7911-13	Core - qtzitic ss as above, some small grnish gy & one red brn clay? inclusions.

Diabase  
00

*Te?*  
SH OK, KANA  
ROR @ 10715

*41-48*  
D.M.B.S.

*49-55*  
PALOVEDIC 99276

True Paleog. quartzite in core 7909'

OWNER : Coastal Petroleum Company  
 FARM NAME: Everett P. Larsh No. 1 Permit #95  
 LOCATION : 750 S. and 25' W. of center of Sec. 1, T2S, R3E, 1½ mile SE of Wacissa  
 COUNTY : Jefferson  
 ELEVATION : 19' Gr., 51' DF Schl. from Riley  
 STARTED : November 6, 1948  
 COMPLETED: January 7, 1949 - Dry and abandoned  
 CASING : 24" at 35' w/40 sx.; 13 3/8" at 712' w/222 sx.  
 DRILLER : Parker Drilling Company  
 DEPTH : 7913 in quartzite after passing through diabase sills  
 USE : Test for oil  
 REMARKS : T. Lwr. Cret. (cores) 3837'  
 Lost circulation at 150'. No samples from 150 to 952'. 712 cuttings from 12 to 7913' received from J. E. Banks on various dates. 17 cores from #1 @3420-3425 to #17 @7911-7913'. Core descriptions (1st 13 cores). Driller's log 0-7913'. Schlumberger 45-7905'.

9-28	Clay
28-390	Lime
390-1440	Lime and dolomite
1440-2525	Lime and chert
2525-3420	Shale and chalk
3420-3483	Shale and sand
3483-3802	Shale
3802-5368	Sand and shale and sandy shale
5368-5487	Sand shale and lime
5487-6425	Sand and shale
6425-6590	Sand, shale & lime
6590-6660	Sand and shale
6660-6744	Sand, shale & lime
6744-7126	Sand and shale
7126-7297	Sand, shale & lime
7297-7620	Shale and sand
7620-7728	Shale
7728-7795	Igneous rock

OWNER : Coastal Petroleum Company  
 FARM NAME : Everett P. Larsh No. 1 (Permit no. 9  
 LOCATION : 750' S and 25' W of C of sec. 1, T2S,  
 R3E, 1½ mi. SE of Wacissa  
 COUNTY : Jefferson  
 ELEVATION : ? 19' grd; 51' Df.  
 DRILLER : Parker Drilling Co.  
 STARTED : Nov. 6, 1948  
 COMPLETED : Jan. 7, 1949  
 DEPTH : 7913' in quartzite after passing thru  
 diabase sills)  
 CASING : 24" at 35 w/40 sks; 13-3/8" at 712'  
 w/222 sks.  
 USE : Test for oil. Dry and abandoned  
 REMARKS : \*T Lwr Cret (cores) 3837'  
 Lost circulation at 150'. No samples  
 from 150 to 952'.  
 352 cuttings from 12 to 4350' and 13  
 cores from No. 1 at 3420-3425' to core  
 No. 13 at 3875-3885', received from  
 Joe Banks, Coastal Petroleum Co. on  
 December 28, 1948.  
 2 cuttings from 7770 to 7789 brought in  
 by Drs. Vernon and Calver on Jan. 6, 1949.  
 2 cores, No. 14 at 7789-7791, and core  
 No. 15 at 7791-7795 were brought in  
 by J. E. Banks, Coastal Petroleum Co.  
 Jan. 8, 1949.  
 358 cuttings from 4350 to 7913', rec'd  
 from J. E. Banks, Coastal Petroleum  
 Company, Jan. 12, 1949. 2 cores from  
 Core no. 16 at 7909-7911 to core No. 1  
 at 7911-7913', were brought in by J. E.  
 Banks, Coastal Petroleum Co. Jan. 11  
 1949.

#### HAWTHORN

10-29 CLAY, sandy, (quartz), olive green, iron stained, massive.

#### ST MARKS

29-35 LIMESTONE, slightly sandy (quartz), cream, finely crystalline, hard,  
 slightly moldic porosity, (chalcedony, gray), fossiliferous (foraminiferal),  
 molds of Sorites sp.

SUWANNEE

- 40-50 LIMESTONE, cream, finely crystalline, medium hard, intergranular porosity, foraminiferal coquina. Coskinolina floridana. Discorinopsis gunteri.
- 50-60 LIMESTONE, cream, finely crystalline to chalky, soft to medium hard, intergranular porosity, foraminiferal coquina. No fossils noted.
- 60-70 LIMESTONE, as above. Coskinolina floridana.
- 70-80 LIMESTONE, as above.
- 80-90 LIMESTONE, as above. Discorinopsis gunteri.
- 90-100 LIMESTONE, as above, foraminifers loosely cemented. Abundant Coskinolina floridana.
- 100-110 LIMESTONE, as above, darker cream in part, chalky. Fossils as above, Coskinolina floridana, Rotalia mexicana.
- 110-120 LIMESTONE, as above. Fossils as above.
- 120-130 LIMESTONE, as above. Fossils as above.
- 130-140 LIMESTONE, as above. Fossils as above.
- 140-150 LIMESTONE, as above; dolomite, brown, finely crystalline, hard, dense. No fossils noted.
- 150-160 DOLOMITE, as above, slight moldic porosity. No fossils noted.
- 160-925 No samples.

AVON PARK

- 925-960 DOLOMITE, chalky, slightly glauconitic, brown, fine rhombs cemented by  $\text{CaCO}_3$ , hard, dense, fossiliferous, Cribrbulimina cf. cushmani
- 960-970 LIMESTONE, dolomitic (rhombohedral), cream to light brown, slightly peat-flecked, hard, slight intergranular porosity. No fossils noted.

LAKE CITY

- 970-980 LIMESTONE, chalky, slightly glauconitic, cream, finely crystalline, hard, intergranular porosity, fossiliferous, trace of chert. No fossils noted.
- 980-990 LIMESTONE, chalky, very gypsiferous (white), glauconitic, light tan, finely crystalline, hard, intergranular porosity, very fossiliferous, Discocyclina sp., Fabiania vauhani.
- 990-1000 LIMESTONE, as above. Papulate Lepidocyclina sp.
- 1000-1010 LIMESTONE, as above. Fossils as above. Dictyoconus cf. americanus.
- 1010-1020 LIMESTONE, as above. Fossils as above.
- 1020-1030 LIMESTONE, as above. Fossils as above.
- 1030-1040 LIMESTONE, as above. Fossils as above.
- 1040-1050 LIMESTONE, as above. Fossils as above. Miliolids.
- 1050-1060 LIMESTONE, as above, but less glauconitic and very chalky, slightly gypsiferous. Fossils as above.

1080-1090	LIMESTONE, as above. Fossils as above.
1090-1100	LIMESTONE, as above. Fossils as above.
1100-1110	LIMESTONE, as above. Fossils as above.
1110-1120	LIMESTONE, as above. <i>Fabiania cubensis</i> . Fossils as above.
1120-1130	LIMESTONE, as above. Fossils as above.
1130-1140	LIMESTONE, as above. Fossils as above.
1140-1150	LIMESTONE, as above. Fossils as above.
1150-1160	LIMESTONE, as above. Fossils as above.
1160-1170	LIMESTONE, as above. Fossils as above.
1170-1180	LIMESTONE, as above. Fossils as above.
1180-1190	LIMESTONE, as above. Fossils as above.
1190-1200	LIMESTONE, as above, very slightly glauconitic. Fossils as above.
1200-1210	LIMESTONE, as above. Fossils as above.
1210-1220	LIMESTONE, as above. Fossils as above.
1220-1230	LIMESTONE, as above. Fossils as above.
1230-1240	LIMESTONE, as above. Fossils as above.
1240-1250	LIMESTONE, as above, glauconitic and gypsiferous. Fossils as above.
1250-1260	LIMESTONE, as above. Fossils as above.
1260-1270	LIMESTONE, chalky, gypsiferous, glauconitic, peat flecked, cream, finely crystalline, medium hard, moldic porosity, microfossiliferous. Fossils as above. Dolomite, gypsiferous, peat flecked, glauconitic, brown, finely crystalline, hard, dense.
1270-1280	LIMESTONE, as above. Fossils as above.
1280-1290	LIMESTONE, as above. Fossils as above.
1290-1300	LIMESTONE, as above.
1300-1310	LIMESTONE, chalky, peat flecked, dolomitic, cream, finely crystalline, medium hard, intergranular porosity, microfossils (less fossiliferous than above). Limestone, <i>Discocyclina</i> sp.; dolomite, peat flecked, brown, medium crystalline, hard, intergranular porosity; no fossils noted.
1310-1320	LIMESTONE, and dolomite as above. Limestone, light cream, finely crystalline, hard, intergranular porosity, microfossiliferous. <i>Discocyclina</i> sp.
1320-1330	LIMESTONE, chalky, peat flecked, dolomitic, cream, finely crystalline, medium hard, intergranular porosity, microfossiliferous. <i>Discocyclina</i> sp.; dolomite, brown, medium crystalline, hard, intergranular porosity.
1330-1340	LIMESTONE, chalky, glauconitic, peat flecked, cream, finely crystalline, medium hard, intergranular porosity, microfossiliferous, <i>Discorbis</i> cf. <i>inornatus</i> , <i>Dictyoconus americanus</i> , miliolids.
1340-1350	LIMESTONE, as above. No fossils noted.
1350-1360	LIMESTONE, as above. No fossils noted.
1360-1370	LIMESTONE, as above. No fossils noted.
1370-1380	LIMESTONE, as above. No fossils noted. Cones.
1380-1390	LIMESTONE, as above. No fossils noted.
1390-1400	LIMESTONE, as above. Dolomite, peat flecked, brown, finely

- 1044-1410 LIMESTONE, as above, slightly glauconitic; dolomite as above. No fossils noted.
- 1410-1420 LIMESTONE, as above, gypsiferous. Fabularia gunteri, flat Dictyoconus americanus, Lepidocyclina sp., inflated center, flat at periphery.
- 1420-1430 LIMESTONE, as above.
- 1430-1440 LIMESTONE, as above, no glauconite. No fossils noted.
- 1440-1450 LIMESTONE, as above, very slightly glauconitic. No fossils noted.
- 1450-1460 LIMESTONE, as above, no glauconite. No fossils noted.
- 1460-1470 LIMESTONE as above, with brown peat flecked chert. No fossils noted.
- 1470-1480 LIMESTONE, and chert as above. Dictyoconus americanus.
- 1480-1490 LIMESTONE, and chert as above. Dictyoconus americanus.
- 1490-1500 LIMESTONE, and chert as above. Dictyoconus americanus.
- 1500-1510 LIMESTONE, chalky, peat flecked, gypsiferous, cherty (brown, peat flecked), dark cream, very finely crystalline, slight intergranular porosity, microfossiliferous, less granular in part than above limestone, no fossils noted.
- 1510-1520 LIMESTONE and chert as above. No fossils noted.
- 1520-1530 Limestone and chert as above. Fabularia gunteri.
- 1530-1540 LIMESTONE and chert as above. Dictyoconus americanus.
- 1540-1550 LIMESTONE and chert as above. No fossils noted.
- 1550-1560 LIMESTONE and chert as above. No fossils noted.
- 1560-1570 LIMESTONE and chert as above. No fossils noted.
- 1570-1580 LIMESTONE and chert as above. No fossils noted.
- 1580-1590 LIMESTONE and chert as above. No fossils noted.
- 1590-1600 LIMESTONE and chert as above. No fossils noted.
- 1600-1610 LIMESTONE and chert as above. No fossils noted.
- 1610-1620 LIMESTONE and chert as above. No fossils noted.
- 1620-1630 LIMESTONE and chert as above. No fossils noted.
- 1630-1640 LIMESTONE and chert as above. No fossils noted.
- 1640-1650 LIMESTONE and chert as above. No fossils noted.
- 1650-1660 LIMESTONE and chert as above. No fossils noted.
- 1660-1670 LIMESTONE and chert as above. No fossils noted.
- 1670-1680 LIMESTONE and chert as above. No fossils noted.
- 1680-1690 LIMESTONE and chert as above. No fossils noted.
- 1690-1700 LIMESTONE and chert as above. No fossils noted.
- 1700-1710 LIMESTONE and chert as above. No fossils noted.
- 1710-1720 LIMESTONE and chert as above. No fossils noted.
- 1720-1730 LIMESTONE and chert as above. No fossils noted.
- 1730-1740 LIMESTONE and chert as above. No fossils noted.
- 1740-1750 LIMESTONE and chert as above. No fossils noted.
- 1750-1760 LIMESTONE and chert as above. No fossils noted.
- 1760-1770 LIMESTONE and chert as above, becoming glauconitic. Clay, carbonaceous glauconitic, soft, grayish tan.

1780-1790	LIMESTONE and chert, as above.
1790-1800	LIMESTONE and chert, as above.
1800-1810	LIMESTONE and chert, as above. <u>Lockhartia cushmani</u>
1810-1820	LIMESTONE and chert, as above. <u>Epistomaria semimarginata</u>

?CLAIBORNE & WILCOX UNDIFFERENTIATED

1820-1830	LIMESTONE, silty, argillaceous, peat flecked; chert (tan to dark brown), glauconitic, chalky, finely crystalline, medium hard, intergranular porosity, microfossiliferous (foraminiferal),
1830-1840	LIMESTONE and chert as above, with clay as 1760'.
1840-1850	LIMESTONE, chert and clay as above.
1850-1860	LIMESTONE, chert and clay as above.
1860-1870	LIMESTONE, chert and clay as above.
1870-1880	LIMESTONE, chert and clay as above.
1880-1890	LIMESTONE, chert, as above; limestone, argillaceous, silty, medium hard, tan, contains thin laminae of peat.
1890-1900	LIMESTONE, chert, as above; clay same as 1830-1840'.
1900-1910	LIMESTONE and chert, as above.
1910-1920	LIMESTONE and chert, as above.
1920-1930	LIMESTONE and chert, as above.
1930-1940	LIMESTONE and chert, as above.
1940-1950	LIMESTONE and chert, as above.
1950-1960	LIMESTONE and chert, as above.
1960-1970	LIMESTONE and chert, as above.
1970-1980	LIMESTONE and chert, as above.
1980-1990	LIMESTONE and chert, as above.
1990-2000	LIMESTONE and chert, as above.
2000-2010	LIMESTONE and chert, as above.
2010-2020	LIMESTONE and chert, as above.
2020-2030	LIMESTONE, as above. No chert. Less glauconitic than above.
2030-2040	LIMESTONE, as above; chert as 2010-2020'.
2040-2050	LIMESTONE and chert as above.
2050-2060	LIMESTONE and chert as above, becoming more glauconitic than above.
2060-2070	LIMESTONE and chert as above, but less glauconitic.
2070-2080	LIMESTONE and chert as above.
2080-2090	LIMESTONE and chert as above.
2090-2100	LIMESTONE and chert as above.
2100-2110	LIMESTONE and chert as above.
2110-2120	LIMESTONE and chert as above.
2120-2130	LIMESTONE and chert as above.
2130-2140	LIMESTONE and chert as above.
2140-2150	LIMESTONE and chert as above.

- 2180-2190 LIMESTONE and chert as above.
- 2190-2200 LIMESTONE as above; chert, dark brown.
- 2200-2210 LIMESTONE as above; chert, dark brown; limestone, very glauconitic, chalky, light tan, finely crystalline, medium hard, intergranular porosity, microfossiliferous (foraminiferal).
- 2210-2220 As above.
- 2220-2230 LIMESTONE, chalky, silty, micaceous, brown chert (may be cavings) tan, cryptocrystalline, laminated and medium hard, interstitial porosity, ?microfossiliferous (foraminiferal).
- 2230-2240 As above.
- 2240-2250 As above.
- 2250-2260 As above.
- 2260-2270 As above.
- 2270-2280 LIMESTONE and chert as above, slightly glauconitic.
- 2280-2290 LIMESTONE, and chert as above, but more glauconitic.
- 2290-2300 LIMESTONE and chert, as above, but dark brown in part.
- 2300-2310 LIMESTONE and chert, as above.
- 2310-2320 LIMESTONE and chert, as above, no glauconite.
- 2320-2330 LIMESTONE and chert as above, slightly glauconitic.
- 2330-2340 LIMESTONE and chert as above, no glauconite.
- 2340-2350 LIMESTONE and chert as above.
- 2350-2360 LIMESTONE and chert as above.
- 2360-2370 LIMESTONE and chert (maybe cavings) as above, with large glauconitic pellets in limestone; limestone, cream, finely crystalline, medium hard, intergranular porosity, microfossiliferous (foraminiferal).
- 2370-2380 LIMESTONE, slightly glauconitic and chalky, cream, finely crystalline, medium hard, intergranular porosity, microfossiliferous (foraminiferal).
- 2380-2400 LIMESTONE, as above, becoming more glauconitic, and light to dark brown chert present.
- 2400-2410 As above.
- 2410-2420 As above.
- 2420-2430 LIMESTONE, chalky, silty, micaceous, gray, cryptocrystalline, hard, interstitial porosity, ?microfossiliferous (foraminiferal).
- 2430-2440 As above.
- 2440-2450 LIMESTONE, as above, becoming glauconitic; chert, light brown to dark brown.
- 2450-2460 LIMESTONE, as above,
- 2460-2470 Sample cavings from above.
- 2470-2480 Sample cavings from above.
- 2480-2490 LIMESTONE and chert, same as 2450-2460', but dark brown chert.
- 2490-2500 LIMESTONE, same as 2370-2380', may be cavings with light to dark brown chert.
- 2500-2510 As above.

## MIDWAY

- 2510-2520 <sup>shale</sup> CLAY, very calcareous, slightly glauconitic, dark gray, massive, medium hard, fossiliferous (foraminiferal).
- 2520-2530 CLAY, as above. Globorotalia velascoensis.
- 2530-2540 CLAY, as above. Globorotalia velascoensis, Anomilina rubiginosa.
- 2540-2550 As above.
- 2550-2560 As above.
- 2560-2570 CLAY, as above; chalk, white, cryptocrystalline, soft, interstitial porosity, microfossiliferous (foraminiferal).

## U. K. -TAYLOR

- 2570-2580 CHALK as above. Globotruncana arca.

SUMMARY:	0-29	Hawthorn
	29-40	St. Marks
	40-160	Suwannee
	160-925	No samples
	925-970	Avon Park
	970-1820	?Lake City
	?1820-2510	?Claiborne & Wilcox Undifferentiated
	2510-2570	Midway

WELL : E. P. Larsen  
 LOCATION : Sec. 1, T2S, R3E  
 COUNTY : Jefferson  
 ELEVATION : 51' DF  
 DEPTH : 7,905  
 COMPLETED : 1/11/49

REMARKS : No sample at 160' -952', etc.  
 Elec. Log available

CHEN 1963

0	40	Miocene and Younger
40	190	Oligocene
190	490	Ocala Group
490	1830	Claiborne Group
1830	2415	Wilcox Group
2415	2560	Midway Group
0	40	Miocene and Younger
40	135	Fossiliferous LIMESTONE, microcrystalline, fragmental, well cemented, rather pure and porous, very light brown, forams as Cosk., etc.
135	190	DOLOMITE, fine crystalline, dense, dark brown
190	250	Fossiliferous LIMESTONE
250	290	DOLOMITE, fine crystalline
290	320	Fossiliferous LIMESTONE
320	410	Calcitic 70%) DOLOMITE, fine crystalline
410	490	Fossiliferous LIMESTONE, slightly dolomitic

860	880	DOLOMITE, fine crystalline
880	910	Fossiliferous LIMESTONE
910	955	Calcitic (30%) DOLOMITE, fine crystalline, gray brown to brown, rather dense, undolomitized fossil fragments and calcitic material
955	965	DOLOMITE, fine crystalline, dense, dark brown to gray brown, very slightly gypsiferous (gypsum streaks) and few dark brown chert fragments
965	995	Calcitic (30%) DOLOMITE, fine crystalline, as above
995	1050	Highly fossiliferous (forams and fragments) LIMESTONE, good Biosparite, pseudo oolitic, glauconitic, light brown, forams as Dicty. Americanus, etc.
1050	1260	As above, forams (Dicty., Lepido., Antillea, etc., abundant
1260	1270	DOLOMITE, (30%) fossiliferous LIMESTONE, fragmental to pseudo-oolitic, microcrystalline, biosparite, light gray brown, forams rather common, slightly glauconitic
1270	1295	Highly fossiliferous LIMESTONE, pseudo-oolitic, Biosparite, microcrystalline, forams rather common and slightly glauconitic
1295	1305	Calcitic (10% of undolomitized fossil fragments) DOLOMITE, fine crystalline, dark brown, slightly glauconitic and gypsiferous
1305	1320	Dolomitic (30%) fossiliferous LIMESTONE, microcrystalline, finely fragmental, well cemented, fossils
1320	1390	Highly fossiliferous LIMESTONE, biosparite, fragmental, (microcoquina) to pseudo-oolitic, rather well cemented (by clear calcite), light brown to light gray brown, forams and fossil fragments common
1390	1400	Dolomitic (20%) highly fossiliferous LIMESTONE, as above
1400	1480	Highly fossiliferous LIMESTONE, biosparite, as above, few dark gray brown chert fragments

		gray brown, dark gray brown chert fragments rather common
1570	1690	Fossiliferous LIMESTONE, finely fragmental (0.2 -0.5 mm), microcrystalline, well cemented, light brown, well preserved fossils rare
1690	1830	Cherty (10%) Fossiliferous LIMESTONE, finely fragmental, rather well cemented, microcrystalline, light brown to gray brown, dark gray brown chert fragments rather common
1830	1850	Glauconitic, highly fossiliferous LIMESTONE, fragmental to pseudo-oolitic, biosparite, light graybrown, microcrystalline, forams and fossil fragments
1850	1980	Fossiliferous LIMESTONE, microcrystalline, finely fragmental, well cemented and dense, light gray brown, very slightly glauconitic
1980	2070	Glauconitic, fossiliferous LIMESTONE, microcrystalline, finely fragmental, dense, light gray brown to gray brown, glauconite pellets and glauconitized forams
2070	2115	Glauconitic, cherty(10%) fossiliferous (fragments) LIMESTONE, microcrystalline, dense, fragmental, light gray brown, slightly dolomitic
2115	2140	Cherty (10%) fossiliferous (fragments) LIMESTONE, as above, slightly glauconitic
2140	2180	Cherty (20%) fossiliferous (fragments) LIMESTONE, microcrystalline, dense, fragmental, light gray brown to gray brown and chert fragments rather common
2180	2210	Fossiliferous LIMESTONE, microcrystalline, rather dense, fragmental, gray brown, chert fragments
2210	2220	Argillaceous (10%) LIMESTONE, laminated, dense, gray brown
2220	2310	LIMESTONE, microcrystalline, dense, light gray brown, slightly glauconitic
2310	2320	LIMESTONE, dense, laminated, brown gray, slightly argillaceous
2320	2330	LIMESTONE, microcrystalline, dense

- 2360 2415 LIMESTONE, dense, finely fragmental, microcrystalline, light gray brown, slightly glauconitic and chert fragments present, thin calcareous and silicified Shale beds may be occurred
- 2415 2440 LIMESTONE, slightly argillaceous (as above)
- 2440 2515 Cherty (10%) fossiliferous LIMESTONE, microcrystalline, finely fragmental, rather dense, light gray brown, slightly glauconitic
- 2515 2560 Calcareous (30%) SHALE, laminated, dark gray, small forams, (Tamesi Age?)
- 2560 2585 Chalky, fossiliferous LIMESTONE
- 2585 2675 Chalky fossiliferous LIMESTONE, Inoceramus Prisms.

OWNER : Coastal Petroleum Company  
 FARM NAME : Everett P. Larsh No. 1 (Permit #95)  
 LOCATION : 750' S. and 25' W. of Center of  
 Sec. 1, T2S, R3E, 1-1/2 mile SE  
 of Wacissa  
 COUNTY : Jefferson  
 ELEVATION : 19' Gr. 51' DF Schl. from Riley's  
 STARTED : November 6, 1948  
 COMPLETED : January 7, 1949 - Dry and abandoned  
 CASING : 24" at 35' w/40 sx; 13-3/8" at 712'  
 w/222 sx.  
 DRILLER : Parker Drilling Co.  
 DEPTH : 7913 in quartzite after passing  
 through diabase sills  
 USE : Test for oil  
 REMARKS : \*T. Lwr. Cret. (cores) 3837'  
 Lost circulation at 150'. No sample  
 from 150 to 952'. 712 cuttings frm.  
 12 to 7913' received from J. E.  
 Banks on various dates. 17 cores  
 from #1 @3420-3425 to #17 @7911-  
 7913'. Core description (1st 13  
 cores) Driller's log 0-7913'.  
 Schlumberger 45-7905'.

CORES - 1-13  
 (3420-3885')

3420-3425 Core No. 1  
 Top of core

Greenish-gray shale with partings of fine, white, sericitic,  
 slightly glauconitic sandstone, with accidental agglomerates  
 of fine pyrite and traces of carbon.

Gumbelina cf. G. reussi Cushman (C)

Globigerina cf. G. cretacea d'Orbigny (C)

Cibicides sp. (Fr.) Tiny

Small, ornamented Ostracod sp. (R)

Upper Cretaceous (of Eagle Ford shale)

Middle part

Same shale, not so sandy.

Same species and

Globotruncana sp. (1)

Upper Cretaceous (of Eagle Ford shale)

Bottom of core

Same (and sandy as on top of core)

- small black shiny phosphatic "rods" (= Koproliths) (S)  
 pyritized mold of small spired Gastropod  
Gumbelina sp. (R) Tiny  
 Sample characterized by the occurrence of the oyster  
 Bottom or core Lithologically the same but not sandy  
 Oyster fragments (Sc)  
 Echinoid spines (R) Tiny  
Practically barren.
- 3435-3445 Core No. 3  
 Top of core Light greenish-gray, sericitic, slightly finely sandy and carbonaceous clay stone with trace of lime.  
Completely barren.  
 Bottom of core Same with little pyrite.  
 Fragmentary crab remains?  
Gumbelina sp. (R) Tiny  
Globigerina sp. (Sc) Tiny  
Small smooth Ostracod species (1)  
 Upper Cretaceous (of Eagle Ford shale)
- 3445-3451 Core No. 4  
 Top of core Fine, very sericitic and pyritic, partly indurated, gray sandstone with shell fragments of small oyster making the rock appear calcareous.  
 Fish remains (F) Small  
 Small smooth poriferous Ostracod sp.  
 The sample is well characterized by the readily recognizable ostracode.  
 Upper Cretaceous (of Eagle Ford shale)  
 Bottom of core Slightly shaly, greenish-gray clay stone with little (tiny concretionary lumps) sandstone, not conspicuously sericitic, and sericite of small size.  
 Characterized by fragments of a bryozoan species (several) and the same ostracode species as above (S)  
 pelecypod shell fragments (Sc)  
 fish remains (Sc) small  
 Upper Cretaceous (of Eagle Ford shale)
- Gap in section as far as cores go.  
 3805-3810 Core No. 5  
 Top of core Soft, greenish-gray, argillaceous, finely glauconitic, sericitic sandstone.

Shell fragments of small Pelecypod (F)  
Practically barren

3810-3820 Core No. 6

Top of core

Same, no fossils observed.

Middle part

Same, with shell fragments of Pelecypod (small oyster?) (F)

Small prisms of Inoceramus? (Sc)

Small fish tooth (1)

Shiny, black, phosphatic "rods" (= Koproliths?) (F)

Small, smooth, white Ostracod species (1)

Globotruncana sp. (1)

Upper Cretaceous

Bottom of core

Same

3820-3827 Core No. 7

Top of core

Same, with partly coarser quartz.

Fragment of Echinoid (1)

Small, white, Ostracod species (1)

Phosphatic "rod" (= Koprolith?) (1)

Globotruncana sp. (1)

Upper Cretaceous

Practically barren.

Middle part

Same, again with partly coarser, frosted, angular quartz.

Small Inoceramus? prisms (R)

Shiny, black, phosphatic "rods" (= Koproliths?) (F)

Upper Cretaceous

Practically barren.

Bottom of core

Same. Practically barren.

3827-3837 Core No. 8

Top of core

Hard, greenish-gray, sericitic and glauconitic sandstone, slightly chloritic and pyritic, with trace of carbon and shale. Average grain size of quartz somewhat increasing, angular, frosted.

Small species of oyster

Small Inoceramus? prisms in layers

Small, shiny, black, phosphatic "rods" (= Koproliths?) (F)

Upper Cretaceous

Inconclusive evidence

Middle part

Dark gray, pyritic shale and also seritic, glauconitic sandstone as above, little carbon and chlorite.

Small, shiny, black, phosphatic "rods" (= Koproliths?) (F)

(Sc)

Upper Cretaceous

chlorite than sericite and with concretionary pyrite. No coarse grains of quartz, grain-size of same uniformity and very small. No carbon observed.

Completely barren.

Bottom of core Same.

3847-3857 Core No. 10

Top of core

Greenish-gray. Very much chloritic, argillaceous, fine sandstone. Somewhat darker green than the glauconitic sandstone higher up in the section. Average grain-size of the quartz slightly larger. Sericite present, pyrite rather rare.

Completely barren.

Bottom of core Same.

Completely barren.

3857-3865 Core No. 11

Top of core

Same, less pyritic, with a small fraction of somewhat coarser angular quartz.

Completely barren.

Bottom of core

Same, lighter in color (less chloritic) less micaceous, friable (not argillaceous), no pyrite.

Completely barren.

3865-3875 Core No. 12

Top of core

Light greenish-gray, hard (well cemented), chloritic and sericitic, slightly argillaceous, fine sandstone, fairly pyritic (small concretions of pyrite).

Completely barren.

Bottom of core

Same, devoid of pyrite.

Completely barren.

3875-3885 Core No. 13

Top of core

Same, slightly effervescent, owing to the presence of small concretions of lime in the rock.

Completely barren.

Middle part

Same, but for the color which is red.

Completely barren.

Bottom of core

Much the same as top part of core except that the quartz is somewhat coarser and the whole is very chloritic and not calcareous.

Completely barren.

3768-3820 Sand, glauconite

Comanche Series

3820-6808 Red or variegated, calcareous or nodular sand.

Possible Triassic

6808-7620 Red or variegated, calcareous or nodular sand.

7620-7682 Shale

7682-7790 Basic igneous

7790-7802 Metamorphic shale

7802-7892 Basic igneous

7892-7913 Metamorphic shale

Taken from Mesozoic Committee Cross Section by Mary W. Blount, September, 1951

**DEPARTMENT OF GEOLGY**

**Dr. Hiram Carter**  
**Florida Geological Survey**  
**Tallahassee, Florida**

**Dear Sir:**

Thanks for the samples of igneous rocks, etc. which you sent. I have prepared slides of all samples except U-255 which is so soft that it crushed to a mud when I tried to grind it. It will have to be impregnated with balsam before I can do anything with it.

As to the others here is the way I see them:

- U-252 (Duclos Oil & Ref. Co.'s T. S. Johnson No.1) encountered at 20,275 feet.**  
Dark reddish-brown color, igneous in texture and containing numerous crystals. Phenocrysts of quartz and the intermediate plagioclase feldspar. The rock is essentially free of mafic minerals. Perhaps a diorite porphyry or a quartz latite porphyry.
- U-253 (Duclos Oil Co.'s Fossil Land Co. No.1) Total depth 2975 feet.**  
A gabbro with poorly developed dioritic structure composed of hornblende, mafic and stock laths of calcic and labradorite. This rock is similar to many of the basic dikes here in the Crystalline Area of Georgia.
- U-251 (Duclos Oil & Ref. Co.'s W.P. Johnson et al No.1) Total depth 8775 feet.**  
A rock near andesitic porphyry which shows phenocrysts of calcic hornblende, labradorite and some quartz. All the feldspar phenocrysts exhibit some border resorption. The presence of quartz would tend to place this rock in the diorite porphyry class.
- U-257 (Duclos Oil & Ref. Co.'s J.J. Campbell et al No. 1) Total depth 4675 feet.**  
A dark reddish-brown rock which is very soft. Does not indicate but slight induration and exhibits little if any igneous characteristics. It is a clay or a soil of some sort; the near-plagioclitic structure may indicate the extreme weathering of a fine-textured fine structure near the contact or on the surface of a basic flow of some type.
- U-258 (Duclos Oil Co.'s Henry B. Camp No.1) Total depth 4677 feet.**  
Fine-grained matrix with veinlets of calcic hornblende and calcic. Matrix occasionally shows minute grains of silica similar to chert. I believe this is a partially subvolcanic sediment.
- U-256 (Duclos Oil & Ref. Co.'s R.L. Johnson, Trustee et al No. 1) T. S. 4675**  
Quartzite of uniform granularity.
- U-255 (Duclos Oil & Ref. Co.'s S.T. Jones et al No. 1) Total depth 22,975 feet.**

**V-1024** This system is a quartzite with well-sorted grains with few  
mineral inclusions and slight lamination.

Thanks again for your kindness. There are at least two of them which are  
suitable for my work.

Sincerely yours,

/s/ J. O. Foster  
J. O. Foster  
Department of Geology  
Emory University, Ga.

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WELL NAME-  
 COASTAL PETROLEUM CO., PARKER DRILLING CO.  
 REMARKS-  
 GEORGE M. OGDEN, JR., 3-24-76  
 SAMPLE QUALITY GOOD

## STRATIGRAPHIC FORMATIONS -

0.0-	12.0	NO SAMPLES
12.0-	29.0	HAWTHORN FORMATION
29.0-	50.0	ST. MARKS FORMATION
50.0-	160.0	SUHANNEE LIMESTONE

## LITHOLOGIC LOG

N- 1854 . JEFFERSON CO. T02S, R03E, SEC 018C

29.0	CLAY	, V LT OR,	POOR IND,	CLAY CNT,	25 PCT.	SAND (QTZ),
35.0	LIMESTONE,	WHITE,	MD LT GY,	10 PERCENT POROSITY-		MOLDIC,
	GRAINTYPE-	BIOGENIC,	MICRITE,	50 PCT. ALLOCHEMS,		SIZE-CRSE,
	RANGE-	CRYP-CRSE,	MOD IND,	MICRT CNT,		FORAMINIF,
40.0	LIMESTONE,	WHITE,	MD LT GY,	10 PERCENT POROSITY-		MOLDIC,
	INTERGRAN,	GRAINTYPE-	MICRITE,	BIOGENIC,	30 PCT.	ALLOCHEMS,
	SIZE-CRSE,	RANGE-	CRYP-CRSE,	MOD IND,		MICRT CNT,
50.0	LIMESTONE,	WHITE,	10 PERCENT POROSITY-			MOLDIC,
	BIOGENIC,	MICRITE,	60 PCT. ALLOCHEMS,			SIZE-CRSE,
	CRYP-CRSE,	MOD IND,	MICRT CNT,			FORAMINIF,
	DICTYOCONUS	COOKEY				
60.0	LIMESTONE,	WHITE,	10 PERCENT POROSITY-			MOLDIC,
	BIOGENIC,	MICRITE,	60 PCT. ALLOCHEMS,			SIZE-CRSE,
	CRYP-CRSE,	MOD IND,	MICRT CNT,			FORAMINIF,
70.0	LIMESTONE,	WHITE,	15 PERCENT POROSITY-			MOLDIC,
	BIOGENIC,	MICRITE,	70 PCT. ALLOCHEMS,			SIZE-CRSE,
	CRYP-CRSE,	MOD IND,	MICRT CNT,			FORAMINIF,
						MOLLUSKS,
80.0	AS ABOVE,					
90.0	AS ABOVE,					
100.0	AS ABOVE,					
110.0	LIMESTONE,	V LT OR,	15 PERCENT POROSITY-			MOLDIC,
	BIOGENIC,	MICRITE,	70 PCT. ALLOCHEMS,			SIZE-CRSE,
	CRYP-CRSE,	MOD IND,	MICRT CNT,			FORAMINIF,
120.0	AS ABOVE,					
130.0	AS ABOVE,					
140.0	AS ABOVE,					
150.0	LIMESTONE,	V LT OR,	GY BR,	15 PERCENT POROSITY-		MOLDIC,
	GRAINTYPE-	BIOGENIC,	MICRITE,	70 PCT. ALLOCHEMS,		SIZE-CRSE,
	RANGE-	CRYP-CRSE,	MOD IND,	MICRT CNT,	30 PCT.	DOLOMITE,
	FORAMINIF,					
160.0	DOLOMITE,	GY BR,	V LT OR,	10 PERCENT POROSITY-		INTERGRAN,
	10-50 PCT. ALTERED,		EUHEDRAL,	SIZE-MICR,		RANGE-
	MOD IND,	DOLOM CNT,	30 PCT. LIMESTONE,			FORAMINIF,
	TD					

\*\*\* END OF DATA \*\*\*