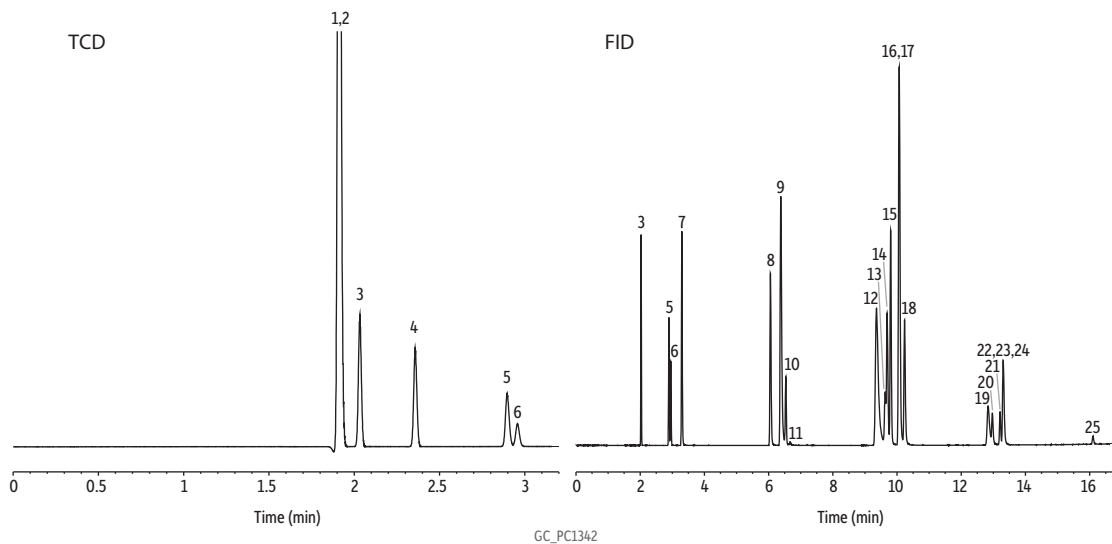


Refinery Gas on Rt-Q-BOND

- 0.53 mm ID provides more sample loading capacity than 0.32 mm ID.



Peaks	Mol%	Peaks	Mol%
1. Nitrogen	Balance	14. Butene-1	2.00
2. Carbon monoxide	1.00	15. 1,3-Butadiene	3.00
3. Methane	5.00	16. Butane	4.00
4. Carbon dioxide	3.00	17. <i>trans</i> -2-Butene	3.00
5. Ethylene	2.00	18. <i>cis</i> -2-Butene	2.00
6. Acetylene	1.00	19. Isopentane	1.00
7. Ethane	4.00	20. Pentene-1	0.40
8. Propylene	3.00	21. <i>trans</i> -2-Pentene	0.40
9. Propane	6.00	22. 2-Methyl-2-butene	0.20
10. Propadiene	1.00	23. Pentane	1.00
11. Cyclopropane	0.04	24. <i>cis</i> -2-Pentene	0.15
12. Isobutane	5.00	25. Hexane	0.10
13. Isobutene	1.00		

Column Rt-Q-BOND, 30 m, 0.53 mm ID, 20 μ m (cat.# 19742)
Sample Refinery gas standard #2 (cat.# 34442)
Injection split
Liner: Topaz 2.0 mm ID straight inlet liner (cat.# 23313)
Inj. Temp.: 200 °C
Oven
Oven Temp.: 40 °C to 250 °C at 10 °C/min
Carrier Gas He, constant flow
Flow Rate: 4 mL/min
Detector FID
Instrument Agilent 7890B GC
Notes The sample was analyzed using two detectors:
 1. FID at 260 °C, 40 μ L split injection (split ratio 10:1)
 2. TCD at 250 °C, 150 μ L split injection (split ratio 10:1)