



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: August 20, 2004

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-N372-RA-2004
HYDROGRAPHIC SHEET: H11316

LOCALITY: Hein Bank, Puget Sound, WA
TIME PERIOD: April 7 - 14, 2004

TIDE STATION USED: 944-4090 Port Angeles, WA
Lat. 48° 07.5'N Lon. 123° 26.4'W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.987 meters

REMARKS: RECOMMENDED ZONING
Use zone(s) identified as: PS75, PS76, PS86, PS87 & PS88

Refer to attachments for zoning information.

Note 1: Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the new 1983-2001 National Tidal Datum Epoch (NTDE).

Thomas J. Hill 8/30/04

CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION

Final tide zone node point locations for OPR-N372-RA-2004, H11316

Format: Tide Station (in recommended order of use)
 Average Time Correction (in minutes)
 Range Correction
 Longitude in decimal degrees (negative value denotes
 Longitude West),
 Latitude in decimal degrees

	Tide Station Order	AVG Time Correction	Range Correction
Zone PS75	944-4090	+36	0.95
-123.196178 48.264366			
-123.168315 48.285688			
-123.14443 48.313573			
-123.127369 48.340873			
-123.123963 48.356885			
-123.100066 48.347695			
-123.083166 48.335712			
-123.075975 48.323007			
-123.073098 48.310299			
-123.075934 48.291108			
-123.083994 48.263941			
-123.093986 48.24378			
-123.131633 48.228165			
-123.192784 48.209796			
-123.19335 48.246388			
-123.196178 48.264366			
Zone PS76	944-4090	+36	0.98
-123.182306 48.150058			
-123.196505 48.148558			
-123.192764 48.208941			
-123.192784 48.209796			
-123.131633 48.228165			
-123.093986 48.24378			
-123.10213 48.227338			
-123.134698 48.174579			
-123.145338 48.175607			
-123.154523 48.171305			
-123.174675 48.158095			
-123.182306 48.150058			
Zone PS86	944-4090	+54	0.96
-123.143413 48.389709			
-123.16949 48.40446			

-123.06433 48.410114
-123.015062 48.405622
-122.96714 48.396292
-122.938279 48.3792
-122.929746 48.368462
-122.930221 48.350455
-122.948235 48.326751
-122.990425 48.294496
-123.035217 48.269084
-123.022734 48.292453
-123.01548 48.32686
-123.030086 48.356299
-123.064723 48.377249
-123.143413 48.389709

Zone PS87

944-4090

+48

0.95

-123.093986 48.24378
-123.035217 48.269084
-123.022734 48.292453
-123.01548 48.32686
-123.030086 48.356299
-123.064723 48.377249
-123.143413 48.389709
-123.129075 48.374977
-123.123963 48.356885
-123.100066 48.347695
-123.083166 48.335712
-123.075975 48.323007
-123.073098 48.310299
-123.075934 48.291108
-123.083994 48.263941
-123.093986 48.24378

Zone PS88

944-4090

+54

0.98

-123.093986 48.24378
-123.10213 48.227338
-123.134698 48.174579
-123.108734 48.182947
-123.015893 48.209859
-122.899968 48.261473
-122.893765 48.285462
-122.887292 48.331774
-122.893736 48.365136
-122.910881 48.391388
-122.929746 48.368462
-122.930221 48.350455
-122.948235 48.326751

-122.990425 48.294496
-123.035217 48.269084
-123.093986 48.24378