



U. S. COAST AND GEODETIC SURVEY.

F. M. Thorne, Superintendent.

State: *Washington Territory*

DESCRIPTIVE REPORT.

Hydrographic Sheets No. *1799 & 1800.*

LOCALITY:

*Shoalwater Bay
and Approaches*

1887.

CHIEF OF PARTY:

J. C. Burnell, U. S. N.

to the mills situated on the Willipa and Nasel rivers. About 100 vessels, averaging 300 tons each, enter the Bay annually.

The tidal currents are very strong, a velocity of $3\frac{1}{2}$ knots being noted during the season. The set is across channel. There are ranges in use by pilots, but none that could be identified on sheet. In approaching the Harbor, bring Light House on Cape Shoalwater to bear $N\frac{1}{4}E$ until up with outer bar buoy, when change course to $NNE\frac{1}{2}E$. Pass to S^d of mid-channel buoy, and leave black buoy No 1 100 yards on port hand. Change course to North and when up with buoy No 6, which give a berth of one cables length, steer $NE\frac{1}{2}E$ if bound up the Willipa. If bound to North Cove, keep close to sands on port hand until up with spar buoy No 1, when make a sharp turn and head for Light House, anchoring in $3\frac{1}{2}$ fathoms water, abreast of plough. The spar buoy should be passed within 25 yards, as the channel at that point is very narrow. In using these courses, attention must be paid

to the current. No directions can be given for
vessels bound to Oysteride or Bay Centre. The
currents are treacherous and run with great
force, making it impossible to steer a compass
course. A pilot should always be employed,
unless one is well acquainted with the channels.

Very respectfully

J. A. Durnell

Lieut. U.S.N. Comdg.