

# ISO 2615:2024-04 (E)

## Analysis of natural gas -Biomethane - Determination of the content of compressor oil

---

<b>Contents</b>		<b>Page</b>
<b>Foreword</b>		<b>iv</b>
<b>Introduction</b>		<b>v</b>
<b>1 Scope</b>		<b>1</b>
<b>2 Normative references</b>		<b>1</b>
<b>3 Terms and definitions</b>		<b>1</b>
<b>4 Principle</b>		<b>2</b>
<b>5 Chemicals and materials</b>		<b>2</b>
5.1 Compressor oils		2
5.2 Solvent		3
5.3 Sampling filters		3
5.4 Backup filters		3
5.5 Calibration standards		3
5.6 Nitrogen pure gas		3
5.7 Compressed liquid propane		3
<b>6 Apparatus</b>		<b>3</b>
6.1 Gas chromatograph		3
6.2 Capillary column		3
6.3 Ultrasonic bath		3
6.4 Pressurised fluid extraction apparatus		3
6.5 Filter housing		4
6.6 Rotary evaporator, concentration apparatus		4
6.7 Laboratory glassware		4
<b>7 Sampling</b>		<b>4</b>
7.1 Sampling apparatus		4
7.2 Sampling steps		4
<b>8 Methods to recover the oil from the buffer tank</b>		<b>5</b>
<b>9 Extraction procedure for coalescing filters</b>		<b>5</b>
9.1 Procedure 1: Ultrasonic extraction – nitrogen flush		5
9.2 Procedure 2: Pressurised fluid extraction		5
<b>10 Analysis</b>		<b>6</b>
10.1 GC/MS analysis		6
10.2 GC/FID analysis		6
<b>11 Calculations</b>		<b>6</b>
<b>12 Test report</b>		<b>7</b>
<b>Annex A (informative) Example of a GC/MS chromatogram obtained for a compressor oil (Figure A.1)</b>		<b>8</b>
<b>Annex B (informative) Example of a GC/FID chromatogram obtained for a compressor oil (Figure B.1)</b>		<b>9</b>
<b>Annex C (informative) Different types of oils</b>		<b>11</b>
<b>Bibliography</b>		<b>13</b>