

Integrity Management and Corrosion Protection

Integrity Testing:

HPOC flowlines are pressure tested initially and periodically in accordance with the requirements of COGCC Rule 1104. Initial flowline pressure testing is conducted in accordance with Rule 1104.a and 1104.h prior to placing new flowlines into service. Annual and tri-annual flowline pressure testing is conducted as prescribed in Rule 1104.

Flowlines are tested at OR above Max Anticipated Operating Pressure, which is determined by historical operations data or anticipated operating conditions. Flowline pressure tests are conducted for at least 30 minutes, unless otherwise specified by the industry standard. A pressure drop over the duration of the test exceeding 10% of the starting pressure is considered a failed test, unless the particular industry standard calls for a different threshold of failure.

On-Location:

Below Ground – Tri-annual pressure testing

Above Ground – Monthly AVO inspections

Off-Location – Annual pressure testing

Dump Lines (in the event isolation is not possible) – Annual static head tests & Monthly AVO inspections

Gas Gathering and Inject System:

HPOC utilizes a third-party vendor to conduct annual instrument monitoring of this portion of their off-location gas flowline network. The vendor uses sensors mounted on light aircraft to detect the presence of elevated levels of methane in the air below the plane. By combining infrared spectroscopic data with optical images of the ground, GPS location, and inertial orientation data, the vendor creates maps showing the location and rate of any detected methane emissions. The vendor provides CSV files with timestamped GPS flight path data that show the dates and times during which the pipelines were inspected.

Corrosion Protection:

The main gathering and injection pipeline system is provided CP current through 4 impressed current cathodic protection systems located throughout our field. The Peterson is not on this system, so the extent of its CP is delivered by Anode bags placed periodically along the right-of-way lines.