Ovanda

E DINBUR

Lincolnshire

New Market
Tumbling Brook section, Va. New Market - Massive lithographic gray 65. Tetradium - novum
3/1/57

Lincolnshire - Thin bedded black 65, weathers gray, carries silicified fanning, contains black nodules.

10-1

10-1 near base, 30' above contact.  
Photo 1 - close up  
2 New Market at base. Coll. of beard hair (photo 1).

Photo 3 close up white marking.

10-2

50' above base 6" lad? Sowerly, test zone? may be below the zone directly above photo 3.

11-1

11-1
photo 4 - Hammer on metaconchite?
bad near top of Lincolnshire.
cobby is above Edinburg or close to it. (11 50) 17°

10-3 Metaconchite? bed 1 2. photo
4, approx 1" thick
discarded, etch showed nothing.

10-4 Shale parting in Edinburg

10-5 LS above sh.

↑ about middle of Edinburg
right above house (brick) & below telephone line crossing.
10-6
Orands
US Highway 11 - 0.4 mile
W. of Tumbling Run, N side
7 rd.
21'

10-7
Same S side 7 rd.
Photo 5 at 10-7
looking E.
Miss G. Collins, Md. Geol. Survey took party to Paleocene localities in Prince Gerges Co., Md.

Loc. 1 - First Paleocene loc. found in Md. Lanham quad., about 1 mile W., SW., of Brightseat. Take Sherrif Rd. west of Brightseat, cross calvert and turn S. on first private Rd. At house turn W. past 2 barns. Creek that starts as spring N. of fence and W. of last barn. About 10' exposed in creek, base not exp.

12-3-1 Shell bed, 9'-10' below top of fm.

12-3-2 Approx. middle of formation, some shells

12-3-3 Top of Paleocene, overlain by leached brown material containing phosphatic nodules. The formation is sandy near base, more claye near top.

Loc. 2 - Creek to W. of same barn as loc.1, this creek curves around houses and crosses Sherrif Rd. at calvert.

10-3-4 Near top of Paleocene, shell bed.

10-3-5 Down stream, Cretaceous clay, fossils better preserved, more pearly, overlain by sandy Paleocene (12-3-6)

12-3-6 Paleocene, less than 1 foot above Cretaceous.
<table>
<thead>
<tr>
<th>Tumbling Brook section, Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newmarket - Massive, lithographic gray ls. non siliceous</td>
</tr>
<tr>
<td>Lincolnshire - Thin bedded black ls., contains black nodules, weathers gray, silicified fossils</td>
</tr>
</tbody>
</table>

| 10-1 | Near base, about 30' above contact. |
| 10-2 | About 50' above base, 6" bed, ?Sowerbyites zone. |
| 10-3 | Metabentonite - Discarded, no fossils |
| 10-4 | Shale parting in Edinburg. Discarded |
| 10-5 | Ls. above shale, about middle of Edinburg, right above brick house and below telephone line crossin road. |
| 10-6 | Cranda, US Hwy 11, 0.4 miles W. of Tumbling Run, N. side of road. |
| 10-7 | Same as above, S. side of road. |

<table>
<thead>
<tr>
<th>Strausburg Junction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower portion of Edinburg</td>
</tr>
</tbody>
</table>

| 10-8 |
| 10-9 | About 10' below 10-8 |
| 10-10 | " 10' below 10-9 |
| 10-11 | " 20' below 10-10, on line with telephone pole |
| 10-12 | 40'-60' above 10-8, near Middle of Edinburg |
Strausburg Junction

Edinburgh.

10-8
Middle Lower position
photo - 6 outside of 10-8
in field, F 11 1/50 - 6'
Photo 0.7 views 3 same

10-9
same as 8, 10' + below 8

10-10
10' + below 10-9

10-11
20' + below 10-10
on line with Tel Pole

10-11
strat above
10-12 below + - 40'-60' 10-8

hear middle of Edinburg. slightly
below side of Tree.
Piscataway Cr. locality, new rd. 7 mi. from district line.
Indian Head Rd. N of Piscataway Cr. Prince George Co. Md.
N. 3 bridg, rd. east.
Ogee - 4' above contact (Marlboro clay)
10-21-3 Noyemog
10-21-2 ogie shelf
10-21-1 bedwire, shelf
Turn ella, mortai
Noyemog - yellowish clay, from cobblestones at Hen. local
(lower member of Noyemog)
well nuts
(Phot 28 by Hessland 7 octop)
Schmitz loc. F ?
10-22-4

50c

1,000,000 lb. 2100 tons

7,500 lb. 34,500 tons

1,000,000 lb. 2100 tons

10-22-4

50c
10-22-5
Upper Marlboro
12 20 2 to 26 yard
2" below Marlboro Clay
Aquia

10-27-6
2" above contact
Marlboro Clay

Addison Rd.
.65 mi S.W. Central Ave.

10-22-7
Paleocene, 0.65 m. S.W.
Central Ave. on Addison Rd.
below contact with Aquia.

10-22-8
Aquia, bad, just above
Paleocene, Addison Rd.
Miss G. Collins, Md. G.S. took party to Paleocene localities in Prince Georges Co., Md.

Loc. 1. (First loc. of Paleocene ever found in Md.)

Lanham - about 1 mile W.S.W. of Brightseat, take Sherrif rd W. of Brightseat cross culvert and turn S on first private rd. at house turn W past 2 barns cr. W. y last barn that starts as spring N of fence

about 10' Paleocene exposed in cr. base not exp.

12-3-1 Shell bed 9'-10' below top of fm.

12-3-2 Approx. middle of fm., some shells.

12-3-3 Top of Paleocene, near B.M. stake, over lain by leached brown material containing phosphate nodules.

The formation is more clayey near top, sandier near base.
12.3.5
Creek to E of same barn as loc. 1
Cr. curves around houses and crosses Sheriff rd at culvert.

12.3.4
Near top of Paleocene, shell bed

12.3.5
Down stream, Cretaceous
clay, fossils better preserved,
Ammonite overlain by sandy
base of Paleocene (12.3.6)

12.3.6
Paleocene less than foot above
Cretaceous

Loc. 3
Addison Rd. 0.6 mi. E of Candlecar

12.3.7
Cret. crops out in Cr. W of house
across rd from cut.

12.3.8
Walk Cr. upstream past pig pens
to exposure. Paleocene 3½' below

12.3.9
Aquifer just above contact 7/12.3.8.

Set 1/26/53
NAME  

DATE  1/26/53

Paleocene Cohantuca

1/26/53-1 loc. 1 lower outc. approx same as 12-3-1, 1931

1/26/53-2 loc. 1 upper outc.
approx same as 12-3-2, 1937

loc. 2
Second Cr. same as 12-3-51, p.2.

1/26/53
2 bags.

Cretaceous below contact 2-5' below erosure and associated with well preserved naconous shells.

Walked up stream 5 heat saw erosure and Naconous shells.  170 Paleocene ??
May 8, 1952

3V W.C.

Film R & W: Knight & 38 Wuerger on top yellow.

12850

S 2-5-8-1. 1" x 1/2" Shale parting betw. 2 Lias beds.

O. Handon

See map with O.
May 9, 1953, p. 1

Keeper or Loc. 100 yd from type sec of Fern Glen.

Fern Glen

Bushberg

Glenc Pk.  sh.

16" shale unknown ge formation

Kinsvick

River moraine

Red house

Drop down to riv.

See Manchester
RR tracks stop car at gate
clayt. Blush greenish 5-9-5
Red bedded 5-9-3
5-9-4
"Fern Glenn" L5 in Mo.
Red, green or gray
Old RR track below present
level.
Red shale at level 7
power line
5-9-5
5-9-4
5-9-6
buff colored above red.

Collect in detail, has ostrich egg

House
Riv.

5-9-3
5-9-6
Disc
cheery red
material around cherry

5-9-5
5-9-6
May 9 p.3

Castlewood Sec
Kansas p. 49

Etch nothing disc

Graptolites
Take channel samples

Phosphatic nodules

Shale has Graptolites

Drip holes

Bush bery

5' 7-8

Plate shale 5'
(Grossy Cr)

Shale has Graptolites

5h

Milepost #?

5' 7' Middle 7 Grossy Cr. 5h. Which contains Graptolites

Collect shale

00'
May 10, 1952

See Faujas of the Glass Park C5: St. Louis.
Read sec. Trans. pp. 16 n. 0.7 pp. 432-471, 1936.

No. 5-10-3 → 6
Bush:
5-10-2, 4

Geyser Park:
5-10-1
3
Shell, unknown

Quarry on hill at 2nd beach
3 tunnels N. and 3 quarry.

Geyser Quarry
5-10-4
Slab near tunnel Glass Plk.
Just above sandy zone at base

1st set of tunnels has
Ostracodes in Kimsw.
May 11, 1952

s. wall

RR cut due S of Cheroe
"B" of the arena. E end of

cut. Prob. Knight's loc.
37. slump? clay with bed.
Prob. L. Ft. Scott.
Piscataway Creek locality
Indian Head Rd., about 7 miles from District line
Schmidt's loc. F?

10-21-3 about 4' above contact. (Marlboro Clay)
Nonjemoy

10-21-2 Shells (Aquia) bed with Turritella martini

10-21-1 Nonjemoy — yellowish clay with iron concretions
the size of walnuts. Lower member of Nonjemoy

10-21-4 Fort Washington, Monmouth- DISCARDED
Upper Marlboro
Md. 202 to car yard

10-21-5 Aquia, 2" below Marlboro

10-21-6 Marlboro clay, 2" above contact.
Addison Road
0.65 miles S. of Central Ave.

10-22-7 Paleocene below Aquia

10-22-3 Aquia, base, just above contact
Loc. 1 of Paleocene, approx. same as 12-3-1-1951

Approx. same as 12-3-2-1951

Loc. 2. Second creek, Cretaceous below contact, 2' to 5' below Exogyra associated with well preserved nacreous shells.

Walked upstream to head, saw Exogyra and nacreous shells — NO PALEOCENE?
5-8-1  J.B. Knight's loc.  38, 1" to $\frac{1}{2}$" yellow shale parting between 2 limestone beds.
12850  see map with x
Keefer Cr. locality, 100 yds from type sec. of Fern Glen

Fern Glen

Bushberg

Shale, 4' - Glen Park

16" shale, unknown age

Kimm Wick Is. (M. Ord)

River

Park at red house and drop down to river

see Manchester quad.
<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9-3</td>
<td>Red shale at level of power line</td>
</tr>
<tr>
<td>5-9-4</td>
<td>Ls. at level 1/2 between tracks and ditch</td>
</tr>
<tr>
<td>5-9-5</td>
<td>Buff colored above red</td>
</tr>
<tr>
<td>5-9-6</td>
<td>Cherty bed, material around chert - DISCARDED</td>
</tr>
</tbody>
</table>
Cattlewood Section
See Guidebook, Kansas G.S., p. 48

5-9-7
Middle of Grassy Creek shale, contains Graptolites

5-9-8
Bushberg above 5-9-7 Etched and DISCARDED
Sohn  Oct 1951 - Mar 1954

118  3/21/06
119  3/28/06
120  4/4/06
<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10-2</td>
<td>Glen Park</td>
<td>Slab near tunnel from Glen Park just above sandy zone near base</td>
</tr>
<tr>
<td>5-10-1</td>
<td>Shale</td>
<td>Quarry on hill at 2nd bench group of tunnels, at north end of quarry.</td>
</tr>
<tr>
<td>5-10-4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- "Glen Park Jr."
5-11-1  S. wall of RR cut due south of Annex "B" of the Arena. E end of cut. Probably Knight's loc. 37. Slump clay with limestone.

Probably Lower Ft. Scott fm.

5-11-2  35' E of centerline of Driveway, N. slope, shale about 4 ft. above curbing & 5' N. of N curb. Shale above massive ls. 2' to 3' thick, and below thin ls. Prob. L. Ft. Scott, Brill later said this is above Knight's loc.

Macklind
May 11, 1952

35' E 7 Dirway, N. slope
Sh. 4'2 above Curbing 75' N. Curbing Sh. above marsh levels 2 - 3' Thick and Feathery Feiz
Ls. Prof. L. F. Scott.

Loc.
Macklin Ave. 7 Wise Ave.
465' W of Macklin Ave on new street which is western extension of Wise Ave.
new slope by Parem Golf Tree.
cross area of a new bldg.

According to Brill
this is above Knights

cyclotherm coal below this is above Scott F. Scott.
May 14, 1952

Hwy 21 & Meaveon Riv.
J.P. loc. "Bryef" shall persist about
1 ft below Top of Upper
Rhinconella zone and
about 4' above Bryen's locality

↑

Probably Bryen's locality 5-11-3

call. Topotype

See J.P. paper for section
May 12

KGS Stop 24 pp. 52-53
Roadside outcrop

St. Louis LS

Phot 475 7 loc. 5-12-2

Green clay in pockets in brecciated zone

5-12-1

½"-1" seam of brown and greenish clay at rt side of exposure and slab just below clay. 30' left of 1st Tel. pole on outcrop.

5-12-2

5-12-3

Greenish sandy zone 2' below 5-12-1 in brecciated zone
5-12-5 5/12/40

Choutea LS (prob. near base) slumps block with shale

5-12-4

Calloway (Dev.) 12' abov. base (at Bob Cr?)
Hemispef

30' Louisiana
2' Sassafras
3' 1/4" Grassy Gl.
7" gray clay shale
2" sand, shale

24' Soil, Bowling

6' core

40' 50' Magnolia

0' 15'
May 12

Composite p. 61-62

Right part of the dwell cabins. Pinnacle Hill over rap above boat house (cave)

Collect. Sam Ford

$1 = 10c . 6s.

Porting in 6s to near cave with large brachiopod, 3'4' above base of 6s. 6s.

Go to r. Y. cave for
beak of Sam Ford. Grassy Cr. and Sh. of sand. Sand may be top of Bowling Cr.

Sam Ford really a mudstone; Grassy Cr. is a black tinecle shale.

1a. 6s. Lowest bed has fossils in partings right above and below.

Dolomitized portion is yellowish, carries calcite

Get picture of 6a. 6s. in morning

(over)
Cooper found Ostracods

1. L.a. L.s. just above base
2. Sh. near base of Saukton
3. Sh. at base of Gr. Cr.

6/17/8
6/7/7
6-7-6

L.a. L.s.
2' sh. green.
3' 1/4' sh. Gr. Cr.

7' grey sh.
2' same shaly
Bowling Gr. (5th)
24'

6' connot

40' magnumita.
May 12
Buffalo Hill (Mount Buffalo)
Shale above lower 2c, bed
Project
Stop near gate walk old road to slide
Type Loc, J L. ?

5-12-6  Shale project 1/2 above base J L. 25

5-12-7  Sh. below
L. 25.

Note walk along road to place where cars are
more by RR. climb up to basal L. 5 with
Grumant and Saverston expi make channel
and collected
May 13 P2

Town Branch Loc. 7 La. 45
100 N. on 7 W. To Griffith's
W on Griff's To brick pen
on 7 to CR. 1/2 blocks

Note: Collect
same town and la.

OK June 6

Chilton: Spring
look for ss. at base of Granger
Noyes oilite at base
Read Guidebook
Read CR. Ch. explore vs. fell
block.

La. Sawella = Ostr. 1 below labs
Granger = base ss.
Brewing Green
Noyes oilite
return trip
9/1/31
outcrop 93.8
93.82 cross cy.
153
May 13
Kodakomo 12 1/2 Rowley's grave 3D bet 5.678
Granny Creek Type locality
cliff opposite Arch Hufford Plate (see Geol 7 Pike Co.)
cliff 40' of shale overain by slumped Louisiana L's.
(See Bowling Green for road)

2-21 clay redder 55 Rd. 6" base conc. 3' conc.

Gray Sh. black green bedding surface

5-13-1
5-13-2
5-13-3
5-13-4

1 cond out of Huddle 8/14/70
May 14
Hannibal Mo. Lover's Leap

5/14/1 Hannibal sh. 1 ft. above
Louisiana L. Lord winit.

5/14/2 Greenish sh. just above
(S-19-1)

Hannibal sh.
Green, brown shale

5-14-2
5-14-1

Lover's Leap. Hannibal Mo.

Go up Fulton & Cypress or T to
last house. Vermiculite ss. 7 Hannibal

make call

above which is basal Burlington full of
Gymnoids called "brown zone" some
places it is called "sedalia", depending
on fauna - no Burlington Gymnoids in Sedalia
May 14
Top of Lover's Leap has top
of Burlington which is white
but with brown layers
and chert blebs. "There is
no appreciable shale in Burlington
overlying Keokuk low shale
which is greenish in color and
also more constant chert."

Lover's Leap. Top:
Burlington to 1' of parking
area in cliff. Rotten zone
3' 1/2' above brown layer
chesty layers common on
face.
Kodak 150f8 Top Lover Leap
Shows br. fed. chert, etc. 7
Top Burlington.
May 14, 1952
Birch St.,

RR Bridge across Miss. River in La. U.S., Robertson and Harrell on Top.

Lovers leap rd.
Fulton St. 2 3/4 mile along river where HA leaves Fulton St. Rd. to Saverton base 7 Louisians and Saverton exposed, yellow sand below is exposed.
Sample La & Saverton

Keep along road 3 miles + % exposure none yet found

Saverton Station. Burned and mowed. Tipple loc. continue to School Turn Rd. to Bridge where with CR & Harshney Co. Exposure Shale will ooze above old 3% thick above
May 14, 1952 p. 4

Drive from school. 1.45 miles.

Shale 2'-3' above Cr.
May be Grass CY.

First house after Lowe mailbox.
opposite house, see William p. 21.

"Hass found better exposure"
keep on road.

1.75 mi. from school rd.
measure. Sunston 41.9" contact with Grass Cr. exp. V
Get samples V
May 15, 1952

Kinderhook Type: 0.8 mi. N.

Foot. Quarry, Guide Book p. 72-73

Stop 37

25' Burlington

10' McCraneys
Fed. 3 in. Iron

30' English Riv.
Fed 2 in. Iron

40' Maple Mill
Coll. 1

Get some above spring.

E. Riv. & McCraneys
No. 2

5-13-16
disq

Eng. Riv.

The English River has light gray and
darker gray beds. It is a sandy
siltstone, fossils not seen, at
weathered into smooth marine surfaces

above Eng. Riv. McCraneys which
looks like La. LS. but about McCraneys
is Burlington

A. Eng. Riv = Hannibal
McCraneys = near 65 below Burlington

B. Eng. Riv = Savannah (which I
do not look like)
McCraneys = La.
Hannibal Eroded
Burlington on Top.

Note: The Burlington-McCraneys contact
sharp, no bedoss. OR profile
Keokuk is bluer than Burlington.
May 15, 1952

Continue on rd. 9 mi. go over bridge burn it. cross bridge go 0.6 mi. stop creek box Steelehorn Hollow

Burlington
Project Hill 8'
McCreary

Stop 42 p.m. 2nd bridge
out 7 L.C.S. Chest 15.

Guidebook p. 76. saw bryozoa x 6x

Stop 43 Keokuk
Shale parting at 2

Query before massive blue bed called upper Keokuk
Merrill A. Sumbrook, 1950

The facies and correlation of the McRaney Limestone of Iowa and Illinois: Am J Sci \( \text{vol} \) 248 March 1950 pp 194-213

Brandon, Iowa.

Sept. 1953 Sumbrook sent slide with 2 crushed round, smooth valves too high for Caradina
May 15, 1942

Type Wassau
St W B School - a Wassau
see Guide p. 77-78

Stop 44.

Drive down to bridge.
Truck into field on left of bridge just before crossing.
Downstream from bridge.
Dolomite with scoria 10' upstream from bridge.

Scoria filled with pegmatite, some base liquid inside.

Collect from Wassau
May 17 1952
3 Photos - ledge 47° above floor & quarry

Williams picture - use hammer on sh. below 1.5"
sh. if 5-17-1

Prob. led 8.75x1.6

S-17-1
No Osdy
S-17-2
No Osdy
S-17-3
No Osdy

3 1/2' below 5-17-1
thin sh. around chert
module, place where
Williams took my
picture E. 7 S-17-1

Keokuk

S-17-1
S-17-2
S-17-3

14 1/8" 3 1/2' 16"
May 17, 1952
See p. 79
0.4 mm, 17"-8

5-17-4
Stabile 2-3' above
Brown dolomitic SS.

5-17-4

St. Louis?

4' 6"
more exposed in Crito N.
May 18, 1952

Weller 1900 Iowa G.S. vol 1 pp 57-79

5-18-14 7 Soft Stuff, quilt 6s.
5-18-15 6 White Cotton 6s.
5-18-16 25 FGr yellow ss, w. point Hole
41 FGr Bl. Mercury

5-18-10 3 Thin hard hard impulse 15
filled w. C. Chormic smoke w. "hom polida bond"

5-18-1 2 Soft ss. Chrysoprase

5-18-2 4 Soft blue 6s.
5-18-3 4
5-18-4 2
5-18-5
5-18-6
5-18-7
5-18-8
5-18-9

Kodak 1-4 See Train 2 Burlington
of Burlington Iowa from fishing village, "Cascade"
Cascade Section  Prospect Hill Sec.

5-18-1  1'-2' above base 7
Chromopterus ss.

5-18-2  6''-1' below base 7 Chromopterus
(assumed base.)

5-18-3  Brown layer 6'' above
5 feet below Top.

5-18-4  Blue shale 2''-3'' above 5-18-3

5-18-5  Sandy zone leave 1' below
then 05-18-4 by Chromopterus; lif. 2

5-18-6  Brown and blue sh. 4' below
5-18-5

5-18-7  5' above base (assumed.) 3
Chromopterus ss.

5-18-8  Shaly zone in Chromopterus ss.
6' above 5-18-7

5-18-9  Blue shale 3''-4'' below 5-18-6

5-18-10  Weller's bed 3. Oolite below
McCraney

5-18-11  bed 3 centes bed below oolite
basal bed of McCraney just above
oolite (5-18-11)

5-18-12  Disc
Cascades Sec. Burdick
May 18, 1932
p3

5-18-13
ostr.
5-18-14
osyr.

Oolite, Weller bed 6.
Weller bed 7, 3' above

Oolite grates into upper bed, contact not visible

5-18-15 Oolite
1'-1/2" sh. 5-18-15

5-18-17 Channel sample
upper 4'/4"

Prospect Hill $5

5-18-17

 Burlington Down
Out Main to Concord

Next St. turn L go down

dirt rdt to Cascade, that is Prospect Hill Section

= N. McCraney
May 19, 1952
Sec. at Snake pt., Knox Co., Mo.
Moore 1928 pp. 73-74
Osage
13 Burlington Ls. (Lower)
13 Ls. gray, coarse gr. eroded ilime, massive 8
12 Ls. lt. gray to brownish, chest, styolite 5
11 Ls. br. del. coarse gr. crin. very massive 5
Sedalia
10 Ls. lt. br. t.s. massive, del. pomo chest 14 6
9 Ls. Higr. x br. t.s. massive 2 chest bands 7
8 Ls. gr. t. brownish, coarse gr. x lime 7
7 Ls. black, green, t. yellow, massive t.gr.

Kindlebrook
Chouteau
6 Ls. It. br. a. yellowish br. thin alternating beds. a massive br. Ls. near middle 7 9-10
5 Ls. br. gr. med gr. partly x lime 3-4
4 Ls. bluish silt br. to br. med gr. argillaceous, scattered patches 7 x 11. Ls. in thin beds. Fossil 5-6
3 Ls. wh. t. Higr. beds 2"-8" weathering shelly with. very tess 14
2 Ls. yellowish br. argillaceous thin beds.

Hannibal?
1 Sh. exposed in Riv. H. t. H. green. 1
May 19, 1952

Snake Pit B pit

#5 20 ft S. 60' Picture upper pit 7 section

"Quarry" Face Left Side

Brown fossil Zone

5/19/1'

Bed 6 bones

2' fossils

6 Alternating beds

Lithogr. Ls.
Calcite nodules

Shale 5/19/1'

5-19-2 Disc

Rotten zone in 1' Lt. colored 6" above Lithogr. Ls.

5-19-1 Shale below 6' bed of Lithogr. Ls.

5-19-3 Bed 6' more

1953

Sieved material labelled 5/19/45
in barren - disc., but may be wrong date or call #
May 19, 1952
Belleview Hollow, Nebo
S. of Clarksonville, Mo.

1 mile from highway just across bridge

6-19-7 Brown argill.
mudstone? at
base of L a. L s.

Go up r't to rt hand fork.
Continue on Left to form base
outcrop on rt.
May 20, 1952

Hamburg I. Eleventh Methodist Church

5-20-2
5-20-1

Rubber cable label: Hamburg

La. Li.
10″ north

5-20-3 Cedar Valley Dev. Li.

5-20-1 bed of Hamburg Shale
member 7. Fine Hamburg calcite
1′+ above La. Li.

5-20-2 3′+ above 5-20-1

DESC. N.D.O

5-20-3 Cedar Valley Li. (Dev.) 1′+ below La. Li.

5-20-4 Go N. of town 0.4 mi. At stips to river. Hamburg calcite 4′ 5″ above base. "Shale beneath, roots on top."
May 20, 1952

Dogtown Landing
Go S. along Water to where rocks are flat
5-20-5 Shale parting in St. Louis L.S.
24606-PR. As below parting is coral
6' above River level (High Water)
about 30' S. of pool

[Diagram of river]
May 21, 1852
1 m. N 7. Hardee Ill. Turn E up Poor Hollow 0.7 m. to Waterfall
Waterfall Cabins (Hamburg oolite) covered by gravel up stream
5-21-1 Hamninbal Stu. Overlap opposite first (and only) house low rd.
May be same as 5-21-2
Go up main road 1.25 m. to Frenchman Hollow, go up rd. 0.35 m.
St. in place, oolite above shale in boulders that may be flint.
Oolite up to fence across Cr.
5-21-2 Shale, presumably Hamburg, below oolite.
Get oolite from Williams & Duncan Co.
query guide step 11
Shale present in Charlie
15-20' above flood
from which Branson got chert.
Burlington black, rolled, out of place with
meerschaum.

Photo R3 7/2/20 1-1/2
311 lbs, 5.5825, bronze 1.7
7 query.

Failed to find Moreys
Locality 200 yrs. from
Early station.
May 23, 1932

Chautauqua Springs.
Bridge across Cr. Little Chautauqua Cr. has damage 25 feet long.

5/23/1

Hi Pat,
Lowndes 7 Mile

5/23/2

Sandy Page (dolomite?) 6'-7'
directly above 5/23/1
(May be bedding)

5/23/3

10'-15' upstream from bridge
less than 1' strat. above 5/23/1

5/23/4

25'-30' above died of Cr.

No.
0371.

Burlington outer 30 rd.
May 22, 1952

Hypotrigone impolita Money 1935 placed in Cryptoclididae, probably Kloedenellinae.

Plagionephrodites OS-1000-5 USMC

Spec. Gone

Money's Thesis pp. 16, 43, 92

pp. 15-16 Kirkbying quadririspinosus

Ap Fig 13, 14

Good Correlating

13

14
Turn N at Kingdom Ct. OZ 54
Cross Quincey Ex. ½ mile
Rd & Quarry. NW ¼ SW ¼ Sec. 35-
T 49 N R 9 W.

Burlington

Chateau

55. Builberg—4’-10”
7-18 Greenst. Shell—Snyder Creek
20’ Dow 4m—Calloway (Iliosstrato)
Harm's Prairie on Rd. "E" from Fulton Valley along Rd. mi. from Harm Prairie

cut show char. and yellow sh. and clay mixed with 55 ft. cobbles may be Snyder Cr. Sh.

S. 23-5 sample 7 Sh.?

S. 23-6 Snyder Cr. Sh. (macro fossils) on smooth slope higher and 30' upstream?

S. 23-9 Bushberg sand go up hill shows drain pipe to recent outwash
Bushing top white sand mixed with yellow clay. Watch for contamination.
Dear Walker, for conference

Buckley\n
waited until 2:00 p.m.

5/23/57

Coffman was back 5/23/57

Judge got police

Georgia is 

Judge, 5/23/57

Judge found material.

Judge signed 5/23/57

-signed, 8:30 a.m. 5/23/57

Locate: 8th floor, 14th

NAME: May 23, 1957

DATE: P.3
May 27, 1952

Castlewood section at
milepost - 2220 fove

5-27-1
6" of brown sand, prob. base
Fern Glenn or Top 7 Bushberg
the same layer extend to
ft, over outcrop as a green
re-entrant. Form thick 1" thick

5-27-2
3" sandy layer 2' above base
7 5-27-1 (Fern Glenn)

The base of the Bushberg
is roughly 8' 0" below 5-27-1

5-27-3
Bushberg 3' above base

5-27-4
2" Bushberg just above
6" phosphatic zone which is
the base of Bushberg

5-27-5
Basal 3" of Bushberg, phosphatic

5-27-6
Top 2" of Gx Cr. just below
Bushberg
May 27, 1952
Castlewood Stalcon

3" of cgr. below shale
basal 1" shale layer
7 Gr. Cr. just above phosphate bed

Gr. Cr. Sh. 1" above base.
Gr. Cr. Sh. 10" x 1'
below top.

Gr. Cr. +

Figs. 19 13

Top 3" of sh. sample discarded
Channel sample of entire pt. 2

Magnoketa Channel sample 2 1/4'
below base 7 Gr. Cr.
Top 4" of 3' Magnoketa No Ost.
May 27, 1952

castlewood

Mcguoket slope 10 ft below top. Taken 3 top material to catch the ostracods.

Nello May 26
May 29, 1952
Goetz Quarry
from Weller 1906 pp. 435-436

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Burlington</td>
<td>1 8</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>x 115 Green Gray Ls</td>
<td>7' 3 1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Red Ls. Ferroblan</td>
<td>8' 6&quot;</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Steel red caly</td>
<td>6' 1&quot;</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>X115 yellow to gray Ls</td>
<td>4' 1&quot;</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Bushberg</td>
<td>14' 1&quot;</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sandy 34</td>
<td>4' 1&quot;</td>
<td>1/2&quot; = 100 ft?</td>
</tr>
<tr>
<td>4</td>
<td>Glen Ph</td>
<td>1' 3'</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Magpyrites</td>
<td>4' 1&quot;</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dijle Ls</td>
<td>1' 6&quot;</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Kimminsch</td>
<td>5' 5&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Note: Some handwriting seems to have been corrected or revised.
May 29, 1952

Goats Quarry

5-29-1
1" x 2" shale clay green and brown between Bushel and Glen PK may contain spalling of Gl. P. and overlying Bushel.
Weller bit 5

5-29-2
A pocket 4" to left of 5-29-1 apparently the same level but probably not contaminated
May 29, 1952

Wellsen bed 3

5/29/9 Glen Park, Ls., upper portion, just below 51 1/2
5/29/8 Top 3" just below G.P. sand?
5/29/7 Lower 9" of shells, gr. br. yellow mottled clay
5/29/6 1' channel dense yellow brown siltstone, black carbonaceous silt
5/29/5 9" same as above channel
5/29/4 3" sand clay with Ls. at base rare oyster, snails
5/29/3 6" mottled red and yellow clay with nodules 1/8

5-29-10 basal 1"+ of Glen park crushed from overhanging ledge.
May 29, 1952

Read from Goeb's Quarry
1/3 above RR cut

5-29-11 red shale in upper part of goochick but long fault above nonforbid memore
Temp is with chest and 5 ft 1" in the chest

The massive material has calcite nodules
May 29, 1952

3 mi. + E of Pacific
Go Hwy. 66 & s/wn Fox Creek
R, turn N, NW 0.7 miles
outcrop 7 ps' on rt. side of road

Curtis C. Fleming, "ost. Platan," typed on 7
within 5'8" above top of Joachim fm.

5-29-12 9½ ft. shale in Platan
according to Pappas near Top of Platan,
contains osteoderms.

5-29-13 bottom 2" of 5-29-12
5-29-14 Top 1" - 1½" of 5-29-12
5-29-15 bed below sh.

5-30-14 3"-5" bottom ps of
overlying ls. which weather like
Kimmisch

5-29-15-

Massive ls
layers 6'-8"
with sharp partings
dark color

Photos 2, 3, 4
Roll 2 #s

Paper at outcrop
Humus below Shale
May 30, 1952

Clark locality for site. Plate:

US 30  E 7 House Springs
To High Ridge or 1 1/2 mile W. High
Ridge. High on which home "Shangri-La" is located
Plate 1'. Weathers Tan above and on
weathered 1'. 2'. Plate is bas. spence
weathered fossils to many fossils

very fine, layers above plate is like 0
yon poem. 2 churches noted

Greenish sh. below is 1"-2" at 9. No. 05
1'2"Ls. above sh.

Upper 2' or 1'6" shale above 5-30-4
1/2" to 1" sh. 6" and 1" rott. 7 Ls. below.
Ls. and Top 3. 1'6" shale layer at 5-30-5.
do Ls. separate

5-30-7
Ls. above 5-30-6 basal pt
may be with 5-30-6

5-30-6
6' layer 2' above 5-30-7. Ls. poor

5-30-9
Massive lom. Ls. 8' above
5-30-8 Top 7 hill
Ls. 2'-3'. Chalk sample from
Top 6' at opposite pole A

Schedule.
Hill below "Shangri-La" home, 1 mile west
Brown High Ridge
Cafe
Shangri-La owned by Brown y St. Louis
May 30, 1952

21' above 1st level

21' above 3rd level

32' above 2nd level

10'6" above 1st level

opposite point of test

Pc = 23.9

15'9"

21'
May 30, 1952
Motion on House 30
see pp 1, 2, 7, May 30, 1952

Platen on Highway 30

Plot on opposite hill 5-30-7

Concrete drain from rd.

Shelf Decor
Shale screening
in Decor Map

Platen "Venetian"

in "outwarp"

30-30-1

21' (3)

2p

6p

6p

2.5 cm x 2.5 cm

C<br>1.4"
t huns 2.8"

25 pieces 211-

Pillow 12p 21 p

3-30-2

3-30-9

Note 3-30-7

3 spaces B 21 p

0 6 pieces 211-

0.8 cm wide

Pillow 12p 21 p

2.5 cm x 2.5 cm
<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reports:**
- Keifer
- Pt. Cr.
- Cr.

**Ship:**
- Go La.
- Buff. Ch.
- LM. V.
- Louis. Cr.

**Colours:**
- Orange
- Yellow
- Purple

**Dates:**
- 14-5: Wold
- 9-15: Hansen
- 18-20: Keokuk
- 21-23: Urbana

**Notes:**
- Augustin Mancino, State Hosp., Montour, Ill.
- SES: W 11' T 12'S R 7'E 1/2
- 6/14: after ship
- 7/19: 400
- 8/11: 1750
May 31 1952

Type Fern Glen

Bed 1 1 11/2" mattress LS, with paper
client modules 3" x 6" to 2" x 10" one
smeller.

Bed - 4' mattress LS.

5-31-1

upper 11/6" bed - station A

5-31-2

Bed 1 sheets
6" above bed 1 sheets station A

5-31-3

3 3/4" shell 3 3/4" above bed 0

5-31-4

red, brown with streaks of green

green about 1/2" at top 6 sta. B.

6" LS, green striping, basal 2 1/4 sta. B.

19579

5-31-5

2' above 5-31-4 3" sh. and LS, bottom 1"
yellow, next incl. red, next incl. 45. sta. B.

5-31-6

5-31-7

upper 6 2" red shell sta. B

5-31-8

The contact 3 green and red is
a zone client modules, module
in red zone also. 2' above contact
at sta. C. In a 6" bed 1 client and
client beds continue up.

5-31-9

speed sh. above contact sta. C.

1" to 1/6" below mattress client x

5-31-9

bed sh. and LS within 1' below

contact with 61 sta. C.

5-31-10

bed 61, 3' below contact with 61 sta. C

5-31-11

sh. above 5-31-10 sta. G. lost.

Note: roll 2 film 5-13 Fern Glen Type 13 bed 0
B&W film worn "Middle Fifteen Shedule"
May 31, 1962
Log from Bear Glacier.

68.51 Private rd. junction with main rd. 5 Heller boxes across rd. Grady

R.H. Hopkins 3 Heller boxes

68.6 Bridge and rd. t. & coming sign castlewood point half Lincoln Beach

69.15 Bridge Turn left

69.23 Castlewood Acres x rd. turn rt. stop at Bill Brint for pepsi rd.

69.3 Mobley's st. on rt.

69.4 Log cabin on rt.

71.45 x rd. main Hwy. turn rt.

72.2 City limits Baldwin

72.35 Bridge

73.55 Crested manor gate on L. side

73.58 end Manchester begin Baldwin.
June 2, 1952
Keeper Cr. Section

6-2-9

6-2-8

6-2-5

6-2-7

6-2-6

6-2-4

6-2-3

6-2-2

6-2-1

5" Greenish

Sandy Clay

1'-1½'

Opalite

Glim Mer

Maquoketa

yellow sh.

Maquoketa
June 2, 1952, p. 2

6-2-1 Yellow shale, waposets

6-2-2 Green sh., 6" dust, hiloed BS?

6-2/3 6" green nec blue milled indurated phosphatic ss.

6-2-4 Glen PK oolite Channeled ¾ lower foot.

6-2-5 Glen PK 5' above base slabbly ls. Top Glen PK

6-2-6 Slabbly 6' ½ above oolite shale between work both separating

6-2-7 Sh. portion above Glen PK, microwear bed and below 6-2-6

6-2-8 Base of Bushibe

6-2-9 Bushibe. SS. 12' + above box
June 2, 1952

Fern Glen RR rail
Grab sample 3 Tubs
3 Fern Glen
Go past RR Track

6-2-10
blue 1' above red
either Fern Glen or
trans. w/ Burlington

6-2-11

Castlewood

6-2-12
Pyritized zone 1 ft.
below top 3/4 milepost
22 20

6-2-13
Fern Glen near Castlewood steps
tower green sb. above ls

6-2-14
Red Fern Glen above green

6-2-15
ls. 2'1/2' below 6-2-13
June 2, 1952

6-2-16 Burlington rd. from Castlewod road 54.65
54.7 Lincoln Beach Road
Out crop E of road
56.6 Hwy. 50
Paint Cr., loc. Illinois with Prof. Werner

Millstadt, Illinois Main Rd.
Turn S. (rt) on S. Jefferson
Take it of Y for Winding Rd.
Side Rd. left. Go straight on winding hill
Side Rd. I'd. 
14. Road turn left
14. 2
11. 4
12. 2
12. 3
Jog right on T road
13. 3
13. 35
13. 85
Iron Bridge
Side road in. Go straight
Turn left on Vogel & Scholl
Continue school house
Bridge
Cross Bridge on left
Drop to Creek
<table>
<thead>
<tr>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-3-1</td>
<td>Shale just above creek level</td>
</tr>
<tr>
<td>6-3-2</td>
<td>L5. 5'-6' with shale between</td>
</tr>
<tr>
<td>6-3-3</td>
<td>Sh. above 6-3-2 4&quot;= la. blastoids</td>
</tr>
<tr>
<td>6-3-4</td>
<td>L5. 6&quot;+ above 6-3-3 looks like limestone</td>
</tr>
<tr>
<td>6-3-5</td>
<td>Shale 6'± above base below L5. nodules 7.6'8&quot;</td>
</tr>
<tr>
<td>6-3-6</td>
<td>Grab sample same level to 6-3-5 2' lower than 6-3-5</td>
</tr>
</tbody>
</table>

6-3-4 25 6'8" 6-3-3 55 4" 6-3-1 15 3"
Buffalo Creek, 2 miles S. E.

Louisiana, Mo.

Walked road skirting the south side of Buffalo Cr. The road has a gate across if on W. side of Hway. Walk to end of hill on side of which Louisiana Ls. crops out. Ledges of massive Ls(? crop out on rd. then an old rd. takes off to left of wagon rd. This rd. ends in a water course. Walk up ravine to plateau above Louisiana Ls. No outcrops. Retrace steps to west end of outcrop of Louisiana Ls. This is near the top of Ls. Two bags and one slab of fossils from brown Ls(? about 1 1/2 x 2 1/2 inch with small geodes. About 21 below this zone is a calcite bearing zone.

Walk back (E) to next outcrop of Ls Ls with slide below it uncovering underlying Sh. 174' paces or 870' running 2 bags of clay patching above basal 1/4 of Louisiana Ls.

1/2 x 2' clay just below Ls. Ls. Black Sh. (Shale on?) just below clay 7 6/4/3
By use of pinch bar 9 removed 6 approximately 3' x 2' of lowermost bed of 65 ls. and scraped the clay partings above this bed and above 6½' bed overlying basal bed. This clay should have a minimum 9% contamination and is coll. 6/4/12.

Removal of lowest bed 66 ls revealed clay below 65 ls which was collected as 6/4/13. This may be slightly contaminated from above.

Scraping away overlying clay I collected top 2"-3" of black shale as 6/4/14. Although care was taken, it may be slightly contaminated with basal clay 7 6/4/13.

Will return tomorrow for more samples.
June 5, 1952

Buffalo Cr. S of Louisiana
870' ± WB of gate of HWY 79
side exposure of basal Louisiana LS
and underlying shales. Some stop at
6/1/52
Basal 2"-3" of yellowish clay
shale

6/5/1
Scrape off yellowish clay
to clean area & fill black shale
and sample black shale,
top 3" ±

6/5/2
Partings above basal bed 1'-1½'
7 Louisiana LS.

6/5/3
Black shale (Gr. Cr.) 6' below
La LS.

6/5/4
Bl. sh. 3½' below La LS.
Broke shovel.

6/5/5
Basal 1½' P, La LS; macrofossils
No 01 LA.

No 01 LA: use for clearing
June 5, 1957

O. scarp of Hill on s. side of Buffalo Ck.

Upper foot 7. Saver for hard, with clinooidal fracture, more like mudstone.

6-5-7 Upper 1' of Saver Tom

6-5-8 Channel sample 7'1/6" greenish and bluish, softer clay shale, Non-fertile, prot 6-5-9 Saver Tom

6/5/19 Top 4' % black flinted shale.

6/5/10 basal 2'7 Gr. Cx 6/5/10

6/5/11 Ss or Ls, 1'2" (clayish) just below Gr. Cx

6/5/12 clay below Ss (or Ls)

6/5/13 bluish clay 2'3" below Ss, then grade into brown Ss. Widening to 2'5' materials. Zone is a mixture of clay and sand about 1' thick

6/5/13 Top 7 Ss & 1'7 gradational clay & sand bowing Green Ss
Go to New London.

0.46

turn, 4 Shell dining St. Wool Co., R.C. 

1.25

Lynnswich, enterop at 1st.

Watch for Stop, 32

sec. 20, 650th

at Litchfield, Shell station.

6/5/14 basal 2" 756.

Brown sandy

Just below Lts.

Basal 6 1/2 is platy here

having 6" + beds.

6/5/15 parting on N. west of 7 640's.

6/5/16 3" of shale yellowish, sandy

dec. 6/5/14. This sh. is

6" +

6/5/17 hard black sh. non soluble

when pressed, concoidal fracture

col. top 2" - 3".

Could not find Shale til 2016.

6/5/18 Shale 5 1/2 below 6/5/17

6/5/19 basal 6" 7 bl: 56, platy sh.

6/5/20 Top 3" + of Green clay

6/5/21 gr: 5 bl, 2" above Green carbon.
June 5, 1952

Junction 61 highway @ R county rd. SE corner Quarry.

6/5/22

To 16-24

6/6/22

Disc

6/19/54

Note:

Floor #7 Quarry formation:

7 1/2" red with yellow seam
1 1/2" in middle. It's very handsome to write?
June 6, 1952

Gravel ex. Live.

32.45

turn left from church which is left from Ef. Schoolhouse

33.3

Tech

34.12

Jog rt.

34.9

Bridge - cross it

Ford in Cr. Keep rt.

Go to house past car

Walk across field to Cr.

and outcrop

Walk up slope downstream

from outcrop to top of

Cliff. Let us float plaster

dig in top of outcrop

Yellow and green junctions

Clay. Distance below lake is

not determined but not

very great.

Yellow and green clay

highest available

Tarn shale, clay junctions

at bottom of 6/6/1.

Black horn shale 3'-4' below

6/6/2 Cr. Cr?

Dark sandy sh. at top 7' cliff

Upstream tend of exposure
June 6 p.m.

Greasy Cr.

6-6-5
Bl. sh. Gr. Cr. at upstream side y exp. This is understood by farm.sh.

6/6/6
Underlying lighter-colored sh. (Magnolites?)

Dropped type, second magnolite hand

Barn

Sh.

6-6-1

6-6-2

6-6-3

6-6-4

Gr. Cr.

6-6-5

6-6-6

Magnolites
Town by locality see May 13 1943 for directions.
30'-40' LOUISIANA BREA
bed 1 1/2 thick.
Two to 3" brown grading into dark marine hard
tonsil mudstone (Sawepton).

Dark marine towards Sawepton
Upper 3"

Brown material overlying (6.5/8"
6/6/7 2.3"
6/6/7 ?

La. La. pay tongs 1-2'
above base

Walked along R.R. to bridge
Louisiana 15. about 40' or so, Facility
at one place there is a slight
syncline in beds. Further
North there is an exposure of
the base with underlying sh.
and justing along the N.W.
and overlying English River is
exposed. Walked up steps to
bridge, according to history.
Takes the center of the span
is 72' above second water level.
June 7, 1952
Pinnacle Hill
Met. S. K. Tutthill
Troy J. Leowell

Tutthill is doing the Nebo E for his master's state interest.
Leowell did Bowling Green for Ph.D. state will publish.

6-7-1 parting in La 65 at cave.
2 holes Pinnacle Hill Tutthill
3 1/2 same pieces 38' of 65° X ""

6-7-2 The boys measured 38' of 65° 2
7 La 65.
Go above to Hannibal Sh.

6-7-3 Hannibal Sh. 10' above Top of La 65.

6-7-4 "Lower Brown" 7 Burlington top
no hole 10' below Top of cliff
within 5' of base
Too Climbed To top of Hannibal
Hill said white Burlington
June 7, 1952
took boys to lunch.

went back to put up of pinnacle hill picture site
channel sample 9" 7 str. and
sandy s of below G. S. C.

see bach 9 May 10.3

Basal 6" by Grassy C.

Channel 2' 18" Grassy C.

Basal 3" 7 Seventon just above Condor

Baseing in 52 c. s.
N. 1. dam or picturesite

Top Magnitude & Stream
3 356 46'
June 7, 1952

Clayton Springs, Louisiana

6-7-10 Saverdon 1' below La. LS. C.I. Cooper reports ostracods.

Saverdon is 1'7" submarine
by bluish Green C.r.

6-7-11 Top 3' of Green C.r.

6-7-12 2 bags of portoral in La. LS. bag B has

hardt water.

6-7-13 2 pieces of Noix de plane
June 4, 1952
Geyser Cr. Loc. Upstream on top, upstream edge.

1/8/1 6" tan 55° sh. above Magnesite

6/8/1 6" phosphatic zone filled with gr. just above 6/8/1 and directly beneath 6/8/5.

6/8/2 6" phosphatic zone filled with gr. just above 6/8/1

6/8/3 Geyser Cr. at face just above 6/8/2

6/8/4 Top 2"-3" 7 Magnesite

6/8/5 Magnesium Mining Co. Quarry 3 NE of Bowling Green

 gravy zone in Bowling Green, about middle of Bowling Green.
June 9, 1932

RR Tracks of Burlington Br. Bridge
Kodak 2 exp. 9 hr.
6/9/1 Pictorial by Mrs. Greenly. Postcard in box & color.

6/9/1

6/9/2

6/9/3

Burlington, Iowa

Burlington Br. in Riverside park
Rd. bends around point just S. of Mark Twain Statue
June 10, 1952

Waterfall near Highway 61 and saw 3rd car on little lumber Co.
The waterfall is held up by a 2'-3' ledge of porphyry.

Burlington

6/10/1 Clay shale 1" "clay"

6/10/2 Massive yellow cement grades into tan siltstone 2'-3'

6/10/3 Became bluish (wet) and

6/10/4 Witness bedded to water 2'

6/10/5 Burlington 3' above base
June 10, 1982

6/10/8
Clay, probably waterborne
100' + inside portal

6/10/7
Shale parting at 4' RH
Light brown tuff "brick wall" at top of wall inside portal

6/10/8

Tyrene cave

6/10/8

Drive around right

6/10/9
Shale parting in L-4 L-5
Sh. 1" - 2" just below L-4 L-5

The above is in hole IV' 7' rd. to Camp 080° T1101
Ann J. Sci 248 nos
p 194, 1950
June 11, 1953
02:55
07:45
Schoenhorn Hollow:
Quarry KG5 stop
Turn rt. after crossing bridge
Before bridge arrow points left
To Schoenhorn.

Clay, Kroencke placer
on left, creek. r.t. empties
in front. 7 barn, high embankment flat. Walked up
Cl. To Burlington in place.
Undergroun tons, yet exposed.
No collection.

Park 1/2 way between bridge
and farm house. The creek
crossed by old bridge. Has
upstream from bridge is
exposed.

Burlington 6 1/2 " remote. Rest
3. McCarthy.
13 ft. McCarthy Exp.

McCarthy has bands, look like
varved zones, 1" thick.
June 11, 1947

Seabrook Hollow Creek crossed by Bridge Locality.

Overlying the McRaney is a yellow sandy mudstone. At one place there is a mottled brown and yellow clay between this ss. and the McRaney, apparently filling a channel by the McRaney. I dug back the concordant projection ss. at the upstream end and found the clay behind the ss. could push 6 inch bar for more than 1 foot behind ss. into clay. This is either weathered ss. or a older ss. between ss. and ls. The clay has the same feel as weathered McRaney. 6-11-3 check if it is dolomite.

Clay behind ss.

ss. above and in front of clay weathered McRaney 1'2 from top
3' channel 3'2 from top 7 McRaney
Wesaco, Ill. Type-
loc. by Stone Bridge
Go upstream good to left
to water fall. A marquee
6s. ledge 2'-3' holds up
creek.

6/11/6 6s. directly above sh.
+Some slate same. 6/11/1 6-11/6>2'-2.5
6/11/5 sh. 2' just below 6s
6/11/7 sh. 7' below ledge
breeks in concoidal
6/11/8 sh. 8' below 6/11/7 downbreaking 5'
a good led 2'-3' beofd coll
6/11/8 Geoid Bed:
Walk around bend geoid bed
2':2.5' thick
6/11/10 2':6' before 1st geoid bed 12'6''
second geoid bed 5' below
13'5''
6/11/11 sh. 5' 2nd geoid bed to which
5' 1/4' about creek we
3rd geoid bed forms a bend
2' above water
6/11/12 top 7' 3rd geoid bed 2' below
6/11/13
see p 4
June 11, 1953

About 30' upstream from bridge
4 L's. ledge picks up
3'-4' below good bed 3.
6/11/13

Shale just above L.S. 3'-4'
Below 6/11/12

Color 4 "Type Warded"
White layer at bottom is
good bed 3.
Felin 13 # W Type Warded

6/11/14 L.S. just below 6/11/13
near Bridge.
June 12, 1912

Hall Co., No. 1

1.75 miles from Saverton sch., and 0.3 mile upstream from white house which is at Saverton "C" end of line. 

June 12, 1912

1.75 miles from Saverton sch., and 0.3 mile upstream from white house which is at Saverton "C" end of line.

6/12/1 Sample from in lake, 1½" above C.

6/12/2 Saverton, Channel Top 1'

6/12/3 1" channel sample 2' from top.

6/12/4 1" channel 1" below 6/12/3

6/12/5 Bottom 3" from Saverton?

6/12/6 Top 3" of more silty glacial in this area.

6/12/7 1" channel 6" below 6/12/6

6/12/8 5' below 6/12/7 at

C. Level
June 12, 1952

6-12-1
6-12-2
2
6-12-3
11
6-12-4
11
6-12-5
3
6-12-6

Change to Ill. Stationery Co., Co.?
June 12

6/12/9
Lovers Leap, opposite RR yd.
Basal Hamilton (Yellow)
and top la b.s.? red.

6/14/10
Hamilton just above
6/12/10
Burlington?

6/12/11
Float weathered Hamilton
at 6/12/10
June 13, 1952

Keokuk, S. A. St. X N.
Site 7, Soap Cr. & Pd.
Query behind Service Stallion, Rubber factory
as mentioned in US. Weather.

6/13/9 LS just below 6/13/8
6/13/8 consistent
6/13/7 Top 1/8" LS & sh. 1/2" above 6/13/5
6/13/4 2" lime layer 6/13/3
6/13/3 Lower 3/4" sh.
6/13/2 Shelley bed meets Taber
6/13/1 Top 7 L.S. ledge 6/13/2

Color: 9-14 or 10-15 Keokuk Quarry
15 01-16 Limestone Coll. 6/13/8 to 9
June 13, 1852

N. side of Des Moines Riv., Iowa, exp. on N.W. at "City limits" and S. of 7th St. at entrance to bridge.

6/13/10 Sh. with geodes overlying LS has geodes. Prob. better.

6/13/11 Sh. above LS. No geodes observed, green streaks in sh.
June 13, 1852

Cover's Leap Rd. to last house on rd.

6/13/16 weathered cs. red brown.

6/13/16 sh. below Burlington.
Top Hamilton.

6/13/16 Hamilton Verm. ss.

6/13/14 Green sh. 8".

6/13/15 Tan Verm. ss.

red. Burlington.

sh. 1 1/3".

Verm. cs. 1 1/2".

Green sh. 8".

Tan ss.

Green & Vertical.
Kinderhook Quarry
see May 15, 1952 p. 1

The quarry is not like 2a 650 m. in that there are no clay pans. In 6 little
caves or holes filled with brown clay, they be
brought in
brown clay from holes
in Mccrahey's entire surface
brown dirt from 2 little
larger caves in Mccrahey
8x 4x 2.5
55 brown face 7 Mccrahey

6/14/1
6/14/2
6/14/3
6/14/4
6/14/5

Engle Riv. near base
in Cr. above spring
Maple Mill in Cr. above
Spring
Hannibal Locality from Hannibal
Williams Oct 12, 1950

From Hannibal Hwa, 36 to Monroe
city then take Hwa 2 to section
line Sec 5. To White Franklin
school. Turn left where Hwa 2
1 mile on 2. Turn North 1
Go W on small Rd 0.41 mi to
cross roads. Turn S ½ NW.

Go W on small Rd 0.41 mi to
cross roads. Turn S ½ NW.

Go W on small Rd 0.41 mi to
cross roads. Turn S ½ NW.

Turn S ½ NW 0.3 to 1st bridge
over 1st stream (Booner's
Branch). Walk 1/2 mile upstream
to Hannibal Shade

Go downstream to La Le.
Top of cliff Jimmy didn't know.
3-16-1
Central Ave. and Addison Rd. NW of x.
Tel pole 89378, E. of Esso station
Patapsco, in cut for Bldg.

Oak Grove section
Central Ave. to Largo, turn rt. on 202 2.7 mi.
cross bridge. This is Schmidt loc. B.p.396.

3-16-2
Below indurated bed, prob. Schmidt sample B-6
Piscataway member of Aquia fm.

3-16-3
6" below 3-16-2

3-16-4
Green fossil. sand just below calc. ledge 55'
from tree at W. end of cut

3-16-5
Sand at road level W end of cut opposite Pole
across road.
3-16-6  1½ mi. W of Leland on Largo-Leland rd. which is road to left from Oak Grove. Road cut opposite Perry Hill Farm gate. Green sand Cooke says Aquia

3-16-7  Continue on rd. past Pope Cr. RR. Branch, cross Collington Br. Cut in road on curve Cooke says prob Aquia, may be Nanjemoy

3-16-8  Continue to next curve and rd.cut. Leland Rd. 3/4 mile from Crane Hwy Nanjemoy on map.
<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-16-9</td>
<td>Miocene just below diatomite, approx. 10' above pink Marlboro Clay.</td>
</tr>
<tr>
<td>3-16-10</td>
<td>Pink Marlboro Clay</td>
</tr>
<tr>
<td>3-16-11</td>
<td>Tan clay just above pink - Marlboro?</td>
</tr>
<tr>
<td>3-16-12</td>
<td>Marlboro Clay at road level</td>
</tr>
<tr>
<td>3-16-13</td>
<td>Clay 6' approx. above 3-16-12 Miocene?</td>
</tr>
</tbody>
</table>

301 N. of Central Ave. 1 1/2 mile to Queen Ann Rd. on rt. (E), 1/4 mile to rd cut.
301 South of Marlboro, first road cut S. of RR. crossing

Marlboro? clay E side of rd. N. end

Top of cut near 2nd pole

Nanjemoy, dark fossiliferous sand.
Upper Marlboro Quadrangle
Road opposite 3682 Crane Hway. Creek E. of Rd.

Keep rt on Marlboro Pike E. from D.C. at Marlboro triangle

Creek shows contact of Aquia and Marlboro Clay

3/16/16 Marlboro Clay 1' above contact
3/16/17 Aquia just below contact

(Schmidt says E. of rd, but E. has no ledge)

3/16/18 Aquia greensand below second indurated ledge

3/16/19 Rd. above car lot, same loc. as 10/22/5 1951 but road has been cut and slope moved Aquia near top.
USGS loc. 17101, 17102, Prince Georges Co.

Report p.32, paragr. 2

Flora Park Rd., 2½ mil E of Piscataway

Gully near house of W.I. Stanton, over 2 fences to spur with exposure. Fossiliferous not seen because of fallen trees.

3/16/20 Nanjemoy
Indian Head Rd. 1½ mi. S. of Silesia, rd. cut 0.4 mi. S. of fork
Green and mottled clay above Marlboro, Miocene or Nanjemoy
Marlboro Clay

Friendly - Schmidt loc.

3/16/21

Aquia

3/16/22

Cretaceous

3/16/24

3/16/25

3/16/26

Friendly rd. near Indian Head rd.
Aquia