

Table 1 AP Pipeline Segments

Pipeline Segment	Threats	History	Consequences	Mitigation
Carbon Transmission	Manufacturing defects Construction defect potential Third Party Activity External corrosion Coating Type SCC	Pipeline is 1958 vintage Enamel coated pipe Operating at 58% stress level No Hydrostatic strength test	Loss of service and gas supply for a major portion of Calgary area residential, commercial and industrial customers, and is located in class 3 locations, safety and economic impacts.	Urban portions of the line to be addressed under Calgary UPR program. Remainder of pipeline had in-line inspection conducted in 2014 to carbon rocky view site. Until removal from high pressure service the line is inspected twice annually through a foot parole including leak detection.
Petrogas Meadowfield Transmission	Manufacturing defects Construction defect potential Third Party Activity External corrosion Coating Type SCC	Pipeline is 1966 vintage PE tape coated pipe Operating at 50% stress level No Hydrostatic strength test	Loss of service and gas supply for a portions of Calgary area residential, commercial and industrial customers, and is located in class 3 locations; safety and economic impacts.	Urban portions of the line to be addressed under Calgary UPR program. Remainder of pipeline is identified for future in-line inspection program. Until removal from high pressure service the line is inspected twice annually through a foot parole including leak detection.
Jumping Pound Transmission	Manufacturing defects Construction defect potential Third Party Activity External corrosion Coating Type SCC	Pipeline is 1950 vintage Enamel coated pipe Operating at 45% stress level No Hydrostatic strength test	Loss of service and gas supply for a major portion of Calgary area residential, commercial and industrial customers, and is located in class 3 locations; safety and economic impacts.	Urban portions of the line to be addressed under Calgary UPR program. Remainder of pipeline had in-line inspection conducted in 2012. Until removal from high pressure service the line is walked twice annually and a leak inspection is completed during that foot patrol.
Pembina Transmission	Manufacturing defects Construction defect potential Third Party Activity External corrosion Coating Type SCC	Pipeline is 1954 vintage Enamel coated pipe Operating at 50% stress level No Hydrostatic strength test	Loss of service and gas supply for a major portion of Edmonton area residential, commercial and industrial customers, and is located in class 3 locations; safety and economic impacts.	Urban portions of the line to be addressed under Edmonton UPR program. Remainder of pipeline is identified for future in-line inspection. Until removal from high pressure service the line is walked twice annually and a leak inspection is completed during that foot patrol.
Devon Transmission	Manufacturing defects Construction defect potential Third Party Activity External corrosion Coating Type SCC	Pipeline is 1950 vintage Enamel coated pipe Operating at 45% stress level No Hydrostatic strength test	Loss of service and gas supply for a portions of Edmonton area residential, commercial and industrial customers, and is located in class 3 locations; safety and economic impacts.	Urban portions of the line to be addressed under Edmonton UPR program. Remainder of pipeline had in-line inspection conducted in 2014. Until removal from high pressure service the line is walked twice annually and a leak inspection is completed during that foot patrol.