

HJ 1012-2018

	.....	ii
1	.....	1
2	.....	1
3	.....	1
4	.....	2
5	.....	3
6	.....	5
7	.....	7
8	.....	12
9	.....	13

2018 12 29
2019 7 1

1

“ ”

2

GB 3836.1

GB/T 4208

IP

GB/T 16157

HJ 38

HJ 168

HJ 604

-

3

3.1

total hydrocarbons THC

HJ 38 HJ 604

3.2

nonmethane hydrocarbons NMHC

HJ 38 HJ 604

3.3

instrument detection limit

3.4

quantitative measurement repeatability

3.5

response factor

3.6

instruments parallelism

3.7

conversion efficiency

4

4.1

/

4.2

5.1.4

5.2.4.1

4.3

/

/

/

5.2.4.2

4.4

5.2.4.3

2

4.5

5.2.4.5

4.6

5

5.1

5.1.1

5.2.1

5.1.2

5.2.2

5.1.3

5.2.3

5.1.4

5.2.4

120

20

5.2

5.2.1

5.2.1.1

5.2.4.5.4

5.2.4.5.5 /

5.2.4.5.6

6

6.1

6.1.1

6.1.1.1

0.13 $\mu\text{mol/mol}$ 0.07 mg/m^3

6.1.1.2

6.1.1.3

2.0%

6.1.1.4

$\pm 2.0\%$

6.1.1.5

80% 120%

6.1.2

6.1.2.1

2 min

6.1.2.2

0 40

$\pm 5.0\%$

6.1.2.3

$\pm 10\%$

$\pm 2.0\%$

6.1.2.4

$\pm 5.0\%$

6

6.1.2.5

VOCs

1

1

1		0.9 1.2
2		0.8 1.2
3		0.8 1.2
4		0.75 1.15

6.1.2.6

2

5.0%

6.1.2.7

95%

6.2

6.2.1

6.2.1.1

1.49 $\mu\text{mol/mol}$ 0.8 mg/m^3

6.2.1.2

6.2.1.3

2.0%

6.2.1.4

$\pm 2.0\%$

6.2.1.5

80% 120%

6.2.2

6.2.2.1

2 min

6 2 2 2

- d) 0 ± 2 30 min t_3
 M_3
e) 20 ± 2 30 min t_4
 M_4
f) 5

6.1.2.2 6.2.2.2

$$b_{sr} = \frac{(M_3 - Z_3) - \frac{(M_2 - Z_2) + (M_4 - Z_4)}{2}}{R} \times 100\% \quad \frac{(M_1 - Z_1) - \frac{(M_0 - Z_0) + (M_2 - Z_2)}{2}}{R} \times 100\% \quad \dots \quad 5$$

b_{sr} -----		%		
M_0 -----	t_0		$\mu\text{mol/mol}$	mg/m^3
M_1 -----	t_1		$\mu\text{mol/mol}$	mg/m^3
M_2 -----	t_2		$\mu\text{mol/mol}$	mg/m^3
M_3 -----	t_3		$\mu\text{mol/mol}$	mg/m^3
M_4 -----	t_4		$\mu\text{mol/mol}$	mg/m^3
Z_0 -----	t_0	$\mu\text{mol/mol}$	mg/m^3	
Z_1 -----	t_1	$\mu\text{mol/mol}$	mg/m^3	
Z_2 -----	t_2	$\mu\text{mol/mol}$	mg/m^3	
Z_3 -----	t_3	$\mu\text{mol/mol}$	mg/m^3	
Z_4 -----	t_4	$\mu\text{mol/mol}$	mg/m^3	
R -----		$\mu\text{mol/mol}$	mg/m^3	

7. 3. 8

			50% \pm 5%
	T		10%
		P	
10%			Q
	3	6.2.2.3	6

$$V = \frac{P - T}{R} \times 100\% \quad \frac{Q - T}{R} \times 100\% \quad \dots \quad 6$$

V —		%		
T —			$\mu\text{mol/mol}$	mg/m^3
P —		10%	$\mu\text{mol/mol}$	mg/m^3
Q —		10%	$\mu\text{mol/mol}$	mg/m^3
R —		$\mu\text{mol/mol}$	mg/m^3	

7.3.9



b)	90%	+	10%	+	22.4 μmol/mol	16 mg/m ³	
	224 μmol/mol		160 mg/m ³				<i>b</i> ₁
c)	80%	+	20%	+	22.4 μmol/mol	16 mg/m ³	
	224 μmol/mol		160 mg/m ³				<i>b</i> ₂
					<i>a</i> ₀		<i>b</i> ₀
	<i>a</i> ₁ <i>a</i> ₂		<i>b</i> ₁ <i>b</i> ₂				<i>a</i> ₁ <i>a</i> ₂ <i>b</i> ₁ <i>b</i> ₂
		≙			\bar{a}_i	\bar{b}_i	9

6.1.2.4 6.2.2.6

$$= \frac{\bar{a}_0}{R} \times 100\%$$

W

$$P_j = \frac{1}{C_j} \times \sqrt{\frac{\sum_{i=1}^2 (C_{i,j} - \bar{C}_j)^2}{1}} \times 100\% \quad \dots\dots\dots 11$$

P_j — j %
 — j $\mu\text{mol/mol}$ mg/m^3
 $C_{i,j}$ — i j $\mu\text{mol/mol}$ mg/m^3
 i — $i=1$ 2
 J — $j=1$ 3

7. 3. 14

				7.3.2
		2.0%	2.0%	7.3.3
		± 2.0% F.S.	± 2.0% F.S.	7.3.4
		80% 120%	80% 120%	7.3.5
		2 min	2 min	7.3.6
		± 5.0% F.S.	± 5.0% F.S.	7.3.7
		/	± 2.0% F.S.	7.3.8
		± 2.0% F.S.	± 2.0% F.S.	7.3.9
		/	± 2.0% F.S.	7.3.10
		± 5.0% F.S.	± 5.0% F.S.	7.3.11
		0.9 1.2	0.9 1.2	7.3.12
		0.8 1.2	0.8 1.2	
		0.8 1.2	0.8 1.2	
		0.75 1.15	0.75 1.15	
		5.0%	5.0%	7.3.13
		95%	95%	7.3.14