



3772

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

State: *North Carolina*

11-5813

**DESCRIPTIVE REPORT.**

*Hydrographic Sheet No. 3772*

LOCALITY:

*Ahemarle, Croatan &  
Roanoke Sounds  
Oregon Inlet to  
Javelle Point*

1915

CHIEF OF PARTY:

*O. W. Ferguson*

3772

COAST AND GEODETIC SURVEY

Dr. E. Lester Jones, Superintendent.

Survey on the Albemarle, Croatan and Roanoke Sounds, N.C.

TITLE SHEET

For Hydrographic Sheet (H) 3772

Extending from near Oregon Inlet to Powells Point, including  
1  $\frac{3}{4}$  miles of Pamlico Sound, all of Croatan and Roanoke Sounds and six  
miles North into Albemarle Sound, N.C.

Latitude 35° 46' to 36° 06' .

Longitude 75 32 to 75 50 .

Scale 1 : 20000

From May 17th. to November 12th. 1915.

Schooner Matchless.

O. W. Ferguson, Assistant, C. & G. S. in Command

OBSERVERS.

O. W. Ferguson, Assistant .

James E. Marsh, Mate

Raymond P. Eyman, Aid.

Andrew C. Witherspoon, D.O.

Eugene S. Plunkett, D.O.

H. W. Godsey, C.W. and

H. H. Thomas, C.B.M.

LIBRARY

Place with descriptive report  
of hydrographic sheet No. 3772

U. S. COAST AND GEODETIC SURVEY  
Register No. 3772

*SPD.*  
Drawing Section.

STATE North Carolina  
GENERAL LOCALITY Albemarle Sound (eastern part)  
LOCALITY Roanoke and Croatan Sounds  
Surveyed by O.W.Ferguson, J.E.Marsh, R.P.Eyman  
Chief of party O.W.Ferguson  
Date May - November 1915  
Scale 1/20,000

Soundings in feet  
at mean low water \*

Protracted by Field Party  
Soundings plotted by Field Party  
Inked by R. L. Rosenberg  
Verified by R. L. Rosenberg

The 6 foot curve is shown thus  
" 12 " " " " "  
" 18 " " " " " "

3772

COAST AND GEODETIC SURVEY

Dr. E. Lester Jones, Superintendent-

Survey on the Albemarle, Croatan and Roanoke Sounds, N.C.

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\*OBSERVERS\*

O. W. Ferguson, Assistant.

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Eugene S. Plunkett, D.O.

H. W. Godsey, C.W.

H. H. Thomas, C.B.M.

## DESCRIPTIVE REPORT FOR HYDROGRAPHIC SHEET H.

## REGION ABOVE ROANOKE ISLAND N.C.

DESCRIPTION

This sheet examines all the depths in Croatan and Roanoke Sounds together with the Southeastern part of Albemarle Sound and the Northern part of Pamlico Sound .

TOWNS

Manteo and Wanchese, both on Roanoke Island, are the principal towns. A daily line of steamers run from each of the <sup>SE</sup> towns to Elizabeth City.

OCCUPATION

The occupation of the people is Fishing, farming, Lumbering, buying and selling.

SHORES

The shores are low, dispersed with stretches of sand and marsh; sand dunes are prominent on the western side of Roanoke Sound and prevail generally between the sea and sound.

CREEKS

The creeks are small, but the waters are wide and shallow and indented with deep bayous and estuaries .

WATER

The northern portions of these waters are fresh, but the central somewhat brackish from the influence of Oregon Inlet and the southern portions more brackish, .

Fresh water of good quality is generally found about the <sup>SE</sup> ~~bays~~ of sand dunes, and is abundant every where .

## DESCRIPTIVE REPORT FOR HYDROGRAPHIC SHEET H.

## REGION ABOVE ROANOKE ISLAND N.C.

The bottom is generally hard and sandy, and <sup>but</sup> a small per cent of it is good holding bottom .

HARBORS

The whole area portakes of the nature of a harbor, but the exposed areas become dangerous for small boats at times.

DAY MARKS AND LIGHTS

On this sheet are the Croatan, Roanoke marshes and Bodie's Island Light House<sup>s</sup>, also the Red Beacon off Powells point; the red middle ground beacon, head of Roanoke Island; the two red Beacons into Manteo and the Blockade Shoal beacon .

These with the day marks give the directions for navigating these shallow waters quite satisfactory . see sailing directions recently published, give the results of this survey.

CURRENTS

These are irregular, <sup>r</sup>vaying with the wind and phases of the moon. When the winds and the tides are working together the current in Croatan Sound, past the Light House and Blockade Shoal, is strong.

NAVIGATION

The navigation on these waters is considerable boats ply in all directions , generally small boats , Fishing boats and small freighters, of 5 to 20 tons, propell<sup>ed</sup> by sail or by gasoline, ~~vessels~~ <sup>vessels</sup> drawing from 5 to 6  $\frac{1}{2}$  feet have very little trouble in making these runs.

Many barges are towed <sup>northward</sup> ~~through~~ through Croatan Sound, loaded with lumber, drawing eight feet . A depth of 9  $\frac{1}{2}$  feet can be *carried*

## DESCRIPTIVE REPORT FOR HYDROGRAPHIC SHEET H.

## REGION ABOVE ROANOKE ISLAND N.C.

through Croatan Sound, and eleven by a little dredging .

SHIPPING

The principal<sup>al</sup> commodities shipped out of here are lumber, fish, truck, farm products in moderate quantities and some cotton.

The articles shipped in, are general supplies, fertilizers, hay and gasoline.

SURVEY OF CROATAN AND ROANOKE SOUNDS, NORTH CAROLINA.

3772

LIST OF GEOGRAPHIC POSITIONS TO ACCOMPANY HYDROGRAPHIC SHEET NO. (H) 3772.

Name	Character	Latitude	Longitude
Ash.	Ashby 1915, tripod.	V. 35° 52' 727.3	75° 40' 379.1
	Ashby 1909, small flag.	35 52 710.1	75 40 402.1
Bal	Ballast Point 1915	V. 35 54 1127.7	75 38 1223.8
Bank	O Red beacon off Powell Point	V. 36 08 934.	75 47 76.
Baum	Baums Point 1915	V. 35 55 281.4	75 39 851.
Beak	O Red beacon near Manteo	V. 35 55 157.	75 39 33.
Bleck	Blockade Shoals beacon 1909	V. 35 53 1919.3	75 43 580.1
Bodie	Bodie Island Light House 1909	V. 35 49 204.	75 33 1229.7
Bot	O Flag on end of wharf	36 04 326.	75 44 901.
Broad	Broad Creek 1909	V. 35 51 1582.5	75 37 412.3
Bun	O Buntin Island, tripod	V. 35 48 965.	75 40 32.
Burn	O Shed on outer end of Burnside wharf (same as Manteo Beacon 1909)	V. 35 54 255.	75 42 103.
Bush	Channel bush on dredged cut	V. 35 55 1560.7	75 39 504.8
Cal	Callaghan 1915	V. 35 51 50.8	75 44 1254.6
Club	O Cupola of Bodie Island Club house	V. 35 48 1443.6	75 33 1324.8
Con	O Red Beacon Near Manteo	V. 35 55 866.	75 39 864.
Court	Manteo Court Houst 1909	(V) 35 54 1089.3	75 40 308.3
Cup	O Cupola of Bodie Island L.S.S. 1909	V. 35 50 425.2	75 33 823.2
Dare	Dare 1909	V. 35 50 407.	75 44 68.8
Deub	Wanchese House Double 1909	35 50 382.4	75 37 523.5
Down	O Flag	35 50 1505.	75 39 1295.
Duck	Duck 1909	V. 35 47 1327.3	75 35 590.5
Dur	Dur 1915	V. 35 58 62.	75 49 1226.
Fel	Flag	35 51 416	75 39 1134.
Fleet	Fleetwood 1909	V. 35 53 170.2	75 45 23.9



SURVEY OF CROATAN AND ROANOKE SOUNDS, NORTH CAROLINA.

LIST OF GEOGRAPHIC POSITIONS TO ACCOMPANY HYDROGRAPHIC SHEET NO. H.

Name	Character	Latitude	Longitude
Hav	0 Tripod on Big Island 1915	V. 35 <sup>0</sup> 49 <sup>1</sup> M	75 <sup>0</sup> 40 <sup>1</sup> M
Heg	⊗ Hog 1915	V. 35 48	75 37
Hos	0 Chimney of white house of wharf	V. 35 50 742.	75 39 1327.
Hot	⊗ Hot 1915	V. 35 58 68.4	75 39 79.4
Isle	0 Tripod signal on Island	V. 35 54 1335.	75 36 1397.
It	0 Flag	35 51 1382.	75 39 1471.
Kit	⊗ Kittyhawk 1915	V. 36 02 935.6	75 44 474.5
Life	⊗ Nags Head L.S.S. 1909 (V)(1915 is	V) 35 55 1759.9	75 36 812.9
Lunch	⊗ Lunch 1915	V. 35 59 1198.6	75 41 1344.8
Man	⊗ Manns Point 1915	V. 35 58 540.	75 41 1466.3
Mar	⊗ Marsh 1915	(V) 35 47	75 43
Mill	⊗ Mill Creek 1909	V. 35 49 1321.1	75 37 11.3
Nag	⊗ Nags Head 1909	V. 35 56 1360.1	75 37 1216.4
New	⊗ New 1915 on Weir Point	V. 35 55 932.6	75 43 603.4
Noke	⊗ Roanoke 1915	V. 35 55 1511.1	75 40 1249.9
North	⊗ North Point 1915	V. 36 01 637.1	75 43 1036.6
North base,	⊗ Bodie's Island North Base 1909	V. 35 53 1768.4	75 35 1312.
Oil	0 Large white oil tank on wharf	V. 36 03 766.	75 42 212.
Peg	0 Topographic peg.	35 46 1260.	75 44 130.
Pig	0 " "	36 02 1563.	75 42 471.
Pole	0 Flag pole near Wanchese railway	35 50 243.	75 39 408.
Perk	⊗ Perk Point 1909	V. 35 54 209.4	75 41 1319.4
Pow	⊗ Powell Point 1915(built on tree)	V. 36 04 555.4	75 47 1279.3
Ral	⊗ Raleigh 1909	V. 35 56 684.2.	75 42 487.2
Red	⊗ Redstone 1909	V. 35 54 1381.5	75 46 112.1
Roan	⊗ Roanoke Marshes Light House 1909	V. 35 48 1213.7	75 42 107.2

SURVEY OF CROATAN AND ROANOKE SOUNDS, NORTH CAROLINA.

LIST OF GEOGRAPHIC POSTIONS TO ACCOMPANY HYDROGRAPHIC SHEET NO. H.

Name	Character		Latitude			Longitude			
			<sup>o</sup>	<sup>'</sup>	<sup>m</sup>	<sup>o</sup>	<sup>'</sup>	<sup>m</sup>	
Rob	△	Roberts Fishery 1915	V.	35	56	161.2	75	46	1492.2
Rod	△	Reden 3	V.	36	00	305.9	75	43	1163.3
Roon	△	Carreon Pinot 1915	V.	35	57	1031.	75	48	818.8
Sand	○	Sand Island Beacon	(V)	35	50	571.	75	40	206.
Shan	○	Chimney of fish shanty	V.	35	53	628	75	37	14.
Sharp	△	Sharp (?)	(V)	35	45	1216.	75	43	1153 .
Shall	△	Shallbank 1915	V.	36	03	694.7	75	44	718.4
Spire	⊗	Wanchese Church Spire 1909		35	50	1645.1	75	38	783.3
Spoon	○	Water signal( tripod style)	(V)	36	02	806.	75	47	997.
Stack	○	Smoke stack of Manteo Ice Plant	V.	35	54	1234.	75	40	118.
Tal.	○	Chimney of small fish house		35	48	588.	75	42	1096.
Tan	⊗	Croatan Light House 1909	V.	35	56	1309.	75	46	1029.1
Te	⊗	Manteo Marshes 1909	V.	35	53	807.3	75	38	190.
Vir	⊗	Virginia 1909	V.	35	49		75	43	
War	○	Wharf in Kittyhawk Bay		36	02	1832.	75	42	1242.
West	⊗	North West 1909	V.	35	56	209.1	75	43	1032.
White	⊗	Wanchese White House 1909		35	50	823.6	75	37	517.3
Wit	⊗	Wither (water signal tripod style)		35	59	900.	75	46	1234.
Wreck	⊗	Wreck Hill 1909	V.	35	51	1013.1	75	35	998.2

AIDS TO NAVIGATION.

Rid	Location	Latitude			Longitude		
		<sup>o</sup>	<sup>'</sup>	<sup>m</sup>	<sup>o</sup>	<sup>'</sup>	<sup>m</sup>
Black Spar #1.	Entrance to Currituck.	36	02	120	75	46	299
Black Spar #3	" " "	36	02	1179	75	45	805
Red beacon	Off Powell Point	36	04	586	75	47	1292
Black Can #9	Head Of Croatan Sound	35	57	1710	75	47	864

## AIDS TO NAVIGATION.

Location		Latitude			Longitude		
Red beacon	N.W. of Roanoke Island	35	57	836	75	45	600
Red nun # 2	Off N.W. Point Roanoke Island	35	56	1398	75	43	983
Creatan L.H.	Head of Creatan Sound	35	56	1309.	75	46	1029.1
Black spar #7	" " " "	35	56	1182	75	46	1129.
Red Spar #6	Channel Of Creatan Sound	35	55	1167	75	45	523
Black Spar #5	" " " "	35	55	252	75	45	193
Red nun #4	" " " "	35	54	1383	75	44	398
Black can #3	" " " "	35	54	331	75	43	874
Black beacon	" " " "	35	53	1820	75	43	483
Red nun #2	" " " "	35	49	112	75	42	794
Roanoke Marshes, Light House	Mouth of Creatan Sound	35	48	1213.7	75	42	107.2
Black Spar #1	" " " "	35	48	602	75	42	195
Red & Black spar	" " " "	35	47	1680	75	41	1067
Red nun #2	Approach to Creatan Sound	35	46	1296	75	39	1448
Red Spar #4	Southern extremity of Roanoke Id.	35	47	673	75	38	392
Black Spar #1	" " " "	35	47	664	75	37	728
Red spar #6	" " " "	35	47	1461	75	36	1378
Wooden frame,	Inner turn of Shallowbag Bay	35	54	1123	75	39	1207
Red beacon	Entrance to Shallowbag Bay.	35	55	157	75	39	33
Bush	Dredged Channel	35	55	1561	75	39	505
Red beacon,	Head of Dredged Channel	35	56	866	75	39	864

Descriptive Report to accompany Hydrographic Sheet No.3772.

The work done by party in 1917 was only additional work to complete survey of 1915.

1. The marshy islands in Croatan Sound to southward and westward of Ashby Harbor have entirely disappeared, sufficient number of lines were run over and along side locations of same to verify their disappearance.

2. Several attempts were made to run lines through channel from southward on east side of Collington Island without success; the continuous northerly winds during months of December made low water in this locality. Two feet of water is about all that can be carried through this channel at southern entrance.

3. The eastern and inner part of Collington Bay or Harbor could not be developed on account of shallow water and heavy grass.

4. A narrow spit, partly awash at low water, runs out to southward and eastward from extreme southern point of Collington Island.

5. Lines were run as near as possible according to blue pencil lines indicated on bromide sheet furnished by the office. The lines were plotted on two separate pieces of boat sheet, and work in Kittyhawk Bay on bromide sheet. It appears that soundings taken in 1917 are generally shoaler than those of 1915- probably due to continuous northerly winds in December 1917. (tide reductions not yet applied to this work).

The smooth sheet for this work is in the office.

Respectfully.

*Oscar M. Straube*

Mate, Coast & Geodetic Survey.

CROATAN and ROANOKE SOUNDS, N.C.  
 Statistics for  
 Hydrographic Sheet No. 3772

Date	Letter	Statute miles	Positions *	Soundings	Vessel	Surveyed by
May 26, 1915	a	38.25	152	1350	Launch 54	R.P. Eyman
June 1,	b	30.25	129	1052	" 54	"
" 9	c	29.00	109	889	" 54	"
" 10	d	34.00	141	1100	" 54	"
" 11	e	16.25	70	537	" 54	"
" 12	f	20.50	83	659	" 54	"
" 14	g	20.00	78	623	" 54	"
" 16	h	16.00	61	481	" 54	"
" 17	i	32.25	128	990	" 54	"
" 18	k	43.00	161	1258	" 54	"
" 19	l	18.00	68	511	" 54	"
" 22	m	12.50	47	358	" 54	"
" 23	n	34.75	124	981	" 54	"
" 24	o	32.25	120	863	" 54	"
July 28	p	37.50	139	1142	" 44	J.E. Marsh
" 30	r	16.50	64	511	" 44	"
" 31	s	18.25	74	580	" 44	"
Aug. 2	t	26.50	89	800	" 44	"
" 3	u	15.75	63	566	" 44	"
" 5	w	46.25	169	1424	" 44	"
" 6	x	30.00	101	844	" 44	"
" 7	y	22.00	69	582	" 44	"
" 27	z	30.00	127	922	" 44	R.P. Eyman
" 28	a'	15.00	58	473	" 44	"
" 30	b'	11.00	63	406	" 44	"
Sept. 4	c'	16.75	65	529	" 44	"
" 7	d'	39.00	142	1168	" 44	"
" 8	e'	35.00	121	981	" 44	"
" 9	f'	43.75	161	1294	" 44	"
" 10	g'	28.25	108	892	" 44	"
" 13	h'	32.75	126	1001	" 44	"
" 14	i'	19.00	76	634	" 44	"
" 15	k'	29.75	121	905	" 44	"
" 16	l'	32.00	124	1008	" 44	"
" 17	m'	34.50	135	1088	" 44	"
" 20	n'	12.50	49	385	" 44	"
" 24	o'	15.20	72	511	" 44	"
Oct. 4	p'	2.25	11	74	" 44	"
" 13	r'	32.25	166	1265	" 44	"
" 14	s'	8.10	34	303	" 44	"
" 14	t'	31.00	113	914	" 54	J.E. Marsh
" 18	u'	24.70	101	752	" 54	"
" 19	w'	17.70	68	627	" 54	"
" 25	x'	47.75	151	1225	" 54	"
" 26	y'	37.30	161	1186	" 54	R.P. Eyman
" 27	z'	47.00	173	1364	" 54	J.E. Marsh
" 29	a"	35.00	137	1038	" 54	"
Nov. 4	b"	28.25	123	956	" 54	"
" 8	c"	19.38	147	235*	" 44	"
" 9	d"	18.00	128	187*	" 54	"
" 11	e"	38.75	164	1212	" 54	"
" 12	f"	28.25	107	827	" 54	"
Total	52'	1397.88	5571	42,481		

\* Drag work

Statistics Sheet No. 3772.

Date	Letter	Volum	Positions	Soundings	Miles	Vessel.
Nov. 26	a	1	34	239	6.0	Launch 54.
" 27	b	1	31	220	5.3	" "
" 28	c	1	63	563	14.0	" "
Dec. 4	d	1	114	564	11.5	" "
" 20	e	2	79	596	9.6	" "
" 22	f	2	31	208	4.7	" "
" 24	g	2	122	908	22.4	" "
Nov. 30	a	1	115	961	20.5	" 56
Dec. 1	b	1	28	387	4.5	" "
" 3	c	1	90	625	11.0	" "
" 24	d	2	<u>76</u>	<u>529</u>	<u>16.5</u>	" "
Totals			783	5800	126.0	

*J. S. S. J.*

ADDRESS  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON, D. C.

REFER TO NO. 5-VEC

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

April 6, 1918.

CHARTS (H) *✓*

LIBRARY

Place with descriptive report  
of hydrographic sheet No. 3772

Division of Hydrography & Topography: *hdy*

Division of Charts:

*✓*  
Drawing Section.

Tidal reductions have been approved in  
21 volumes of sounding records for

HYDROGRAPHIC SHEET 3772

Roanoke and Croaton Sounds, N.C.  
O.W. Ferguson in 1915

Plane of reference is  
Mean low water, reading

ft.	
4.5	on tide staff at Nags Head, N.C.
3.4	" " " " Croaton Light, "
3.1	" " " " Burnside wharf, "
	Pork Point, "

*L. P. Shidy*

Acting Chief, Section of  
Tides and Currents.

ADDRESS  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON, D. C.

REFER TO NO.

5-VEC

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

LIBRARY

April 16, 1918. Place with descriptive report  
of hydrographic sheet No. 3772

*J. D. S.*  
HYDROGRAPHY ETC., (HT)

CHARTS (H) ✓

Division of Hydrography and Topography: *NCG*

Division of Charts:

Tidal reductions have been approved in  
4 volumes of Sounding records for

HYDROGRAPHIC SHEET 3772 (additional)

Roanoke, Albemarle and Croatan Sounds, N.C.  
E.E. Smith in 1917

Plane of reference is  
Mean low water, reading

2.6 ft. on tide staff at Nags Head, N.C.

*L. P. Shidy*

Acting Chief, Section of  
Tides and Currents.

Drawing Section. ✓



Hyd. Sheet No. 3772

Croatan and Roanoke Sounds, N. C.

Positions protracted and soundings plotted by Field Party.  
Inked and verified by S. L. Rosenberg.

This survey was uniformly good. The area was well developed, and the crossings, with the three exceptions noted on the sheet in pencil, were good. The records were carefully kept.

In verifying it was assumed that the positions were correctly protracted and only those that appeared doubtful were checked and corrected when found in error. The protracting and plotting were carefully done, but the soundings were plotted in feet and fractions, contrary to the instructions given in paragraph 338 of the General Instructions for Field Work which provide that fractions up to .8 of a foot shall be dropped and those of .8 or more shall be considered a whole foot, except in critical places.

The work done on c" and d" days was not plotted by the field party, so it was attended to by the verifier.

The overlaps with Hyd. Sheets 3732 and 3000 were compared and found to agree fairly well, although a few of the soundings from Hyd. Sheet 3000 fell on an island when transferred to this sheet.

S. L. Rosenberg.

Soundings in feet.

Hyd. Sheet 3772  
Supplementary Development.  
(position numbers in green & red)

That portion of this additional work done by the chief of party was not up to the standard expected by this office. It appears as if there was too great a desire to hurry in order to get through even at a sacrifice of accuracy. (Mr. Straube's work was much better)

Several positions used on "d" (blue) day were shown on the boat sheet, but no explanation of any sort of the manner of locating them could be found, and it was necessary to transfer them from the boat sheet, which was badly distorted, to the finished sheet. In addition to this positions 52 to 75 "d" (blue) day were so erratic that it was necessary to reject them - some of the crossings were poor, in other places the time and distance didn't correspond, and several of the positions were absolutely wrong and could not be corrected in anyway except by wild guesses.

Line 97 to 102 "a" (blue), showing from 1 to 6 feet of water, fell between 2 other lines of soundings showing up to ten feet of water and after a personal interview with Mr. Straube was rejected.

Signal Dan seemed to give the recorder a great deal of trouble and it was referred to as Dan, Ban, Larn and Band at various times. They were all accepted as being

the same signal upon Mr. Stranbe's recommendation.

Most of this additional work appeared to be from one to two feet shallower than the original work of 1915. This was probably due to the continuous, <sup>westerly</sup> winds in December 1917.

A narrow spit, partly awash at low water extending from A Lun to © Black (From extreme southern point of Collington Island, running south and east), was indicated on the boat sheet and mentioned in the descriptive of report, but no exact location was given in the sounding records and it was necessary to transfer it from the boat sheet.

S. L. Rosenberg.  
March 1919.

March 17, 1919.

Attention is respectfully called to the following recommendations:

1. That chiefs of parties be impressed with the necessity for accuracy rather than speed. One bad sounding should detract more from a man's efficiency record than several days time saved should add to it.

2. A description of all signals used in a survey, together with the manner of location, should be included in the descriptive report. If a signal is transferred from the topographic sheet, it should be so stated; if it is determined by cuts, the angles should be given in the sounding records or angle book. There should be no necessity for guesswork on the part of the office draftsman.

3. The low water curve has been overlooked in the notes stamped on hydrographic sheets. This curve is frequently as important as the 6 ft. curve and the following addition should be made to the curve note:

The low water curve is shown thus: \_\_\_\_\_

S. L. Rosenberg.