9. QUALITY

- 9.1 Gas delivered by Shipper to Transporter at the Receipt Point(s), and Gas delivered to Shipper by Transporter at the Delivery Point(s), shall conform to the specifications set forth in this Section 9.
- 9.2 (a) Heating Value. The Gas shall be natural gas having a Total Heating Value of not less than 900 nor more than 1100 Btus per Cubic Foot.
 - (b) Freedom From Objectionable Matter. The Gas shall be commercially free (at prevailing pressure and temperature) from sand, dust, gums, crude oil, impurities and other objectionable substances which might interfere with its transmission through pipelines or its commercial utilization or which may cause injury to or interference with proper operation of the lines, regulators, meters or other appliances through which it flows.
 - (c) The Gas shall not contain levels of the following contaminants higher than the levels specified below:
 - Sulfur/Hydrogen Sulfide. Not more than ten grains of total sulfur per 100 cubic feet nor more than one-quarter grain of hydrogen sulfide per 100 cubic feet;
 - Oxygen. Not more than four-tenths of one percent by volume of oxygen, provided that Shipper shall make every reasonable effort to keep the Gas free of oxygen;
 - (iii) Carbon Dioxide. Not more than two percent by volume of carbon dioxide;
 - (iv) Entrained Water. Not more than four pounds of entrained water per 1,000,000 cubic feet, at a pressure base of 800 pounds per square inch and a temperature of 15 degrees Fahrenheit as determined by a dew-point apparatus approved by the Bureau of Mines or such other apparatus as may be mutually agreed upon;
 - Polychlorinated Biphenyl (PCB). No measurable quantity of PCB utilizing the best available measurement technology; and
 - (vi) Hydrocarbon Dew Point. Less than 15 degrees Fahrenheit at 800 pounds per square inch.
 - (d) Temperature. The Natural Gas shall have a temperature of not more than 110 degrees Fahrenheit.
- 9.3 Quality Tests.
 - (a) Upon reasonable notice from Transporter, Shipper shall conduct or cause to be conducted such tests as are required to determine whether Gas tendered by Shipper to Transporter is in conformance with the specifications set forth in this Section 9. Upon reasonable notice from Shipper, Transporter shall conduct such tests as are required to determine whether Gas redelivered by Transporter to Shipper at the Delivery Point(s) is in conformance with the specifications set forth in this Section 9.
 - (b) The gross heating value of Gas delivered hereunder shall be determined from read-outs of continually operating measurement instruments. The method shall consist of one or more of the following:
 - (1) calorimeter;
 - (2) gas chromatograph;
 - (3) any other method mutually agreed upon by the parties.

Measurement of gross heating value with the calorimeters shall comply with the standards set forth in the American Society for Testing and Materials' ASTM D 1826- 83 or any subsequent revisions. Analysis of Gas with gas chromatographs shall comply with the standards set forth in ASTM D 1945-81 or any subsequent revisions. Calculation of the gross heating value from compositional analysis by gas chromatography shall comply with the standards set forth in ASTM D 3588-81 or any subsequent revisions. Transporter or its Agent shall calibrate and maintain the gross heating value measurement device at intervals as agreed upon by Transporter and Shipper. Shipper shall have access to Transporter's devices and shall be allowed to inspect the devices and all charts or other records of measurement at any reasonable time.

- (c) Tests shall be made to determine the total sulfur, hydrogen sulfide, carbon dioxide and oxygen content of the Gas, by approved standard methods in general use in the gas industry, and to determine the hydrocarbon dew point and water vapor content of such Gas by methods satisfactory to the parties. Tests shall be made frequently enough to ensure that the Gas is conforming continuously to the quality requirements.
- 9.4 Failure to Conform to Specifications. If the Gas offered for delivery to Transporter at the Receipt Point(s) or made available to or on behalf of Shipper at the Delivery Point(s) by Transporter shall fail at any time to conform to any of the specifications set forth in Sections 9.1, 9.2 or 9.3 of the General Terms and Conditions of this Tariff, then the party receiving such Gas (the "receiving party") shall notify the other party (the "tendering party") of such deficiency and thereupon the receiving party may at its option refuse to accept such Gas pending correction by the tendering party. Upon the tendering party's failure promptly to remedy any deficiency the receiving party may accept such Gas and may make changes necessary to bring such Gas into conformity with such specifications, and the tendering party shall reimburse the receiving party for any reasonable expense incurred by it in effecting such changes. In no event shall the failure of any Gas offered for delivery to Transporter by Shipper or for Shipper's account to conform to any of the specifications set forth in Sections 9.1, 9.2 or 9.3 of the General Terms and Conditions of this Tariff relieve Shipper of Shipper's obligation to pay Transportation Reservation Charges, if applicable. In no event shall the failure of any Gas made available to or on behalf of Shipper at any Delivery Point(s) to conform to any of the specifications set forth in Sections 9.1, 9.2 or 9.3 of the General Terms and Conditions of this Tariff relieve Shipper of Shipper's obligation to pay the Transportation Commodity Charges and, if applicable, Transportation Reservation Charges.