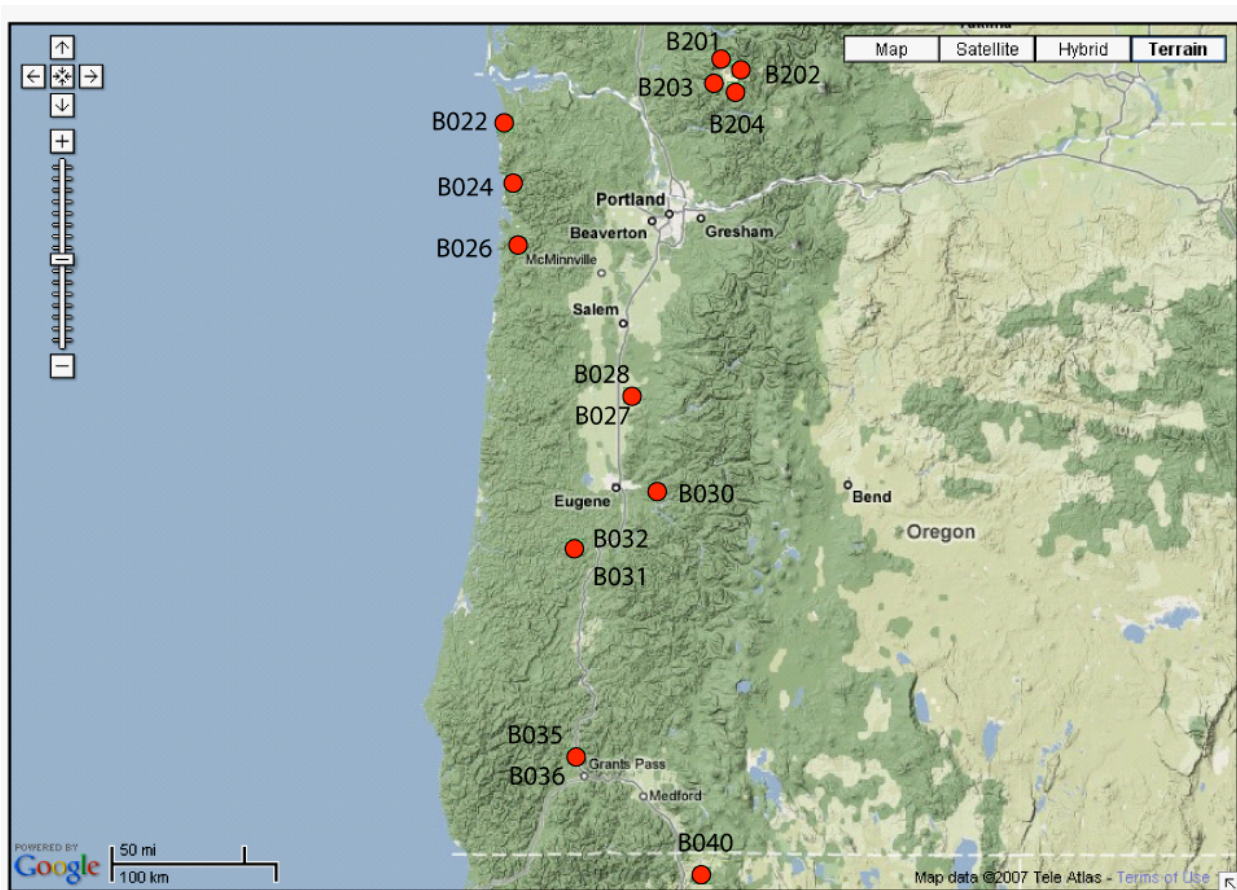


Station Notes for B031, hergrt031bor2007

Latitude:	43.6643 (WGS 84)
Longitude:	-123.3967 (WGS 84)
Elevation:	71 m / 233 ft
Install Depth:	140.8 m / 462 ft
Orientations:	CH0=239.3, CH1=179.3, CH2=119.3, CH3=89.3
Install Date:	November 30, 2007
GTSM Technologies #:	US53
Executive Process Software:	Version 1.14
Logger Software:	Version 2.02.2
Home Page:	http://pboweb.unavco.org/stations/?checkkey=B031
Notes Last Updated:	March 29, 2019

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

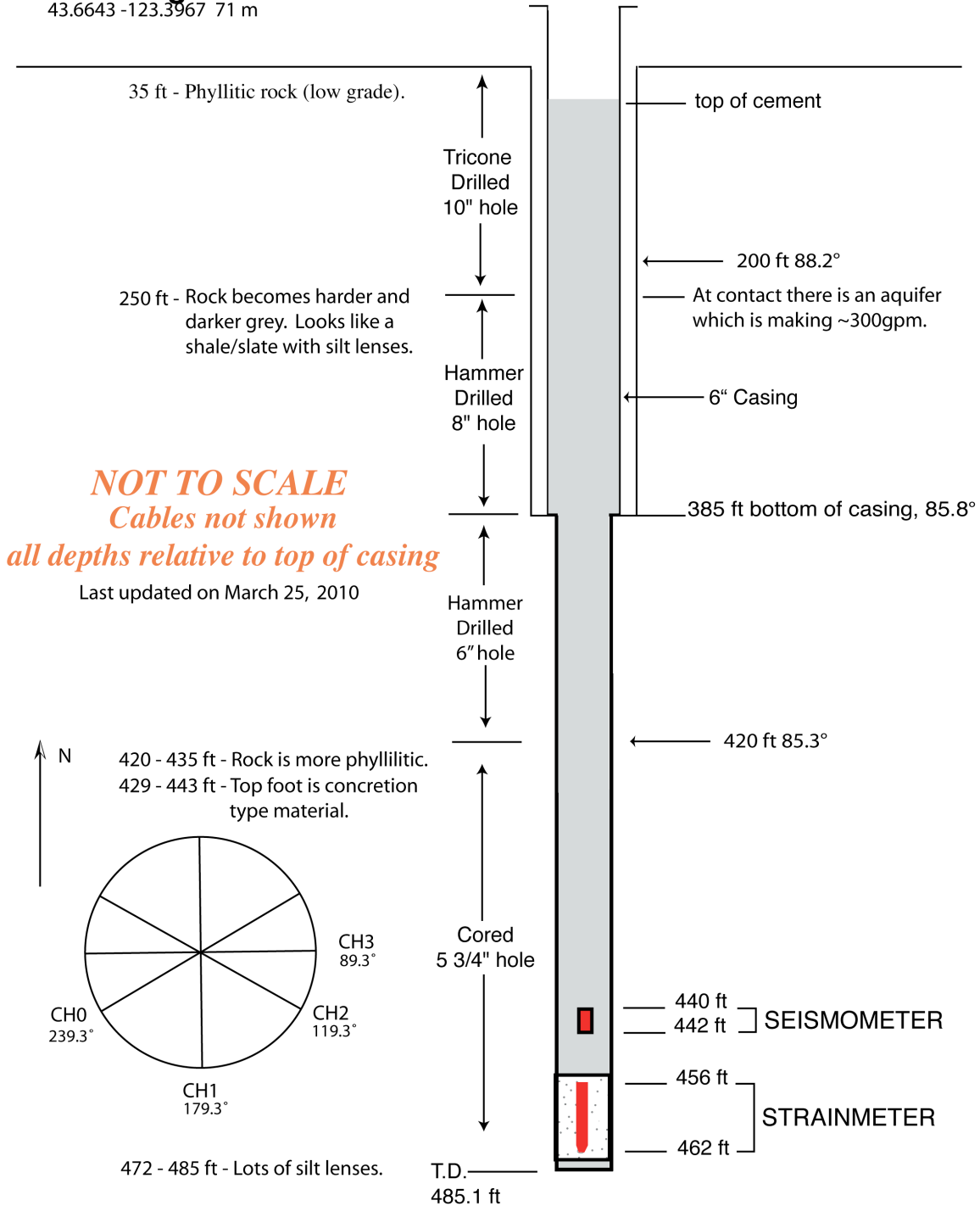
Orientations are in degrees East of North.



Oregon PBO strainmeters, December 2007

B031hergrt031bor2007

43.6643 -123.3967 71 m



Instrumentation at Strainmeter

Instrument	Units	Bottle/ASCII Scale Factor	SEED Scale Factor
Pore Pressure	Hecto Pascals	None Installed	---
GTSM Barometer	Kilopascals	1.0	0.0001
Rain Gauge	Millimeters/hour	1.0	0.252
Down hole Temperature Sensor	Degrees Celsius	1.0	0.0001
Logger Temperature Sensor	Degrees Celsius	1.0	0.0001
Setra Barometer	Hecto Pascals	None Installed	

1. Installation notes

November 30, 2007 UTC

17:00 - Set up for install.

17:17 - Shut down GTSM, compass test X: 2.043 1.462 Y: 1.751 1.212.

18:52 - Start mixing grout.

18:57 - Last bag in.

18:58 - Last water added (16 gal/9bags).

18:08 - Pour grout in baler.

19:21 - On bottom, good trip.

19:27 - Pulled out of grout.

19:33 - SM in hole. 20m down they found a "dent" in the cable, and used an Ohm meter to check jacket integrity. Jacket was not breached, so they used silicon, mastic tape, and electrical tape to plug hole.

20:15 - SM at 462', turned on. Final compass X: 1.582 Y: 1.651.

22:30 - Called good, GTSM renamed.

December 1, 2007 UTC

16:50 - Onsite.

22:10 - Test seismometer SN 8. V 2.4 kohms H1 2.3 kOhms H2 2.3 kOhms.

22:33 - Lower seismometer.

23:05 - On bottom. Trip in 1 1/2 pipe.

23:24 - Adjust down hole temperature.

23:35 - Logger back on.

23:44 - Tripped in 447' of pipe, seismometer is at 442'.

2. General Information

- This station is part of a cluster that includes B032, hergrt032bor2007.

3. Strainmeter Maintenance

- February 11, 2008 UTC
19:35 – Emily Seider arrived onsite. She turned on AC power at the pole, plugged in the surge protector, and power cycled the Cisco router.
19:55 – Offsite.
- July 23, 2008 UTC- Reason for visit: VSAT not responding .
20:20 - On site. Everything is powered up, notice that the Coax cable has been pulled out of the lower connector of the ODU. Crimped connector is still attached to the ODU but the stripped wire is hanging out. Leave to buy a new connector in Yoncalla.
21:20 - Return to site. Terminate and reconnect the cable. VSAT system is OK, but Mike G. is unable to reach the Cisco.
21:40 - Call Chuck Kurnik, power cycle Cisco, still can't reach it.
22:30 - Off site.

- September 19, 2008 - Warren Gallaher upgraded the GTSM logger software from version 1.15 to 2.02.2. The site was offline from about 13:30 until about 14:30 UTC.
- December 4, 2008 – Wade Johnson visited the site to replace the fiber optic modem.
- May 21, 2009. Logger Software Version upgraded to 2.02.2 .
- June 4, 2009. Swapped out US53LG and put in US52LG/26714.
- September 20, 2010 – Mike Gottlieb swapped Eb6 radios and whip antennas, and manually turned up power to 7.
- July 19, 2011 – Wade Johnson visited the site to get it back online. Comms were down due to a bad configuration on the router. Router configuration was updated. He also rebooted the GTSM21 and swapped GPS timing antenna. This did not improve timing, needs a new power box.
- August 4, 2011 – The GTSM clock was increasingly slow so the power box and GPS were replaced.
- October 20, 2011 – Over the last month the site has intermittently gone off-line. On arriving and checking the VSAT system, the receive was listed as 75% and the cross pole at 85%. The dish was readjusted so that the receive is now at 85% and the cross pole is at 95%. The VPN was re-initiated the next day. The site data flow is being observed.
- March 31, 2012 – Removed yellow jacket nest on enclosure.
- May 12, 2013 – Liz sprayed the VSAT mount for yellow jackets.
- May 13, 2013 – Liz visited the site and replaced the batteries. The site now has 10 batteries, 4 GTSM batteries and a main bank of 6 (2x3). She tested the LDV on/off points during the battery swap. She also replaced the desiccants, removed yellow jacket nests and filled the VSAT mount with expansive foam. She adjusted the quads and chop, strapped all equipment to the equipment rack, and spread diatomaceous earth on the enclosure floor.
- May 29, 2013 – When Liz arrived at the site the IDU at the site was dead, no lights on. She switched to a new power inverter, still nothing. A new IDU was added. Receive was adjusted from 61% to a max of 76%. The signal was flaky, sometimes going to 0% and she could not get transmit above 55%. The ODU (The old transmit horn on the ODU was kept because the spare had a bolt end broken off into it) and cable were replaced. No change to the flaky signal. She re-terminated the cable ends on the old cable. There was some corrosion on the tip of the old connector going into the IDU. The signal greatly improved. The receive max was 91%, however to get transmit to pass at a max. of 66% the receive had to be knocked down to 66%. Not ideal, but it passed.
- May 30, 2013 – Replaced the router.
- June 5, 2013 – The VSAT was adjusted to improve signal strength and potentially help with the VPN issue. Receive was adjusted to 87%, but cross-pole could not be raised above 50%.

The IDU was replace, cables re-terminated and tested for continuity, and ODU swapped. After several hours the cross pole was still 60%, which passes. Site VPN has been stable since.

- October 12, 2016 – Verizon cell service had drastically improved at the site. Replaced VSAT comms with CDMA.
- May 16, 2018 – Added Setra to site. Set up Q330 for data collection.
- March 19, 2019 – Liz visited the site to try and get it back online. Station was online, but was unable to restore Verizon service while onsite. Adjusted GTSM chops and quads, very noisy.
- March 28, 2019 – Replaced RV50, comms are back online.