



YE Loop Flowline

Kinder Morgan maintains that the riser equipment observed in the Field Inspection Report Doc #714001501 east of the former YE-7 well location is part of the active YE Loop (Flowline Facility ID: 478121) and not associated with the YE-7 well location. The above ground equipment observed is required to operate solely the YE Loop flowline. See Form 44 Doc# 404022508.

Although the YE Loop flowline is registered under the former YE-7 well location as its Endpoint, it has never been functionally nor operationally associated with the location since its initial registration. The true endpoint of the YE Loop is the YE-YF Manifold (37.4987, -108.8084), which is situated just north of the YE-7 location. The registration was organized this way because during initial implementation of the 1100 series rules, and in subsequent email communication with ECMC Integrity Engineering Staff, ECMC expressed preference for operators to utilize existing Location IDs for endpoint registrations, even if not precise. **As such, due to the YE-7 location's proximity to the Endpoint manifold, the YE Loop became administratively (but erroneously) associated with the YE-7 location.**

Per recommendation by ECMC Integrity Engineer Steven Wheeler during a teleconference on 12/17/2024, Kinder Morgan requests that the YE-YF Manifold be assigned a Location ID so that the YE Loop flowline can be dissociated from the YE-7 location within ECMC's COGIS database, and have its endpoint updated to the YE-YF Manifold.

YE-7 Production Flowline

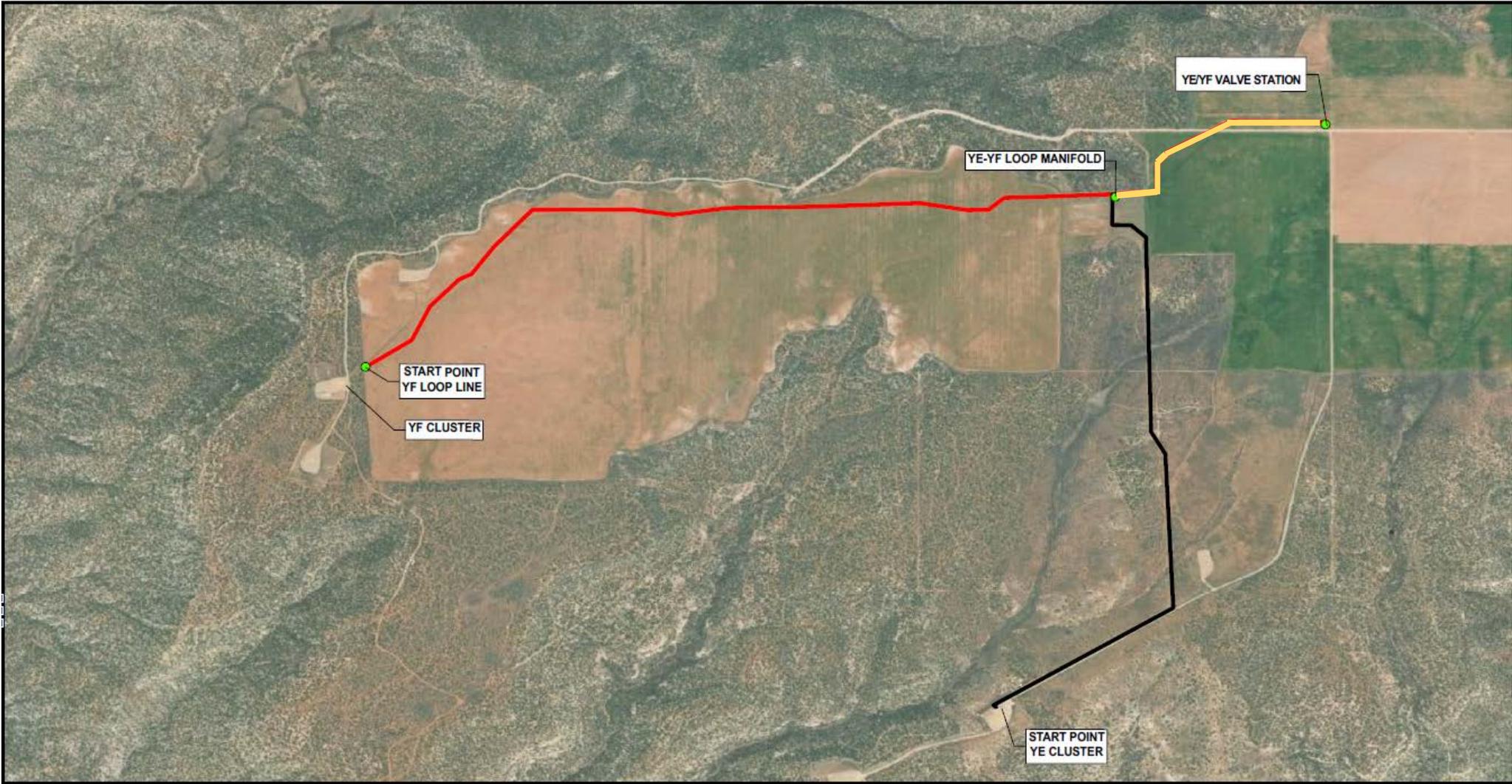
The YE-7 production flowline was constructed in conjunction with the drilling of the YE-7 well circa 2009, prior to sufficient evaluation of the well's viability as a producer. The YE-7 flowline extended east from the wellhead and then traversed south, terminating at the YE Cluster. The well never showed production so its flowline was never used. Kinder Morgan plugged the YE-7 well in 2017, and shortly thereafter, utilized this existing infrastructure to convert the majority of the unused YE-7 flowline into the YE Loop, which supports additional capacity from the YE Cluster. The segment of pipe from the YE-7 wellhead to the bollard cage/below grade flange on the eastern edge of the location was permanently abandoned on 7/12/2017 per the 1100 series rules (see Form 42 Doc #401343995). A small section of flowline was constructed from this flange, extending north to the YE-YF Loop Manifold to complete the YE Loop. The original YE-7 production flowline was not required to be registered in its original configuration as a production flowline because it was abandoned prior to implementation of the flowline registration requirements. The re-purposed flowline was appropriately registered in its current configuration as the YE Loop.

Annulus Vents

With respect to design, construction and operation, all Kinder Morgan CO₂ Source gathering system flowlines follow applicable American Petroleum Institute (API) standards. Due to the highly corrosive nature of wet CO₂, all gathering system flowlines have a coated carbon steel exterior with a high density polyethylene (HDPE) liner. The HDPE liners are pulled through the carbon steel pipe (a process called slip lining) after the steel pipe is welded together and buried in a trench. The slip lining process results in a micro-annulus between the carbon steel pipe and the HDPE liner. Annulus monitoring vents, also known as “tattletales”, are installed on the gathering flowlines and appear as small diameter risers above the ground surface. Welded steel bollards protect the above-ground risers from damage by wildlife (primarily bears), domestic livestock, and farm equipment.

Kinder Morgan CO₂ Source gathering system flowlines are pressure-tested on a quarterly frequency. In the case of a failed pressure test, the annulus monitoring vents can be used to narrow down the location of the source of a leak in a flowline that might be several miles in length. Annulus monitoring vents are installed on the carbon steel pipe at the endpoints of the flowline and on either side of any flanged connections on the flowline. Annulus monitoring vents are installed on either side of a flange set because the flanged connection blocks communication between the annular spaces on either side of the connection. The spacing of annulus monitoring vents is typically determined by the maximum length of pipe that liner can be pulled through. For example, the typical diameter of Kinder Morgan CO₂ Source flowlines is 10 inches and the maximum length of HDPE liner that can be pulled through a 10-inch diameter carbon steel pipe is approximately 2,000 feet.

The annulus monitoring vents are installed on the flowlines by welding threadolet on the twelve o'clock position of the carbon steel pipe, drilling a hole through the threadolet and carbon steel pipe, and extending small diameter carbon steel pipe from the threadolet to the surface. Ball valves are typically installed on the buried and surface ends of the annulus monitoring vent pipes. Typical annulus monitoring vent and protective bollard configurations are shown on the attached drawing.



Legend

- YE Loop
- YE/YF Loop
- YF Loop

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Scale in Miles

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YE-YF Loop Manifold
Montezuma County, CO

