# ISO 16960:2014-10 (E)

## Natural gas - Determination of sulfur compounds - Determination of total sulfur by oxidative microcoulometry method

## Contents

Page


Foreword ..... iv

Introduction ..... v

1 Scope ..... 1

2 Normative references ..... 1

3 Test principle ..... 1

4 Reagents ..... 1

5 Apparatus ..... 2
5.1 Converter ..... 2
5.2 Titration cell ..... 2
5.3 Microcoulometer ..... 2
5.4 Flow controller ..... 2
5.5 Electromagnetic agitator ..... 2
5.6 Medical syringe ..... 2
5.7 Volumetric flask ..... 2

6 Test preparation ..... 2
6.1 Preparation of electrolyte ..... 2
6.2 Reference sample ..... 2
6.3 Apparatus installation ..... 3
6.4 Preparation of instrument ..... 3
6.5 Check and adjustment of the instrument ..... 3
6.6 Determination of recovery factor of sulfur ..... 3

7 Test procedure ..... 4
7.1 Sampling ..... 4
7.2 Sample injection and measurement ..... 4

8 Calculation ..... 4
8.1 Volume conversion ..... 4
8.2 Calculation of total sulfur mass concentration in the gas sample ..... 5

9 Precision ..... 6
9.1 General ..... 6
9.2 Repeatability ..... 6

Bibliography ..... 7