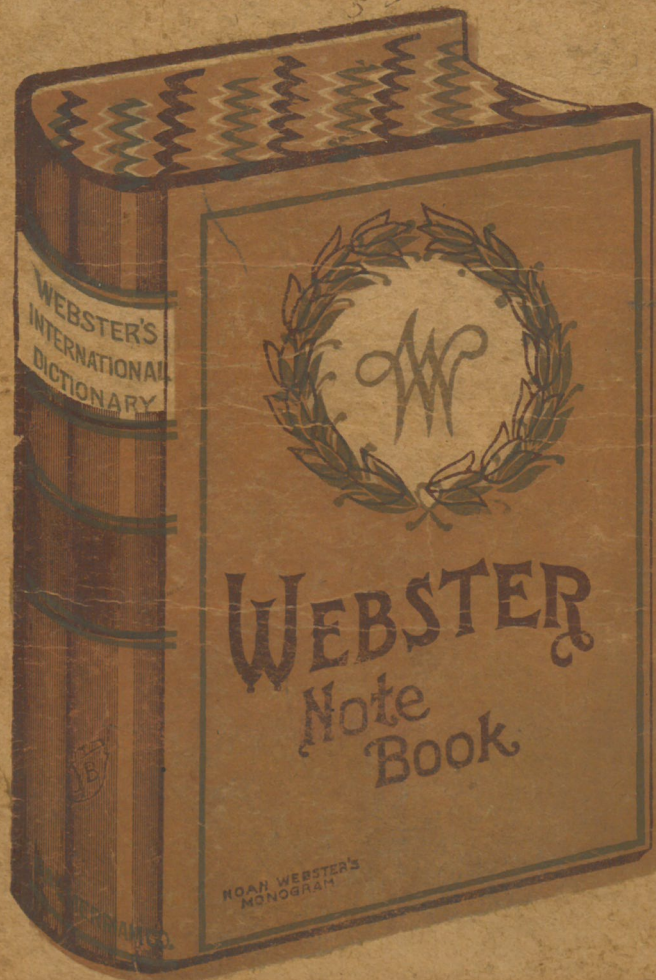


7

2-2
5-
52



- Mode of -

Estimating Discharge of Springs.

Effective width x average depth x
rate of flow per second x 60 = cubic
feet of water per minute. One cubic
foot of water is approximately 7
gallons, therefore, one cubic foot of
water x 7 = gallons flow per minute.

7.48

Florida State Geological
Survey.

Tallahassee, Fla.

Herman Gunter.

Horton, West & Co.
Tallahassee.

100 ft. 4 in

50 ft.

(bunker)

W. H. Harris, Lee, Fla.

66
23
x 3

J. E. Charles.

H. M. O'Sullivan.

H. E. Parham.

Sam Reese.

J. J. Lavine.

B. F. Smith.

School House.

Sunset Lbr. & Cattle Mill.

O. B. Boge.

R. H. Hancock.

O. B. Owens.

H. O. Collier.

Quincy, Fla.

J. D. ^{Cul}McDuffy, Ocala *

C. B. Brown, Archer. ✓

M. S. Fletcher, Albion, Fla.

Hammock, Archer?

95 ft. deep.

Head - 65 ft.

✓ 20 ft. higher depth

Ed Ellis, Albion.

Depth 65.

Head - 40

Maynard + Moffett - Rock Springs. ✓

A. Mac Artaw, Leroy. ✓

Clark, Ray, Johnson Co. Juliett. ✓

C. Y. Miller, Leroy. ✓

Information by Mr. Allen.

Sydney Pump & Well Co -

Richmond, Va -

drillers of lat. + one city well, Jacksonville.

Well at bath mine 22, Jacksonville.
1st 95 ft. clay + boulders. The talcum
was brownish rock. (?)

Water level at Croom - 16 ft.

Evidence by Mr. Allen that underground
water moves.

Well at Brunswick, no cavity. Green gray
formation. Only 1' in water

Gainesville well, Am. Oil & Chem. Co.

Depth 276

Casing 150

Depth to bed rock 140.

" of 40 ft. phos. gravel.

Head - 128 ft.

Rock at Istachatta 20 ft.

Brooksville 9 u well

Depth 150, 8 in

Casing 110

Rock 80 ft

Head - 103 ft.

Change 3 way well to Mr. Allen

J. J. Mac Donough.

Rural.

Depth 120 8 in

Rock 20

Casing 40

Head - 20

~~Brooksville~~
Istachatta is

Pole and Tie Co. Brookville 2 u E

125 ft. 6 in

Rock 35 ft.

Casing 40

Head - 60.

(8 in, 125 ft. casing 40, Head ~ 35

275 n very small supply well

Crown Boring Works.

Archer, Fla.

1906, Depth 65.

S. Frei, Archer, Fla. $\frac{1}{4}$ mi N
Depth 53, 2ⁱⁿ ~~filled m. brown~~, Archer
Head - 35 ft. 1891
yes. Hard.

Montrose.

Simon Blitch. Hancock Green.
Depth 52 Head - 23, Rock 30 ft
No clay, all sand. casing 42. Hard
Same Elevation.
1894.

Williston.

John Epperson. near. No
James Hancock Green.

Depth 45, 2ⁱⁿ, 1892.

Case 36. Head - 18 ft - Rock 2 ft
Hard. Same Elevation.

Got Simon, Boyd, Lake Bird, Luther,
Simon, Muley Hall.

Morriston.

Boston Ring, Hancock, Archer.

Depth 43 ft. 2ⁱⁿ casing 40 ft.

Head - 16 ft. Rock 38 ft. no clay, ^{all} sand

Same as depot.

1899

A. C. L., Morriston. Hancock, Archer

Depth 90 ft. 5ⁱⁿ casing 40 ft.

Head - 18 ft. rock 18 ft. yes.

Same about, little higher. 1902

Venable, Archer

2 1/2 S. Archer.

Depth 56, 2ⁱⁿ 1903

Head - 28

Rock 40 ft.

Casing 50 ~

Dr. Stataway - Palmer, Jhr.

1/4 mi from depot 1898

Depth 140 ft. 2ⁱⁿ

Head - 120 ft. no ^{dry} quick sand

Rock 130 ft. all very.

Casing, 135 ft.

Mr. Taylor Albion.

near depot.

Depth 96 ft. 2ⁱⁿ 1900

Head - 70

Rock 70, casing 96 ft.

Jim Medlin Albion.

Depth 60 2ⁱⁿ 1902

Head - 45

Rock 50 ft. no clay sand all the way

Perimeter Pk. Co. Albion.

N. S. Fletcher + H. D. Bassett, birm.

1st 65 ft. case 60 ft.

1892

2nd 85 ft. case 60 ft.

Rock 35 ft.

- 60 ft.

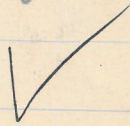
Geo. L. Taylor, Archer.

2 1/2 mi NE

birm John done.

depth 80 ft.

Head -30-35



Rock.

Depth Hainsville well 194 ft

Mr. J. E. Nigelsworth.

Palmer, Fla.

Owner,

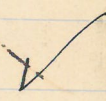
Type, dug.

Depth 31,

Rock 31

Head -27

1902



(18 = higher)

~~Mr. Cushman could not furnish information about sewage well~~

National Odd Fellows Sanitarium.

Hainsville, Fla.

N. J. Hamilton, Owner.

1903

Depth, 215, 4 mi

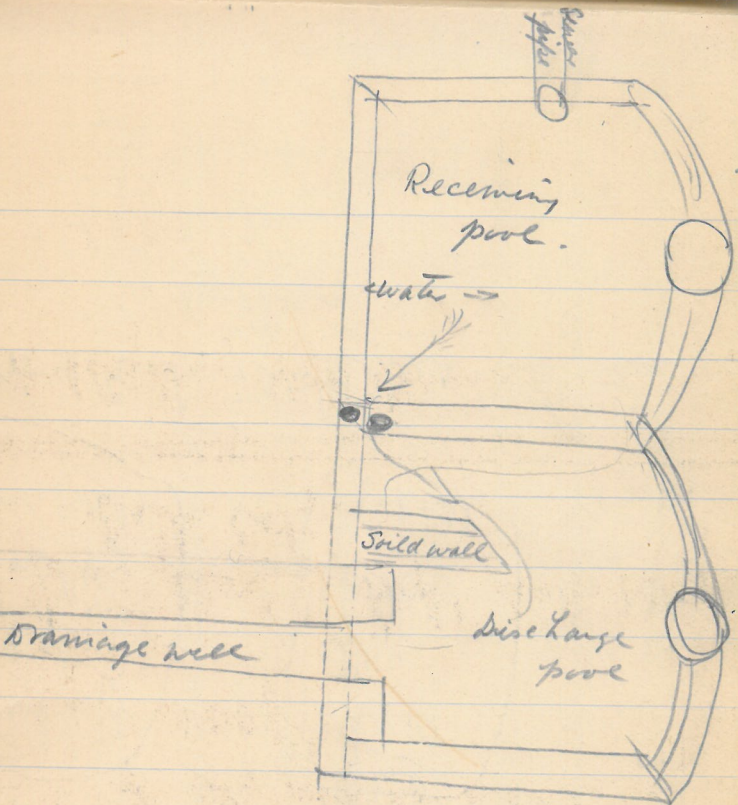
A. M. Cushman

W. H. Massey.
Orange Springs. Fla.

Depth of City well at Lake City
400 ft.

J. W. Reeve / Supt. Water Works
Lake City.

R. H. Higdon, High Springs.



High Springs.
J. H. Dedge.
John Steight, driller, H.S.
Depth 103 ft. 2ⁱⁿ

H. H. Traxler
High Springs.

W. H. Traxler. H.S.

Will Summers, High Spr. driller
150 ft. 2ⁱⁿ.

Head about -120 ft.

harder about 60 to 70 ft
higher than High Springs

St. Charles springs shown by barometer
to be 100 ft. ^{higher} than depth at H.
White.

J. A. White Hard Rock Co.
2515 Boston St.

Baltimore, Md. ✓
No shipment for 1907.

J. W. Pope, Capt. obs. co.

H. White.

(Pil 55)

Depth 375, 12ⁱⁿ

casing 80

Head - 63 ft.

1903

about 20 ft
depth

A.C.L. J. A. White

Depth ^{Pil 25} 25 ft. 3ⁱⁿ
100

Head - 30

stand. 2 ft. lower.

Geo

John Bibby, A.C.L. pump
H. White ✓

20 100


Profile from Archer to Altion.

A.C.L. McAlpin.

Smith, driller.

Depth 85 4 in 1907

Pit $\frac{40}{125}$ ft.

- 60 ft.

Warren, McNeil + Co.

Serpentine

✓ Helborn, Fla.

Steinhatchee Springs.

Mayo, open wells about 30 ft.

" " " 50 to 100 ft.

W. J. Dees ^{Mayo} Mayo, Fla.

O. B. Dees Mayo, Fla.

mgr. Mayo ~~Shops~~ + Water Co.

Theo. Williams, Quincy.

Mayo, Fla. ✓

Log of well in W. J. Dees. Mayo.

Sand 6 ft.

Clay

Sand

Rock (lime) at 30 ft.

Iron rock. at 70 to 80 ft.

Flint and sand over.

Water!

Not entered in permanent
note book. See Appendix!

Booth's Hammock, 12 mi S of W. of
Mayo, prospecting for phosphate.

Theo. Williams, mngs ✓
 C. J. Burnett ~ ✓ mng
 O. B. Dels ✓ ~
 L. B. Dels ~
 J. J. Dels ~
 R. E. Bradsworth ~
 C. A. O'Quinn ~
 J. B. Horn. ~ Printer
 V. E. Leggett ~
 H. E. Bothwell ~ ✓
 W. C. Johnson ~

M. D.
 W. Bruce, Surfiler.
 Alton.

O. D. McFarland, mng.
 Alton

Capt. H. H. Dift. } Information in
 Difton, Ga. } regard to the two
 J. Lee Ensign } wells at Alton.
 Jacksonville

Bayton Mercantile Co, Day, Fla.

Sinks in Horton Creek, Lee, Fla.
 Evidence given that water in sink
 rises with and falls with Savannah
 river. Samples of water taken,
 some have lime phosphate! Mr.
 Thibault states that wells are also
 affected by the rise & fall of river,
 to a very appreciable degree.

W. H. Cunningham, Fairholloving.
E. M. Pope

J. M. Bray Lbr. Co. Bayd, Fla.
have a well but could not
get record of same.

J. L. Smith Lake Bird. Saw mill
G. P. Payne, Simmans well drill.

Geo. Reily, Perry, Fla. Taylor Co. Naval Store Co.
E. Conner, River, Luther, Fla. ^{in Nelson Spring.} reported to
have phosphate and limestone.

D. J. Davis, Simmans, Fla.

J. D. Simmans, Simmans.

A. H. Edwards, "

J. B. Wright, "

J. R. Vance & Co. "

Capt. James H. English.
Pres. South Nat. Bank.
Atlanta, Ga.

Give this
address
mail.

A. L. Allmon, Aucilla. Livery.

H. B. Davis. Madison.

J. J. Neuman, Mfg. Elect. & Ice Plant
Madison.

John Sharp, Madison, well drill.

J. D. Farrell, " Hamilton store.

Madison well, reported to be deeper
now than when first put in. but
paid for 50 ft. but well was measured
and found to be only about 24 ft.
It has filled in some since then.
Water has been analyzed but could not
find analysis. Water soft.

Madison well 55 ft. above S.A.L.
 H.M. Taylor place. on Mr. John Sharp.
 R.G. Rouse, Madison, Mayor
 Boardman + Jeter, drillers of well at Ocala.
 Walter C. Toste, Nacissa Fla.
 'Jim Brumbley', Nacissa, Fla.

J. A. Hagau, Nacissa.
 J. J. Poland, Thomas City. P.O. Nacissa
 A.T.D. #4.
 Sulphur Spg. Nacissa, Mr. Carney.

Horn place, Taylor Co. Phosphate
 J. E. Vance place, Taylor Co. "
 B. F. Brooks " Jefferson Co. " Below Walter Spring
 Reams " Taylor Co. "
 See Neil McIvor, a Comb phosphate, 1/4 mi.
 In Walter Spring.

Big muddy, phosphate Thom.
 J. F. Reams. Lamont.
 S. B. Smith, P.O. Lamont.
 W. L. McCall, "
 R. G. Carrolle "

John M. Henry, Monticello.
 W. N. McRory, Monticello Hotel.
 W. N. Carroll, Mayor, Monticello.
 J. J. Turnbull, Clerk Council Monticello.
 Capt. Parkhill, Clerk of Court, Monticello.
 Log of well at Monticello, 800 ft.

Red clay		no well flows 60 or 75 ft. above sea.
Pipe "		
Blue "	50 ft.	
Sand.		
White clay.		
Limestone	10 ft.	
Marble	10	
Lime		

Set barometer at 2000 at Walker Springs.
 at Lamont was 2050
 2 1/2 mi N " " 2100
 3 " " " 2150
 5 " " " 2100
 6 " " " 2070
 at Anilla 2050

~~P. L. Jones, Naukeena.~~
~~J. A. Teate, Thomasville, Good well.~~
~~H. M. Lindsey, Naukeena.~~ ^{at Naukeena.}

Micasukle Bluff, nothing but clay
 exposed. Has several smits around
 but no limestone exposed. Smits apparently
 old trees growing in them, and clay
 washed in. no water at all.

Bluff is about 40 ft. from water level.

~~J. P. Chaires, Chaires, Fla.~~

~~J. H. Patterson " "~~

~~E. H. Patterson " "~~

~~J. J. Lloyd, Lloyd, Fla.~~

~~B. B. Cromartie, " "~~

Micasukle drain about 2 1/2 mi. E
 Lloyd, limestone is exposed, for
 some 12 ft. Water has cut through
 and made valley. Water sinks in
 limestone sink. A good place for
 photographs.

Barometer readings.

R.R. 542. 7:50 A. 72°

2000 cloudy

Top of hill S.W.

2075

Newport Spring

1925 11 AM. 81°

Hammock. some lumber
probably tanks

Not. Bldg at St Mark

1950. 12:15 82°

1st Newport Spring

1960 2 PM. 83°

Top of hill 6:30 83°

2100 S.A.B.

2135 2140 at deck. 8 PM

Office desk 8 AM.
2/75.

A. H. Miner, Ga. factory, Kissimmee
R. N. Ellis, Supt. Water Works. Jax.
at City Hall.

Senator Crill,

at The Bank, Palatka, Fla.

Well driller at Hardware Store.

Sanford, Fla.

Street leading S. from depot. 2nd Regt.

Pagenhardt, Sanford, Fla. Shelly
shell from shell mound.
Lewis shells. S. from depot.

Mr. Bender, N. Kissimmee.

H. Merwin.

~~Well driller~~
Palatka, Fla.

J. W. Mahoney, General Hdw. Co.
Sanford.

H. A. Stafford.

Sanford.

Life

Sanford.

C. O. Newton,
N. F. Bass.

Kissimmee.
Fla

Well driller.

Union
End of Millerville Ave at Paces.

Murrell + Minsken.

C. F. Walker. Pres.

Sanford, Fla.

Kalamazoo.

~~Howe + Pyron,~~
deceased.
Sanford.

Mr. Maloney states that The water level now is 2.9^m less than the highest of any time last year. In June of last year Mr. M's well within about 4^m of surface and now it only flows at 8 ft. below surface.

The head of well that is in the street at Sanford had a head of +18 ft when first put in about 1889 and is now about 12 ft. Mr. M. put one down right in river about 1898 and it had a head of 25 ft. 0

Mr. Maloney does not think that the additional number of wells has in any way decreased the flow of surrounding wells. The wells range usually from 150 to 250 feet in depth and from 3 to 4ⁱⁿ in diameter.

Mr. H. Bass, Küssinmer, Fla. Hill drier.

to be attended to while in Tallahassee.

Send J. H. Harvey and Davis Bastin,
Anthony, Fla., a well blank.

Send Mrs. Thompson, Astor, copy analysis.

In writing Ray get records of wells at Ft.
White complete and also record of well at
Melbourne.

Send P. M. Warren the well list.

Send out sample water bottles ✓

Write Mr. Allen about wells at Juliette,
Bolton mine.

Write Moffatt for lime statistics.

Time wells for 15 ^{gal.} min. 7 wells
flow into the basin and at end
of time water volume can be found.
The exact measure of basin is 10 min.
Therefore flow of 7 wells can be found.

June.

2. Hotel Sanford #1 4.50

Livery " 1.00

Sample containers 10

3 Hotel Kissingmire 2 2.50

Livery " (1 horse) 50

4 ~~Hotel Sanford~~ 2.00

Dinner 50

Hack Palatka 25

5 Hotel Palatka 3 2.00

Livery 45

Hack Pal. + fax. 50

Sample containers 10

Kodak films 40

6 5.75 R. 75. B. 50 208

7 Hack 3.00

Pullman 50

15 Express, in plate package to Gay 19

16.45

Walker Sp.

$2 \times \frac{2}{3} \times \frac{1}{3} \times 60$

$1\frac{1}{3}$

1.33

$$\begin{array}{r} .33 \\ 399 \\ 399 \\ \hline .4389 \\ 60 \\ \hline 26.3340 \\ 7\frac{1}{2} \\ \hline 184.31 \\ 13 \\ \hline 197. \end{array}$$

$$\begin{array}{r} 24 \overline{) 350.00} \\ \underline{24} \\ 110 \\ \underline{96} \\ 140 \\ \underline{120} \\ 200 \\ \underline{192} \\ 80 \end{array}$$

Log of Thurman well, Kissimmee -
0 to $149\frac{1}{2}$ Sand + shell.

$149\frac{1}{2}$ to $151\frac{1}{2}$ Rock.

$151\frac{1}{2}$ to 231 Soft limestone + shell.

231 to $233\frac{1}{2}$ Flint Rock

$233\frac{1}{2}$ to $236\frac{1}{2}$ Cavity

$236\frac{1}{2}$ to 244. Soft clayey white.

244 to 250 Cavity

250 to 268 Soft limestone, white + cavity.

268 to $340\frac{1}{2}$ White clay soft millay.

$340\frac{1}{2}$ to 341 Flint rock.

Reported by A.A. Lall

in permanent not book.

10 x 8 x .50 x 60

$$\begin{array}{r}
 40 \\
 \underline{50} \\
 20.00 \\
 \underline{60} \\
 120.00 \\
 \underline{7.46} \\
 159.6 \\
 \underline{7.46} \\
 90.52
 \end{array}
 \qquad
 \begin{array}{r}
 24.50 \\
 \underline{12.00} \\
 60 \\
 \underline{7.20} \\
 7.46 \\
 \underline{42.20} \\
 288.0 \\
 \underline{50.40} \\
 536.120
 \end{array}$$

Reading on rail at Depot Greenville 2000
 " " toll 2000

550

$$\begin{array}{r}
 550 \\
 \underline{1.50} \\
 27500 \\
 \underline{1550} \\
 825.00 \\
 \underline{.3} \\
 24.75 \\
 \underline{60} \\
 1485.00 \\
 \underline{7.46} \\
 7610.5 \\
 \underline{59.40} \\
 10395 \\
 \underline{11065.10}
 \end{array}$$

57

$$\begin{array}{r}
 11 \times 8 \frac{1}{2} \\
 \underline{8 \frac{1}{2}} \\
 24 \frac{1}{2} \\
 \underline{25 \frac{1}{2}} \\
 231
 \end{array}
 \qquad
 \begin{array}{r}
 1128.1 \\
 \underline{25.2} \\
 8640 \\
 \underline{343.6} \\
 864 \\
 440 \frac{1}{4} \times 190 \\
 \underline{231} \\
 2006.11480 \\
 \underline{2079} \\
 154 \\
 \underline{231}
 \end{array}$$

~~8 1/2~~

$$\frac{2}{3} \times \frac{1}{6} \times \frac{1}{2} \times 60$$

31

$$\frac{2}{3} \times \frac{1}{4} \times \frac{5}{12} \times 60$$

$$\begin{array}{r} 125 \\ 125 \\ \hline 1500 \\ 1500 \\ \hline 1875 \\ 1875 \\ \hline 2343.75 \end{array}$$

$$\begin{array}{r} 145 \\ 145 \\ \hline 1740 \\ 1740 \\ \hline 2175 \end{array}$$

$$\begin{array}{r} 145 \\ 145 \\ \hline 1740 \\ 1740 \\ \hline 2175 \end{array}$$

$$\frac{3}{4} \times \frac{1}{2} \times 1 \times 60$$

$$\begin{array}{r} 75 \\ 75 \\ \hline 937.50 \end{array}$$

Union Spring

3 mi S/W, Hampton Spring

$$\begin{array}{r} 225000 \\ 225000 \\ \hline 270000 \\ 270000 \\ \hline 337500 \end{array}$$

Naldo Spg

4 1/2 mi S/E Hampton Spg

11,065 flow per min

Imp. 72°

$$\frac{1}{5} \times 1.50 \times 3 \times 60$$

From Line Oak to Melborn. S&L.

Reading at L.O. 2000

" " Houston 2030

30 ft. higher at Houston.

Reading at L.O. 2000

" at Melborn 2040

40 ft higher at Melborn

From Melborn to Line Oak. S&L.

Reading at Melborn 2000

" " Houston 1975

25 lower.

Reading at Melborn 2000

" " Line Oak 1950

50 lower L.O.

~~Staircase~~
Bay.

Chaucy
not 100

~~Old Town~~
alton

Lincoln, Saker, Register.

Fen Holloway

Boyd.

Lake Bird

Luther Taylor Co

J. D. Renfro - Supt. W. H.
Perry, Fla.

L. H. Blanton, Mayor Perry.

Hampton Springs.

J. L. Foster, Perry, Fla. Well driller

Jim Poppell " " " "

J. M. Hawkins - Perry, Fla.

H. A. Henry, Clerk of Council, Perry, Fla.

Interstate Line Spring.
 72 ft in 12 sec.

$$\begin{array}{r} 23.60 \\ 1500 \\ \hline 10500 \end{array} \quad \begin{array}{r} 37.5 \\ 60 \\ \hline 22500 \\ 7.46 \end{array}$$

25 x 1 1/2 x 1 x 60

$$\begin{array}{r} 135000 \\ 90000 \\ \hline 157500 \end{array}$$

$$\begin{array}{r} 15 \\ 82 \\ 30 \\ 12.9 \\ 12.90 \\ 738.00 \\ 7.46 \\ 4528 \\ 2952 \\ 5146 \\ \hline 550448 \end{array}$$

$$\begin{array}{r} 3000 \\ 1800 \\ 746 \\ 800 \\ 200 \\ 1600 \\ 1242 \\ 134 \\ \hline 16785000 \end{array}$$

$$\begin{array}{r} 098 \\ 026 \\ 0988 \\ \hline 027 \\ 29 \\ 8 \end{array}$$

25 x 1 1/4 x 1 x 60

6 1/4

37.50

$$\begin{array}{r} 31.25 \\ 60 \\ \hline 187500 \\ 7.46 \\ \hline 11250 \\ 7500 \\ \hline 13125 \\ 12987.50 \end{array}$$

$$\begin{array}{r} 60 \\ 225000 \\ 746 \\ \hline 135000 \\ 90000 \\ \hline 157500 \\ 16785000 \end{array}$$

25 x 2 x 1 x 60

$$\begin{array}{r} 5060 \\ 5000 \\ 746 \\ \hline 5 \end{array}$$

22380 gals. per min.

Interstate Lbr. Co. 1/22/06

J. W. Cobb, of City with also one of
 Spring. 1/21/06

Orange Spring.

4 ft wide, Avg. depth 9 in

$$4 \times \frac{3}{4} \times 1 = 3 \times 60 = 180$$

$$\begin{array}{r} 180 \\ 7.46 \\ \hline 10.80 \\ 720 \\ \hline 1260 \\ 1342.80 \end{array}$$

$$5 \times 1 \times 1 = 5 \times 60 = 300$$

$$\begin{array}{r} 300 \\ 7.46 \\ \hline 300 \\ 2238.00 \end{array}$$

Mar. 20th 1908, 8:30 a.m. Archer, Fla.
Reading on rail at depot S.A.R. 2000.
Albion " " " " " " 1980
Difference in Elevation (lower) 20 ft.
check

Poe Spring.

$$30 \times 2\frac{1}{2} \times 1\frac{1}{3} =$$

$$\begin{array}{r} 3 \overline{) 10'5''} \\ \underline{3'5''} \\ 1'40'' \\ \underline{60''} \\ 8'40'' \\ \underline{7'46''} \\ 50'40'' \\ \underline{33'60''} \\ 58'80'' \\ \underline{62'64''} \\ 1'16'' \end{array}$$

$$\begin{array}{r} 3 \overline{) 75'5''} \\ \underline{25''} \\ 100'00'' \\ \underline{6000''} \\ 7'46'' \\ \underline{6000''} \\ 44'76''00'' \end{array}$$

Reading on S.A.L. rail near corner
of water house. 2000. at Lake City.

At Winfield, at Depot. 1950

50 feet higher at Lake City
Did not check 20 ft still higher at L.C. on return.

Reading at Winfield 2000

" at J.R. Roberts 2010
10

10 feet higher at Well.

53.3	21.5
2.8	9.10
<u>50.5</u>	

31.3

15 - 200

15) 20 (1 ¹/₃
15
5

18
60
12
2000

20600