

6613

6613

Form 504  
Rev. April 1935  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic }  
Hydrographic } Sheet No. JJJ

State Florida

LOCALITY

St. Johns River

~~SPRING-GOLDEN LAKE~~

Lake Woodruff to ~~De Leon Springs~~

De Leon Springs

1938

CHIEF OF PARTY

L. D. Graham

213

Applied to chart # 688. April 1940. Rants.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY  
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AUG 9 1938

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. JJJ

REGISTER NO. T6613

State Florida

General locality St. Johns River

Locality Lake Woodruff to ~~Spring Garden Lake~~ De Leon Springs

Scale 1:10,000 Date of survey Jan. & Feb., 1938

Vessel MIKAWA

Chief of party L. D. Graham

Surveyed by E. B. Brown

Inked by E. B. Brown

Heights in feet above --- to ground to tops of trees

Contour, Approximate contour, Form line interval --- feet

Instructions dated November 9, 1936

Remarks: Signals and the shore line were located with the sextant and plotted on this sheet. The original record was

sounding Vol. No. 1, sheet 40 H-6302 (1938)

Ref. Sta. Jones Island 1935

Lat.  $29^{\circ} 07' 03.968''$  (122.2 m)  
Long.  $81^{\circ} 23' 56.286''$  (1521.7 m) *adjusted*

DESCRIPTIVE REPORT

To Accompany Topographic Sheet JJJ.

INSTRUCTIONS - November 9, 1936 ✓

Project HT-212

LIMITS

Lake Woodruff to DeLeon Springs on the St. Johns River, Florida. ✓

✓ SURVEY METHODS

~~Refer to Note on opposite page.~~

The projection for this sheet was made in the Washington Office. The shoreline <sup>of Norris Dead River and vicinity</sup> was transferred to the sheet from the map drawings with a projector and is shown in pencil. The shoreline shown in black was rodded by the field party. The signals shown in green were spotted on the photographs and located on the map drawings. The green signals were used as part of the control on this sheet. The signals shown in blue were located with the sextant and 6 meter pole as explained in a special report of Carl I. Aslakson entitled "Methods Employed in Making Surveys of Mangrove Fringed Rivers and Creeks". <sup>Special Report #143, 1930</sup> Several changes were made in the methods of observing and recording the data. The distance angles were read by measuring an angle from the right target to the left then the angle measured from the left target to the right, which gave a reading off the arc. This was repeated giving two readings on the arc and two readings off the arc. The mean of the four readings was used to compute the distance. By employing this method it is believed that small errors in the adjustment of the sextant are eliminated. The data were recorded in Volume 1 sheet <sup>H6302</sup> 40 and volume 1 sheet <sup>H6313</sup> 41 as follows: ✓

The signals at which the observations were taken are shown in the "position column". The signals between which the horizontal angles were taken are shown in the "time" column. The right hand signal is listed first. The horizontal angles are shown in the "soundings" column. These angles were generally read to the nearest minute. The signals to which the distances were measured are shown in the "reducer for tide" column. The distance angles on the arc are recorded in the "reduced soundings" column. The distance angles off the arc are recorded in the "bottom" and "heading by compass" columns. These angles were read in degrees, minutes and seconds. The mean distance angles are shown in the "angles and ranges" column. The final distance in meters is shown in the remarks column. In some cases it was not possible to take the distance angles from the station because of overhanging trees obscuring one or both targets. In this case the distance was measured from the eccentric station to the station with a steel tape and was applied to the distance in meters. In all cases this correction for eccentricity is shown in the remarks column. The distances were computed in the field on the hypsograph. They were checked with curves that were drawn up from computations. The shoreline was rodded in by this method, however, in most cases only one reading was made on and one off the arc. In cases

Project 21-212

INSTRUCTIONS - November 9, 1930

LIMITS

Lake Woodruff to Lawson Springs on the St. Johns River, Florida.

SURVEY NUMBER

The projection for this sheet was made in the Washington Office. The shoreline was transferred to the sheet from the map drawings with a projector and is shown in pencil. The shoreline shown in black was recorded by the field party. The signals shown in green were located on the photographs and located on the map drawings. The green signals were used as part of the control on this sheet. The signals shown in black were located with the sextant and a meter pole as explained in a special report of Carl E. Atkinson entitled "Methods of Locating Signals on Surveys of Large Trained Rivers and Creeks". Several changes were made in the data according to the data.

\* Station Pno is evidently one of the stations located on an photographic survey T 5683 but it is not shown on T 5683. The station falls off the western limit of this sheet and this report does not state how the traverse from 00ar to  $\Delta$  Jones Island 1935 was carried around the west side of Lake Woodruff but the closing error at  $\Delta$  Jones Island as stated on the opposite page is isotis factory.

B.G. Jones.

As the ~~at~~ survey was controlled by sextometer, the traverses were probably plotted in this office on tracing paper extensions of the sheet. Traverse errors are discussed in the review, par. 4c.

J.A. Mc Cormick.

where the distance angles were too large to be read off the arc two readings were taken on the arc and an index correction was read on the rod at the time of the observation. At very short distances the index correction of the sextant is very large. ✓

The signals on Lake Woodruff were located on a traverse that originated at triangulation station Jones Island, 1935 and was tied into green signals Oar and Pro. The closing error between Jones Island and Oar was ✓ 23 meters in  $2\frac{1}{2}$  miles. The traverse was investigated in the field and no error could be found. This excessively large error could be due to a combination of two sources of error as follows: Signal Oar was near the eastern limit of the photographs and its position could not be accurately radial plotted. In the second place the traverse originated from an azimuth on an azimuth mark, which was not more than about  $\frac{3}{4}$  of a mile from the station and the length of the traverse was more than three times that length. Even though a long azimuth line was plotted on the sheet a small error could arise from this condition. This error was adjusted between triangulation station Jones Island and signal Oar according to distance along the traverse. The traverse was continued from Oar to <sup>x</sup>Pro with a closing error of 4 meters, which was adjusted. The traverse was continued from signal Pro back to Jones Island with a closing error of 7 meters, which was adjusted. Photo signal And was relocated on the traverse and shown on the sheet in blue. A traverse was run from triangulation station Jones Island to Burwyn Park Water Tank. The azimuth mark was used for the initial orientation. It was not practical to run traverse to the tank, therefore, four cuts were taken on the tank while on the traverse. The cuts show a closing error of 22 meters in 4.1 miles (5.4 meters per nautical mile), which was adjusted. Burwyn Park Water Tank falls off this sheet but was moved westward 2 minutes of longitude so that the cuts could be plotted on the sheet. The station and cuts are shown in an insert. ✓

Insert removed from sheet as it contains no shoreline and interferes with main topo. J.A.M.

DeLeon Springs falls off the limits of the sheet but was plotted on an insert on a scale of 1:5,000. ✓

#### RECOVERABLE STATIONS

There are no recoverable stations on this sheet. The private beacons and pointers are recoverable for a few years but are not considered permanent enough to be described. ✓

#### DESCRIPTION OF COAST

The southwestern shore of Lake Woodruff is low with overhanging trees. The northern and eastern shores are low and covered with tall marsh grass. There are no landings on the lake. There is a small area of high ground in Dead River on the southwestern shore on the first point eastward of its mouth, between signals Tic and Gun. This area is used as a camp by fishermen. There are a few piles extending about 10 meters off shore on each side of the river at this point. ✓

The shores of Spring Garden Creek are low and covered with tall marsh grass, except the northern shore is in general covered with overhanging trees. There are many cypress trees in this area. Three canals have been dug to facilitate cutting and removing the cypress trees. There is firm ground on the eastern shore of the creek about 0.6 miles from its mouth (northeast of signal Con). There is a farm house and an orange grove on this ground. To the eastward of this area extends a heavily wooded area. When the water is low during the dry season, highway connections can be made from the orange grove to the mainland.

The western shore of Spring Garden Lake is low and covered with tall marsh grass. The eastern shore is generally high and covered with overhanging trees. There are several orange groves and fern farms on this shore. A canal has been dug across the marsh at the northern end of the lake.

The point at Lat.  $29^{\circ} 08.1'$ , Long.  $81^{\circ} 22.0'$  (on which is located signal Tow) is developed into a park. There are several boat houses and small wharves on this point. There is a cable crossing extending eastward from this point with a clearance of 31 feet at mean high water. There is a park and hotel in the vicinity of the spring, which is about  $\frac{3}{4}$  of a mile off U. S. Highway No. 17 and railway connections. There is a boat house and a small wharf in the vicinity of the spring. Boats can anchor to the westward and southwestward of the boat house. There is a concrete bulkhead that extends around the eastern end of the harbor.

#### LANDMARKS

The only landmark in this vicinity is Burwyn Park Water Tank, which was located by triangulation in 1935. It is in a residential development called Burwyn Park. It can be seen from the greater part of Lake Woodruff from the eastern reach of Spring Garden Creek and from the western part of Spring Garden Lake.

Outside limits of sheet. Lat.  $29^{\circ} 07'$  Long.  $81^{\circ} 21'$

#### NON-FLOATING AIDS TO NAVIGATION

The only non-floating aids to navigation are private beacons and pointers maintained by Ralph P. Driggers and F. N. Burk, both of DeLeon Springs. The numbered beacons were marked as follows: No. 13 is a white square (3 ft. x 3 ft.) with a black number, supported by a single pile. Nos. 14, 16 and 18 are white triangles ( $3\frac{1}{2}$  ft. x  $3\frac{1}{2}$  ft.) with red numbers, each supported by a single pile. There is a white diamond (7 ft. x 7 ft.) that marks the southern side of the entrance to Spring Garden Creek. This beacon is not numbered. Spoil banks and shoal areas are generally marked by pointers that are supported by single piles, which extend about 8 feet above the surface of the water at mean water level. The four pointers in the easterly reach of Spring Garden Creek are supported by tripods of two inch diameter poles.

GEOGRAPHIC NAMES

The following names were furnished by Ralph P. Driggers of DeLeon Springs and checked by other local residents:

- Scoggin Creek - On southern end of Lake Woodruff.  
Dead River - On southeastern end of Lake Woodruff.  
Scoggin Lake - Between Scoggin Creek and Dead River.  
Spring Garden Creek - Flows from DeLeon Springs into the northeast end of Lake Woodruff.  
Tiger Bend - A sharp bend about 1.1 miles from the mouth of Spring Garden Creek.  
Hollow Cypress Bend - About 1.9 miles from mouth of Spring Garden Creek.  
Deep Creek - A small creek that enters Spring Garden Creek about 2.4 miles from its mouth.  
Deep Creek Bend - About 0.1 mile north of Deep Creek.  
Spring Garden Lake - A very shallow lake to the southwestward of DeLeon Springs.  
DeLeon Springs - Known locally as the original spring discovered by Ponce de Leon, while in search for the fountain of youth, however, there are numerous springs that are supposed to be the original.  
DeLeon Springs - A small village with railroad and highway connections, approximately 1 mile from the springs bearing the same name.

The area covered by this sheet falls outside the limits of chart number 509, print No. 35-7/11. ✓

MAGNETIC MERIDIAN

The magnetic meridian was drawn from declinatoire observations made at 10:02 a.m. Friday Jan. 28, 1938. Both declinatoires, Nos. 249 and 129, were used and found to be in agreement with each other. After the observations were made the declinometer was set up and measurements taken. These data have been submitted on form 38a. ✓

Approved and forwarded:

*F. L. Callen*

F. L. Callen  
H. & G. Engineer  
Chief of Party

Submitted by,

*E. B. Brown, Jr.*

E. B. Brown, Jr.  
Jr. H. & G. Engr.



Remarks.

Decisions

	Remarks.	Decisions
1		File No. 291 813
2		" " "
3		" " "
4		" " "
5		" 291 814
6		" " "
7		" 290 814
8		" " "
9		" " "
10		" " "
11	<i>spelling as app'd follows USGB decision (6<sup>th</sup> Report) for the precinct. A revised USGB decision.</i>	" 291 813
12	<i>off limit of this survey - for title only</i>	USGB decision
13		File No. 291 813
14	<i>Name obtained from <math>\Delta</math> sta. Location off limit of survey. No other information obtained.</i>	" " "
15		
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GEOGRAPHIC NAMES

Survey No. T-6613

Name on Survey	On Chart No. <b>509</b> On previous survey No. On U. S. quadrangle Maps From local information <b>D.R.</b> On local Maps P. O. Guide or Map Rand McNally Atlas U. S. Light List									
	A	B	C	D	E	F	G	H	K	
<u>Spring Garden Lake</u>				✓						1
<u>Deep Creek</u>				✓						2
<u>Deep Creek Bend</u>				✓						3
<u>Hollow Cypress Bend</u>				✓						4
<u>Tiger Bend</u>				✓						5
<u>Spring Garden Creek</u>				✓						6
<u>Lake Woodruff</u>	✓			75683						7
<del>Norris</del> <u>Dead River</u>				75683						8
<u>Scoggin Creek</u>				✓						9
<u>Scoggin Lake</u>				✓						10
<u>De Leon Springs</u>				✓						11
<u>St. Johns River</u>	✓									12
<u>Jones Island</u>										13
<del>Burwyn Park</del>										14
										15
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										27

*Deleon Springs*

Names underlined in red approved  
 by *YAE* on *1/17/39*

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT } ~~xxxx~~  
~~PHOTOSTAT OF~~ } No. T-6613

{ received Aug. 9, 1938  
 { registered Nov. 1, 1938  
 { verified  
 { reviewed  
 { approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section or calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
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✓ TBR

SECTION OF FIELD RECORDS

REVIEW OF TOPOGRAPHIC SURVEY NO. 6613 (1938) FIELD NO. JJJ

Lake Woodruff to De Leon Springs, St. Johns River, Florida.  
Surveyed in Jan.-Feb., 1938, Scale 1:10,000.  
Instructions dated Nov. 9, 1936 (MIKAWE)

Sextometer Survey

Aluminum Mounted

Chief of Party - L. D. Graham.  
Surveyed by - E. B. Brown,  
Inked by - E. B. Brown.

1. Junctions with Contemporary Surveys.

There are no other contemporary plane table surveys in this vicinity. The junctions with topographic maps T-5683 (1935) and T-5684 (1935) are satisfactory.

2. Comparison with Prior Surveys.

This Bureau has made no prior surveys within the area covered by the present work.

3. Comparison with Chart.

The area covered by the present survey is not shown on the latest chart of the vicinity.

4. Condition of Survey.

- a. The descriptive report is satisfactory.
- b. The field drafting is good.
- c. Traverse errors of 23 meters and 22 meters in distances of 2.5 and 4.1 miles respectively (descriptive report, page 2) are in excess of the 4 meters per mile specified in the topographic manual, page 4, par. 8, for a survey of this scale. The errors were investigated in the field but their sources were not definitely ascertained. In view of the sextant-stadia method of control and the relative unimportance of the area, the survey is considered acceptable without further investigation of the errors.

5. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project.

6. Additional Field Work Recommended.

No additional work is recommended.

7. Reviewed by - J. A. Mc Cormick, Feb. 20, 1939.

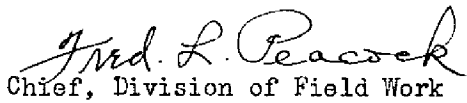
Inspected by - E. P. Ellis.

Examined and approved:




T.B. Reed,  
Chief, Division of Field Records

K.T. Adams  
Chief, Division of Charts



Chief, Division of Field Work

  
Chief Division of H. & T.