

TALISMAN

E N E R G Y

PRODUCER TIE-IN SPECIFICATIONS

Talisman Midstream Operations - Foothills Midstream Area

GAS QUALITY SPECIFICATIONS

Item	Description	Specification
1.1	Gas	Hydrocarbon gas production shall be free of deleterious substances, sand, completion fluids (drilling mud, acid, fractionation sand, etc.) waxes, asphaltenes, crude oil, Sx, or other objectionable substances in such quantities as may, in Talisman's sole discretion, be injurious to their facilities.
1.2	Water Content	Dry Gas: Maximum 0.032 kg / 103m ³ (2 lbs / mmscf). Dehydrated gas only. Wet Gas: No free water. Water must be in the gas phase at pipeline operating pressures.
1.3	Hydrocarbon Liquids	Dry Gas: No free liquids. Removed at the well site. Wet Gas: No free liquids. Removed at the well site. Exceptions will be evaluated on a well by well basis.
1.4	Hydrogen Sulphide	Hydrogen sulphide (H ₂ S) content of the hydrocarbon gas production shall not exceed ERCB pipeline approvals of: - 125 mol / kmol (12.5%) West of 08-24-057-06W6 (F1), - 275 mol / kmol (27.5%) East of 08-24-057-06W6 (F1), - 275 mol / kmol (27.5%) between 05-31-054-22W5 and 5-25-051-22W5 (Wet Leg)
1.5	Mercaptans	115 mg / m ³ (5 grains / 100scf)
1.6	Pressure	Hydrocarbon gas production shall not exceed the allowable Talisman Maximum Operating Pressure (MOP): - 13,500 kPa (1957.5 psi) West of 08-24-057-06W6 (F1), - 12,500 kPa (1813 psi) between 08-24-057-06W6 (F1) and 14-32-054-22W5 (B7), - 9,930 kPa (1440 psi) East of 14-32-054-22W5 (B7), - 9,790 kPa (1420 psi), de-rated for temperature between 05-31-054-22W5 and 5- 25-51-22W5 (Wet Leg).
1.7	Temperature	Dry Gas: Gas temperature shall not exceed design operating temperature of 49°C (Yellow Jacket limitations). Wet Gas: Hydrocarbon gas and liquid production shall maintain an operating temperature 8°C above hydrate formation temperature and below 65°C. The hydrate temperature will be dependent on the delivery point.