Paul Huddlestun

ca. 1980

Written up – 2/19/14

**LAURENS COUNTY (DUBLIN) CORE, GGS-3523, TT**

**LAURENS COUNTY, GEORGIA**

**Dudley 7½’ Quadrangle**

**In rest area 87 along east-bound lane of I-16,**

**2.6 miles southeast of Dudley, Laurens County**

**Latitude N 32° 30.491’**  **Elev. 285 feet**

**Longitude W 83° 02.768’**

Lithostratigraphic

unit and bed number Description Thickness Depth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(feet) (feet)

**SOIL – 2 feet**

Bed 1 Sand: fine to medium and well sorted; no 2.0 0.0

other lithic components noted; structureless;

unconsolidated and loose but competent;

grades downward into:

**RESIDUUM - 5.5 feet**

Bed 2 Residuum: sand: fine to medium and well 5.5 2.0

sorted; argillaceous; massive and structureless;

unconsolidated and competent (100% core

recovery); deeply weathered; grades downward

into:

**MIOCENE**

**ALTAMAHA FORMATION? – 42.5 feet**

**No diagnostic Altamaha features**

Bed 3 Sand: fine and medium grained and well 6.0 7.5

sorted; very argillaceous and somewhat

limonitic; some horizontal color banding

suggestive of stratification; unconsolidated

but tough and competent; deeply weathered:

mottled deep brown/red with some gray and

dusky yellow orange coloration; grades

downward by decrease in clay content and

noticeable stratification:

Bed 4 Sand: medium to fine grained and mostly 3.5 13.5

well sorted; argillaceous with interstitial clay;

unconsolidated and competent; weathered;

grades downward by continuing decrease in

clay content and loss of stratification into:

Bed 5 Sand: medium to fine sand and mostly well 3.0 17.0

sorted; slightly argillaceous with somewhat

more clay in the lower 1 foot; massive and

structureless; unconsolidated, coherent and

competent; grades downward by increasing

sand-size into:

Bed 6 Sand: coarse grained and moderately well 2.0 20.0

sorted; slightly argillaceous near the top of the

Bed; massive and structureless; unconsolidated

and competent; overlies:

CORE GAP 3.5 22.0

Bed 7 Clayey fine sand/finely sand clay: no other 0.5 25.5

lithic components noted; structureless; sticky

and plastic but of unknown competence; gray

in color; overlies core gap:

NO CORE 11.0 26.0

CORE GAP 2.5 37.0

Bed 8 Sandy clay/clayey sand: (may be the same bed 0.5 39.5

as Bed 7); structureless; unknown competence;

gray in color: grades downward into:

Bed 9 Sand: coarse grained and poorly sorted; clayey, 2.0 40.0

with a coarse gravel stringer at the top of the

Bed and abruptly fining downward into clayey

sand; some MnO2 (wad) at the base of the

recovered core; stratified but appears

structureless below the gravel stringer;

unconsolidated and of unknown competence;

weathered and orange in color; overlies core

gap:

CORE GAP 8.0 42.0

**OLIGOCENE? RESIDUUM - 11 feet**

Bed 10 Clay residuum: with clasts or chunks of 9.5 50.0

chert of various sizes. some mica noted but

no quartz sand; the clay matrix appears to

have been layered but is now contorted,

perhaps due to drilling; otherwise massive

bedded; the clay is unconsolidated and

tough but moderately poor competence,

probably due to the chert clasts during

core drilling (~36% core recovery); overlies

core gap:

CORE GAP 1.5 59.5

**UPPER EOCENE, UPPER JACKSONIAN**

**OCMULGEE FORMATION – 40.5 feet**

Bed 11 Sand: fine to very fine and well sorted, clayey 10.5 61.0

and slightly micaceous; appears to be massive

and structureless; unconsolidated and poorly

competent (~17% core recovery); somewhat

weathered and leached; overlies:

Bed 12 Clay: scattered films of MnO2, no other lithic 10.25 71.5

components noted; massive and structureless;

unconsolidated and very poorly competent

(~12% core recovery); greenish gray in color but

somewhat leached; overlies core gap:

CORE GAP 9.25 81.75

Bed 13 Limestone: granular and calcarenitic with 6.0 91.0

scattered bryozoan fragments; argillaceous;

massive and structureless; moderately

consolidated and competent; grades

downward into:

Bed 14 Clayey limestone/calcareous clay: no other 1.0 97.0

lithic components noted; “peculiar

interlayering, some layers rotated during

coring, have the appearance of ‘fish scales’”;

unconsolidated but apparently competent;

overlies:

Bed 15 Sand: fine grained and well sorted; calcareous 3.5 98.0

and argillaceous with scattered clay clasts;

some probable “pyrite” grains, the same

“pyrite” occurs along clay clast/matrix

boundaries or contacts (could be Mn02);

massive and structureless; unconsolidated

and moderately coherent and competent

(~43% core recovery) abruptly overlies:

**UPPER EOCENE, LOWER JACKSONIAN**

**BARNWELL GROUP – 146 feet**

**DRY BRANCH FORMATION**

**Twiggs Clay Member – 134.5 feet**

Bed 16 Limestone: finely sandy and slightly 2.0 101.5

argillaceous with a thin layer of clay at

~103 feet; thin clay bed in a massive and

structureless limestone; mostly consolidated

and competent; grades downward into:

Bed 17 Sand: fine grained, well sorted and 1.5 103.5

argillaceous; bioturbated; unconsolidated but

competent; grades downward by loss of sand

content into:

Bed 18 Clay: some silt and very fine sand along 6.5 105.0

bedding planes and partings, slightly

calcareous; very thinly laminated, like paper

shale; unconsolidated but tough, resistant

and competent; grades downward by

increase in sand and loss of calcite contents,

and by introduction of bioturbation into:

Bed 19 Sand and clay: no other lithic components 4.0 111.5

noted; bioturbated, appears originally to have

been prominently layered; unconsolidated and

coherent and competent; abruptly overlies:

Bed 20 Limestone: argillaceous and moldic with 10.0 115.5

common to abundant mollusk molds; slightly

and finely sandy in the upper few inches of

the Bed and in the lower half of the Bed, no

quartz sand noted between the two

occurrences; consolidated and moderately

competent (~45% core recovery); grades

downward into:

Bed 21 Sand: fine grained and well sorted; very 3.5 125.5

calcareous with shell fragments concentrated

in the middle of the Bed, moderately

argillaceous; partially structureless with very

rude layering; unconsolidated but competent;

grades downward into:

Bed 22 Clay: similar to Bed 18 - some minor silt and 16.0 129.0

very fine sand along bedding planes and

partings, slightly calcareous throughout; fish

scales noted along partings in the basal few

inches of the Bed; very thinly laminated, like

paper shale; unconsolidated but tough,

resistant and competent; grades broadly

downward by increase in quart sand and

calcite and abrupt diminishing and loss of

clay contents into:

Bed 23 Sandstone: fine grained and well sorted; very 2.0 145.0

calcareous, fossiliferous and argillaceous;

massive and structureless; moderately to

lightly cemented and moderately competent;

grades broadly downward into:

Bed 24 Sand: fine grained and well sorted; 3.0 147.0

argillaceous and calcareous; massive and

structureless; unconsolidated and moderately

coherent and competent; grades downward by

increase in calcite content into:

Bed 25 Sand/limestone: the quartz sand is fine 3.0 150.0

grained and well sorted; very calcareous,

somewhat fossiliferous and a trace of

phosphate; massive and structureless; poorly

consolidated and moderately coherent; very

pale in shade; grades downward by

diminishing of calcite content into:

Bed 26 Sand: fine grained and well sorted; very 3.5 153.0

calcareous with higher calcite content in the

upper part of the Bed, argillaceous with

higher clay content and a trace of mica in

the lower part; massive bedded and mostly

structureless; unconsolidated and moderately

coherent and competent; grades downward by

increase in clay content into:

Bed 27 Clay: very calcareous, and variably and finely 1.5 156.5

sandy; massive and structureless;

unconsolidated and moderately competent

(~62% core recovery); very pale in shade;

grades downward into:

Bed 28 Sand and clay: quartz sand is fine grained 2.0 158.0

and well sorted; clay occurrence is both

interstitial but mostly in thin, undulatory

layers; calcareous; prominently stratified;

unconsolidated and moderately competent

(~62% core recovery); grades downward by

increase in clay and decrease in sand

contents:

Bed 29 Clay: with thin layers, laminae and dustings 5.0 160.0

of fine sand to silt along clay partings;

calcareous; undulatory or wavy bedded;

unconsolidated and moderately competent

(~55% core recovery); grades downward by

increase in sand content into:

Bed 30 Clay: similar to the overlying bed but the 2.0 165.0

interlayered sand content is greater;

calcareous as above; prominently stratified

although the stratification planes are more

level and less undulatory; unconsolidated

and moderately competent (~55% core

recovery); grades downward into:

Bed 31 Clay: slightly and finely sandy and silty with 43.0 167.0

scattered quartz distributed along bedding

planes and partings, slight lenticular

concentrations of sand; calcareous with a

trace of glauconite in the basal 1 foot; thinly

stratified to laminated, layering ranges from

slightly and unevenly undulatory to

horizontal and flat; unconsolidated but tough

and mostly competent (~93% core recovery);

grades abruptly downward into:

**Tivola Limestone transitional into Twiggs Clay;**

***not* Tivola Limestone – 26 feet**

Bed 32 Limestone: argillaceous and glauconitic, a 5.5 210.0

thin, glauconitic clay layer at ~210.5 feet;

fossiliferous with common *Lepidocyclina* and

scattered *Pecten* cf. *spillmani*; nil sand;

stratified and undulatory bedded; mostly

consolidated and competent (100% core

recovery); grades downward into:

Bed 33 Limestone: marly and very argillaceous, 2.0 215.5

glauconitic and fossiliferous; stratified and

undulatory bedded; mostly partially

consolidated and competent; grades

downward into:

Bed 34 Clayey, calcareous, calcarenitic sediment/ 3.5 217.5

calcarenitic, calcareous clay: very glauconitic

and clayey, frequent to common *Lepidocyclina*,

rare to frequent bryozoans some pectenids and

mollusk and solitary coral molds; *Lepidocyclina*

and bryozoans are the most conspicuous fossil

elements; mostly massive and structureless;

slightly consolidated, tough and competent;

grades downward into:

Bed 35 “Limestone”: similar to the overlying bed but 15.0 221.0

more calcareous and consolidated; very

argillaceous to clayey and variably glauconitic,

fossiliferous as above but with the addition of

*Operculinoides* and apparent *Discocyclina*

noted in the lower part; thinly to thickly

stratified, individual layers are mostly massive

and structureless; variably consolidated to

unconsolidated, tough and competent (100%

core recovery); grades broadly downward into:

**UPPER EOCENE, LOWER JACKSONIAN**

**BARNWELL GROUP**

**CLINCHFIELD FORMATION – 11.5 feet**

Bed 36 Sand: fine grained and well sorted; 7.0 236.0

calcareous and slightly argillaceous and

slightly fossiliferous; massive and

structureless; unconsolidated and

mostly competent (~71% core recovery);

grades abruptly downward into:

Bed 37 Limestone: finely and irregularly sandy and 4.5 243.0

variably fossiliferous with a line of intraclasts

at the base of the Bed; massive and

structureless except for the irregular

distribution of fossil molds and quartz sand;

consolidated and competent (~100% core

recovery); disconformably overlies:

**MIDDLE EOCENE, CLAIBORNIAN**

**CLAIBORNE GROUP**

**LISBON FORMATION**

**Blue Bluff Member - 65 feet**

Bed 38 Silty, finely sandy clay/clayey, fine sand: 6.5 247.5

somewhat calcareous with one thin sandy,

argillaceous limestone layer with some shell

impressions; finely micaceous with lignitic

flecks; thinly interlayered to laminated, very

nicely color banded with darker clay and

lighter sand; unconsolidated but tough and

mostly competent (~77% core recovery);

grades abruptly downward into:

Bed 39 Limestone: very argillaceous with irregular 7.0 254.0

distribution of fine sand, some lignitic clasts

and pyrite noted (“dirty looking mess”);

massive bedded but some irregular

distribution of lithic components and some

lithic variation down-section; consolidated,

tough, hard and competent (~100% core

recovery); grades downward into:

Bed 40 Clay: very finely sandy to silty, very 30.0 261.0

micaceous and common lignitic flecks

scattered throughout, common dark

minerals of which some may be very fine

pyrite crystals or dustings; a trace of

pelletal phosphate or glauconite noted;

calcareous throughout with some scattered,

thin, argillaceous limestone layers, nil to

few scattered small, chalky mollusk shells

and shell fragments; scattered burrows;

slightly bioturbated, partial rupturing of

bedding planes, very wispy, churned,

laminated appearance; unconsolidated but

very firm, tough and competent; striking

light/dark color patterns due to interlayering

of darker shades of clay and lighter shades

of sand color, disrupted layering and

bioturbation; resembles “migmatite: in

places;

A fine grained, argillaceous limestone layer

present at ~264 feet;

Wisps of small, chalky mollusk shells below

~266 feet;

The bivalve *Atrina* noted at ~269 feet;

Fossil shells are less chalky and more

aragonitic below ~272 feet;

Has the appearance of “migmatite” below

~275 feet;

No more fossil shells below ~282 feet;

Bioturbation diminishes, layering is less

disrupted and more even bedded below

~285 feet;

Very thin limestone stringers at ~290 feet;

Grades broadly downward by loss of

bioturbation and increase in clay content

into:

Bed 41 Clay: with very fine sand and silt along clay 16.5 291.0

interlayers and partings, quartz sand

content gradually decreases down-section;

nil mica in the upper part, finely micaceous

in the lower part of the Bed; calcareous

throughout but non-macrofossiliferous; very

thinly layered to laminated but layering is

less conspicuous than in the overlying bed;

unconsolidated but firm, tough and

competent; grades downward into:

Bed 42 Clay: calcareous and fossiliferous, micaceous 1.0 307.5

and pelletal phosphatic or glauconitic (can’t

tell which); massive bedded; unconsolidated

but competent; grades downward into:

Bed 43 Clay: appears granular in texture due to the 1.0 308.5

abundance of pelletal phosphate; calcareous

with scattered shells and shell fragments;

finely micaceous; massive bedded;

unconsolidated, firm and competent (~100%

core recovery); grades downward into:

Bed 44 Limestone: argillaceous to clayey, glauconitic 3.0 309.5

with scattered shells, rubbly with frequent

intraclasts of clay with thin, glauconitized

films or coatings on the surface of the

intraclasts (basal rubble); massive bedded;

consolidated and competent; disconformably

overlies:

**LITHOLOGICALLY TRANSITIONAL BETWEEN STILL BRANCH SAND AND HUBER FORMATION (NOT OCONEE GROUP) – 107.5 feet**

Bed 45 Clay: no other lithic components noted; 4.0± 312.5

massive and structureless; unconsolidated

and waxy, moderately coherent (~47% core

recovery); pale greenish gray to light gray;

thickness and basal contact depth is

uncertain due to poor recovery in the

interval; appears to grade downward into:

Bed 46 Sand: fine grained and well sorted; probably 2.0± 316.5±

a trace of interstial clay; very thinly layered;

unconsolidated and moderately coherent and

competent (~47% core recovery); greenish

colored; thickness and basal contact depth is

uncertain due to poor recovery in the

interval, appears to grade abruptly downward

into:

Bed 47 Clay: silty; very finely laminated with silt 1.0 318.5±

occurring along clay partings; unconsolidated

but competent; gray in color; thickness is

probably accurate, basal contact depth is

uncertain due to poor recovery in the cored

interval; abruptly grades downward into:

CORE GAP 11.5 319.5±

Bed 48 Sand: medium grained and well sorted; no 2.0± 331.0± other lithic components noted; massive and

structureless; unconsolidated, mostly

incoherent and poorly competent; thickness

and basal contact depth is uncertain due to

poor recovery in the cored interval, overlies

core gap:

CORE GAP 8.0 333.0±

NO CORE 20.0 341.0

Bed 49 Sand: clayey and micaceous; massive 3.0± 361.0±

bedded to faintly bioturbated; unconsolidated

and moderately coherent and competent

(~50% core recovery); dark gray to black in

color; overlies core gap (thickness and depth

of contact depth is uncertain due to poor

recovery in the interval):

Bed 50 Sand: medium to medium/fine and well 2.0± 364.0±

sorted, a layer of very coarse and granully

sand in the middle of the Bed; mostly

massive and structureless except for the

layer of coarse sand; unconsolidated and

poorly coherent and poorly competent

(<20% core recovery, thickness uncertain);

moderate gray in color; overlies:

CORE GAP 11.0 366.0±

Bed 51 Sand: clayey, carbonaceous and lignitic; 4.0± 377.0±

massive and structureless; unconsolidated

and poorly coherent (<20% core recovery,

thickness uncertain); overlies:

Bed 52 Sand: variably medium-grained to medium/ 19.0± 381.0±

carbonaceous clay coarse grained to very

coarse and granully, mostly well sorted

quartz sand; probably a trace of interstitial

clay and with scattered thin layers to

laminae of dark gray, some scattered

carbonaceous or lignitic flecks, slightly

micaceous in the lower part; the sand is

massive and structureless with scattered

thin layers to laminae of clay;

unconsolidated and moderately coherent

and competent (~42% core recovery);

thickness and basal contact depth is

uncertain due to poor recovery in the

interval:

**Bashi-equivalent? – ~20 feet**

**(“E1” according to USGS palynology)**

Same stratigraphic bed as above stratigraphic unit

Bed 53 Sand: medium to coarse grained and not 2.0± 400.0±

well sorted; very micaceous, carbonaceous

and lignitic; slightly, but not obviously,

argillaceous, rudely stratified; unconsolidated

and poorly coherent and poorly competent

(~14% core recovery); thickness and basal

contact depth is uncertain due to poor

recovery in the core intervals; overlies core

gap:

CORE GAP 7.0 402.0±

Bed 54 Sand: fine/medium to medium grained and 5.0± 409.0±

Well sorted; micaceous with lignitic flecks on

bedding surfaces, probably minor interstitial

clay with one thin carbonaceous clay layer

in the lower part of the Bed; thinly and

rudely stratified; unconsolidated and

moderately coherent and competent (~42%

core recovery); thickness and basal

contact depth is uncertain due to poor

recovery in the core intervals; overlies core

gap:

CORE GAP 6.0 414.0±

**UPPER PALEOCENE, SABINIAN**

**BAKER HILL FORMATION? – ~51.5 feet**

**Nanafalia-equivalent (“P2” according to USGS palynology)**

Clay: disrupted; “sticky clay at bottom of 7.0± 421.0±

409-421 foot core run”, gooey, gray clay with

some lignitic material: very poor recovery

(“messed up clay, reworked?” but moderate

core recovery); thickness and basal

contact depth is uncertain due to poor

recovery in the cored intervals; overlies:

Bed 56 Kaolin: hard kaolin, very pyritic; massive and 17.0± 428.0±

structureless but marbled gray and cream in

color; unconsolidated and moderately

competent (~54% core recovery); thickness

and basal contact depth is uncertain due to

poor recovery in the core intervals; grades

downward into:

Bed 57 Kaolin: “good, hard Huber-type kaolin”, 6.0± 445.0±

no other lithic components noted; mostly

massive and structureless but appears to

be vaguely stratified in the lower 1 foot;

unconsolidated but tough, hard and

moderately competent (~50% core recovery);

thickness and basal contact depth is

uncertain due to poor recovery in the core

intervals; grades downward into:

Bed 58 Kaolin: “still Huber-type of hard kaolin”, no 2.5± 451.0±

other lithic components noted; recovered core

is massive and structureless; unconsolidated

and poorly competent, “getting gooey and

plastic” in the lower part of the recovered core

(~25% core recovery); thickness and basal

contact depth is uncertain due to poor

recovery in the core intervals; overlies core

gap:

CORE GAP 7.5 453.5±

NO CORE “sand cuttings” 10.5 461.0±

**LOWER PALEOCENE, MIDWAYAN, DANIAN**

**TRANSITIONAL MARSHALLVILLE/CLAYTON FORMATION – 91 feet**

**(Danian or “P1” according to USGS palynology)**

Bed 59 Sand: fine grained and well sorted; clayey, no 2.0± 471.5±

other lithic components noted; recovered core

is massive and structureless; unconsolidated,

plastic, poorly coherent and competent (~22%

recovery); thickness and basal contact depth

is uncertain due to poor recovery in the cored

intervals; overlies core gap:

CORE GAP 7.5 473.5±

CORE GAP “4 inches of carbonaceous sand cuttings” 11.3± 481.0±

Bed 60 Sand: medium/fine grained and mostly well 3.0± 492.3±

sorted; argillaceous with increasing clay

content downward and somewhat

carbonaceous in the lower part of the

recovered core; massive and structureless

unconsolidated and moderate to poorly

coherent and competent; (~35% core

recovery); gray in color; thickness and

basal contact depth is uncertain due to

poor recovery in the cored intervals;

overlies core gap:

CORE GAP 5.7 495.3±

Bed 61 Sand: fine grained and well sorted; somewhat 3.0± 501.0

argillaceous with a layer of carbonaceous

sandy clay in the lower part of the recovered

core, scattered carbonaceous/lignitic material

throughout; mostly massive and structureless;

unconsolidated and poorly coherent and

competent (~30% core recovery; thickness

and basal contact depth is uncertain due to

poor recovery in the cored intervals; overlies

core gap:

CORE GAP 7.0 504.0±

Bed 62 Sand: fine/medium grained and well sorted; 10.0± 511.0±

calcareous with irregularly scattered fossil

shells and shell fragments; argillaceous and

irregularly glauconitic; massive and

structureless except for irregular distribution

of subordinate lithic components;

unconsolidated and moderately coherent

and competent (~46% core recovery);

thickness and basal contact depth is

uncertain due to poor recovery in the cored

intervals;

Bed 63 Sand: the recovered core consists of massive 2.5± 521.0±

and structureless, medium grained and well

sorted sand, no other lithic components

noted; unconsolidated and poorly coherent

and competent (~12% core recovery);

thickness and basal contact depth

is uncertain due to poor recovery in the

cored intervals; overlies core gap:

CORE GAP 16.5 523.5±

Bed 64 Sand: medium grained and well sorted; 13.5± 540.0±

slightly argillaceous; thinly layered at the

top of the recovered Bed, massive and

structureless below the upper 1 foot but

could be very rudely layered – poor recovery,

difficult to tell; unconsolidated and poorly

coherent and poorly competent (~22% core

recovery); thickness and basal contact depth

is uncertain due to poor recovery in the cored

intervals; overlies core gap:

CORE GAP 7.5 553.5±

Bed 65 Sand: medium to coarse grained and 1.5± 561.0±

moderately well sorted; iron-stone cemented

at the top of the recovered Bed, intraclasts of

dark olive, waxy clay at the base of the

recovered core, some interstitial clay; gypsum-

bloom on the core surface; bioturbated;

unconsolidated and poorly coherent and

competent (~20% core recovery); thickness

and basal contact depth is uncertain due

to poor recovery in the cored intervals;

disconformably overlies:

**UPPER CRETACEOUS, NAVARROAN-MAASTRICHTIAN**

**FORT VALLEY GROUP**

**PROBABLY NAKOMIS FORMATION - 121 feet**

**Transitional between the Nakomis and Ripley formations**

Bed 66 Kaolin: micaceous, appears to be of the “soft 16.5± 562.5±

type” of kaolin but here it is soapy, tough and

hard (this formation is not encountered in the

kaolin mines up the dip); massive and

structureless; unconsolidated but tough, hard

and poorly competent (~25% core recovery);

thickness and basal contact depth

is uncertain due to poor recovery in the cored

intervals; grades broadly downward by

introduction of sand into:

Bed 67 Sandy kaolin/kaolinitic sand: quartz sand is 11.0± 579.0±

fine grained and well sorted; kaolinitic with

kaolin content decreasing down-section;

somewhat micaceous; massive and

structureless; very tough and almost hard

but poorly competent (~20% core recovery);

thickness and basal contact depth

is uncertain due to poor recovery in the

cored intervals; grades broadly downward

into:

Bed 68 Sand: medium grained and well sorted; 3.0± 590.0±

clayey and somewhat micaceous; massive

and structureless; unconsolidated, still tough

as the overlying bed and the clay present

strongly influences the texture and

hardness of the sediment, poorly

competent (~20% core recovery); thickness

and basal contact depth is uncertain due to

poor recovery in the cored intervals; overlies

core gap:

CORE GAP 8.0 593.0±

Bed 69 Sand: variably medium to coarse and 82.5± 601.0±

granully, variably well to poorly sorted, the

coarse sand may be well sorted or poorly

sorted, the basal 1 foot of the Bed is very

coarse grained and poorly sorted; scattered

thin layers of clay/kaolin but probably very

little interstitial clay/kaolin, the clay/kaolin

layers range from soft and plastic on one

hand to soapy, waxy, brittle and hard on the

other hand; slightly micaceous but the mica

appears to be associated mostly with the

clay/kaolin, some lignitic material and/or

pyritic material associated with the clay/

kaolin; unconsolidated and the sand is

mostly loose and poorly coherent, poorly

competent (~19% core recovery), thickness

and basal contact depth is uncertain due

to poor recovery in the cored intervals;

grades abruptly downward into:

**UPPER CRETACEOUS, NAVARROAN-MAASTRICHTIAN**

**RIPLEY FORMATION – 83.5 feet+**

Bed 70 Clay: finely micaceous with very fine sand/ 10.5± 683.5±

silt along clay partings, some scattered

lignitic material on clay partings and a pyrite

nodule noted in the basal, transitional zone;

very thin and delicate layering but

bioturbated in the basal, transitional zone;

unconsolidated and waxy but moderately

good competence (~70% core recovery);

thickness and basal contact depth is

uncertain due to poor recovery in the cored

intervals; grades broadly downward into:

Bed 71 Sand: fine to medium grained and moderately 6.5± 694.0±

sorted; clayey and carbonaceous; massive and

structureless; unconsolidated and poorly

coherent and competent (~23% core recovery);

thickness and basal contact depth is uncertain

due to poor recovery in the cored intervals;

grades abruptly downward into:

Bed 72 Sandy clay/clayey sand: finely sandy clay at 2.5± 700.5±

the top of the Bed, becoming more finely

sandy and less clayey downward; no other

lithic components noted; massive bedded;

probably poorly competent (~24% core

recovery in the core interval); thickness and

basal contact depth is uncertain due to poor

recovery in the cored intervals; overlies

core gap:

CORE GAP 8.3 703.0±

Bed 73 Clay: weathered orange/ochre, drilling mud 0.7± 711.3±

or caving? overlies:

Bed 74 Sand: slightly fining upward; fine/medium 10.0± 712.0±

grained and well sorted in the lower part of

the Bed, becoming fine grained and well

sorted upward; little clay noted in the lower

part of the Bed, interstitial clay content is

somewhat irregular in the upper part; no

other lithic components noted; mostly

massive bedded; unconsolidated, poorly

coherent and poorly competent; thickness

and basal contact depth is uncertain due

to poor recovery in the cored intervals;

grades downward into:

Bed 75 Sand: silty, very fine to fine grained and well 3.0± 722.0±

sorted with a few somewhat coarse layers;

somewhat argillaceous, slightly and finely

micaceous with darker colored, thin layers

or streaks of dark minerals; mostly massive

in appearance but with subtle, rude layering;

unconsolidated and poorly coherent and

competent (~30% core recovery); thickness

and basal contact depth is uncertain due to

poor recovery in the cored intervals; overlies

core gap:

CORE GAP 6.0 725.0±

Bed 76 Clay: with silty partings, probably very finely 2.0± 731.0±

sandy in the lower part, no other lithic

components noted; thinly layered to laminated

but somewhat wispy and bioturbated in the

lower few inches of the recovered core;

unconsolidated and poorly competent (~20%

core recovery); mostly black in color but gray

in the basal few inches; thickness and basal

contact depth is uncertain due to poor

recovery in the cored intervals; overlies

core gap:

CORE GAP 8.0 733.0±

Bed 77 Sand: fine to medium/fine grained and well 26.0± 741.0

sorted; argillaceous becoming less

argillaceous downward, a few thin clayey

intervals; finely micaceous; massive in

appearance but some thin intervals

suggest rude stratification; unconsolidated

and variably coherent, some mostly very

soft, almost incompetent intervals, other

intervals are competent (the average core

recovery is ~49%); thickness and basal

contact depth is uncertain due to poor

recovery in the cored intervals; bottom of

the logged core at 767 feet.

NOT LOGGED BELOW 767 FEET 13.0 767.0

NOT CORED BELOW 780 FEET 910.0 780.0

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TOTAL DEPTH – 1690 FEET