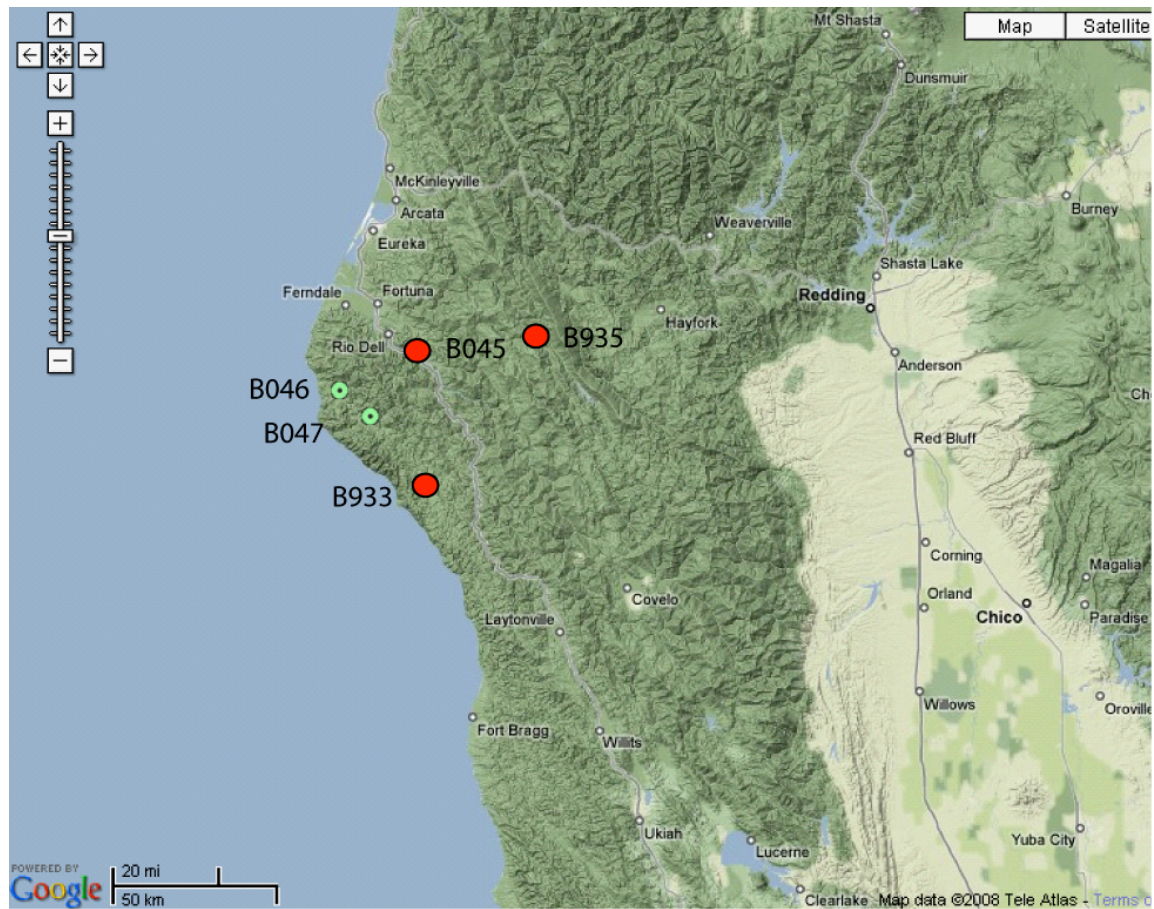


Station Notes for B933, mckeem933bcn2008

Latitude:	40.0600 (WGS 84)
Longitude:	-123.9690 (WGS 84)
Elevation:	268.1 m / 968 ft
Install Depth:	149 m / 478 ft
Orientations:	CH0=271, CH1=211, CH2=151, CH3=121
Install Date:	September 12, 2008
GTSM Technologies #:	US79
Executive Process Software:	Version 1.14
Logger Software:	Version 2.02.2
Home Page:	www.unavco.org/instrumentation/networks/status/pbo/overview/B933
Notes Last Updated:	April 25, 2019

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

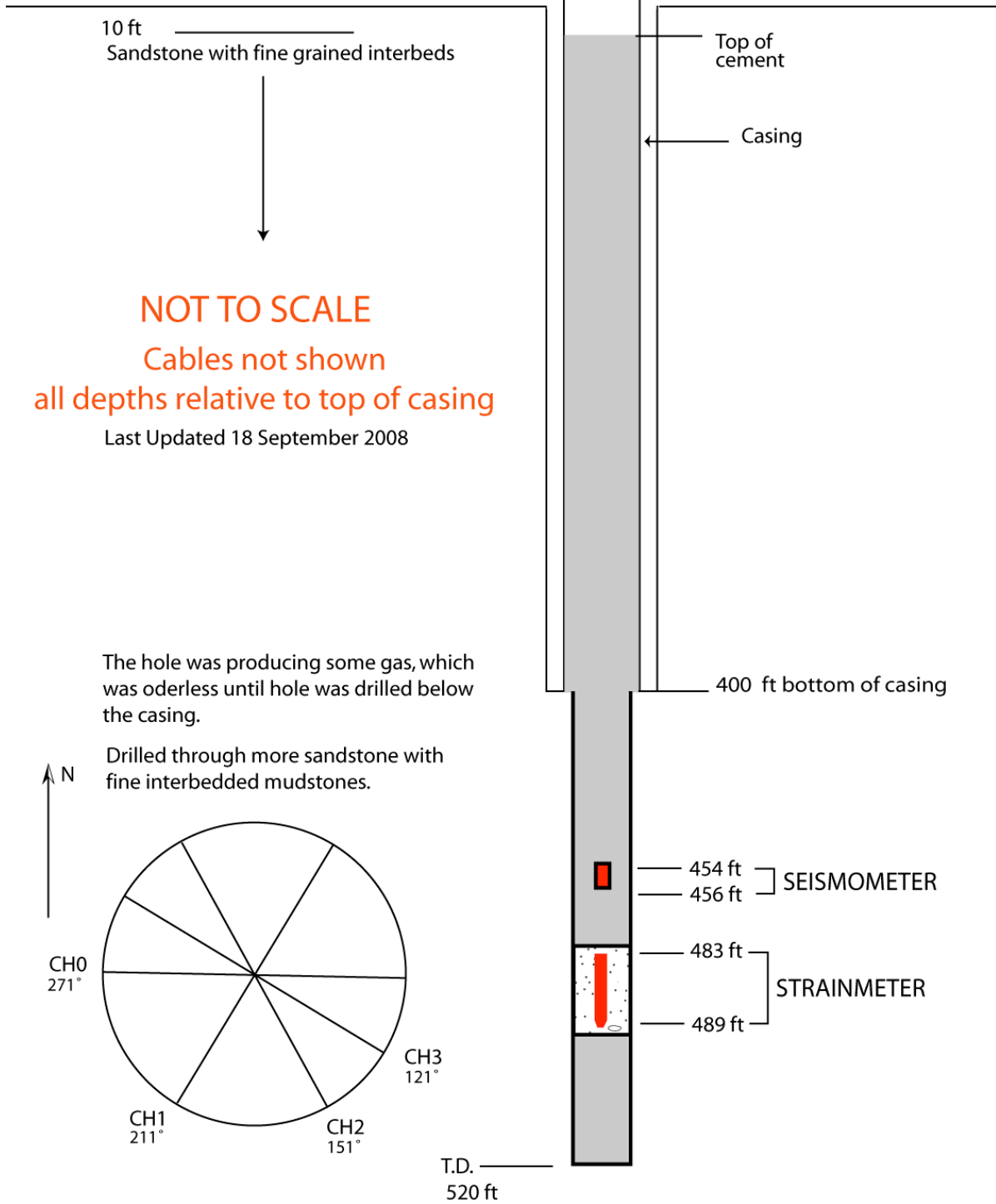
• Orientations are in degrees East of North.



Mendocino PBO strainmeters, October, 2008. Green dots represent boreholes that only have a seismometer.

B933 mckeem933bcn2008

40.0600 -123.9690 268.1 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	1.0	unkown

1. Installation notes

September 12, 2008 UTC

16:30 - On site. Sound bottom: 488'4" with banger, 487'4" with bailer. US79 has been on test since last night, looks good.

Compass Test US79

X 1.396, 2.319

Y 1.530, 2.490

Mix 9 bags of Penn Grout, batches DJ805, AM806.

Bailer with grout sinks to 489'.

Strainmeter installed at 489'.

19:03 - Turned on strainmeter.

19:05 - Renamed to B933.

x.init - 2.260

y.init - 1.899

19:45 - Off site.

September 13, 2008 UTC

Test Seis #35.

V - 2.439 kOhm

H1 - 2.434.kOhm

H2 - 2.450 kOhm

18:00 Lower seismometer to 456'.

18:30-19:30 Trip in, tag grout at 460'.

19:45-22:00 Pump Cement down hole and fill annulus.

22:30-00:30 Strainmeter off while pouring pad.

01:00 Off site.

September 14, 2008 UTC

16:00 - On site.

Point VSAT.

Install uphole electronics.

Clean up site.

Final strainmeter numbers: X - 2.264, Y - 1.902.

Temp - 1.778.

2. General Information

- Sensitivities of all EH channels corrected in the dataless on March 4, 2010.

3. Strainmeter Maintenance

- February 20, 2009 – Liz and Steve visited the site to get it back online. They replaced the VSAT IDU.

- March 19, 2009 – The logger software was upgraded from 1.16 to 2.02.2.
- June 12, 2009 – Liz VanBoskirk visited the site from 17:30 to 18:39 local time. The RT firmware was upgraded to 1.20 and quadrature adjusted. A Setra barometer was also installed.
- April 6, 2010 – From 15:30 to 17:30 PT Liz replaced the Q330.
- January 11, 2011 – Chad Pyatt deployed a temporary broadband sensor at the site to get seismic data to orient the borehole seismometer. He also collected Birdog data from the borehole seismometer.
- March 21, 2012 – A broadband seismometer, marmot and Q330 were temporarily deployed at the site. The seismometer will be used to orient the borehole seismometer.
- March 26, 2012 – An oscilloscope was configured as a time domain reflectometer and was used to verify the length of the seismometer cable. The calculated length was ~464', which is within the expected range of the value documented during installation (454-456').
- March 7, 2013 – The RT board was swapped, and the quadrature and chop were also adjusted. The rain gauge was cleaned and replaced.
- January 23, 2014 – Lliz applied the coldstart command to fix an invalid GPS clock.
- February 11, 2014 – Adam Woolace visited the site. When I arrived at the station he discovered the IDU was not powered up. He cycled the timer and it powered up. He thought the timer may have failed so he bypassed the timer. The IDU is now on all the time.
- November 17, 2014 – Station had been offline for several days. Adam visited and discovered the IDU was hung up. This was the 2nd time this problem had occurred. He will monitor the station over the next few weeks and reinstall a timer if the problem persists.
- December 22, 2014 – IDU stopped working again. Adam reconnected the existing timer and confirmed the settings were up to date. VSAT IDU immediately came back online after being power cycled. Rain gauge was completely clogged and overflowing. Rain data for fall/winter 2014 will not be accurate. He cleaned out the debris and confirmed rain gauge was in working order.
- August 6, 2015 – Swapped old VSAT IDU with a new HN7000. Cleaned rain gauge. Had some organic material in the screen but not enough to block flow.
- October 6, 2015 – Installed and configured a Metpack.
- February 22, 2018 – Verified Marmot was bad. Could not ping it from the internal LAN. Swapped failed Marmot receiver.
- August 10, 2018 – Swapped 6 batteries and cleaned clogged rain gauge.
- January 23, 2019 – There was a fatal error on CH1, no longer getting data from that channel. Used Reboot_Electronics to try and clear fatal error on CH1, did not work. Will need to try replacing RT board and oscillator board, as well as down hole instrument testing.
- March 26, 2019 – CH1 was in error mode, unresponsive. Rebooted all boards, which fixed issue. Set chop and quad on all channels.