2098

Diag. Cht. No. 6102-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. 2096

LOCALITY

State Washington

General locality Sanford Island

Locality to Seattle Sd

1891

~~194~~

CHIEF OF PARTY

P. L. Delehanty U.S.N.

LIBRARY & ARCHIVES

DATE .....

8-1870-1 (1)++

2098

U. S. COAST AND GEODETIC SURVEY.

T. C. Mendenhall Superintendent.

State: Washn.

DESCRIPTIVE REPORT.

Hydr. Sheet No. 2096

LOCALITY:

James Isld. to Osett Id.

Pacific coast.

1891.

CHIEF OF PARTY:

Lt. D. Delehanty – U.S.N.

Descriptive Report

Write me at: U.S. Navy Yard, Mare Island,

Telegraph me at: ~~Hydrographic Inspector~~ Cal.

My Express Office is: DEC.29.1891. 022484 San

Assistant in Charge, U.S. Coast and Geodetic Survey, Str Active.

for Archives U.S. Navy Yard, Mare Island, Cal.

DEC 29 1891 COAST & GEODETIC SURVEY

Dec 23, 1891

2—547

D.S.

T.C. Mendenhall,
Superintendent U.S.C.&G. Survey,
Washington, D.C.

Sir:

I have the honor to report as follows in regard to the locality of the survey made by the party under my command during the past season, embraced between Ozett Island and James Island, Coast of Washington.

The general character of this portion of the Coast as seen from seaward is low rolling hills, densely wooded, with the Vancouver and Olympus range of mountains in the back ground. Numerous rocks & islets lie off the coast and extend out in places over two miles. Inside of this distance the ground is very foul and

while Sounding with the boats, great caution was necessary on the part of the Officers to avoid disaster. During stormy weather the appearance of the Coast is wild & forbidding, the high seas rolling in & breaking with great violence.

Many of the rocks on account of their peculiar shape form excellent landmarks.

The views of these rocks shown in Davidsons Coast Pilot are admirable.

On approaching this part of the coast in thick weather a vessel should not get in less than twenty-five (25) fathoms.

There are no safe anchorages.

Currents. I found the currents extremely irregular in strength & direction. The following observations were carefully made, but their only value is to show the great necessity for extended series of current observations in this vicinity.

September 23rd 91. While running Ships normal near Osette Island, during flood tide, there was no apparent current inside the twenty (20) fathom curve. Outside this depth the set was about three-quarters of a knot (3/4) to the Northward, the strength gradually diminishing towards end of tide when no current was observed.

September 24th 1891.

While at Anchor near signal "Back," in fifteen (15) fathoms, during the afternoon observed set of the current to be to the Southward on flood tide, approximate strength one-quarter (1/4) to one-half (1/2) knots.

September 25th 1891. During the forenoon the ship was set to the Northward about one-quarter (1/4) knots per hour during Ebb tide.

October 2nd 1891.

Observed slight Northwardly set during forenoon until 3 pm after which light Southerly set. High water

11/14/92

about 12.30 pm.

Oct: 18. 91. A strong Northerly current all day - During the forenoon while the tide was flooding, the ship was steered S X W ½ W to make a S W course. There was a light Southerly breeze and light S. W swell.

During the afternoon while the tide was ebbing the set was found to be two miles per hour to the Northward, This was determined in a run of twenty five miles by frequent cross bearings and comparisons with pat: log and revolutions of screw.

This was spring tide.

Very respectfully
D. Delehanty
Lieutenant, USN
Commanding.

Report 1892 Reg. 22481 Dec. 29-91

U. S. Coast and Geodetic Survey. [Form 11.—Statistics of Field Work.]

Statistics of Field Work executed by Lieut. D. Delehanty U.S.N.

Date of beginning field work Septr: 2d 1891

Date of closing field work Octob 31st 1891

Western Division
State of Washington.
South of Cape Flattery

RECONNAISSANCE:

Area of, in square statute miles

Lines of intervisibility determined as per sketch submitted

Number of points selected for scheme

BASE LINES:

Primary, length of

Secondary, length of

Beach measurements, length of

Number of days employed in measurements of base

Number of days employed in re-measurements

TRIANGULATION:

Area of, in square statute miles

Signal poles erected, number of

Observing tripods and scaffolds built, number of

Observing tripods and scaffolds built, heights of

Days occupied in opening and verifying lines of sight, number of

Stations occupied for horizontal measures, number of

Stations occupied for vertical measures, number of

Geographical positions determined, number of

Elevations determined trigonometrically, number of

GEODESIC LEVELING:

Elevations determined by spirit-leveling of precision, number of

Lines of geodesic leveling, length of

LATITUDE, LONGITUDE, AND AZIMUTH WORK:

Latitude stations occupied, number of

Pairs of stars observed for latitude, number of

Average number of observations on a pair

Longitude stations, telegraphic, number of

Longitude stations, telegraphic, number of nights on which signals were exchanged

Longitude stations, chronometric, etc., number of

Azimuth stations, number of

Number of nights of observations for azimuth

Number of stars observed for azimuth

GRAVITY DETERMINATIONS:

Number of pendulum stations occupied	

MAGNETIC WORK:

Stations occupied for observations of the magnetic declination, number of	
Stations occupied for observations of the magnetic dip, number of	
Stations occupied for observations of the magnetic intensity, number of	

TOPOGRAPHY:

Area surveyed in square statute miles	
Length of general coast-line in statute miles	
Length of shore-line of rivers in statute miles	
Length of shore-line of creeks in statute miles	
Length of shore-line of ponds in statute miles	
Length of roads in statute miles	
Topographic sheets finished, number of	
Topographic sheets, scales of	

Topographic sheets, limits and localities of:

HYDROGRAPHY:

Area sounded in square geographical miles	138.0
Number of miles (geographical) run while sounding	183.9
Number of angles measured	1731
Number of soundings	1655
Number of tidal stations established	2
Number of specimens of bottom preserved	8
Current stations, number of	0
Hydrographic sheets finished, number of	1
Hydrographic sheets, scales of	40,000

Hydrographic sheets, limits and localities of:

Osett Island to James Island. Coast of Washington.

PHYSICAL HYDROGRAPHY:

Number of soundings on cross-sections	
Current stations, number of	
Deep-sea current stations, number of	
Deep-sea surface current observations, number of	
Deep-sea sub-surface current observations, number of	
Number of observations of density of water	
Number of observations of temperature of water	
Tidal stations established, number of	
Miles (geographical) run in deep-sea sounding	
Number of deep-sea soundings	
Number of specimens of bottom preserved	

Locality of work; results, how shown, etc.:

U.S.C.&G.S. Str. Hassler,

Respectfully Submitted,

O. H. Tittmann

Lieutenant, U.S.Navy

Commanding.