Station Notes for B006, shoresne2bwa2005

Latitude: 48.0588 (WGS 84)
Longitude: -123.5008 (WGS 84)
Elevation: 302 m / 991ft
Install Depth: 156.7m / 514 ft

Install Depth: 1 156.7m / 514
Orientations: 2 Unknown
Install Date: July 28, 2005
GTSM Technologies #: US04

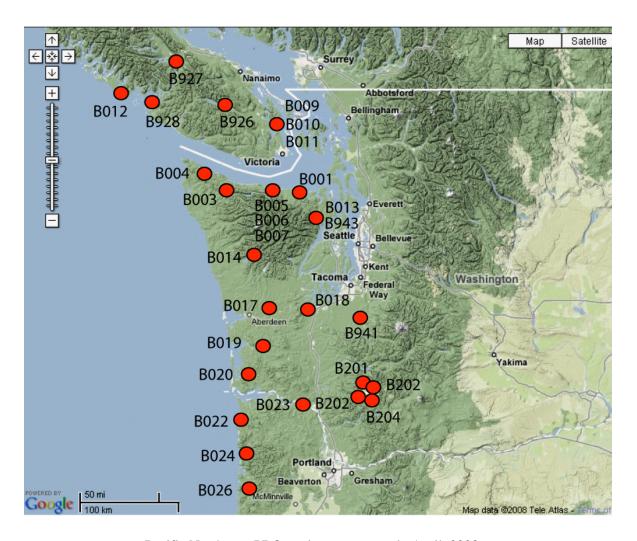
Executive Process Software: Version 1.14
Logger Software: Version 2.02.2

Home Page: http://pboweb.unavco.org/stations/?checkkey=B006

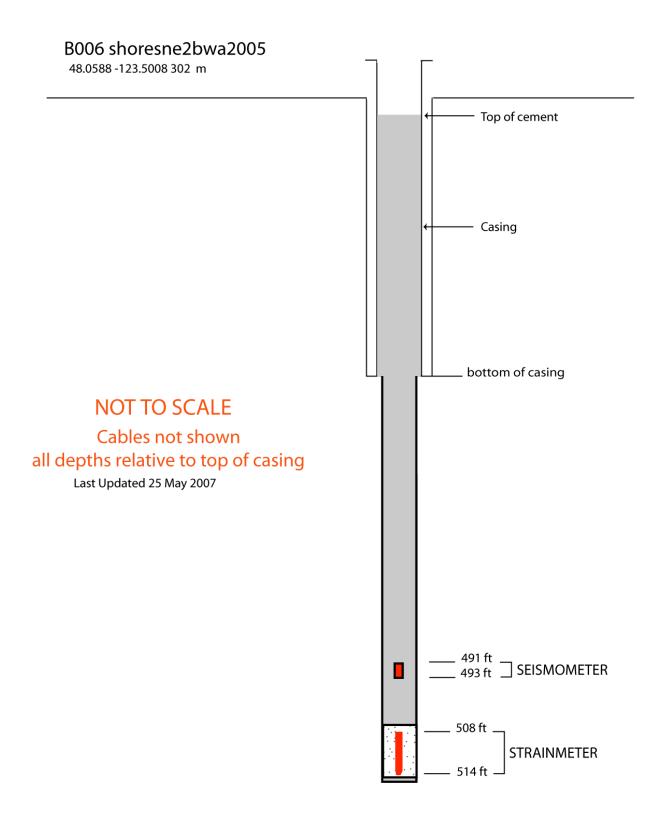
Notes Last Updated: October 11, 2016

¹Install depth is from the top of the casing to the bottom of the strainmeter.

²Orientations are in degrees East of North.



Pacific Northwest PBO strainmeter network, April, 2008



Instrumentation at Strainmeter

Instrument	Units	Bottle/ASCII Scale Factor	SEED Scale Factor
Pore Pressure	Hecto Pascals	N/A	N/A
GTSM Barometer	Kilopascals	1.0	0.0001
Rain Gauge	Millimeters/hour	N/A	N/A
Down hole Temperature Sensor	Degrees Celsius	1.0	0.0001
Logger Temperature Sensor	Degrees Celsius	1.0	0.0001
Setra Barometer	Hecto Pascals	1.0	1.43045E-4

1. General Information

- B006 is part of the Shores cluster of strainmeters. Strainmeters B006 and B007 are within a few 100 meters of B005.
- This station appears to be hydrologically coupled.
- Sensitivities of all EH channels corrected in the dataless on March 4, 2010
- Quarry blast on September 5, 2007 at 18:43 UTC. The blast caused offsets on all channels of B005, B006 and B007.
- Quarry blast on July 16, 2008. The blast caused offsets on all channels of B005, B006 and B007
- Sensitivities of all EH channels were corrected in the dataless on March 4, 2010. The blast caused offsets on all channels of B005, B006 and B007.
- Quarry blast on May 24, 2012 at 22:44 UTC. The blast caused offsets on all channels of B005, B006 and B007.
- Quarry blast on May 7, 2013 at 21:07:03 UTC (confirmed by the USGS http://earthquake.usgs.gov/earthquakes/eventpage/uw60526356#summary). The blast caused offsets on all channels of B005, B006 and B007.

2. Strainmeter Maintenance

- November 1, 2007 UTC Steve Smith visited the site.
 - 19:23 Onsite.
 - 19:35 Replaced F/O switch and now everything works.
 - 19:38 All good, checked in all sites with Boulder.
 - 19:41 Offsite.
- February 27, 2008 UTC Sarah Venator visited the site to replace the marmot.
 - 16:30 Open enclosure. Remove old marmot and attach new marmot which had been preconfigured by Warren G.
 - 16:42 Close enclosure doors.
- July 8,2008 UTC
 - 21:00 Mike Gottlieb arrived on site. The GTSM ws powered off, the one port fiber optic modem was also off. The GTSM batteries (3) are dead (2.84 V), and the mains batteries (2) still good (13.5 V). It was determined that the white lab power supply had failed. There were three of those inside the hut, likely from previous failures. Mike was able to get one of them working enough to use (at least temporarily).

- 21:15 He split the 2 good batteries so that the GTSM side had one and the mains had one.
- 21:20 GTSM back on, battery charging.
- 21:55 Off site.
- 29 July 2008 PST
 - 10:10 On site, enclosure open.
 - 10:25 Power down site except for GTSM, remove 3 batteries (voltage ~3.0v).
 - 10:45 Removed 3 GW DC Power Supply boxes (model# GPS-1850D)
 - * Noticed pore pressure transducer is wired into power block and Q330, but there is no packer in place to gather data from .
 - 12:50 Added 8 batteries, 2 to strainmeter bank and wired (2) 3 battery banks. Added Tripp-Lite, and rewired Q330, Marmot, Intuicom, and F/O Modems to AC back panel.
 - 12:55 Noticed smoke coming from Untuicom ethernet cable and unpluged it. Bad connection, put in replacement.
 - 1310 Power back on, ping GTSM, Q330, and Marmot, all respond
 - 1315 Close enclosure, off site.
- March 26, 2009 Logger software upgraded to 2.02.2
- January 21, 2010 Wade Johnson visited the site to figure out why the SOH data had gone bad. He found the power box full of water and everything inside corroded. He replaced the power box and the SOH data looks normal again.
- May 28, 2010 Liz visited the site to place ID tags on equipment that did not have them.
- October 21, 2010 Chad repaired the damaged VSAT mount, and the Shores network was back online.
- March 21, 2011 Power supply for Cisco router failed. After it was replaced the comms
 came back up. All test points on the datalogger were within 0.05V and the RT numbers
 looked good. Currently data looks normal for this site. Failing power box caused previous
 flat line in data.
- July 21, 2011 The GTSM Power Box was opened to check for water corrosion. It appeared there may have been a little water (white marks on bottom of PB) in the box that evaporated, and there was no sign of corrosion in the PB. GTSM data has returned from the flatline state. A new Enclosure for the entire site may help this issue.
- September 21- 22, 2011 Pad was extended, equipment rack installed, full size hut installed, and 5 batteries were upgraded.
- January 12, 2012 On arriving at the site, Liz turned off the strainmeter and checked all cable connections for corrosion. The only concern was some moisture in the connector attached to the environmental box. The logger and oscillator board were pulled, checked and reseated. Next she checked the quadrature. The oscillator board was flat lined. It was replaced and the quadrature was rechecked. It now had a normal response. The middle two channels were set in phase. Due to a power issue with the Oscilloscope she did not set chops.

- June 14, 2012 The main battery bank of 6 was replaced. The GTSM quadrature was adjusted.
- October 6, 2015 Adjusted quads, little to no change. Replaced desiccants and added diatomaceous earth.
- September 27, 2016 Turned off GTSM and documented resistance and capacitance of downhole instrument. Replaced enclosure locks.
- July 7, 2017 Adjusted quads and chops.
- July 12, 2017 Updated strain_logger.conf file to match power box. Disabled pressure pot and Current Coil Sensor.