

From: Campbell, Ben (NRD)
Sent: 3/14/2012 7:13:18 PM
To: 'Shori, Sunil' (sunil.shori@cpuc.ca.gov)
Cc: Redacted
Cabral, Mark (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=MAC5);
Ramaiya, Shilpa R (/o=PG&E/ou=Corporate/cn=Recipients/cn=SRRd)
Bcc:
Subject: FW: T-97 Nitrogen Test of Redacted Crossing

Hi Sunil:

At a recent meeting, you requested that we inform you any time we proposed a nitrogen test during our strength testing work. We have an upcoming test on seamless, 8-inch diameter, Line 148 in the San Joaquin Valley outside of the Modesto area that will occur in the next couple of weeks that will involve nitrogen. The test is described below and the drawings and STPR are attached. I can also make the Site Specific Test Plans available to you if you want them. The nitrogen test is necessary because of restrictions in the pipeline that cannot be removed without disturbing the levee system around the Redacted. The total test is about six miles but we are isolating about 4000 feet across the river for the nitrogen test, and we will be testing the rest of the pipeline with water. Because this area is county farmland with no occupied homes in the immediate vicinity, the issues that existed in Burlingame during that nitrogen test are not a concern at this location.

Please let me know if you would like more information about this test or if you have any concerns.

Ben Campbell

PG&E

415-971-5571

From: Cabral, Mark
Sent: Wednesday, March 14, 2012 3:31 PM
To: Campbell, Ben (NRD)
Subject: T-97 Nitrogen Test of [Redacted] Crossing

Ben,

Attached are the issued for construction drawings for T-97 on L-148 which include a nitrogen test of approximately 3,653' of 8" pipe - a portion of which crosses the [Redacted]. The test segment is between Locations B and C on the attached. These are shown in Plan View on Page 2 and Profile on Page on Page 5. The test ends and test configurations are on Page 3 of the drawing package.

This section of L-148 runs through farmland and is primarily Location Class I, with only approximately 75' on the far western end being Class II. The pipeline's MAOP is 408 psig and it operates at below 30% SMYS. The pipeline will be tested to 1.7x MAOP and spike tested to 1.1 x the minimum test pressure of 694 psig. There is an abandoned home and barn in the vicinity of the test on the east side of the river at Location C. There is a 3/4" service to this home/barn that will be included in this test. This service will be isolated at the regulator set at the property line and we will have a man stationed at this location for the duration of the test to keep all persons away from the pressurized piping.

This section of L-148 is being tested with nitrogen (see page 2 of attached STPR .pdf, Test 2, Sheet 1 of 1) due to two 4" taps and 8" pressure control fittings on the test section, one each on either side of the river that render the pipeline not piggable. The taps and PCFs cannot be easily reached to have them removed and spooled due to their location within the inward banks of the levees of the river.

The procedure for the test is to raise the pressure to between 100 psig and less than 20% SMYS, and hold for 1 hour to watch for leaks. If any are found they will be identified and repaired. Next we will then take the pressure up to 75% of test pressure and hold for an additional hour to settle out and obtain temperature equilibrium. Again, we will watch for leaks and if it is determined from the RCP program that we have a leak, it will be identified and

repaired. Finally we will spike test the segment to 764 psig for 15 minutes, then lower the pressure to between 694 – 725 psig for an additional 45 minutes, giving us a 1 hour strength test per 192.507 of the code. The limiting segment within this test segment is 425' of 8.625" x 0.312" SMLS pipe. There is some evidence that this pipe is Grade B, but in an abundance of caution I have called it as 24,000 SMYS. At minimum test pressure this segment will be at 23.50% SMYS and at spike pressure just over 44% SMYS.

If you have any additional questions or Mr. Shori would like to discuss this test or it parameters I am happy to meet at your convenience.

Regards,

Mark A. Cabral, PE