



**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 2012 to 2013
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, Japan

2. Information on instrument

- (1) Analytical method: Gas Chromatography (FID)
- (2) Manufacturer: Agilent Technologies
- (3) Model: HP5890

3. Information on sampling

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

4. Information on the main column

- (1) Diameter: 1/8 inch
- (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: 7
- (2) Concentration of standard gases: 512, 1261, 1512, 1762, 2014, 2512 and 3012 ppb
- (3) Scale: NIES94 Scale

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