

Lumpkin city test well  
 Stewart County, Georgia  
 Drilled April 1973 by Tom Smith, Artesian  
 well Co.

	Thickness <del>Depth</del>	Depth
clayton? residuum		575
Quartz sand in reddish clay matrix	40	40
sandy clay, yellow brown	20	60
Providence sand		515
Quartz sand, poorly sorted	120	180
no samples	220	400
In <del>cusseta sand</del>		175
In <del>Blufftown Formation</del>		
<del>gray shale and</del>		
<del>quartz sand, very fine and</del>	160	560
gray shale		
some feldspar, glauconite		
many black grains (iron phosphate)		
Gray clay, some quartz sand	920	1480
relatively few fossils,		
<u>Citharus texanus</u> , <u>Margulinia austriana</u> ,		
and <u>Planulina texana</u> at		
400-420. also <u>Pectolites</u> spp.,		
<u>Cimulinoidea</u> , <u>trilatera</u> and		
a few others.		
Blufftown Formation		+15
Gray clay, some quartz sand.	920	1480
few fossils. non-waterbearing throughout.		-905
Eutaw Formation		
sand with grains of siltstone		
clay, shale, sandstone and		
some quartz sand.	180	1660
Water bearing unit		

Lumpkin City test well  
 Drilled Tom Smith Artesian Well Co.  
 Drilled April 1973

clayton? residuum Qty sd in reddish clay matrix	20	20
do	20	40
<del>Providence</del> Silty clay, yellow brown	20	60
Praxinoses (?) sd	20	80
Qty sd, do, some clay	20	100
Qty sd, vf-vc, lt brown, muscovite feldspar?	20	120
Qty sd, vf-c, lt brown carbonaceous frag, fine muscovite	20	140
Qty sd, m-c lt brown a few large black grains	20	160
do	20	180
Qty sd, f-vc gray brown some vf grains of brick red	20	200
no samples (samples had been laid out on ground by driller and were washed away by heavy rain)	220	400

# Thickness (Eagle)

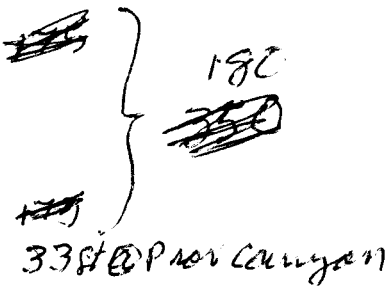
Tops  
 @ Lumphin  
 Eagle  
 map  
 (Stalome  
 550  
 1250)

chattahoochee

Central (or)

Providence

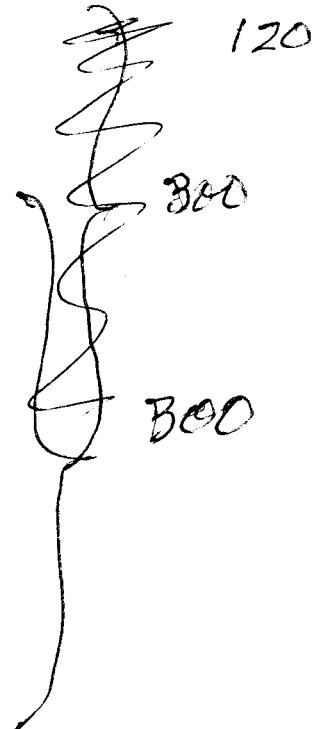
perate mbr  
 carbonaceous  
 micaceous  
 silt)



400

Ripley

135 (p. 57)



200

Carleton

185

50

Blufftown

410

Antau

125 (p. 25)

Tuxedo

265 (p. 11)

Lumpkin 1 d d

LOG OF WELL DRILLED FOR CITY OF LUMPKIN, STEWART COUNTY, GEORGIA, BY LAYNE-ATLANTIC Co., NORFOLK, VA., AND SAVANNAH, GA. STARTED NOVEMBER 1, 1938, COMPLETED JANUARY 16, 1939. DRILLER HOKE SMITH.

DESCRIPTION	FROM (feet)	TO
Red sandy clay	0	25
Coarse sandy clay, hard	25	52
Coarse white sand, mixed with clay	52	74
White chalky clay	74	77
White sand soft	77	82
Hard sand with small amount of clay	82	107
Soft sand	107	114
Hard and soft streaks of coarse sand with some clay	114	144
Soft coarse sand with clay	144	155
Black mud with shells	155	185
Very hard	185	-

Record of screen and casing setting:

- 12" casing to 185'
- 0 to 102' 8" blank pipe
- 102 to 107' screen
- 107 to 117' blank pipe
- 117 to 122' screen
- 122 to 132' blank pipe
- 132 to 142' screen
- 142 to 148' & 8" blank pipe
- 148' & 8" to 153' & 8" screen

135 ft

Left hand coupling in 8" pipe at 64 ft.  
Well underreamed to 26" and about 25 tons of gravel pumped into well around 8" string of casing and screen.

Static water level 96' below surface  
Pump level about 150' when pumping 135 gals. per min.

Lumpkin City well  
drilled 1973  
400 - 420

- 1 *Rotulus*
- 2 *Rotulus*
- 3 *Rotulus stephensoni* and/or *muensteri*
- 5 *Planulina* and/or *anomalina*
- 6-7 *Vaginulina texana* = *Citharina texana*
- 8-9 *nodosaria affinis*
- ~~12~~ 4 *Carulinoides trilata*
- 13 *Pseudopolymorphina*
- 14 ~~*marginulina*~~
- 15
- 16 *marginulina austriana*
- 18-20 *Planulina texana*
- 32 *Dorothy*, *Plectina* or *Textularia*

Lumpkin

10 mesh shell frag, frag of gray shale 20 420

20 mesh lt gray sd: qtz, some feldspar  
enough clay to cement grains  
shell frags

50 mesh qtz sd  
some iron stained forams (shde)  
glauconite(?) ostracode

80 mesh

20 440

abun dark grains 20 460

gray shale  
black phosphate, glauconite 20 520

420-440

50 mesh. abun quartz  
abun black nonphosphato  
glauconite  
no mica  
ostracods

80 mesh quartz a few forams  
echinoid? spines

440-460

same as above

460-480

same as above

480-500

same but more silt and clay

500 - 520  
Qty sd and gray clay  
some gypsum xls  
no fossils seen

520 - 540  
clean qty sd  
some muscovite, glauconite  
black, phosphate?  
no fossils  
~~540~~



540 - 560

50 mesh

qtz sd, muscovite; gray clay  
some glauconite, ~~quartz~~  
lignite,  
some few orange grains (corals?)  
one broken ostracod

80 mesh almost pure qtz sd

560 - 580

Gray clay

afew small gypsum xls  
some qtz sd

580 - 600

20 mesh

gray clay

30 mesh

gray clay, qtz sd  
glauconite

80 mesh

nearly pure qtz sd  
no fossils

600-620

Same as above

620-640

- do

Abulus, thin circular pelecypod shell with mod.  
640-660

do

660-680

do

680-700

do

-

700-720

do

---

720 - 740

do

740 - 760

do

760 - 780

do

50 mesh

~~for max collection~~  
ant < 80 mesh

slide w/ 3 fossils

780 - 800

do

800 - 820

do

820 - 840

do

840 - 860

do

860 - 880

do

880 - 900

do

900 - 920

do

920 - 940

slide essentially same as above

940 - 960

~~do~~

do

960 - 980

do

980 - 1000

do

1000 - 1020

1020 - 1040

1040 - 1060

1060 - 1080

1080 - 1100

1100 - 1120

1120 - 1140

1140 - 1160

1160 - 1180

1180 - 1200

all look alike except  
for samples  
metamorphosed by  
truck tires.



Lumpkin

1270-1240

\* light planktonic on slide

gray clayey silt  
fragments of thin shells rare

120

1240-1260

130



1260-1280

1280-1300

1300-1320

1320-1340

1340-1360

1360-1380

1380-1400

1400-1420

essentially the same as  
above

1440-1460

1460-1480

rare *Feldofus*  
*Polanella* *musca*

Lumpkin

1520-1240 exam of  
slide washed sample

20 mesh

gray shale  
shell frags

iron stained etc

10 mesh

gray shale with shell frags  
blauwite nodules  
pyrite

washing didn't make purple, even  
slide

"Entaw" Sand

1480-1500 The Aquifer

20 mesh

1 lg qtz grain  
1 shell frag

50 mesh

gray shale (concret)

1 sd clay

a few lg qtz grains

a few shell frags

fine gr silty ss

80 mesh

1500-1520

10 mesh

gray shale

20 mesh

do

white clay

shell frag

more than 50% if dispersed

would pass thru 50 mesh

clay looks deceptively like fossils

50 mesh

+ muscovite

ostracodes

80 mesh

same as above

1520-1540

do



1600 - 1620

- 10 mesh gray shale
- 20 mesh gray shale, qtz, sd, shell frag  
feldspar,
- 50 mesh <sup>coarse</sup> qtz sd coated w/ fines  
some feldspar  
carbonaceous frag  
a few shell frags  
no forams
- 80 mesh v little material on screen  
mainly qtz sd  
a few grains of pyrite  
no forams!
- < 80 almost no material  
no fossils

1540-1560 aquifer sand

sand as so of many lithologies -  
seemingly sedimentary rock that  
has been abraded and rounded  
~~that is~~ various qtz and

miscellit, clay balls and  
s.w. clay matrix

gray fissile shale that is probably some  
some calcareous grains

some phosphate  
rose quartz  
garnet?

some few shell frag

1560-1580 do } but maybe

1580-1600 do } more qtz and

most of sample is on 50 mesh  
so it is medium sel

1600-1620 same but w/ more  
gray shale

1620-1640 med qtz sel w/ streaks of  
gray shale

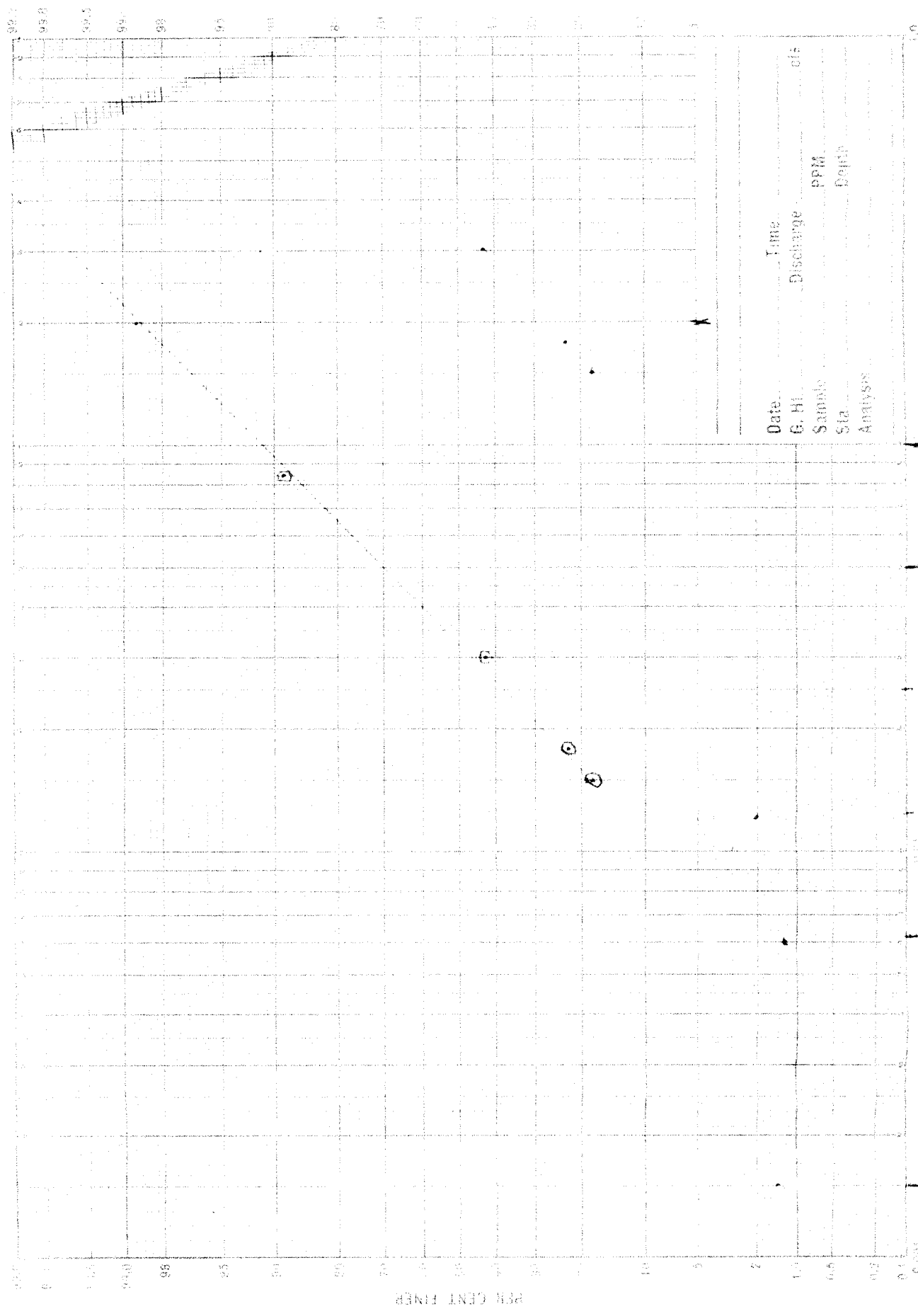
1640-1660 very fine sel

1640-1660 fine sd

sieve analysis

on 20 mesh	11 %	} much is fines - disintegrated ss.
" 50 "	46 "	
" 80 "	20 "	
" 100 "	5 "	
<" 100 "	<u>18 "</u>	

Essentially same lithology as above  
but no gray shale



Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 G. H. \_\_\_\_\_ Discharge \_\_\_\_\_ cfs  
 Sample \_\_\_\_\_ PPM  
 Sta. \_\_\_\_\_ Depth \_\_\_\_\_  
 Analysis \_\_\_\_\_