

## **ARP Series Gas Specification**

Gaseous fuels supplied to the Atrex Energy ARP Series of Fuel Cells:

- 1. Shall have a nominal gross heating value of:
  - Natural Gas: 750 to 1100 BTU/cu.ft., for fuels outside of this specification, please consult with Atrex Energy
  - Propane/LPG: 2400 to 2700 BTU/cu.ft., for fuels outside of this specification, please consult with Atrex Energy
  - Other gas mixtures (Syngas, APG, Biogas etc.) or NGL: Consult with Atrex Energy
- 2. Shall have maximum Water content: <2500ppmw, non-condensing at operating temperature and pressure
- 3. Shall have the maximum Sulfur concentration of:
  - Total concentration: <100ppmw
  - COS (carbonyl sulfide): <100ppmw</li>
  - DMS (or di-sub sulfides): <50ppmw
- 4. Shall have Fuel supply line conditions of:
  - Temperature: <55°C/130°F</li>
  - Pressure: a) inlet to Fuel Cell system: 1-5 psig, b) inlet to Atrex Energy's High pressure
    Regulator kit option: 5-125 psig
- 5. Shall not contain any particulates larger than 30 microns in diameter including but not limited to sand, dust, gums, crude oil, and other impurities
- 6. Shall not have a dew point in excess of 0°C/32°F at 25 psig
- 7. Shall not contain more than 1% of oxygen
- 8. Shall not contain more than 12% of CO<sub>2</sub> or N<sub>2</sub>