CLAIMS

1. A method for analyzing impurities contained in a sample gas, comprising:

a pretreatment step of reducing a partial pressure of water in a gas cell into which the sample gas is introduced to 10 Pa or less; and

an analysis step of introducing the sample gas into the gas cell in which the pretreatment step has been carried out and detecting the impurities by Raman spectroscopy,

wherein in the pretreatment step, the partial pressure of water is not reduced for at least one optical path selected from an optical path of an excitation light and an optical path of a Raman scattered light.

2. The gas analyzing method according to claim 1, wherein the pretreatment step is a step of purging an inside of the gas cell with a dry gas.

3. The gas analyzing method according to claim 1 or 2, wherein the impurity is at least one of a fluorine gas, a chlorine gas, a bromine gas, hydrogen fluoride, hydrogen chloride, hydrogen bromide, water, and carbon dioxide.

4. The gas analyzing method according to any one of claims 1 to 3, wherein the sample gas contains at

least one of a fluorine compound, a chlorine compound, and a bromine compound.