

No. 17



PROPERTY OF
U.S. STATE GEOL. SURVEY



E. H. Sellards,

April 1909 - July 1909

Indexed June 18, 1915 -

✓ 7/15/1911

Notes keeping.

- (1) ~~Section at Nicholson's.~~
- (2) ~~Information from Miller regarding temperature at which fullers earth is formed.~~
- (3) ~~Information regarding "new" chatahouchee landing. No such landing.~~
- (4) ~~Section giving elevation of defect of the section & dip of strata on hill south of R.R.~~
- (5) ~~Photo of exp. in cut on G. T. & A. west of Fatta bench.~~
- (6) ~~Dip in strata at same section.~~
- (7) ~~Clum Bluff section.~~
- (8) ~~Bluff below Bustel.~~
- (9) ~~Amount of fullers earth taken from an acre.~~
- (10) ~~Time making whitening at Manama.~~
- (11) ~~ochre deposits.~~

3 - 3
 3 - 9
 9 - 0

1st Sand exp. 300 ft from landing

(1) covered from water 15 - 9 m
 consists of sand & shells
 mostly yellow. 2 - 3
 13 - 64

(2) Sand with lime cement 12 - 9 - 26 - 3
 near fault.

(3) Greenish sand with lime inclusion
 6 - 9 - 33 ft

(4) Contact unconformable slightly.

(5) ^{at 10 ft. off 11 ft.} Clay & Alumina clay 20 ft 33 ft

(6) covered in the line of section to the top of the hill.

Section in stream just below bridge

covered to top of hill

Some without red granite 12 1/2

Chert with fossils 16 ft

Blue sandstone & shales with
clay has much 8 ft.

unconformity.

water covered + Sandstone 22 ft.

3-3

3-3

3-3

3-3

1-0

Lardalib $\frac{1}{8}$ mi S Landing
 Here the chert rests directly
 upon the sandstone in alum sh. &
 no filler cobb, large pieces of
 greenish sand.

Section line

- (1) Corral (sands) 9 ft - 6
 (2) Sandstone 17-9 27 - 3
 (3) Fossiliferous chert. 11 ft.
 11 ft 6 in 38 - 9

(4) Alum clay.

Tough micaceous alum clay
 at 10 ft from top. 69 - 0

3+ 5-2
 5-3
 2-3
 3-3
 5-3
 5-3
 1-0
 30 - 9 5' passing into drab yellow
 sand & corral to top 10

Cornmeal 5-3
 5-3
 Sorbete 5-3
 5-3
 5-3
 2 Hints 5-3
 Blue 31-6
 5-3
 3 9-9
 27-3
 12-6
 777 deers

5-3
 13
 34
 68-3
 4-3
 72-3
 52-6

36-9
 5-3
 5-3
 3-3
 4-3
 5-6-9
 777 Bluns.

5-3 5-2-6 5-3 5-3
 13 5-3 5-3 5-3
 34 5-3 5-3 4-0
 68-3 5-3 5-3
 4-3 5-3
 72-3 5-3
 52-6 5-3

on north
 Near middle of bluff

(1) sloping + covered by consisting of
 slight reddish sand with
 orange yellow updray
 10-6
 2
 8-6

2 Sorbete, lime cement
 15 ft. - 9
 24-9
 (3) Intensely blue Sorbete
 302 - 27-3
 chas. rake work 12-6 39-9
 aluminous clay 17 56-9
 covered by last slide 68 ft. 124-9
 Red sand with clay lenses
 mixed 8 ft. 132-9
 sloping sand 163-9
 31-0

or on old sand slide just below
 29 ft. aluminous clay.

$$\begin{array}{r} 124 - 9 \\ 1 - 3 \\ \hline \end{array}$$

$$32 - 0$$

14

$$\begin{array}{r} 126 - 0 \\ 5 - 3 \checkmark \end{array}$$

$$5 - 3$$

$$3 - 3$$

$$21$$

$$3 - 3$$

$$5 - 3$$

$$35$$

$$5 - 3$$

$$36$$

$$5 - 3$$

$$37$$

$$\begin{array}{r} 1 - 0 \\ \hline \end{array}$$

$$165 - 0$$

$$163 - 9$$

$$\cancel{5 - 3} \quad \cancel{5 - 3}$$

Middle of Bluff.

(1) cliff face with poor
fossils & with vegetation

2 ft.

(2) covered & sloping

$$10 - 6$$

$$5 - 3$$

$$8 - 6$$

$$2 - 0$$

$$3 - 3$$

$$5 - 3$$

3. Gnatcatcher was hatched. See.

$$\text{Barnaby } 5 - 3$$

$$5 - 3$$

$$1 - 6$$

$$12 - 0$$

$$22 - 6$$

Cross hatched Sando.

$$5 - 3 + 5 - 3 + 5 - 3 + 5 - 3$$

$$23 - 3$$

$$3 - 3$$

Chlorophyll

$$5 - 3 + 5 - 3 + 6 \text{ ft} = 16 - 6 - 39 - 0$$

14

11

17

1101 Sand and

(1) Yellow sand with fragments
of fossils.

5 ft

(2) Sandstone with lime
9 ft

14 ft

3 Coarse sand & clay laminae
covered to top.

a few steps farther on.

(1) Yellow sand with fossils 3 ft

(2) Sandstone etc 11 ft 13

(3) Greenish sand with clay 5 8

4. Phosphate more here 8 18 ft

North of Landing

cored 10 1/2

- 5-3
- 5-3
- 3-3
- 5-3
- 5-3
- 5-3

5-3 + 1 lot left

- 5-3
- 7 1/2

Section about 50 yards north of landing

cored in line of section to top
 dab clays, tough sandy & with
 mica (exposed) 11 ft. 59 1/2 ft.
unconformity.

yellow sand (exposed) 6 1/2 ft. 48 1/2 ft.
 comes to river 42 ft

The greatest thickness of aluminous
 clay found at Alum bluff is seen in the
 section in the north half of the bluff about
 1/8 mi from the landing and again just
 beyond the point at which the full
 section is made. This stratum is here 30 ft.

The greatest thickness of the mud found is
 seen in the section south of the middle
 in about Hall section it is here 16 1/2 ft.

The greatest combined thickness
 of these two measured was in section
 about 1/8 mi from landing 41-9 in.

The base of the chert lies
 above the river. 200 ft from landing. 33 ft;
 1/8 mi from landing. 27 ft - 3 in.
 just beyond this 27 .. 3 .. (full sect.)
 at Hall's section 23 - 3
 at south end of 20 - 0.

The bottom of the chert is therefore
 fairly uniform dipping to the south 13 ft.
 in this exposure which is about 1/2 mile.

The succession under the chert
 is ending in uniformity. At the first small
 stream entering the river north of the
 landing about 150 ft from the landing -
 the chert rests on 8 ft of intensely blue
 sand, clay with leaf remains, coarse sand.
 under this is, light colored sand & sandstone

a few steps beyond abt 200 ft from²⁰
landing it rests on greenish sands. the
blue sands bed remains the being absent.
at a point about $\frac{1}{2}$ mi from
the landing the mass rests directly
upon the sand with lime cement.
at the section measured in full. The
Chicopee rests again on the intensely
blue sands & clays. Then in time
rest upon unconformably upon the
lime clay the green sand being absent.

at the middle of Bluff, Hall section,
the mass rests on 23 ft of coarse bed
sands, the lime sand rests being entirely
absent at the south end of the
bluff the greenish sand with clay
is seen again.

The sand rest with lime &
phosphatic cement has a thickness of
9 to 15 ft at the middle of the bluff
it is for a short distance absent.

The sands under the sandstone make a
bench the full length.

The Chipole is seen only near the
middle

The north half of the bluff faces 21
west the south half faces S.-W. or north.

Bridge to water $\frac{1}{2}$ mi - 28 ft

Exp. rest of depth 100 yards

12 ft of lime clays.

exposed ledge shows abt 7

2 ft in 120 ft. direction north of east
to west of south. nearly south west
may be only individual ledge

above river abt 35 ft

On the public water west of R.R.

Exp. North & South distance 50 ft

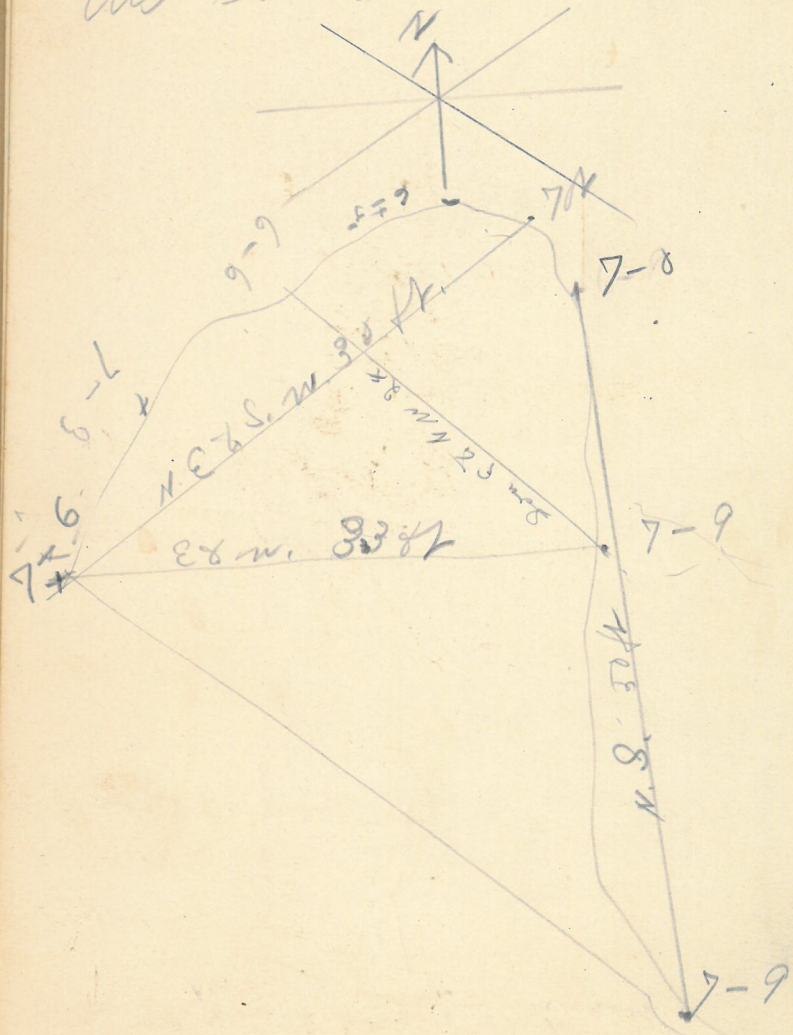
dist. $2 - 9 \frac{1}{4}$ ft, per 50 ft.

$\frac{1}{2} - 3$
North to South 25 ft level of

nearly so

On west side of same
dip 4 in in 20 ft,

dip Southeast N.W.



dip east to west 3 in in 30 ft
 dip north west to south east
 1 ft in 24 ft.
 dip N. E to S. W. 6 in in 30 ft
 dip N. to S. 9 in in 30 ft.

Exp. in Cement dit.

Exp to East to west obs 30 ft.
 apparently no dip.

Cut at Nicholson

Stream covered from bed of stream 20 ft.

Carbonaceous sand 3 ft.

underlain by Buff colored silt

cut 2 ft. or folded.

5 ft.

Fulles cut 2 ft.

From above bed of stream 20 ft.
hurl forward.

1-3

$$\begin{array}{r}
 0 \\
 0-8 \quad \swarrow \quad \searrow \quad 0 \\
 5-3 \quad \swarrow \quad \searrow \quad 0 \\
 5-9 \quad \swarrow \quad \searrow \quad 0 \\
 \quad \quad \quad \quad \quad \quad \quad \quad 2
 \end{array}$$

25-3

1 0

18-3

Base of section above river 38 ft

Laminated clays with fuler cat
partings

8 ft.

Brill colored fuler cat

8 1/2 ft.

Laminated clays

9 1/2 ft.

shut 497 days

11 in

above river $38 + 15 - 7\frac{1}{2} = 45\frac{1}{2}$

Red Silt S.

9 ft.

Pleistocene Silt

10 "

made on post 5 above the river

$45\frac{1}{2} + 4\frac{1}{2}$ ft

49 ft.

Section in public road

27

at Washington

above stream covered finally 10 ft.

Bray sandstone

14 ft.

$10\frac{1}{2} - 3 - 6 + 12$

10 ft.

$\begin{array}{r} 8 \\ 6 \\ \hline 14 \end{array}$

Blue fuler cat magus shales etc

8 ft.

5 1/2 ft.

$8 - 2$

$5\frac{1}{2}$

Sandstone or too like sand on

8 ft.

tests $11 - 9$

$3 - 9$

Partly covered with gravel
sand and stones

4 1/2 ft.

$11 -$

$6\frac{1}{2}$

$4\frac{1}{2}$

Brill colored fuler cat like
set at Washington

4 ft.

$6\frac{1}{2}$

$2\frac{1}{2}$

Laminated clays at Washington
 $10 - 6$ in 1 ft.

11 - 6

covered
9-6
4-6

5 ft

Redish Sols.
4-6 +

36 ft

Powder Sub.

18-3

10-6 0

0

11 0

Forde.

11-6 ft

down 10 ft

6 ft.

8 1/2 ft

11-3

12-

11-

- 2-6

May 20. 09

Line Oak to Howling Park is a
nearly level sandy country,
originally pine wood, now
mostly cleared & formed in corn
and cotton. No streams.

Howling Park to Louaville
level and sandy. pine wood now
mostly cleared. few farms.

No streams and no waterworks
altho old basins seem to be
present.

The old Arch Johnson
place on which the copper
carbonate is upated to have been
found is about 5 mi S. E. of
Howling Park on Section 26.

It is about a 2 in well.
supplied with a free
pump. Nothing remains of
the surface of the drilling.
The tenant on the place
thinks the well was drilled
about four years ago!

30
Mr. Arch Johnson
who owns the well
gives the following partial
recd.

well 2 in diameter, put
down about 1905, by
contractor W. P. Warren of
Welforn. Sluller.
Hiram Sonaford and Jeff Stevenson.
water stops about 25 & 30 ft
from the surface. Mineral not
observed by him until one week
after well was dug. Brought
to his attention by J. B. Smith.
- Bowling Park.

Mr. Johnson's son confirms
above and states that he
saw the mineral brought up
by the drill. That a ^{4th} foot
was reached or so ft. & that
had below was drilled 2 ft.
the mineral coming after the
dynamite had been used on the
hard rock. Total depth of

well 56 ft. Mineral came³¹
up with to the draw of
the drill.

✓
The Mutual Mining Co
at Lawrenceville has closed down.
early in 1909 or late in 1908.
In this pit there is a great
deal of sandstone, flint &
lime boulders with the
phosphat. Sample taken.

May 21.

C. S. Callen

✓ Schulman & Benet one plant
 proting 2 mi N. W. T. 6
~~3 High Springs~~ Det Oct 16 a near.

✓ Sutton Co. Two One plant in
 Columbia 6 mi W. of N. W. in
 T. 6. 74 white

✓ One in Sumner Co. 2 mi
 west of one in Columbia.

✓ One shut down in Feb ^{a week} 09. Det
 $\frac{1}{2}$ mi ~~South~~ of station. Ft. white Hard
 rock co.

Fit. white hard rock co.

are used to dry phosphate.

Closed down Jan. 2, 09. Det 10-16-17
 in new pit 24 ft of reburden 22 ft of
 in last 2 ft. hardpan. mine to
 be water level. Powder to last & load.
 core loaded with pick & shovel.

1. ✓ McDowell $\frac{1}{2}$ mi west of Newburg.
~~Det 5~~

~~Hot flat & Williams 2 mi N. & S.~~

+ Franklin Co. 3 miles all shut.

+ Camp. Plos Co. one plant.

Albion Mins & Plos Co 2 plants located

Mutual Mins Co. now one plant

Cummins (6), plus $\frac{1}{2}$ mi S. west
 6 plants. (5) $\frac{1}{4}$ mi west

Central Plos Co. 2 miles 24 & 25

25 to 40 mi west of Clark.

24 to near Cummins 25

1 mi N. of west of Newburg

Sutton. five or six

✓ E. Ludwig of Tioga some
or Union Plus co. won chief
down.

~~Replat + Williams 3.~~

Thompson, mine 16. miles
from Newbury on S.A.L.

✓ Currier 3. 1/2 mi west of
Newbury. Prof. Sect 5.

✓ Currier 6.5 1 mi south of
Newbury. Prof. Sect 9

Franklin. Sect 7 west of Newbury.

✓ 1.4 mi west of Newbury Sect 25. N.W. 1/4

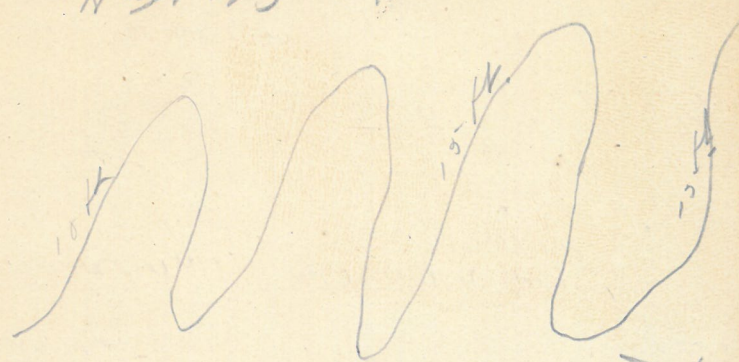
✓ 2 - on same Sect. (25)

✓ 3 - near Clarke 1 mi west. Sect 18

4 - near same. in 30. S.W. 1/4

✓ 7 - near same. in 30. S.W. 1/4
H. L. Cook
Newbury.

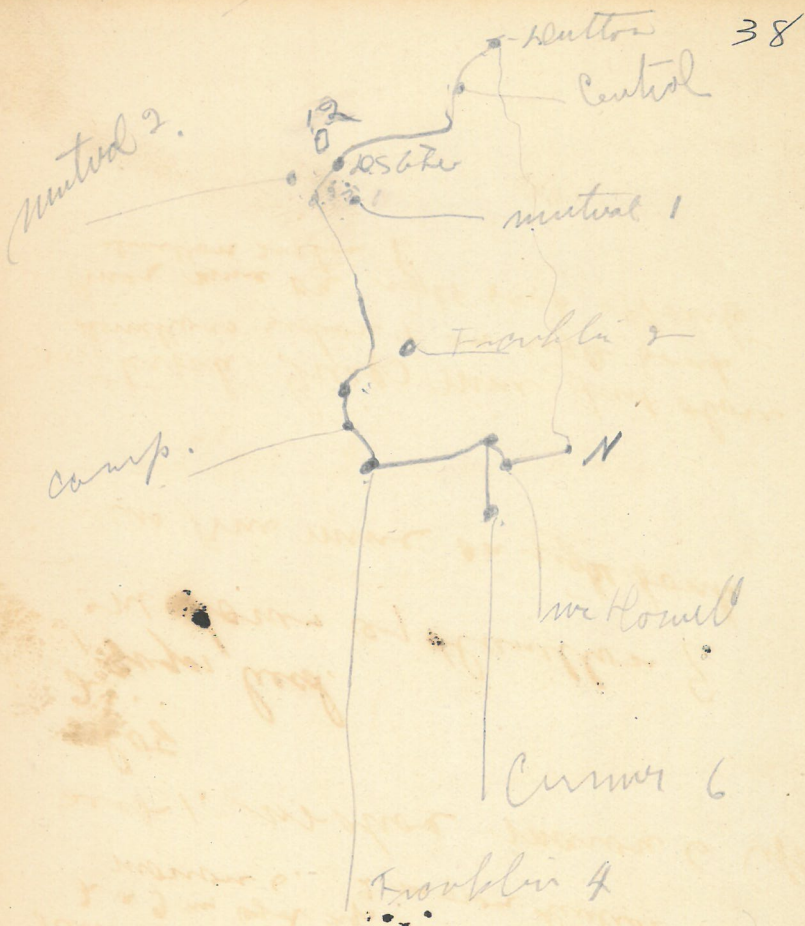
Currier No. 5. Sample of dump
taken. In bin probably 2500 tons.
Died at 20 ft. but no tile pumps
as in High 1/2 co.



Top surface of limestone with
slickensides.

unconformity at top of West Hill





Hertzog says that the
Guarantee or bond now often
calls for net & abt. $2\frac{1}{2}\%$ premium
or a penalty if above 2% .

39

Hunellon co. now has a
digger of ~~the~~ English. Coal is used as
fuel.

~~Hunellon mines~~ Camp

Sect 1. on River at Hunellon, on right bank
Bay mine also in city limits, on right bank.

Blue Pine mine $\frac{1}{2}$ m. up river on left bank.
in town 7 sec. 1st & 2nd

Hunellon mine No. 7. just beyond Cullens
2 a 3 mi. beyond Sigsbee. on right bank.
Marion 6. 2 mi. from Cullens on left bank.

Sect 1. just above Marion 6 left.

24 log

12 sugar head.

one down by Hunellon 2.

Cullens Pine mine on right bank.

Butterfield Greis mine. Just above
Hunellon section 1, on right bank.
Pine mine on right bank opposite
Hunellon section 1.

Butterclub.

River mine on right fork
 Hugo mine on left fork. dry.
 2 mi from Dunellon.

Dunellon 4. + 5 near Felsie Sect 14.

Comp. near ^{Thomas me} Felsie Sect 11.
 Two Dunellon 2 bluen Comp.

Synolcat 1 Sect. 3 co
 The Florida Syndicate Dunell.

Syd. 3 in Sect 3

Dunellon 5 & 9 in Sect 3.

Dunellon 7 in Sect. 35

Butterclub. Sect 3X

~~Perrine~~ Dunellon 34

17. ~~Perrine~~ Dunellon 29

Berkshire 20 (3 Sects)

maior 1 Sect. 7
 + 2 ...

Sect 7 on left fork. 41

Dunellon 7 Sect 7.

Comp four ~~traces~~ in 12.

2 B & C Perrine

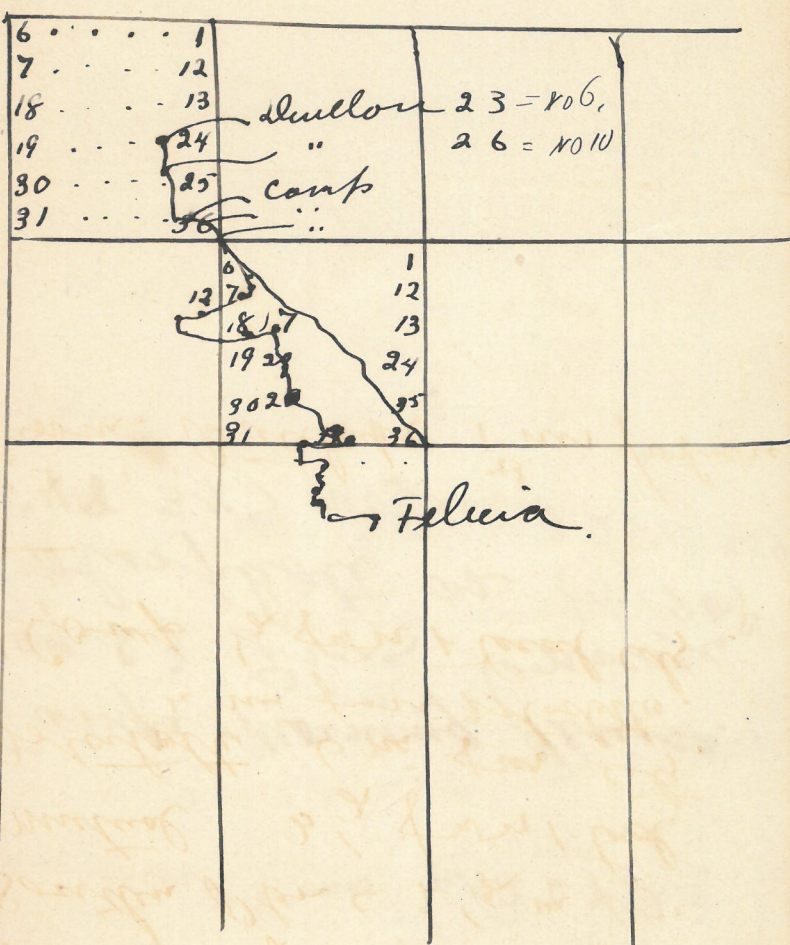
maior 6 Sects 17 - 18.

Dunellons in 26 & 23.

Tampa Morning News.

May 23 Give tonnage
 of phosphate as for 1908
 548, 347 value 3.250, 18%

Sect. 23. Dunellon Plos Co. 42
 Northside of Sect. 26. Dunellon Plos Co.



43

43

Floral City.

Dutton two plant.

1 - one - ow. lob. min. net 7 cts

1 - 2 1/2 mls 11. r

Brodley 2 1/2 mi from

Southern Plos Co 2 1/2 mi

mutual 3 1/2 from T. led.

Wentworth 6 mi from city.

1/2 mi from Wentworth.

Camp 1/2 from Floral City.

Crown. Butcher 1 mi from

add to mailing list

Capt. W. H. Caldwell. F. A. C. Eng.
 Tampa, Fla. (from Plos)

Stackatta

✓ 1 mine, 4 mi West, not much north.
6 mi from Floral City.

Floral City

~~Section~~
Camp 1/2 mi S.E. 1/4 of Sect 16
✓ Section out 2 mi in Sect 17
L. in N.W. 1/4 of 28
✓ Bradley near Sim. in Sect. 28 N.E. 1/4
L Southern. near Bradley
✓ Mutual 1 1/2 mi South of Bradley
in next township.

Inverness

Southern map operating in 08,
- Holder about 2 mi S.W.

Hernando.

6
7, 8, 12 13

Lunellon

41 near town west edge
42 near town

Mutual

✓ one during '08, 1 1/2 mi S.E. (East of road)
✓ one near by (near 08) 08.

Buchenbach.

✓ one south edge of town on 26
✓ one during '08, about 11 (35) 12

Camp 2

45

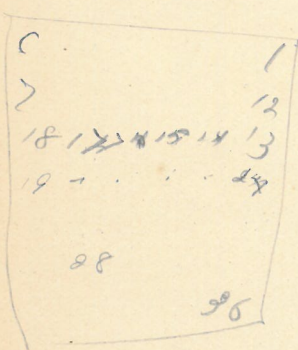
✓ 2 mile N.W. 08.
1 1/2 " N.E. 08. this one on east side
3/4 mi from creek line.

Crown

✓ Buchenbach. 3 mi a little South of west.
2 mi South of Buckville land.
✓ Cullen. 6 mi from Crown. 1 1/2 mi
west of Bay City.

Section in pit of Lunellon

11. at Hernando.
yellow sand 5 to 15 ft.
Lunellon formation 35..



Dunellon 11, cut pig

Amfaden
Phosphate

Dunellon Phos. Co. minus
as follows from their map

K = No 6. on S.E. $\frac{1}{4}$ of Sect. 23. T. 16 S. R. 17 E.
Q = " 10 " N.E. $\frac{1}{4}$ of " 26 " "
L = Sect 1 " East of center of Sect 1 T. 17 S. R. 18 E.
m = Sect 7 " on N.E. $\frac{1}{4}$ of Sect 7 T. 17 S. R. 18 E.
N = No 7 " S.W. $\frac{1}{4}$ of Sect. 35 - T. 17 S. 19 E.
O = " 8 " S.E. $\frac{1}{4}$ of " 3 T. 18 S. 19 E.
P = " 8 " near center of " 3 T. 18 S. 19 E.
Q = " 5 " South of center of Sect. 14. 18 S. 19 E.
R = " 4. $\frac{1}{2}$ mi. S. W. of No. 5. & on east side of
west line

This covers all minus $\frac{1}{4}$ mi below Pelican.

No of Companies.
Hard rock (by towns)

Crown	2
Istockhatta	1
Floral City	6
Gunnness	1
Hernando	6
Felicia to Dunellon	30
Bucknell	2
Gulch	1
Standard	2
Kernberg to Shotton & Clark	21
F.S. White.	4
Sawmills	1
Amfaden	1
Bell	1
by companies	15
Shotton. 2 + 6 + 2 + 1 + 2 + 2 =	6
Mutual 1 + 2 + 2 + 1 =	3
Schulnon & Bene 1 + 1 + 1 =	1
F.S. White Hard Rock Co. 1 =	1
McLennan =	3
Franklin Co =	9
Comp Phosphate Co. 1 + 7 + 1 =	6
Cummins Plus Co. =	2
Central =	1
Thompson =	1
Union Phos Co =	1
	48

Linnellon 2 + 7 + 2 =

11

Buttgerecht 11 + 2 + 1 =

14

Brookley =

1

Southern Plos. etc =

1

Stochetta =

1

Halder 1 + =

1

Williams Plos Co
French Co. Antons

11
79
75

19

In the hard rock section 79 plants
operated by 19 companies.

Long pebble

2. Prairie Pebble

8

(1) Standard

1

2. Mechella

1

Prairie River

1

(4) Charleston min & mfg co

1

(5) Dominion Plos. Co

1

(6) Fla. min co

1

Fla. Plos min Corp.

1

International Plos Co

1

Palmetto Plos Co

2

Shavers min company

1

Pine Plos Co
State Plos Co

49

Crown 2 1/2 mi. S. 9. Plant City.

Plos. min co. on S.A.L. 11 miles. 22
Sect. 8.

Mechella in Sect. 13.

Christina in Sect 27 & 28

Prairie Pebble Plant in 2.

Fla min co. plant in Sect. 8 1/4 Sect 2.

Pine Plos co. plant Sect. north side 36

Prairie Pebbles Long Beds in south side 36.

Pebble Dale in 30.

Prairie Pebble or Plant in 3. Sect

Dominion plos in N. E 1/4 of 1.

Fla Plos. min corp
N. W. 1/4 of Sect 6.

Palmetto Plos Co. 14/12.

Charleston min co. in 22.

International Plos co. in 21.

Miss. Plos. Co.

R. 2 1/2 E. T. 81.

Sect. 10, 15, & 16.
mine in Sect. 10.

Prune pebble map from Sept 15.
run north side.

other plants shown on Duelliere
Plos. Co. map.

A = 2. B & Co. plant on west side of Sect 25.
T. 16 S. R. 18 E. on east side of track. not
working during 1808.

W = W. M. Ross. plant in S. W. 1/4 of Sect 26. 16 S.
18 E. on north side of river.

S = Comp. Plos. Co. in South of center of Sect 35-
18 E. 16 S. on South side of river.

C = 2 B & Co. plant on north side of Sect 1. 18 S. 18 E.
on north side of river.

B = 2 B & Co. plant on S. W. 1/4 of Sect 1 1/4 mi
south of river T. 17 S. 18 E.

T. & M = Comp. Plos. Co. in N. E 1/4 of Sect 12. 17 S. 18 E.
west side of S. & H. R.R.

D = 2 B & Co. plant on N. E 1/4 of Sect 7. 17 S.
18 E. on east side of river.

E = 2 B & Co. on S. W. 1/4 of Sect 8. 17 S. 18 E.

F = " " on north of center of Sect 20 west of B.

G = " " on south of " of Sect 34

Z = Sutton Co. N. W. 1/4 of 29. 17 S. 18 E.

From Bowling Green (Sect. 4 in 33). 57
25. East 32 South in order.
T. 16 S. 18 E. 1/4 of 34.

International Plos. Co. Lone Jay
middle of Sect. 21. 1/2 mi East of A.C. 6
31.

2 Ele. mines & mine Co. S. W. 1/4 of Sect 22.
Bators in 30, 25. Sect 5, 6, 7 & 8.

24. East.

32. Tiger to two plants between
Sects 1 & 12.

~~31 -~~
~~agricola N. E 1/4 of 15.~~
~~state Plos. Co 10.~~

~~Prune Pebble of Plos. Co. Sect 3.~~

~~Common Plos. Co. N. E 1/4 B 1.~~

30 Green Bay in west side of 33.

(?) Florida Plos. mine Co. N. W. 1/4 of 26

Angster N. W. 1/4 of 26

Pebble date two plants in Sect 30
only 1.

23

30 Long Brook mine in S. W. 1/4 36

Prune Plos. Co. N. side of 36

also on line of 25 & 36

Fla. mine Co. S. W. 1/4 of 12. 6. R. 18 E. 3

Plos. mine Co at N. side. N. 20. 1/2 S.

Prune pebble mine plant in 2.

29		52
word pebble in	26	
Bone valley in (no 1)	24	
Christina S.E. $\frac{1}{4}$	23	
also one in S.W.	24	
medulla uninc of	12	
Standard Plos Co	13	

Plos plants from, Hennellon Co. exp.

- X = Pearson & Sexton on N.E. $\frac{1}{4}$ of 3X
not running in 1908.
- Y = W.M. Ross, on N.E. $\frac{1}{4}$ of Sect 3
18 S. 19 E. on section line, west of RR.
- H = J.B. & Co. N.W. $\frac{1}{4}$ of Sect 3, 18 S. 19 E.
- V. = Camp Plos Co. west of center of Sect
11. 18 S. 19 E.

Prairie Pebble Plos. Co. 53

R. 24 E. T. 21 S.

- 1) S. W. $\frac{1}{4}$ 3. ^{no 8} on west side RR
~~(2) N.E. $\frac{1}{4}$ 3 on east side RR~~

3. R 23 E. 31 S. A.C.L.
3. S. W. $\frac{1}{4}$ of 36. west of RR.
near Long Branch.

4. S. W. $\frac{1}{4}$ of 23. ^{no 8} west of A.C.L.

5. S. W. $\frac{1}{4}$ of 11. ^{no 8} west of A.C.L.

6. S. W. $\frac{1}{4}$ of 2. ^{no 4}

~~7. N. W. $\frac{1}{4}$ of 2~~

8. Extension N. W. $\frac{1}{4}$ of 2. ^{no 3}

R 23. T. 29.

9. S. W. $\frac{1}{4}$ of 35. N. 2.

10. S. E. $\frac{1}{4}$ of 34. " 1

54
Others from Prairie Rebble map.

24 E. & 20 S.

✓ Green Bay Plos. Co. Sect 33

✓ Pebbledale Plos Co. " 30 +

✓ Florida Mining Co " 6

23 E. 30 S.

~~Florida Mining Co. north, 12~~

✓ Pierce Plosplat Co. ^{missile} side, 36

✓ South west corner (no name), 3

23 E. 29 S.

✓ Medulla Plos co. 24

✓ Standard Plos co. 13

55
actual size of
Shark's tooth in coll-
ection of A. Brenning of
Mulberry Fla. Tooth collected
from pit at north of fire plant.
'09.

The overburden in the Prairie Pebble pits is removed in some pits by steam shovel & hauled away by cars; in others by water. The phosphate is mined by water.

Section in Prairie Pebble pit near plant.

Light colored sand	3 ft.
red sandy clay	12 5 15 "
Pebble phosphate Stratum det.	15 "

Yellowish clay at bottom.

The pebble phosphate is clearly stratified consisting of layers of coarse and of finer material. phosphate pebbles of all sizes up to the size of two feet. Also worn bones of all sizes. Fossil wood reported in the clay underlying this pit.

Charleston Mining & Mfg. Co.

Section in pit 1 mi. N. W. of Ft. Meade, 2 mi west of A.C.B. track.

Light colored sand	4 ft.
Clay sand	5 ft.
Gray jute phosphate	15 "

method of treatment -

Phosphate from the washer is shown to dryer & dropped into opening. As taken to temporary storage bin by cups on endless chain. From the storage bin is fed through a chute to second endless chain which carries it to dryer. Chute leading to dryer.

The dryers are large revolving cylinders, two in this plant abt 40 ft long by 6 ft. in diameter. The dryers have cross pieces which throw the wobble forward. (See section) The fuel used is oil. about

150 tons a day perishes 58
a dryer on an average 300 tons
to may 26 59. as high as 400
tons for these two dryers in one day.
The temperature is moderate
so much but that you can hold
bond on outside of cylinders.

Temp at Jany Jay Green as about 42%

Tiger Bay. Palmetto Ples Co.
one pit one mile north of Station
One pit 4 miles north west north dominion.
Dominion
Phosphoric
aqueduct

2d

59

Palmetto pit

Sand 4 ft.

Sandy clay 6 ft

Phosphate 12 ft.

Jany Jay

Sand 3 ft

Phosphate sand iron rich 2 ft

Phosphate 7 ft.

Sandy clay more or less

Long Pebble quarry
including Blue pebble

60

61

61

Thomasville Road
3 1/2 mile N.E. Tallahassee.
The alum testing light blue
clays are in a ditch on the
south side of the road, hill
sloping east. Red sands above.
contact not seen though
a sufficient distance to
observe unconformity.

One half mile back a
deep cut in the road shows
about 20 ft of the red sands.
beyond that the top of the hill.

on Thomasville road
1/2 mi from Tallahassee shallow
cut. No superficial sand.
stratification lines dip sharply
to the south.

Hill sloping south Sect. 30.
vertical exposure 8 ft.

no superficial sand.
Not mottled, uniform dull red.
Fine sand not coarse,
even concretions few.
some sandstone inclusions.

Sect. 18. 1 mi South of 62
 Jamonia. Long hill sloping
 south. total height possibly
 75 feet. Red fine structureless
 sand at top 4 or 5 ft. Enough
 clay at bottom to give mottled
 appearance. No superficial
 sand. No iron concretions
 No sandstone inclusions.
 at top of hill is a small
 area of light superficial sand.
 a well at top 45 ft. 6 in deep
 reached bottom the sandstone
 with lime inclusions & with
 clay inclusions like that 3 mi
 west of Tallahassee on S.F.R.
 but no clay & no water in
 well

Sect. 13, 1 1/2 mi west of 63
 Jamonia. Long hill sloping
 east. Total height about 50 ft.
 Red sandy clay. iron concretions
 few and mostly in upper half.
 clay lens. comes in above
 middle sandstone and sand lens
 with clay inclusions abundant
 near middle. one place shows
 apparently small fold of the
 well north top gives 42 ft.
 passing through red sand. gray
 sand & reaching buff colored
 clay. No water.

Sect. 14. alt. 2 1/2 to 3 mi west of Jamonia.
 Hill sloping east & Hill sloping
 west. Great deal of sandstone
 & sandstone pebbles lying up
 up to the top of the hill.

In an old road near the bottom
 of the west slope is found

1. Red sand with boulders 22 in dia or 5 ft
2. light gray sand 5 ft
3. Blue alum tinted clay 1/2 ft

The top of the hill is all horizontal.

steep hills sloping west & 64
sloping east. possibly 75 ft.
total height. much phosphatic
sand rock honeycombed. no coarse
sand. few medium ^{fine} sized sand.
This exposure 3 1/2 mi west of Dawson
sect. 10. q. 16.

a piece of this phosphatic lime
clay with pisolite structure from
the level of R. E. Atherton near the
Georgia line in sect. 9. gave the
following analysis.

m 882.	Phosphoric acid	16.80%
	Eqv. B. P. L.	36.70%

Compact limestone resembling the
Chatahoche was found on head of
small creek in 26 3 mi. S. line.

The Chatahoche starts the
fountain at two points in S. E.
S. E. corner of sect. 10. about 1/2 mi
apart.

1st bank shows only red 65
in sand.

2nd bank of mudstone shows
a gray clayey sand which may
be a landslide. The bluff is
about 2 ^{or 30} feet. Between these
two exposures the bed of the former
stream follows the bluff.

Loke.
About 4 mi N. of Jackson
Station the country becomes
less hilly and surface sands
present. also ^{some} long leaf pine.
This continues to Lake Jackson
Station. South of Lake
Jackson Station the country
remains level & sandy. but
has short leaf pine largely.
Near the river approaching
Chatahoche somewhat hilly.
no coarse sand seen from
Tallapoosa on this route to Chatahoche.
For the exposure ^{near} S. E. & F. & H. corners
section 27 see former notes.

Section at Steel Bridge
across Acklone S. 23.

(1) Soft white or slightly
cream yellow limestone full of
fossil corals especially a gastropod.
Bed of stone to water level 18.5' = 8 1/2 ft.

18.5'
18.8'
5 ft. 3"
8"
8"
4"

1 1/2 ft.

Gray sandstone
covered to the Railway cut
32-10

Fuller's corals clays & spring 18 ft.
a unconformity above River 32 ft. 10 in.

Red clay sands 9 ft.
Unconformity above River 4 ft. 10 in.
Pleistocene sands 8 ft. 4 in.

The sands here are pale yellow &
medium fine.

22 ft.
10' 8"

Quartz & gravel 5 ft. 4 in.
sands some 5 ft. 6 in.

Just above the spring a
several minor folds bring a
gray sandstone as much as
3 ft. above. The 1 ft. of clay
probably lies above this sandstone.

The Red sands of this section
are in places very coarse & contain a lot
of pebbles. This formation is the worst
is notable for the number & local
extent of the clay lenses. Sandstone
inclusions occur especially
near the upper part.

From cross road to mill dam 172.
290 steps.
670 "
796 "
14 ft "
to mill part 172
172 by 2100

C. L. S. 3. 2. 1.

Fuller's earth on bank of ^{11.3 W.} 68
 H. C. Allen. in Sect. 34. 26 ft.
 The level of the fuller's earth is estimated
 very roughly as about 25 ft. above
 the bed of river.

✓ on the bluff at this place
 facing the river is this section
 connected to the top of the bluff
 (1) gray sandstone from the bed
 of the stream

7 1/2 ft.

(2) light green sand

1 ft.

(3) Sandstone weathers yellow

1 1/2 ft.

This incl. dip down stream & the
 S. W. at obt 2 ft per 100 ft.

(4) connect to top obt

28 ft.

Bluff 2 mi below Jackson see Honey
 Shaker Bluff 5 mi below Jackson
 Silver Bluff much below.

See Harry Robinson, Col. to
 Pick Bluff. 2 mi below
 river edge on west side of river.

Bluff on Sect. 34.

about 15 ft of blue sandstone which
 weathers yellow.

(2) connect to top of bluff

28 ft.

(3) sloping to highest obt.

25 ft.

— on Polk creek bank
 sloping east. Section 3.

to a dark slightly brownish
 sand. clay. occurs abt 25 ft above
 the stream bed. This material
 seems to be the "Aluminous clay".

Barometer rock hill at Honey
 creek as $\frac{1675}{1615}$ 60 ft high.

near mill of Walter Honey
 Sandstone on Sect 5. Honey creek

(1) " 5 1/2 + 16 + 3

22 ft.

(2) connect to above river.

34 ft.

To the shells 5 ft x
 $\frac{3 1/2}{6}$

Shells approx
 Covered 8 x 8

2 ft. approx
 6 6 1/2 ft.

about $1\frac{1}{2}$ miles up creek
on Honey creek the north of
about the middle of Sect 8. the
mill of H. & Black rests
on a hard slightly flint
sand rock very hard. The top
surface of this rock is slightly
irregular.

Resting upon this rock is
8 ft of dark blue shell marl.
which forms a deep upon the surface
In this marl the Mr. Black found
moss-like ribs & a fore vertebrae
from the fragments seen the head of
a mostolen femur.

Above this marl is a dark blue
non fossiliferous clay sand.

see shells on double branch.

at Double Branch, ^{Sect 17} about 73
1 mile south of Harvey creek.
Cherokee miocene shells
occur in abundance in the side
of the stream just above the
crossing. Above the shells is found
the aluminous clay.

Section at North End of
Jackson Bluff. above bridge.

Below water & bed of stream	182.
From water. Sandstone	16..
with bluish to cement. 5-3	
Gray sand	7 ft 10 in.
Fuller earth.	5 .. 6 ..
yellow sandstone dip	4 ft
shell marl	5 "
covered to top. 5-2 x 4 + 2-2 =	23 1/2 ft.

Bluff here faces N.W.

100 yard below the bridge ⁷⁴
 the ^{base of the} fuller cobbles lie above
 note 8 + 5 - 4 + 5 - 4 + 4 - 8 = 23 ft.

On creek 3 1/2 mi from
 Jackson's Bluff Freeman's
 creek. The mill is built
 on the intensely Blue
 sands.

The red sands occur on the
 hill. The surface sands are
 coarse.

Escambia Bluff 1/2 mi S.W. of flag 75.
 Stop Escambia Saw mill.

Pale yellow sands	at	15 ft
Red sands	"	15 ft
Greenish stony clay	"	8 "
Pinkish sandy	"	8 "
Pink stony clay		8 "

Pinkish clays small pieces
 occur in the type locality.
 to Fayette or Oxford mass.

Bluff at Magnolia Bluff

Loose sands	
Fayette like sands	
"Hard pan" a yellow	
slightly hardend clays	1 ft
Black stony joint clay	5 "
Yellow sandy clay	2 "

Section in gully $\frac{1}{2}$ mi N. of 76
 meter

- (1) Gray medium coarse sand with white pebbles 5 ft. Occasional stumps occur in the gray sand.
- (2) carbonaceous layer with many tree stumps & leaves 1 ft.
- (3) Yellow finely laminated sand with many pebbles 10 ft.
- (4) Sand light sand 2 ft.

Alum Bluff. June 25 1897

- (1) Sand. Smith considers doubtful. Columbia residual of Lafayette 30 ft.
- (2) Blue & white sand & clay. 60 ft. Smith considers all of this the equivalent of the Pensacola Bluff section.
- (3) claminous clay
- (4) Chesapeake
- (5) calcareous sand.
- (6) bank of yellow sand

at base of section the Alum Bluff sand rest with a distinctly irregular line upon the Chesapeake 22 ft. of Chesapeake above water of the stage 17 ft. contact with the

June 26.

Water taken from the
limestone at Blue Junction Station.
Just east of road crossing.

June 25.

Rock Bluff examined from
Boat. water stage about 7.
- unmistakable evidence of disturbance
in the rock is seen near the middle
of the bluff.



A represents the layers of chert.
above the limestone lying ap-
proximately parallel. horizons
at B the disturbance occurs. The
greenish blue and gray sands
from above being shown. It
dropped into a break in
the limestone.

At this stage of water 10 ft
of chertolade shows. The ostrac
layer being off. 6 or 7 ft above
the top of the chertolade.

Sample by B. C. Phillip.

Rock Bluff. - m - 1254 -

Total phosphoric acid	29.20%
Equiv. to bone phos of lime	68.75.

Section on road east from
 Monamaux on Aug 3 '99
 Yellow clay limestone stratum
 lying about horizontal 3 ft
 this stratum breaks by joint
 Beneath is joint clay like
 fuller earth buff with man-
 grove stones (Sample) 2 ft.
 Beneath this is a blue calcareous
 clay from which was taken the
 fossil shell 3 ft.
 another more calcareous ledge 1 ft.
 part covered by 3 ft.
 soft limestone bed 4 ft.

The last may be richburg the
 other can not as they are
 unlike any richburg seen.

Brick plant at the
State Reformatory, Aug 4 '89.

The clay used is the Lofayette
The top abt 8 ft is removed by
scraper. The sandy, flint & pitted
clay & about 5 ft deep is used.
The brick machine is the
kind used for smelter brick.

The brick is dred in sheds
& burned in brick firing kilns.
The brick burn red.

In the pit here is seen the
crust broken up in place as
at Pensacola

In the Lofayette on the road
out is seen Chalky limestone
inclusion (probably Vicksburg) &

A plant started by Henry of
Macon & now abandoned.

Cost of mine 250.
 40 ft per cu. ft. condensed fuel
 New pit Gas est 86 ft

Anderson says that a
 Car is supposed to ~~now~~ contain
 2 cu yards One of these
 cars might weigh drying,
 1500 + pounds.

after drying 380 lbs.

This is possibly what miller
 met by steam shovel.

well is at office of
 tobacco plant.

miller says one man heated
 to fallus earth and used it for
 cotton seed oil.

✓ Lake Jackson 8 1/2 m. 44500 ft.
Stations 35 ft. above

✓ Line from Tallahenne to Akabehne ⁸⁷

Tallahenne Bros 15 ft. low depth

Lowest Super elevs Ht. 30 = 3000 ft.
wt. - 15, 0

✓ Top of hill. Ht. 10500 ft.
wt. 103 ft above base.

✓ Depress Ht 13000. 35 ft. above
wt.

✓ Depress H. 12000
v. 6 ft above base

✓ 27000 - 53 ft. above

✓ Lowest part at 49000 - 37 ft.

About same at 50000 ft.

M. C. G. Boney
Chief Engineer

Chickadee Bottom of river
 57000 ft. - 12 ft. above base

water in October Oct 12 ft. "

At 12 mi past mile post ends.
 60 ft above base

Take Jackson when high back across
 at 34700 - 33 ft. above
 base.

Hovant Little River.

Hovant River base 165 ft.

Point equally high 2 mi west.

Point above $5\frac{1}{2}$ mi west

presumably Little River 10 ft above base

valley of Little River 15 ft. ²⁰ "

of point 2 mi west of Hovant
 where point ends ends 70 ft.

This line not used.

Continued on next.

2 mi. from Inverness. 28 ft.

above new base.

Public road 6.23 mi from Inverness 75 ft.

Little River 6.5 mi 10 ft above base

4.5 mi. - 60 ft. above base

3.5 mi Branch 8 ft of base

2 $\frac{3}{4}$ in Buck

8 ft above

Quincy creek 2 mi of 12 ft above base

Height of Quincy

100 ft. above

7

8

9

✓ 9 above

10 ft above

✓ 2 mi west

103 ft above

✓ 3 $\frac{1}{2}$ mi ...

6 ft above

✓ 5 $\frac{1}{2}$ mi n. 60 ft

✓ 9 mi west

40 ...

Elevations from Tallahassee. 93

G.T. & depot to the Ochlocknee

River. Datum an assumed base 15 ft below the Tallahassee depot

depot at Tallahassee above base above sea level 15 ft

Nearest depot	3000 ft	= $\frac{32}{44}$ mi	0 "
" "	10500 "	= 2 mi	103 "
" "	13000 "	= $2\frac{1}{2}$ "	35 "
" "	19500 "	= $3\frac{1}{2}$ mi	6 "
" "	27000 "	= $5\frac{1}{4}$ "	53 "
" "	"	= $5\frac{1}{2}$ "	60 "
" "	34700 "	= $6\frac{3}{4}$ "	33 "
" "	44500 "	= 8 $\frac{1}{2}$ "	55 "
" "	49000 "	= $9\frac{11}{128}$ "	37 "
" "	"	= 9 $\frac{31}{64}$ "	45 "
" "	50000 "	= $10\frac{33}{44}$ "	37 "
" "	57000 "	= 12 "	12 "
" "	"	"	60 "

- (1) Notes. - The lowest point in the profile is a little over $\frac{1}{2}$ mi west of Tallahassee. This point is 12 ft. lower than Ochlocknee.
- (2) Lake Jackson is reported to be 18 ft at the least point 34700 which is 18 ft above depot and 21 ft above the Ochlocknee.
- (3) Lake Jackson Station. 44500 is 55 ft. 34 lower than the Tallahassee depot.
- (4) The Ochlocknee River bottom is 34 lower than the Tallahassee depot.

Mr. A. Lewis. Sopchoppy.

Henry Baker. Crawfordville. about 6000.

~~W. ... Alford. A. ... Crawfordville.~~

Jan. 1910.

At the Bridge across the Sopchoppy near W^m Rouse place about 3 mi west of Sopchoppy ~~so~~ gray sandstone or sand of the character of the Alum Bluff sands is exposed. about 20 ft exposed above water, overlaid by 10 ft sand & soil.

A good exposure of marl occurs on the ^{west bank of the} river ~~at~~ near the residence of W. C. Rouse. At least eight feet of this marl is seen lying above gray sands. Mr. Rouse states from wells etc. that he estimates at least 20 acres of marl.

On Hurval branch near 96
some place that took up many
fossils. These not seen by me.
Indications of fullis coals seen
on Hurval branch and near the
head of Mill Creek.

Mill Creek cuts through the
morl and into the gray sand near
its mouth, also cuts the
usual deep trench through the
sands above the mill $\frac{3}{4}$ mi or so.

The Acklockma River was
examined at cut off known as
Mc Millon Creek. & down stream
about one mile to Tuckers place.
Three points on slightly north of west
of Sopeloffy. No red seen in these
sluffs. As the Lewis reports that
the sandstone occurs near the
entrance of Acklockma into
Crooked Creek.

On the Sopeloffy at Sopeloffy 97
the sandstone does not show. The
section at the mill near the town
is approx into

1. Yellow in color sand & soil 10 ft
2. Coarse sand with many
coarse angular quartz pieces.
This sand is lighter in places also
carbonaceous stores black 10 ft
3. Blue to dark sand with dry
from water edge 6 ft

Lewis says that the sand-
stone occurs below Sopeloffy at
several places.



Mr. J. C. McDaniel
 231 E. 8th St.
 Johnsonville,

Allen 1 mi on E. side.

Inquire of Holland P. O. for
 Chambers of Clarke Township.

2 mi above Jackson Bluff
 inquire of Horner for Bluff.

