



**GAW World Calibration Centre (WCC) for Methane
and
Quality Assurance/Science Activity Centre (QA/SAC)
in Asia and the South-West Pacific**



**Methane Reference Gas Intercomparison for Japan from 2015 to 2016
Technical Details on Laboratory Measurements**

National Institute for Environmental Studies (NIES)

1. Information on contributors

- (1) Contributors: Dr. Toshinobu MACHIDA
- (2) Organization: National Institute for Environmental Studies

2. Information on instrument

- (1) Analytical method: Gas Chromatography (FID)
- (2) Manufacturer: Agilent Technologie
- (3) Model: 7890

3. Information on sampling

- (1) Sampling volume: 10 ml
- (2) Carrier gas: Nitrogen (purity >99.99995%)
- (3) Flow rate: 40 ml/min
- (4) Temperature of the oven: 80 °C

4. Information on the main column

- (1) Diameter: OD 1/8"
- (2) Length: 2 m
- (3) Material: Stainless Steel

5. Information on column packings

- (1) Trade name: Molecular Sieve 5A
- (2) Mesh: 60/80

6. Information on standard gas

- (1) Number of standard gases: 4
- (2) Mole fraction of standard gases: 1310.62, 1712.71, 2097.57, 2486.92 ppb
- (3) Diluent gas: Synthetic air
- (4) Scale: NIES94 Scale

7. Other information (references, papers, literatures, etc.)

Pre Column: Polapak Q, 50/80 mesh, 1/8"OD x 2m