

**PACIFIC GAS AND ELECTRIC COMPANY  
Gas Operations Data Response**

PG&E Data Request Index No.:	10803		
Request Date:	04-27-2017	Date Sent:	05-01-2017
Requesting Party:	GOST-CUSTOMER		
External Requester:	Michael Dawson	PG&E Contact:	Valery Jorgensen

**QUESTION 10803.01:** Installation dates of pipelines (requested in Index 10792)

**RESPONSE 10803.01:** Gas transmission pipeline Line 191-1 and Distribution Feeder Main (DFM) 3001-01 are near the Lafayette-Moraga Regional Trail in Lafayette. Please refer to the table below for pipeline specifications for L-191-1 and DFM 3001-01 in this area.

Gas Transmission Pipeline	Material	Maximum Allowable Operating Pressure (MAOP) (psig) <sup>1</sup>	Diameter (Inches)	Installation Year	Specified Minimum Yield Strength <sup>2</sup> (SMYS)	Strength Test
191-1	Steel	283	12	Majority was installed in 1962, with smaller portions installed in 2014.	17.2%	The majority of this line was successfully pressure tested in 2014.
191-1	Steel	338	12 & 16	Majority was installed in 1967, with smaller portions installed in 1962 and 2013.	22.9%	The majority of this line was successfully pressure tested in 2013.
DFM 3001-01	Steel	170	4 & 12	Installed between 1947 and 1983, with a smaller portion installed in 2016.	32.0%	The majority of this line was successfully pressure tested between 1963 and 1983.

<sup>1</sup>Pounds per square inch gage (psig).

<sup>2</sup>The Specified Minimum Yield Strength (SMYS) is used by engineers to assess the degree to which the pipeline steel is under stress while operating. As such, a lower SMYS percentage means that the pipe is in a low stress condition. 100% SMYS is not a measure of full pipeline utilization; rather it is a condition where the pipeline is stressed to the point of mechanical failure (deformation).

**QUESTION 10803.02:** What is the size of the pipelines and what material are they made out of?

**RESPONSE 10803.02:** Please see Response 10803.01.

**QUESTION 10803.03:** Provide the maintenance frequency and history of the pipelines (patrols, leak surveys, cathodic protection system inspections and integrity assessments)

**RESPONSE 10803.03:** PG&E has a comprehensive inspection and monitoring program to ensure the safety of its natural gas transmission pipeline system. PG&E regularly conducts patrols, leak surveys, and cathodic protection (corrosion protection) system inspections for its natural gas pipelines. Any issues identified as a threat to public safety are addressed immediately. PG&E also performs integrity assessments of certain gas transmission pipelines in urban and suburban areas.

- **Patrols:** PG&E patrols its gas transmission pipelines at least quarterly to look for indications of construction activity and other factors affecting pipeline safety and operation.
  - Line 191-1 in this area was last aerial patrolled in April 2017, and there were no reported observations. Due to vegetative cover, portions Line 191-1 in your area were unable to be aerial patrolled in April 2017; however, those portions of the pipeline were last ground patrolled in April 2017, and there were no reported observations.
  - DFM 3001-01 in this area was last aerial patrolled in April 2017, and there were no reported observations. Due to vegetative cover, portions DFM 3001-01 in your area were unable to be aerial patrolled in April 2017; however, those portions of the pipeline were last ground patrolled in April 2017, and there were no reported observations.
  
- **Leak Surveys:** PG&E conducts leak surveys of its natural gas transmission pipelines semi-annually. Leak surveys are either conducted by a leak surveyor walking above the pipeline with leak detection instruments or conducted aurally and followed-up with a ground leak survey if there is a leak indication identified during the aerial survey.
  - Line 191-1 in this area was last leak surveyed in April 2017, and no leaks were found.
  - DFM 3001-01 in this area was last leak surveyed in April 2017, and no leaks were found.
  
- **Cathodic Protection System Inspections:** PG&E utilizes an active cathodic protection (CP) system on its gas transmission and steel distribution pipelines to protect them against corrosion. PG&E inspects its CP systems annually to ensure they are operating correctly.
  - The CP systems on Line 191-1 in this area were last inspected in November 2016, and were found to be operating correctly.
  - The CP systems on DFM 3001-01 in this area were last inspected in December 2016, and were found to be operating correctly.
  
- **Integrity Assessments:** PG&E incorporates three federally-approved methods in its Transmission Integrity Management Program: In-Line Inspections (ILI), Direct Assessment (DA) and Pressure Testing. An In-Line Inspection involves a tool (commonly known as a "pig") being inserted into the pipeline to identify any areas of concern such as potential metal loss (corrosion) or geometric abnormalities (dents) in the pipeline. Direct Assessment may involve any of three separate processes to assess for the presence of External Corrosion (EC), Internal Corrosion (IC) and Stress Corrosion Cracking (SCC), depending on the specific threat(s) identified. During ECDA, ICDA or SCCDA, the pipe is excavated in order to perform direct examination of the pipe

in identified areas of concern. Pressure testing is a strength test normally conducted using water, which is also referred to as a hydrostatic test.

PG&E performs pipeline integrity assessments on its sections of transmission pipeline in high consequence areas (HCAs) at least every seven years. The maximum allowable reassessment interval for integrity assessments are summarized in the Code of Federal Regulations (CFR) (see 49 CFR Part 192, Subpart O). Line 191-1 had an ECDA in 2013. This assessment identified no issues requiring corrective action.

**QUESTION 10803.04:** What is the depth of cover for the pipelines?

**RESPONSE 10803.04:** Please see below for the depth of cover approximations for L-191-1 and DFM 3001-01 in this area:

- PG&E's records indicate a depth of cover ranging from approximately 1.1 feet to approximately 8.9 feet for Line 191-1 near the Lafayette-Moraga Regional Trail in Lafayette.
- PG&E's records indicate a depth of cover ranging from approximately 1.6 feet to approximately 11.5 feet for DFM 3001-01 near the Lafayette-Moraga Regional Trail in Lafayette.

In addition, PG&E's records indicate a depth of cover ranging from approximately 4.5 feet to approximately 6.6 feet for DFM 3001-01 near your residence in Lafayette.

Please note that pipeline depth of cover may vary significantly over the length of the pipeline and is subject to change over time as land leveling and construction affects the amount of cover. Furthermore, without digging and exposing a pipeline, it is not possible to determine the exact depth at specific locations.

Please always call 811 at least two working days in advance of any digging or landscaping project to allow crews to mark the location of all underground utilities before any work begins (a free service).

**QUESTION 10803.05:** What is the maximum operating pressure for both lines?

**RESPONSE 10803.05:** Please see Response 10803.01.

**QUESTION 10803.06:** Are there automated valves or manual valves on the lines? Where are the nearest valves located?

**RESPONSE 10803.06:** PG&E is compiling this information and will provide it as soon as it becomes available.

**QUESTION 10803.07:** Are there any welds on the pipelines in this area? If there are welds, please provide background information on the welds (for example: location, type, etc.)

**RESPONSE 10803.07:** PG&E is compiling this information and will provide it as soon as it becomes available.

**QUESTION 10803.08:** as well as a map of the proposed work for the area (see attached).

**RESPONSE 10803.08:** Please see attachment "*Index 10803-08\_Lafayette\_city\_CPSI\_vers20170428.pdf*" for a map of the unacceptable risk vegetation encroachments in the City of Lafayette.

Please see below for the map specifications:

- Map Scale: 1:13,200
- Size: 8.5" x 11" (portrait)
- Basemap: Imagery
- Tree Proposed for Removal Symbology
  - Unacceptable Risk Tree: Green circle with white outline
- City Boundary: Symbolized as dashed grey line
- Highways, interstates, routes and roads labeled for reference
- Orange extent indicator on the inset map

**QUESTION 10803.09:** Please provide close-up map(s) of proposed work areas along the Lafayette-Moraga Regional Trail in Lafayette.

**RESPONSE 10803.09:** PG&E is still preparing these maps and will provide them as soon as possible.