No. 6.

PROPERTY OF
FLA. STATE GEOL. SURVEY

Indexed June 18. 1915.

Alachua & Marion Counties.

To be Coloured.

Mr. Wm Gibbs.

Oct. 21 '07

Level top of pipe 100

water level in. 31.52 ft from top

Level of top of 2 in well. 106.5 1/2

water level in 2 in well.

31.52 + 6.512 = 38.032

Gibbs measurement - 68.602 actual.

Level of Bench mark magnolia tree near station water-tanks

117.619 ft.

Level of Bench near Steam Comp. Oak tree 100.619

water level in front east of tract

88.119

Bench mark on root of 18 in. mag. bet. pipes & S.W. 93.529

[illegible] red. Bench mark 1 [illegible]

[illegible]

Level of Bench mark on old log in edge of water of swale.

Turning point on log 71.254

Bench mark on log 73.634

Level of water in swale 70.298

Level of water in North Side 70.500

check in on 8 99.8791

[illegible] 99.805

.0725

Index 1.

Gainesville & vicinity. Sept. 24th to 25th 06

1. Deep wells; shallow wells; cisterns; Springs.
2. The City of Gainesville is supplied from a spring, cisterns supply water for household use in country districts; deep wells and shallow wells are used, however to some extent.

For stock the farming districts rely mostly upon lakes, ponds and shallow wells.

For purposes of irrigation water is taken from ponds, shallow wells and to some extent from deep wells.

3. Artesian wells range in depth from 90 to 325 ft; surface wells from a few feet to 35 or 40 ft.
4. –
5. The artesian water is a lime water with occasionally a very little sulphur.
6. The artesian water stands 48 to 50 ft. above sea level. (The Gainesville area varies in elevation from 60 to 179 ft. above sea).
7. Limit of supply of deep wells not known.
8. Depth to rock extremely variable; from a few feet to 50 or more feet.
9. Water bed of shallow wells, sands & clays; of the deep wells invariably limestone.

10. Such springs as occur are shallow springs.
11. The public city supply is from a spring.
12. The soil is sandy or sandy loam.
13. Soils derived from sands, clays, and limestone.
14. Water bearing capacity good; the sandy soil also holds moisture persistently.
15. Transmission through the soils by seepage.
16. Wells, shallow and deep, mostly 2 to 6 in. in diameter, operated by pumps.
17. Water from deep wells is a brine water; that from shallow wells variable.
18.
19. Quantity of water from deep well not determined.
20. No very direct evidence as to seasonal variation on deep wells, water level probably slightly affected.
21. Uses:- See manufacture, household, stock, irrigation, etc.
22 to 34. No quarries are found within this area.

Wells #1.

35. Diamond Ice Co.
36. Gainesville, Alachua Co.
37. 3 blocks W/ post office.
38. W. F. Hamilton, Ocala, Fla.
39. Surface of well 176 ft. above sea. (Estimate from U.S.G.S. topographic map).
40. Bored well.
41.

42. 8± Top to bottom.

43.

44. Depth of water Feds 316 ft.

45. Limestone.

46. Reported cased 160 ft.

47. Head approximately 50 ft. above sea.

48. Air lift.

49. Pumping capacity 600 gal. per min.

50. Amount actually pumped about 300 gls. per min.

51. Tests made by owner indicated that the water could be lowered by pumping 9 ft. but could not be lowered beyond that point.

52-56.

57. Surface location of well very unsanitary, immediately surrounded by stable manure. Casing to rock is supposed to keep out surface water. Probably however does not prevent surface water from following casing to the rock, and then seeping through to the well.

58. Used for ice manufacture.

Well #2. Gainesville area.

36. American Oil & Chemical Co.

36. Gainesville, Alachua Co.

37. ½ mi. S/w. p.o.

38. W. F. Hamilton, Ocala.

39. 131 ft. above sea. (Estimated from U.S.G.S. topographic map.)

40. Bored wells. 41. 1890. 42. 8 in

43.

44. Depth of well 347 ft.

45. Limestone.

46. Reported cased about 140 or 160 ft.

47. Head approximately 50 ft. above sea.

48. Air lift.

49-50

51. Reported lowered by pump, not however exhausted or lowered beyond a definite level.

Well # 3.

Spring of Gainesville area.

64. City of Gainesville.
65. 2½ mi. S/E P.O.
66.
67. Clear, odorless, tasteless.
68-70.
71. Probably free from pollution.
72-73.
74. Flow scarcely or but slightly affected by seasons.
75.
76. Sandy upland with pine woods.
77. Seepage.
78. Water comes mostly from sand with some lime-
stone and sandstone.
79. Forms small stream.
80. Used as source of city water for Gainesville.
86. Pumping plant at Spring.

Public Supply at Gainesville.

88. City.
89. Spring.
90. Derick pump
94. Distributed by direct pressure.
95-98
99. (See spring above 64 to 86)

Alachua and vicinity. Oct 5-6-06.

1. Water supply at Alachua almost entirely from wells.
2. Chief source for domestic use wells; same for stock, and for irrigation when practiced.
3. Range of depth of wells 40 to 225 ft.
4.
5. Lime water.
6. Head of water apparently about 30 ft. above sea
7. Wells not exhausted by pumping.
8. Depth to rock very variable, a few to 200 ft.
9. Porous limestone.
10. No springs in area.
11. no public supply.
12. Soil sandy.
13. Derived from clays, sands and limestone.
14. Good
15. Seepage.
16. Wells mostly tubular 2 to 6 in 40 to 225 ft. dup.
17. Lime water.
18-19
20. Wells reported to vary within a limit of about 4 ft. with extremes of seasonal variation.
21. General household and farm use.
22-34. no quarries in the area.

Wells #, Alachua Area.

35. S. H. Young.
36. Alachua, Alachua Co.
37. ½ mi. South.
38. S. H. Young, Alachua.
39. Elevated. 40. 2 in tubular well. 41.
42. 2 in top + bottom.
43. Sand + rock.
44. Total depth 85 ft.
45. Porous limestone.
46.
47. Head 73 ft. from surface.
48. Steam pump.
49. 50. Not exhausted by pumping.

Well # 2.
35. F. E. Williams.
36. Alachua, Alachua Co,
37. ½ mi. S/W p.o.
38. W. F. Hamilton, Ocala, Fla.
39. Elevated, estimated above sea 65 ft.
40. Driven. 41. 1905. 42. 2 in top + bottom.
43. Sand + rock.
44. Total depth 60 ft.
45. Porous limestone.
46.
47. Water reported to stand 37 ft. from the surface or approximately 30 ft. above sea.
48. Gasoline engine.
58. Household and farm use.

91

"NOTE :- Alachua is located in an important cotton growing section. The soil is mostly a Hammock sandy soil. The topography is rolling. The area is not thickly settled being not more than 50 to 100 feet above sea. There are no surface streams in the immediate vicinity, and almost no lakes or ponds. The rainfall going either into the ground at once, or through short runs and into drainage ditches.

The elevation of the S.A.L. depot is given by U.S.G.S. as 60 ft. (Bull. 275) Within the limits near the depot with a surface elevation estimated at 67 ft. is reported to stand 37 ft. from surface or 30 ft. above sea. The water here is apparently constant for all the wells of the region.

Practically the entire water supply for all purposes is taken from wells. That all of a varying depth, mostly comparatively shallow. The water is found in a porous limestone and when tapped stands at or a uniform level so could be determined about 30 ft. above sea level.

The city has no city water system.

In addition to the wells listed there are a great many more of the same type, mostly 2 in driven wells, all entering the limestone and getting their water.

Alachua Area.

Well #3.

35. Alachua Ice Co.
36. Alachua, Alachua Co.
37. ½ mi. S/W P.O.
38. W. F. Hamilton, Ocala, Fla.
39. Elevated, estimated above sea 70 ft.
40. Bored, 41. 1904. 42. 6 in top and bottom.
43. Ends in limestone.
44. Total depth of well 216 ft.
45. Porous limestone
46.
47. Water reported to stand 58 ft. 8 in from surface.
48. Air lift.
58. Ice manufacture.

Well #4

35. S. Borton.
36. Alachua, Alachua Co.
37.
38. S.H. Young, Ocala.
39. Elevated.
40. 2 in tubular driven.
41. 42. 2 in top and bottom.
43. Ends in rock.
44. Total depth of well 118 ft.
45. Porous limestone.
46.
47. Head brings water to about 106 ft. from surface
48. 49. Lime water.
58. Household use.

Well #5. Alachua Area.

35. City of Alachua.
36. Alachua, Alachua Co.
37. Near.
38. S. W. Young, Alachua.
39. Located in the street.
40. Tubular. 41. 42. 2 in 43. Ends in rock.
44. Total depth 40 ft.
45. Porous limestone.
46.
47. Water stands 24 ft. from surface, or approximately 30 ft. above sea.
48. Hand pump.
58. Stock and general purpose.

Well #6.

35. J. W. Powell.
36. Alachua, Alachua Co.
37. 38. S. W. Young, Alachua.
40. Tubular, 42. 2 in
44. Total depth of well 40 ft.
45. Porous limestone.
47. Water stands 26 ft. from surface.

Well #7.

35. Bell & Pettit, 36 Alachua, Alachua Co.
37. Rear P.O. 38. S. W. Young, Alachua.
39. 40. Tubular. 42. 2 in top & bottom.
44. Total depth 68 ft.
45. Porous limestone.
47. Water stands 28 ft. from surface.

General Water Resources. Alachua Co.

County	Town	Principal source of water	Other sources.	Depth shallow wells	Depth deeper wells	Avg	Surf. material	Thickness	Water Supply	Surface formation
Alachua	Alachua	Wells	Cisterns		225 ft	—	Sand + clay	Variable	very little	Alachua Clays.
"	Aredonda	Wells.	Cisterns	none	125 "	—	Sand	"	slight	Ala. limestone
"	Archer	Driven wells.	"Natural" wells.	none	190 ft.		Sand	Shallow	"	" "
"	Newberry	Wells.	"	45 ft.	200 ft		Sand	Variable	very little	" "
"	Gainesville	Deep wells,	Springs.	35 ft	325 "		Sand	"	Fair	Alachua clays
"	Waldo	Deep wells,	Lakes, open dug wells.	5 to 20 ft.			Sand	"	fair	Clays.
"	High Springs	Wells.	—	—	60 to 100 ft.		Sand	"	very little	Ala. limestone
"	Micanopy	Deep + shallow wells	Lakes, Springs	10 to 25 ft	150 ft.		Sand	"	Fair	Clays.
"	Hawthorn	Wells	Springs,				Sand	"	Variable	"
"	Melrose	Wells	Springs, lakes.				Sand	"	"	

Water Supply	Prin. water beds	Water Supply	Prob. depths	Quality of water	Incr. or Decr.
Very little	Peninsular limestone	Abundant	40 to 220 ft.	Hard	Slight variations with seasons.
Abundant	" "	"	40 to 125 ft.	Hard.	" "
"	" "	"	60 to 100 ft.	Hard	" "
"	" "	"	From first to 111 or more feet.	Hard.	" "
Good	" "	"	From first to 325 or more feet.	Hard	-- "
Plentiful	—			Hard	" "
Abundant	" "	"	60 to 100 ft.	Hard	" "
Plentiful	Porous + cavernous limestone.	Abundant	From first to 150 or more ft.	Hard.	
"	Limestone	"	variable	Hard.	" "
	"	"	"	"	" "

County	Town	Topog. situation of town	Number and kind of privies, cess pools etc	Disposal of sewage	Sanitary cond. of wells.	Prevalence of Typhoid fever
Alachua	Alachua	Hilly	Many privies.	no sewage system	Fair.	Not prevalent.
"	Arredondo	Level.	Numerous	" " "	Fair	" "
"	Archer	"	"	" " "	Good	" "
"	Newberry	Level	"	No sewage system	Good	Several cases reported '07.
"	Gainesville	"	"	Aseptic tanks	~~Fair~~ Doubtful.	" "
"	Waldo	Level	"	No sewage system	Some very unsanitary	Several cases '07
"	High Spr.	Rolling	"	" " "	Good	not prevalent
"	Micanopy	Level	"	No sewage system	Good	" "
"	Hawthorn	Level	"	" " "	- -	" "
"	Melrose	Level	"	" " "	"	" "

Suggested improvements.

Sewage system.

Should abandon sewage well.

Sewage system. To abandon open wells.

References to supplementary notes.

Head of water about 51 ft. above sea. Artesian water level from 37 to 47 ft. from surface. Rock near surface.

Permanent water level about 40 ft. from surface, equals about 40 to 45 ft. above sea.

Permanent water level 35 to 38 ft. from surface, equals 37 to 40 ft. above sea.

Permanent water level about 55 feet above sea equals 75 - 125 feet above surface.

Public Water Supply — Alachua

County	Town	Public or Private ownership	Sources (well) Spring etc.	Geol. Source	Wells: no	Wells: D	Wells: Depth	Wells: Head	Distribution or Storage: Direct or from elevated tank, standpipe etc.	Services	Fire hydr.	miles of main
Alachua	Gainesville	Public	Spring	Alachua: Clays					Direct ~~pressure~~	City supply		11 mile.
"	"	"	Well		1	12in	1944.	31.32		" "		

Daily Consumption.	Dom. Pressure	mineral? character	Capac. of reservoir or standpipe.	Elev.	Elev. T	Use of meter	Sufficiency.	Pumped direct or from cisterns.	Location: ft.	Dept.
		Soft water	———	—	—		Insufficient	From cistern	—	—

Public Water Supplies

Topog. location of well or Spring	Relation to town	Direct. of mvmt of grd water	Distance from nearest House	Cesspool	Privy	barn	Is supply sufficient
Sandy upland with pine woods	90 feet lower.	Not determined	Near		Near		No.

(continued) Alachua 3x

Changes contemplated	Suggestions	Remarks	Supplementary notes
Dup well		New well to supplement supply.	

Springs

Alachua

County	Nearest Town or P.O.	Direct Dist of P.O.	Dist	STRQ	Owner	Name of Spring	Character of Water	Discharge	Nature of mineral deposits	Temp.	variations of flow-seasons	geol. formation from which water comes	Nature of passage	Manner of Emergence	Nature of Stream.
Alachua	Gainesville	S/E	2½ mi		City of Gainesville	Coulware.	Soft water.		None.		Slightly affected	From sand with some lime stone + sandstone	Seepage	Not a boiling spring.	Enters branch.
"	High Springs				D.A. Underwood										
"	" "				Mike Whitstone, Estate										
"	Hawthorn				J.L. Brown										
"	Traxler				H. Traxler.										

Springs

Topographic Surroundings	Distance from Nearest House	Distance from Nearest Privie	Distance from Nearest Barn	Distance from Nearest Cesspool	Possibilities of Pollution	Is spring muddy after rains	Uses Drinking, Domestic, Industrial, Public, Shipping, Irrigation, Medicinal	Remarks
Sandy upland with pine woods							City water supply	

Trade name of water	Improvements at Spring	Amt Shipped	Price	Remarks
None	Pumping plant at Spring.	None	——	

Wells

Alachua

County	Nearest Town or P.O.	Direct from P.O.	Dist. from P.O.	STRQ	Owner	Driller and Address	Type of well	Date Sunk	elev above sea	Depth	Diam	Length of casing	Depth of prin. Supply	Depth of Sec. Supplies	Geol. formation in which well stands.	Geol. Source of Supply	Head	Yield	Incr' or Decr'
Alachua	Gainesville	S.E.	2 mi		City of Gainesville	R.J. Allen, Lakeland -	Drilled	1907	abt 87ft	194 ft	12 in.	-	194 ft	—	—	—	-31.32	—	—
"	Waldo		near		A. Jolly		Driven		26 mi 150ft	40ft.							-15		
"	Gainesville	N/W	3 Blks.		Diamond Ice Co.	N.F. Hamilton, Ocala.	Drilled		176 ft.	316 ft.	8 in	160 ft.					-12 ft.	300 gallons.	—
"	"	S/W	½ mi		American Oil and Chemical Co	" " " "	"	1890	126	347 ft.	8 in	140 or 160 ft.					-3 ft.		
"	Alachua	S	½ mi		J.W. Young	Owner	Driven			85 ft.	2 in						-73 ft		
"	Archer	S/W	1 mi		Henry McCrae	? Chesnut, Gainesville	"	1—	—	125 "	2 in	<	~~90~~	—	Ten. limestone	Ten. limestone	- ? -	—	—
"	"	—	near		D. Howard.	Webb, -	"	1894.	Est 90 ft.	47 "	2 in				" "	" Limestone	-37 ft.		
"	Alachua	S	⅛ mi		F.E. Williamson	J.W. Young, Alachua	"	1905		60 "	2 in					"	-58 ft		
"	"	S	½ "		Alachua Ice Co.	N.F. Hamilton, Ocala	Drilled	1905		216 "	6 in						-196 "		
"	"				S. Borton	J.W. Young, Alachua	Driven	—		118 "	2 in						-24 "		
"	"		near		City of Alachua	" " " "	"	—	178.	42 in	2 in						-25 "		
"	"		near		J.W. Powell	" " " "	"			45 in	2 in						-28 "		
"	"		near		Bell & Petit	" " " "	"			68 "	2 in						-48 "		
"	Micanopy	S/E	2 mi		J.D. Watkins	Brown Bros, Archer	"	1894	155	118 "	2 in						-80 "		
"	"	W/N	2¼ "		Montgomery,	" " "	"	—	" 100 -	91 ft	3 in						-65 "		
"	"	N	3 Miles		S.S. Gay + Co.		"	—	" 100 -	60 in	2 in								
"	"	W	¼ mi		C.E. Melton	Dibble and Cabaniss.	Bored	—	" 110 -	151 "	5⅝ "						-38 "		
"	Clyatt	N/W	4½ " (Micanopy)		F.H. Clyatt	H.D. Lewis, Gainesville	Driven												

Wells continued Alachua

Mineral char. of water	Distance from nearest House	Cess Pool	Privy	Barn	Are protecting clay beds present	Well properly cased?	Is well probably polluted?	Uses.	Action in boilers	Does it corrode casing.	Suggestions	Remarks.
	1 Blk	-	1 Blk	1 Blk	Yes.	Yes	No	City water supply				See Suppl. note p.
Lime	near		near	near				General				
Lime								Ice manufacture	-			
Lime												Location of well very unsanitary. 400,000 gls. pumped per day.
Lime	-	-	-	-	No.	—	—	Household.	-	—	— — —	
"	Near		Near	Near	"	Yes	No	"	-	— "	— — — — — —	Rock 4 ft. surface. Cavity found at 10 ft from surface containing no water.
Lime												
Lime								Household + farm				
								Ice manufacture.				
								Household.				
Lime								General purposes.				
Lime								——				
Lime								Household.				
Lime								Orange grove irrigation				
Lime								Saw mill purposes.				about 6? ft to rock
"												

Wells

County	nearest Town or P.O.	Direct from P.O.	Dist. from P.O.	S	T	R	Q	Owner	Driller and address	Type of well	Date sunk	Elev. above Sea
Alachua	Clyatt Station	N/W	4½mi		micanopy			F. H. Clyatt	H.D. Lewis, Gainesville	Driven	1896	Est. 103 ft.
"	" "	"	"		"			" " "	" " "	"	1896	" 100 ".
"	" "	"	"		"			" " "	Summer Bros. High Springs	Bored		90 ft
"	Rochelle	N	2 miles					A.C.L. R.R.	— — — —	Bored		80 "
"	Nacahootee	S/W	2½mi					F.M. Ramsey	Owner.		1903	Abt. 65 ft.
"	"	"	"					" " "	"		1900	" 90 "
"	Newberry	N/W	⅛ "					G.W. Livingston	Owner	Driven	1896	" 72 "
"	"	W	4 miles					Julia Gray	G. W. Livingston, Newberry	"	1906	" 69 "
"	"	S	3 "					City of Newberry	Natural well in limestone	—	—	" 72 "
"	"	W	6 mi					Dan Mc Kinnon & Co	G. W. Livingston, Newberry	Driven	—	—
"	"	N W	6 "					M. Langford	" " " "	"	—	—
"	"	N/W	1 "					John Mc Dowell	Owner	Dug 39 ft Bored 80 "	—	—
"	"	W	1 "					" "	"	Pit 38 " Dug 72 "	—	—
"	"	N/W	2 "					C. F. Weston	Owner	Pit 38 " Bored 85 "	—	—
"	"	"	"					" " "	"	Pit 38 " Bored 65 "	—	—
"	Clark	W	1 "					Cummer Lbr Co.	Owner	Pit 44 B. 62	1906	—
"	Newberry	N/W	4 "					D.W. Norfleet	— — — — — —	P. 47 ft B 163 "	—	—
"	Rocky Point	—	near					Denton		Dug well	Before war	100 ft.

Alachua Co

Depth	Diam	Length casing	Depth prin. supply	Depth second. supplies	Geol. formation in which well stands	Geol. source of supply	Head	Yield	Incr. Decr.
55 ft.	2 in						-35 ft.		
62 ft.+	3 in						-32 "		
62 ft.	2 in	—	—	—	—	—	-20 "		
							-10 "		
							- 4 "	120 gl min.	
60 ft.	4 in		54 ft.				-28 "	200 gls min.	
48 "	4 in		48 "	— — —	— — — —	— — — —			
55 "	2 in						-38 "		
52 "	2 in						-34 "		
—	5 & 6 feet in diam.			— — —	— — —	— — —	-	—	—
102 ft.	2 in						-32 ft	-	—
102 "	2 in						—	800 gls min.	With seasons 5 to 8 ft.
119 "	10 in	—	—	—	—	—	-38 "		
110 "	10 in		110 ft.				-40 "	200,000 gls. day	"
123 "	12 in		123 "	Some at 37 ft.			-37 "		"
103 "	"		103 "				-37 "		
106 "	12 in		108 "	" " 47 ft.			-47 "	200,000 gls. day	
—	10 in		—	—			—	—	
—	—	—	—	—	—	—	—	—	—
					Pen. limestone	Pen. limestone	- 52 ft.	-	—

Wells. — Alachua Co. — cont'd.

Mun.	Character of water	Distance nearest cesspool	barn	privie	House	are clay beds present	so well properly cased.	so well probably polluted.	Uses.	Location in Borbs	Basin of casing	Suggestions	Remarks.
	Lime								Household purposes				
	"								irrigation.				
	Lime	—	—	—	—	—	—	—	— — —				
	Lime								— — —				
	Lime + sulphur.								Irrigation				
	Lime								Irrigation				
	Lime								Household.				
	Lime								"				
	Lime												
	Lime (or was)	—	—	—	—	—	—	—	no water in well.	— — —	—	— — — — — — —	Well became dry about year 1900. Held water in abundance up until that time
	Lime	—	—	—	—	—	—	—	Turpentine still	— — —	—	— — — — — — —	
	Lime								— — —				Two other wells at same place.
	Lime								Phosphate mining	Incrusts.		— — —	63 ft - 78 ft. otherwise same as one just recorded.
	Lime	—	—	—	—				" "	"			
	Lime								" "	"			
	"								" "	"			
	"								" "	"			
	—	—	—	—	—	—	—	—	Insufficient supply obtained.	— — —	— —	— — — — — — — — —	These last 6 (or) wells are listed as as examples of wells supplying water for mining purposes. Many other wells of same type are found in area.
	Hard	near	near	near	near	no.	+	no	Household.			Remarks: Rock from surface.	

Note.

City Well - Gainesville - Levels made by Wm Gibbs, Oct. 21, '07
Level of top of 12 in. casing taken as 100.
Water level in well Oct. 21, 07 31.52 ft from top of casing.
Actual level of casing above sea — 82.180 ft
Actual level of water above sea in large well. 50.66 ft
Level of top of casing of 2 in. well 106.512 ft.
Level of water in 2 in. well 38.032 from top of pipe.
Actual level of water above sea in small well 50.66 ft
Level of bench mark on magnolia tree near Water works Station 117.619 ft
Level of bench mark on oak tree near Stream 100.619 ft
Water level in branch east side of track 88.119 ft
Level of bench mark on root of 18 in. magnolia near North Sink 93.529 ft
Level of bench mark on old log at the edge of the water at West Sink. 73.634 ft.
Level of turning point on same log 76.204 ft.
Level of water in West Sink Oct. 21, 07 70.494 ft
Level of water in North Sink Oct 21, 07 70.500 ft
Actual level of water in West Sink 52.674 ft.

Notes.

Levels made by G. H. Cairns, 10-28-07.

Bench mark at Court House Square - Gainesville 176.992 ft
Sweet water Branch under A.C.L. R.R. 160.64 ft
Summit of Grade, South of Branch on A.C.L. approx 122.96 ft
Bench mark on top of brick wall ten feet w. of
twelve inch well 83.28 ft

Floor of the Engine Room 81.979 ft
Top of casing of twelve-inch well — — — 82.180 ft

Mr Gibbs' levels reduced to sea-level datum: —

Top of twelve-inch casing — — — — — 82.180 ft
Actual level of water 82.180 - 31.52 50.66 ft
Level of top of casing of two-inch well 88.692 ft
Actual level of water 88.692 - 38.032 — — — 50.66 ft
Level of Branch under A.C.L. 70.299
Level of water in Alachua Sink 52.674

Wells.

County	Nearest Town or P.O.	Direct P.O.	Dist. P.O.	S	T	R	Q	Owner	Driller and address	Type of well	Date Sunk	Elev. above sea
Alachua	Wilcox		Near					Wilcox Chem. Co.	Geo. Livingston, Newberry.	Bored	1906	
"	Tyler.		Near					Tyler Lbr. Co.	" " "	—		
"	Wades	N.	6 mi.	Newberry				Riley + Anderson	" " "	Driven		69 ft.
"	Archer	N.	2 1/2					G. D. Flemming	Natural well	—	—	83 ft. Est.
"	Kanapaha		Near					J. C. Swearingen	F. M. Ramsey, Waccahootee	Bored		87 "
"	Gainesville	E	1/4 mi									

Alachua Co.

Depth	Diam.	Length of casing	Depth Prin. supply	Depth of second. supply	Geol. formation in which well stands.	Geol. source of supply	Head	Yield	Incr. Decr.
49 ft.	7 in		49 ft.	25 ft.			- 25 ft.	—	—
—	6 in		—	—	—	—	—	—	—
55 ft	2 in		—	—			- 38 ft.	—	—
—	3 feet						- 28 3/4 ft	—	
95 "	3 in						-30 "		

Wells.

Mill.	Character of water	Distance Cesspool	Distance House	nearest Brick	Barn	Are clays beds present	Is well properly cased?	Is well probably polluted.	Uses.
	Lime								Distillation of turpentine.
		–	–	–	–	—	—	—	Household use
	Lime	–	–	–	–	–			
	Lime	–	–	–	–	No.	—	—	Household use
	Lime								Saw mill
	Lime								Sewage from hospital

Alachua Co. Contd

Action in Boilers	Does it corrode casing	Debris to work	Suggestions				Remarks.
							material penetrated sand until pipes were sunked, no rock found. Some water found at 4ft. & below - supply not sufficient & no foundation to support casing.
—	—	—	—	—	—	—	Well used since town was settled.
—	—	—	—	—	—	—	Another well 2 in at same plant a depth of 80ft. otherwise corresponding.

Wells.

Alachua Co

County	Nearest Town or P.O.	Direct P.O.	Dist P.O.	S	T	R	Q	Owner	Driller and address	Type of well	Date struck	Elev. above Sea	Depth	Diam	Length casing	Depth Prin. supply	Depth Second. supplies	Geol. formation in which well stands	Geol. source of supply	Head	Yield	Incr. or Decr.

Wells.

Mineral Topog.	Character of water	Distance Corr pon	House	nearest Barn	Privie	an clay Pits present	so well prop. erly cased	so well prob. ably polluted	Wells.

Action in boilers	ones in corrode casing	Da[illegible]n to work	Suggestions	Remarks

Note:- Type of well of Alachua Co. Phosphate area.

The wells used in washing phosphate in the Alachua Co., phosphate area are made as follows:-

A pit from ten to twenty feet in diameter, the pit being either round or square, is dug to within about 3 or 4 feet of the ground water level of that locality. The pit is located when possible so as to pass the entire distance through limestone; this is to avoid casing or curbing. From the bottom of the pit a boring is made, usually 10in or 12in diameter, until a sufficient supply of water is obtained. The pump is lowered to the bottom of the pit and then brought to within a few feet of the water level. Not infrequently a second boring is put down in the same pit. This is done whenever it is desired to run two pumps. The borings in these wells are usually not cased; or cased only a short distance. The casing is left off both because it is ~~expensive~~ unnecessary, and it is desired to allow the water to collect the entire length of the boring. The limestone, although soft is sufficiently hard to hold up. The 10in or 12in boring uncased thus becomes a collecting tube for water from the water level to the bottom.

Note on variation of ground water level in the Alachua Co. phosphate area.

The type of well uniformly used in phosphate mining (see opposite page) offers exceptional opportunities for observing change in the ground water level. The pumps as mentioned are put down in the pit to within 3 or 4 feet of the (average or low) ground water level. During the rainy season, or rather during during the two or three months following the rainy season, it not infrequently happens that the water level rises to the point of immerging the pumps entirely. This definite evidence of rise in the water level was confirmed by every phosphate operator consulted. The average annual variation is given as 4 to 5 feet. The extremes of variation 8 to 9 ft., or even reported by some as 11 ft. during exceptionally wet years.

At the time examined (10/27/06) the water was high from the rainy season of the preceding spring and summer; may to about aug 15. It was stated by one or two operators that the greatest height of the water level came about three months after the close of the rainy season, or about Christmas time, and the lowest water about May or June.

General Water Resources, Marion Co.

County	Town	Prin. source of water	Other sources	Depth shallow wells	Depth deep wells	Avg.	Surf. material	Thickness	Water Supply	Surface formation
Marion	Ocala.	Wells.	[illegible]		1200 ft		Sand	Variable	Little	Limestone
"	Citra	"		10 to 25 ft.			"	"	Some	Clays.
"	Dunnellon	"	River.	—	300 ft		"	"	"	Limestone
"	Weirsdale	"	Lake Weir.	20 to 40 ft.	52 ft.		"	"	"	Clays & limestone.
"	Summerfield	"	Surface springs.	15 to 30 ft.	—		"	"	"	"
"	Belleview	"		20 to 40 ft.	60 ft.		"	"	"	

Water Supply	Prin. water beds	Water supply	Prob. depths	Quality of water	Inc. or Decr.
Abundant	Limestone	abundant	60 to 200 ft.	Hard	With seasons.
Good	"	"	50 to 100 ft.	"	" "
Abundant	"	"	40 to 200 ft.	"	" "
Good.	———	———	50 to 100 ft.	———	———
"					

General Water

Topographic situation of town	Number and kind of privies, cess-pools etc.	Disposal of sewage	Sanitary condition of wells.	Prevalence of typhoid etc.
Hilly	Cess pools, and sewage wells.	By bored wells.	Bad -	
Rolling	Several	No system	Good	Not prevalent
Level	"	" "	"	" "
				" "
Rolling	"	" "	"	
"	"	" "		

Resources, Contd. Marion Co.

Suggested improvements.

Shoud abandon sewage wells.

References supplementary notes.

See note page *

Public Supplies.

County	Town	Kind of Supply Public or Private	Source Well or Stg. Tk.	Geologic Source	No of Wells	Wells Di	Wells Depth	Wells Head	Distribution or Storage	Services	Fire hydr.	miles of main	Avg. Daily Consumption	Dom pressure
Marion	Dunnellon	Public	Well		1	8in	155ft	-20ft		Supply Town	5.	about 2 mi.	60,000 gl.	24 lbs.
"	Ocala.	Private	Wells.		2	12in 8in	190ft. 250"	-72 12/12 -70 8/12	72 12/12 70 8/12 Storage	Town supply.	91	9 mi.	500,000 gl.	50 lbs.
		Private	wells	-	2in 2½ 2½	98 100 101	-20 -30 -30	2,0000 gl. Tank		Town	12.	abt. 2½ mi	30000 gals	

Marion Co.

Fire pressure	Mineral Character	Capacity of stand pipe or reservoir	Elev.	Elev above T	Use of meter	Sufficiency	Pumped direct or from reservoir	Casing Di	Casing Depth	Date
60 lbs.	Lime	40,000 gls.	30ft.	30ft.	—	Ample.				
50 lbs.	Hard lime / Hard sulph.	112,000 gls.	80ft.		33 1/3 %	Ample.	Pumped from cistern	30ft.	13ft.	July - 1906 Dec. 14 - 07
	Lime	20,000	60ft	Level		Sufficient	Direct.	-	-	

Public Supplies

Topog. location of well or spring	Relation to town	Direction of movement of ground water	Distance from nearest House	Barn	Privy	Cess pool	Supply sufficient
Level.	Same		near	near	near	—	Sufficient
Level	same		near		near		"
Level	Few feet		—	—	—	—	—

Changes contemplated	Suggestions	Remarks — Supplementary notes
none		Head of dug well measured July 1906 -63 ft. Same well measured Dec. 14th '07 -70 8/12 ft.
"		
Enlarge.		

Springs.

County	nearest Town or P.O.	Direct. P.O.	Dist. P.O.	S	T	R	Owner	Name of Spring	Character of Water	Discharge	Nature of min. deposits	Temp	Variations of flow. Seasons	Geol. formation from which water comes.	Nature of passage	Manner of emergence.	Nature of stream
marion	Juliette		near					Blue Springs	Lime Hard	Est. 151,210 gls per min.	none		Not det.	Pen. limestone	Sol. cavity	Boils.	Stream enters St Ithel accoochie River near Dunnellon.
"	Norwalk	N.	3 mi				W. C. Townsend.	Salt Spring	"Salty".	Est. 84,000 gls.	—		none reported	" limestone	" "	"	Forms creek which enters Lake George.
"	Silver Springs	—	near				Navigable water	Silver Spring	Lime	385,000 gls.	none	70°	Appreciable	Eocene Limestone	" "	"	Forms stream which enters Ocklawaha.

Springs

County	nearest Town or P.O.	Direct. P.O.	Dist. P.O.	S	T	R	Owner	Name of Spring	Character of Water	Discharge	Nature of min. deposits	Temp	Variations of flow. Seasons	Geol. formation from which water comes.	Nature of passage	Manner of emergence.	Nature of stream
~~Lake~~ Okahumpka		N.	¼ mi					Bugg Spring	~~lime~~ Hard	At 15,000 gal. per min.	none	76.	not det.			Boil	Small stream, two or three miles.
"	Sorrento	W.	2½ mi				Wilson Cypress Co. Palatka, Co.	Seminole Sprg.	Partly hard	25,200 gls.	"		"	wh. det.	Sol. cavity	"	Small stream

Springs. Lake County

Springs (contd)

Topog. surroundings.	Distance from nearest Human habitation	Distance from nearest Animal habitation	Possibilities as to pollution	Flow of spring in dry season	Flow of spring in muddy after rains	Drinking, medicinal Domestic	Remarks.
Hilly Rolling	near		Improbable	Ab.		not used	
"	"	—	Near	near	"	"	Drinking + for stock
Level			not Prob.	no		not used	

Springs (Cont'd.)

	near	near	Slight.			Not used.	
to		—	none	no	lf.	"	"

Marin Co.

Trade name of water	Improvements at Spring	Amount Shipped	Price	Remarks.
none	none	none	—	Interior spring stands 38-40 ft. abv sea level.
none	none	none	—	
none	none	none	—	

Springs - Lake County.

none	None	none	—	Spring is of nature of (Sink-hole and is 172 ft deep.
none	"	"	—	

County	Nearest Town or PO	Dist. P.O.	Dist. PO	S	T	R	Q	Owner.	Driller & Address	Type of well	Date finished	Elev. above sea	Depth	Diam.	Length of casing	Depth of prin. supply	Depth of Second. supply	Geol. formation in which well stands	Geol. source of supply	Head	Yield	Owner's or Driller's
Marion	Dunnellon		near					City	R.J. Allen, Lakeland	Drilled	1905	about 70 ft.	153 ft.	6 in	90 ft.					-2 ft.		
"	"		near					A.C.L. R.R.	R.J. Allen, Lakeland	"		"	300 ft.?	4 in	12 ft. dia.							
"	"	N	1¼ mi					Dunnellon Phos. Co.	McClure & McKay, Ocala	"	1906	about 60 ft.	175 ft.	12 in		175 ft.		Oligocene	Pen. Limestone	-20 ft. abt. -21 ft	not ft.	
"	"	"	"					" " "	" " "	"	"	" " "	235 ft.	6 in		235 ft.		"	" "	"	"	
"	"	W	2 Blks					Dr. A.B. McQueen	G.N. Young, Alachua	Driven	1905	" 50 ft.	120 ft.	2 in		120 ft.	~~Prob. not soft~~	"	" "	-20 ft.		noné reported
"	"	W	2 Blks					Mrs. Smoak	S " " "	"	"	" " "	45 "	2 in						-20 ft.		
"	"	E	2 mi					G.P. Bridges	? Ferguson, Blitchton	"	"		63 "	2 in		63 ft.						
"	Ocala	N.	¼ mi					Ocala Ice & Packing Co.	W.F. Hamilton, Ocala	Drilled		abt. 65 ft.	172 ft	4 in	172 ft	172 ft	—			-21 ft	100 gal per min	—
"	Ocala	N.	⅓ mi					Shorter & Rawls Mill	E.L. Freyermuth Ocala	"	1900	About 70 ft.	85 ft	3 in	50 ft	—	—			-27 ft	—	—
"	"	S.W.	½ mi					E.L. Freyermuth, Owner	Owner	Driven		—	97 ft	2 in	96 ft	97 ft	—			-38 ft	—	—
"	"	S.	¼ mi					Ocala Water Co.	E.F. Joyce —	Drilled	1891	abt. 100 ft.	1298 ft	12-8	Jo tottings	1298	—	—	Pen. Limestone	-63 ft	200,000 gal. per day.	—
"	"	E.	½ mi					Marion Farms Co.	E.L. Freyermuth, Ocala	Drilled	1906	abt. 150 ft.	140 ft	3 in	125	140 ft	—	—	—	-105 ft	—	—
"	"	E.	½ mi					Marion Farms Co.	E.L. Freyermuth, Ocala	"	1906	— 150 "	175 ft	3 in	125	175 ft	—	—	—	-105 ft	—	—
"	"	N.	¼ mi					East Fla. Ice Co.	W.H. Hamilton, Ocala	"	—	abt. 65 ft.	Rpts			—	—			—	—	
"	"	N.	½ mi					A.C.L. R.R.	—	"	—	abt. 80 ft.	200 ft	—	30 ft							
"	Martin	N.E.	1½ mi					Col. Martin	E.L. Freyermuth, Ocala	"	1902	—	90 ft	2 in	90 ft	—	—	—	—		20,000 gal. per day.	

Wells, (contd) Marion Co.

Mineral Character of water	Distance from nearest House	Cesspool	Barn	Privie	Are dairy tools present	30 wells properly cased	30 wells probably polluted	Uses	Action in boiler	Does it corrode	Suggestion	Remarks
Lime	near		near	near		yes.	no	city supply				
Lime	near.							Railroad tanks	Incrusts			2 softening plants used to soften water
Lime						yes.	No.	Phosphate mining				Pumped lowered to a min. 9 ft. of water level.
"						"	"	"				This well is only about 6 ft. from one above.
Lime water	near		near			yes.	No	Household & stock				
" "	"					"	"	Genl household				
" "								" "				
" "	near	near	near	near		yes	Yes.	Ice mfg.			See note page	Well polluted by sewage.
" "	"	"	"	"	—	—	—	abandoned				
" "	"	"	"	"	—	yes	—	Household use				Owner states that several cavities with water were passed through
Sulphur "	"	"	"	"	—	yes	No.	City water supply	—	—		wells located about 6 ft. apart. Reach cavities at depth of 140 & 175 ft.
Lime "	—	—	—	—	Yes	yes	"	General	—	—		Well opens surface water from the top. page
" "	—	—	—	—	yes	"	"	General	—	—		See note page
" "	—	—	—	—	—	No.	Yes.	Not in use	—	—		See note page.
" "	—	—	—	—	—	—		Boiler purposes	Corrodes	—		
" "	—	—	—	—	—	yes	—	—				

Wells — Marion Co.

County	Nearest Town or P.O.	Direct P.O.	Dist. P.O.	S	T	R	Q	Owner.	Driller and address.	Type of well	Date comp'd	Elev. above sea	Depth	Diam	Length casing	Depth prin. supply	Depth of sec. supplies	Geol. formation in which well stands	Geol. source of supply	Head	Yield	Use in Dec.
Marion	Ocala	N.W.	1/4 mi.					Ocala Bottling Works Co. mpny	E. L. Frymmeuth, Ocala	Drive	1902		70 ft.	3 in	60 ft	70 ft				25 ft		
"	"	E.	1 Blk					City of Ocala	W. F. Hamilton, Ocala	Drilled			Rpt. 220 ft	3 in?								
"	"	S.	1/2 Blk					Dunne		"				3 in								
"	"	S	1 Blk					Montezuma Hotel	—	Drilled	—		—	3 in						—		
"	"	E.	—					L. Horn	E. L. Frymmeuth Ocala	"	1903		70 ft aft	3 in.	60 ft.					aft		
"	"	E.	—					J. C. Chambliss	" " "	"	1902		90 ft	3 in.	90 ft aft					63 ft		
																				63 ft.		
"	"	—	—					W. S. Chambers	" " "	"	1903		160 ft	3 in	145 ft					60 ft		
"	"	E.	1/8 mi					Hall & Lester	W. H. Hamilton Ocala	—												
"	"	—	—					Bullock & Scott	E. L. Frymmeuth Ocala	Drilled	1904		98 ft	3 in	96 ft					96 ft.		
"	"	E.	1/4 mi					C. S. Cullen	" " "	"	1905		100 ft	3 in	120 ft					90 ft		
"	"	—	—					Chase	" " "	"	1904		80 ft	4 in	70 ft.					65 ft		

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County	Town	Mineral Character Water	Distance nearest Disposal	Hauk	Privie	Barn	are clay fills present	so well properly cased	so well probably polluted	Uses.	Location of Boilers	Does it corrode casing	Suggestions	Remarks.
Marion	Dr	Lime water	near	near	near	near				Disposal of waste water and sewage				~~Drilled~~ 12 See note p.
"		" "								Disposal of Sewage			Should be abandoned as it pollutes surrounding water wells.	Receives sewage from City Hall and Scala House Blk. See n. p.
"		" "								" " "			Should be abandoned	Receives sewage from Devine Blk.
"		" "								" " "			" " "	Receives sewage from Montezuma Hotel
"		" "								" " "			" " "	Receives sewage from residence. Ends in sik or seven feet cavity.
"		" "								" " "			" " "	Receives sewage from residences. Ends in cavity just after entering well.
"		" "								Receives sewage from residences			" " "	
"		" "								Sewage from residences			" " "	Good cavity in limestone
"		" "								" Chaser			" " "	Rock at 65 ft. Well ends in large cavity.
"		" "								"Black".			" " "	

Note

Well of Ocala Bottling Works Company - Cavity of well became clogged July 1906. Well was then drilled to about one hundred feet without encountering second cavity. It was then abandoned and a second well put down near by.

Note.

Partial log of well of Ocala Ice and Packing Co.

Surface to 8 ft — surface sand
8 to 20 ft — clay and gravel
20 to 40 ft — limestone
40 to 120 ft — quick sand
120 to 172 ft — limestone

Well of Col. Martin, Martin Station,

1 to 3 ft — flint rock
3 to 90 ft — rock with very many small cavities not strong enough to support casing.

Wells

County	Nearest Town or P.O.	Direct P.O.	Dist P.O	S	T	R	Q	Owner.	Driller and address	Type of well	Date sunk	Elev. above Sea
marion	Weirsdale	near	near					G. P. Rast.	Wm Allsop, Jax	open.	—	Same as depot.
"	Ocala.	S	½ mi					Ocala Water Co.		drilled		100 ft.
"	Belleview	N	1 mi					McGehee + Mayo	E. L. Freyermuth, Ocala.	"	1902	Abt. 79 ft.
"	Ocala	S/E	2 mi					Fla. Lime Works	" " " "	"	1904	—
"	Martel	—	near					Martel Lbr. Co.	McIver + Mackay "	"	1905	Abt. 75 ft.
"	Silver Springs	E	½ mi					E. P. N. Rentz Lbr Co.	H. T. Lloyd, Millen, Ga.	"	1907	45 ft.
"	Mendarin	—	near					Standard Lime Co.	Owners.	Dug.	1887	82 ft.
"	Zuber	N/E	½ mi					Ocala Lime Works.	Smith, Ocala.	Drilled	1907	
"	"	—	near					Sumner Lbr. Co.	"Natural"	—	—	—
"	Anthony	—	"					Town.	J. H. Harvey, Anthony	Drilled	1899	-77 ft.
"	"	N	near					A. P. Griffin	Owner.	owner + drilled	1890	"
"	"	—	"					H. A. Meadows.	Davis Bashlin, Anthony	"	1907	
"	"	N	2½ mi.					" " "	Owner.	"	1906	
"	Lake Kerr	N.	3 mi					W. P. Williamson	Brown Bros. Archer	"	1887	
"	Boardman	E	½ "					W. H. Hopkins	? ?	"	1892	Abt 63 to 65 ft.

Marion Co.

Depth	Diam	Length of casing	Depth of Prin. supply	Depth of Second-supplies	Geol. formation in which well stands.	Geol. source of supply	Head	Yield	Uses or Owner.
52 ft.	—	—	50 ft.				-50 ft.	—	Seasons.
190 ft.	12 in				Ocala limestone		-72 1/2 ft.		"
80 ft.	2 in	—					-50 ft.?		
70 "	2½ in	—					-60 ft.		—
72 ft.	6 in	72 ft.	72 ft.				-32 ft.		"
507 ft.	2 in	6" casing abt. 320 ft.					-5 ft		"
50 ft.	—	—	47 ft.		Ocala Limestone		43 to 45 ft.		"
93 ft.	2½ in	all	93 ft.				-68 ft.		"
Abt. 35 ft.	—	—	32 ft.				-30 ft.		"
60 ft.	4 in	all	60 ft.				-40 ft.		~
96 "	3 in	90 ft.					-40 "		"
20 to 100 ft.	3 in	66 ft.					-37 "		"
132 ft.	3 in	98 "	—				-86 "		"
68 ft.	2 in	all	103 ft.				-50 ft.		—
90 "	2 in	"	90 ft.				-10 to 15 ft.		~

Wells.

Mineral Character water.	distance nearest Privie	Cesspool	House	Barn	Are clay beds present.	Is well properly cased.	Is well probably polluted	Uses.
Soft. ?	—	—	near	—	yes.	yes	~~No.~~	Drinking - public.
Lime	near	—	"	—		yes	—	Reserve for City Supply.
Lime	"	—	"	near	yes.	—	—	Turpentine still use.
Lime	"	—	"	"	—	yes.	no.	Genl purposes.
Lime	—	—	"	—	yes	"	"	Drinking + Genl.
Hard Sulphur.	near	—	"	—	—	—	—	Saw mill purposes.
Lime	—	—	"	—	no	—	—	Genl. purposes.
Lime	—	—	—	—	—	—	—	" "
Lime	—	—	"	near	no	—	—	Saw mill "
"	—	—	—	—	yes.	yes	no	Public.
"	near	—	near	near.	"	"	"	General.
"	—	—	"	—	"	—	—	"
Soft.	—	—	—	—	—	—	—	Irrigation
Lime	near	—	near	near.	—	"	"	Household.
" (iron)	"	—	"	"	yes.	"	"	" + irrigation

Marion Co. Cont'd.

Action of boiler	Does it corrode casing	Depth to water	Suggestions	Remarks.
—	—	—		
Incrusts.				
—		4 ft.		
Incrusts.		10 ft.	Pit 20 ft. deep.	Another well 35 ft. supplies mill
				" " 58 ft. Genl purposes,
Incrusts		Surface		both of same character as one recorded.
"				
"				
—	—	20 ft.		
—	—	Abt. 89 ft.		
—	—	—		Phosphate marl 66 ft.
—	—	?		
—	—	?		

County	Nearest Town or P.O.	Direct. P.O.	Dist. P.O	S	T	R	Q	Owner	Driller + Address	Type well	Date sunk	Elev above sea	Depth	Diam	Length casing	Depth prin. supply	Depth second. supplies	Geol. formation in which well stands	Geol. source of supply	Head	Yield	Incr. Decr.
Lake	Leesburg	S	1/8 m					Leesburg Ice Co.	John Heaton Eustis	drilled	1907	87	98	4	95	95	none	limestone	limestone	-20 -18	30,000 +20,000	—
"	"	S	1/8 m					"	A. S. Hardwon Leesburg	"	1887	87	100	8 1/2	[illegible]	deep	"	limestone	limestone	-20	—	
									"		1892	87	101	8 1/2	55	deep	"	limestone	limestone	-20	—	
"	Fruitland Park	H	near					clark	" Edmondson (ind) Grand Island	"	1895		132	3 in	70 ft	—	—	—	limestone	-3?	—	
"	Leesburg	2	W.					J. T. Ebert	John Heaton	"	1906		175	4 in	84	175	125	—	Ocala	-16	—	
"	near							City of Leesburg	Padgett	"	1886 87		150	2 in	-	—		—	—	-18		
"	Sorrento	S/E	1 1/2 mi					L. B. Jones.	Owner.	Drilled	1907	—	103 ft.	2 in	67 ft.	—	—			-70 ft.	—	—
"	Okahumpka	Near						Joseph Barton	Mawel	"	1901		110 "	6 in	110 "	110 ft.	—	—	— —	-27?	—	—

Wells. contd. – Marion Co.

Min. character water	Distance nearest Cesspool	Privies	Hog	Barn	Are clay beds present	Is well properly cased	Is well probably polluted	Uses	Action in Boilers	Does it corrode casing	Suggestions	Remarks
Lime	—	—	—	—	Yes	yes	no	city & ice mfg	corrodes	—	see analyses p. 114	Passed through clay & rock, [illegible] thin layer of rock at 88 ft. then no clay. Solid rock at 95 ft.
"					"	"	"	Emergency	"	—		
"	—	—	—	—	"	"	"	"	"	—	—	Rock at 70. [illegible] of bottom 10 ft. (cylinder down 16 to 18 ft).
"	—	—	—	—	"	"	"	General use	"	—	—	
"	near				"	"	"	Irrigating	"	—	Skinner pump & Skinner system [illegible] cost 1500.00 [8]	20 ft. clay, 10 ft. [illegible] Rock 127 ft. [illegible] 175 ft. [illegible] 123 ft.
"	"				—	—	—	gen town	—	—		
Slight hard	—	near	near	near	Yes.	yes	no	Household	—	—		Rock at 57 ft.
Hard	—	..	..	..	"	"	"	Hotel	—	—		Gasolene Engine

General Water Resources. Lake County

County	Town	Prin. Source of water	Depth Shallow wells	Depth Deepest wells	Avg.	Surface material	Thickness	Water Supply	Surface formation	Water Supply	Prin. Water beds	Water Supply	Probable depths	Quality of water	Inc or Decr
Lake	Leesburg	Wells	10 to 30 ft	225 ft		Sand	Variable	Some	Clays	Some	Limestone	abundant	100-200 ft	Hard water	With Seasons
"	Tavares	"				Sand	"	"	"	Good	"	"	95 to 150 ft.	"	" "
"	Eustis	"	10 to 40 ft			Sand	"	"	½ & Sand	"	"	"	100 to	50 ft?	
"	Umatilla	"	10 to 50 ft.	60 ft.		"	"	"	"	"				"	" "
"	Altoona	"	10 to 30 ft.	—		"	"	"	"	"				"	" "

General Water-

Topog. Situation	Numbers & kind of privies, cesspools etc.	Disposal of Sewage	Sanitary Condition of wells	Prevalence of typhoid
Rolling	Many	No system	Good	Not prevalent
Slight rolling	"	" "	"	" "
Rolling	"	" "	"	" "
"	"	"	"	" "
" to flat.	"	" "	"	" "

Resources Cont'd.

Suggested improvements

Water supply & sewage system.

References, Supplementary notes.

See log page #116 —

-Protecting clays beds present.

Protecting clay beds usually present.

" " " " "

" " " " "

Wells

County	Nearest town or P.O.	Direct P.O.	Dist. P.O.	S	T	R	Q	Owner	Driller + Address	Type of well	Date Sunk	Elev. above Sea
Lake	Astor Park	S/E	½ mi					C. M. Richey	S. H. Hoagland, Astor	Drilled	1905	
"	Astor	—	near					Astor Estate		"	1885	Est. 15 ft.
"	"		near					A. A. Thompson.	S. H. Hoagland, Astor	"	1905	" "
"	"	S/W	¾ mi					S. H. Hoagland.	Owner.	"	1904	—
"	Whitney	near	near.					S. E. Walker,	Owner.	Driven & Bored.	—	
"	"	W.	¼ mi					J. Sphinx.	John Heaton, Eustis.	Drilled	1906	
"	Tavares	E	⅛ mi					Ocoola Hotel	? Sears. New Hamp.	"	1891	66 ft.
"	"	—	—					E. S. Burley	Owner.	"	1897	
"	Eustis		Near					Henry Bishop	Owner	Driven	1901	Abt. 66 ft
"	Tavares	E	near					R. L. Nutt	owner.	Open	1898	—
"	Mount Dora	W	½ mi					J. M. Wells	Dibble + Earnest, Eustis	Drilled	1905	—
"	Lane Park	N/W	½ mi					Hopkins		"	1886?	
"	Grand Island	—	near.					P. M. Kate		"	—	same as dept.
"	" "	—	—					Fla. Fertilizer Co.	Dibble + Earnest, Eustis	"	1906	—
"	Umatilla	E	3 mi.					John Rutherford	Owner	Driven	1904	—

Wells. Lake Co.

Depth	Diam.	Length Casing	Depth of prin. Supply	Depth of second Supply	Geol. formation in which well stands.	Geol. source of Supply	Head	Yield	Incr or Decr.
185 ft.	2 in	125 ft.	—	—	Limestone	Limestone	+W ft.	—	With seasons.
104 ft.	3 in	—	—	—	—	—	+14 ft.	"	"
82 "	3 in	abt 75 ft.	82 ft.	—	—	"	+14 ft	—	—
123 "	2 in	95 ft.	—	—	—	Limestone	+10 ft.	"	"
22 ft.	8 in + 2 in	22 ft.	22 ft.	—			-10 "	—	—
243 ft.	3 in	Abt 240 ft.	243 "	—			-11 "	—	"
124 ft.	2 in	124 ft.	124 ft.	—			-6 or 8 ft.	"	
135 ft.	1¼ in	98 ft Rock	135 ft.	—		Limestone	—	—	
75 ft.	1¼ in	75 ft.	75 ft.	Some at 34 ft	No rock.		+10 ft.	—	
12½ "	Open	—	12 ft.	—	—	—	-3 ft		
180 ft.	6 in	124 ft.	182 ft.	—	—	—	-10½ ft.	—	—
	2 in						-6 ft. 25 gl. min.		
							Flows.		
290 ft.	2 in	—	—	—	—	—	?		
186 ft.	5 5/8 in	107 3/12 ft.	186 ft.	—	—	—	? 25 gl. min.	—	—
	2 in	—	—	—	—	—	+2 ft.	—	—

Wells

Mineral character of water	Distances House	Distances Cess pool	From nearest Privy	From nearest Barn	Are clay beds present	Is well properly Cased	Is well probably polluted	Uses.
Hard, probably some sulphur.	Near	-	Near	-	-	yes.	No.	Not in use.
Sulphur.	"	-	"	-	-	"	"	Public use at Astor
Sulphur	"	-	-	Near	-	"	"	Hotel purposes.
Sulphur	"		"	"	-	"	"	General purposes.
	"	-	"	"	yes.	"	"	General.
Lime	Remote	-	Remote	"	"	"	"	Brick plant.
Sample taken	Near	-	Near	"	"	"	"	Hotel purposes.
Hard					yes.	yes.	"	no water
Contains iron	Near	-	Near		yes.	"	"	Hotel & general.
See analysis State Chemist	Near		"			-	-	not in use now
Hard.	Near	-	-	-	"	"	"	General.
Sulphur	"	-	-	-				Drinking.
"	"	-	-	-	yes.	yes.	No.	"
Soft.	"	-	-	-	"	"	"	"
Sample taken	"	-	"	"	-			"

Action in boilers	Does it corrode casing.	Suggestions	Remarks
-	-		Flow was not strong enough to give satisfaction and owner has abandoned well - will probably drill deeper. Head about +6 to 8 ft. Sample taken.
-	Yes.		
-	Yes.		This well was only 111 ft. deep originally and owner stated that same went dry and would only flow at stated intervals - apparently with rise and fall tide. Since going 12 ft. deeper however, no fluctuations have been noticed and he has a strong flow. See log & analysis page 113.
-	-		
-	-	See note page 113 for log and analysis.	
-	-		Rock at 98 ft. See log page 115
-	-		See analysis page 115
-	-		See note page 117.
-	-		Struck rock at 85 ft. At depth of 114 ft. solid rock was struck, through which they drove casing.
-	-		
-	-		
-	-		

Wells

County	Nearest Town or P.O.	Direct Dist. P.O.		S	T	R	Q	Owner	Driller + Address	Type of Well	Date Sunk	Elevation above sea.
Lake	Eustis	E	2 Blks					J.R. Miller	Dibble + Earnest - Eustis	Drilled	1907.	
"	"	S	3 "					G.W. Scott	" " "	"	"	
"	"	S	3 "					J.J. Harrison	" " "	"	"	
"	"	S	3 "					Mayland Sweet	" " "	"	"	
"	"	S	4 "					C.B. Magargie	" " "	"	"	
"	Grand Island	N/W	½ mi.					F.D. Blake	" " "	"	1906	with depot.
"	Eustis	S/E	3 Blk					Mrs. Fuller.	" " "	"	1907	abt. 25 ft.
"	"	"	1 mi					J.R. Wagner	" " "	"	"	" 80 "
"	"	"	¼ mi					Wm Williams	" " "	"	"	" 60 "
"	"	E	1 Blk					L.N. Herrick	" " "	"	"	14 "
"	"	SS/E	7 Blks					J.S. Lane	" " "	"	"	" 54 "
"	"	E	3 Blks					" " "	" " "	"	"	
"	"	S/E	4 "					L.M. DeWitt	" " "	"	"	
"	"	W	4 "					J.D. Clifford	" " "	"	"	Same as depot
"	"	E	4 "					J.W. Church	" " "	"	"	abt. 50 ft.
"	"	N/W	1¼ mi					Mrs. F.H. Day	" " "	"	"	
"	"	S/W	1 "					Currey Currey + Atwater	" " "	"	"	2 ft. lower depot.
"	"	"	"					" " "	" " "	"	"	" " "
"	"	S/E	4 Blks					Tuttle + Farmer	" " "	"	"	56 ft. above Lake

Wells Cont'd.

Depth.	Diam.	Length Casing	Depth of prin. Supply	Depth of second Supply	Geol. form. in which well stands	Geol Source of Supply	Head	Yield	Incr or Decr.	
144 ft.	5⅝"	106 ft.					—	—	—	
169 ft.	"	119 8/12 ft					—	—	—	
174 ft.	"	115 7/12"					—	—	—	
44 "	"	all	44 ft.				32 ft.	—	—	sand.
163 ft.	"	116 ft.					—	—	—	
							abt	20 gls		
109 ft.	"	101½ "					48 ft	min		
147 "	"	110 4/12 "	146 ft.				33 "			
203 "	4¼"	133 4/12 "	200 "				86 "			
183 "	5⅝"	126 "	173 "				44 "			
108 "	4¼"	103 4/12 "	108 "				18 "			
196 "	5⅝"	105 7/12 "	190 "				?			
158 "	"	116 "	156 "				abt. 35 "			
154 "	"	119 12/12 "	150 "				abt 44 "			
118 "	"	103 7/12 "	118 "				5 ft.			
160 "	"	113 "	160 "				41 "			
115 "	"	102 "	115 "				?			
288 ft.	"	92 "	115 "				1½ "			
163 "	"	157 4/12 "	163 "				+2 ft.			
173 "	"	134 "	170 "				62 "			

2/9/07

County	Near town of	Mineral Character of water	Distance from nearest Pool	Distance from nearest River	Are children present?	Is well properly cased.	Is well probably polluted	Uses
Lake	Ea	Soft. ?	Near	—	Near	—	Yes	No	Domestic
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	Iron.	"	—	—	—	No	"	"
"	"	Soft.	"	—	—	—	yes.	"	"
"	Grand	"	"	—	—	—	"	"	"
"	Ea	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	Hotel purposes.
"	"	"	"	—	—	—	"	"	Domestic
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	"	"	"
"	"	"	"	—	—	—	Some	"	Irrigation.
"	"	Sulphur odor	"	—	—	—	No.	"	Ornamental
"	"	Soft.	"	—	—	—	yes.	"	Domestic.

Action in boilers	Does it corrode casing	Depth to water	Suggestions	Remarks
no action.	No	100 ft.		
"	"	110 "		
"	"	100 "		Well ends in coarse sand. no rock.
no action	No			
" "	"			
" "	"	98 ft.		
" "	"	120 "		
" "	"	120 "		
" "	"	99 "		
" "	"	100 "		
" "	"	100 "		
" "	"	118 "		
" "	"	80 "		
" "	"	100 "		
" "	"	100 "		
" "	"	90 "		
" "	"	157 "		
" "	"	130 "		Sample taken. 12/9/07

Well of S. E. Walker, Whitney, Fla.

Log:- Sand 4 ft.
Clay with water 14 ft.
Tough clay 2 ft.
Sand with pebbles + water at 20 ft.

Analysis :—

Well of J. Sheiss, Whitney, Fla.

Log:- Sand 3 ft.
Clay 3 to 14 ft.
Sand 14 to 236 ft.
Rock 236 to 243 ft.

Analysis :- From offic State Chemist 1906.

This well is reported by the owner to have cost $3000.00.

Analysis of water of Lusburg Ice Co's well :- made by Fidelity and Casualty Co, New York. D. C. Harward, Supt. of inspection.

Mineral analysis:

	Grains per gal.	Equals parts per Mil.
Silica	.794	
Oxide of Alumnia + Iron	.186	
Carbonate of Lime	5.009	
Nitrate of Lime	.328	
Sulphate of Lime	Trace	
Carbonate of magnesium	1.209	
Sodium + Potassium sulphates	Trace	
" - " chlorides	2.040	
Loss, etc.	.362	
Total solids	9.928	

Total incrusting solids 7.526
" non-incrusting " 2.402
Pounds incrusting solids per 1000 U.S. gallons 1.07
" non- " " " " " " " .34

Soda as solvent recommended using 6 to 8 oz. per day.

Henry H. Bishops well at Eustis, Fla.

Analysis :- R. E. Rose, State Chemist. Aug. 28th 1902.

carbonate of Lime	Trace.
Sodium Chloride	"
no phosphates.	—
no sulphates.	—
no magnesia.	—

Ferrous carbonate and oxide 1.5 parts per million.

E. S. Burley, well at ~~Eustis~~ Tavares, Fla.

Log :-

Sand	10 to 12 ft.
Clays, Kaolin and Sands	to 86 to 98 ft.
Limestone rock at	98 ft.

General for Leesburg as given by A. S. Hardman, driller.

Sand
Red (road making) clay
Quick sand.
Hard pan.
Clays
Blue clay
Thin hard rock about 22 in thick & containing water at 86 ft.
Shell rock
Hard rock variable with cavities & holding principal water supply.

Wells owned by R. L. Nutt, Navares. Fla.

A sample of this water sent in to State Chemist. See report for same.

Note on wells driven & dug in vicinity of one recorded:- A driven well about 10 ft., deep gave Sulphur water. The water from open well, a few feet away, which was analyzed was Alum, and another driven and drilled past flint & caolin giving still another water.

190 ft. 72 4/12

1250 ft. 69 2/12

63

64.2