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Appendices

1. % Selectivity of gas products

$$\% \text{ Selectivity of X} = \frac{\text{Concentration of X} \times 100}{\text{Total concentration of products}}$$

$$\text{Concentration of X} = \frac{b \times c}{a}$$

a = Peak area of X in standard gas

b = % molar of X in standard gas

c = Peak area of X in sample products

2. % Selectivity of liquid products

$$\% \text{ Selectivity of Y} = \frac{\text{Concentration of X} \times 100}{\text{Total concentration of products}}$$

$$\text{Concentration of X} = \frac{b \times c}{a}$$

a = Peak area of X in standard liquid

b = % molar of X in standard liquid

c = Peak area of X in sample products

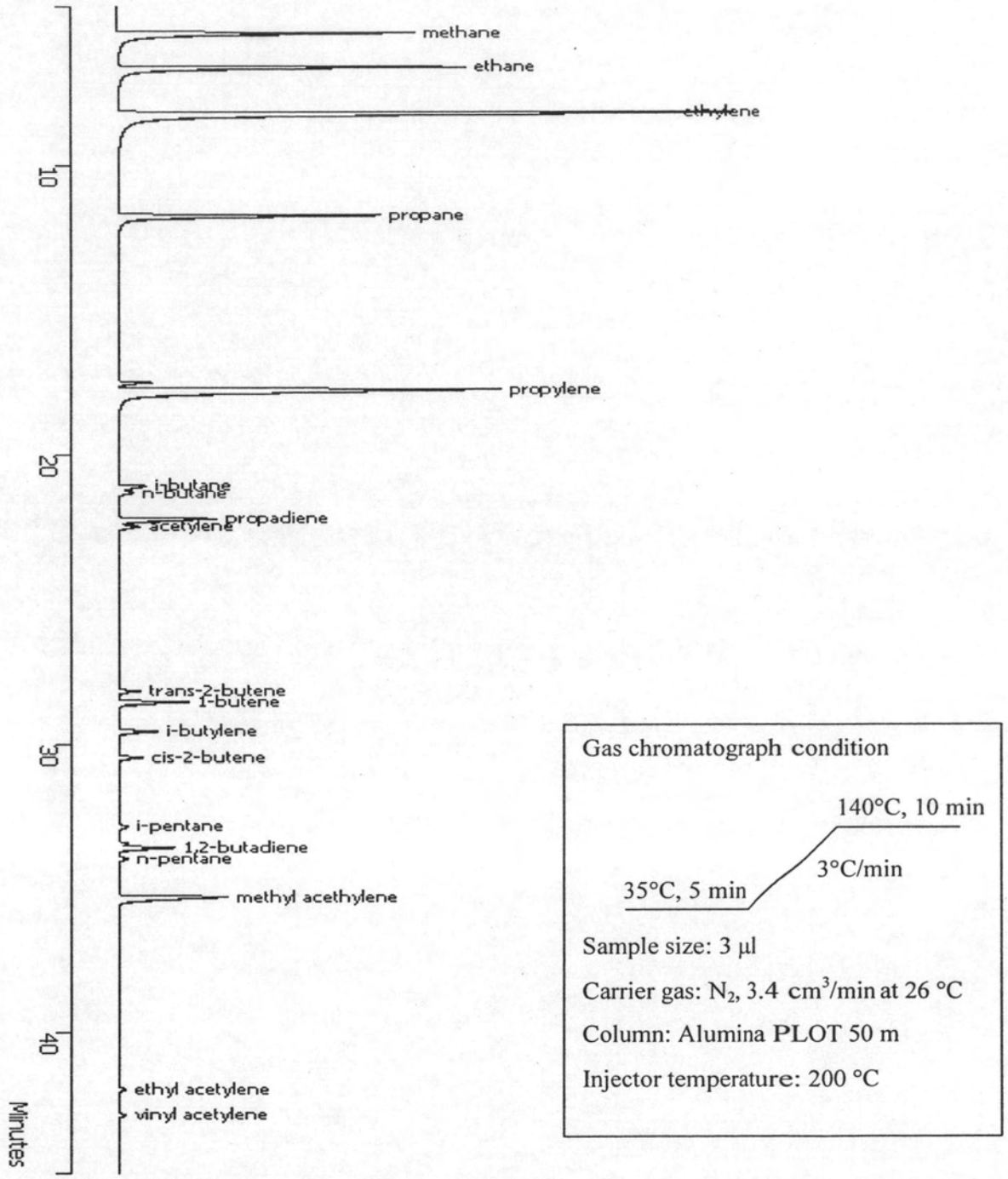

Figure A-1 Gas chromatogram of standard mixture gas.

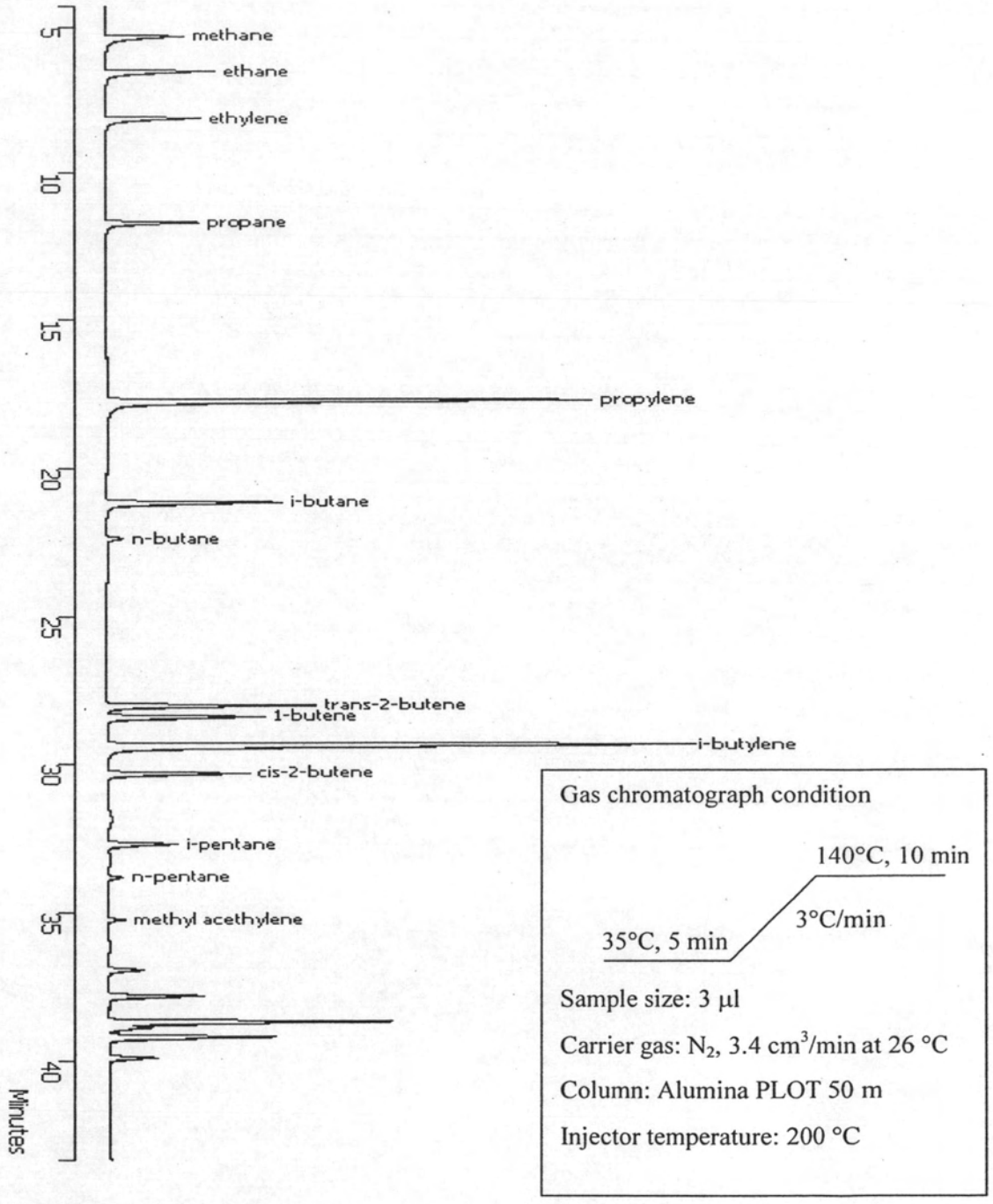

Figure A-2 Gas chromatogram of gas product obtained from catalytic cracking of PP over H-Al-SBA-15(10) at 380°C.

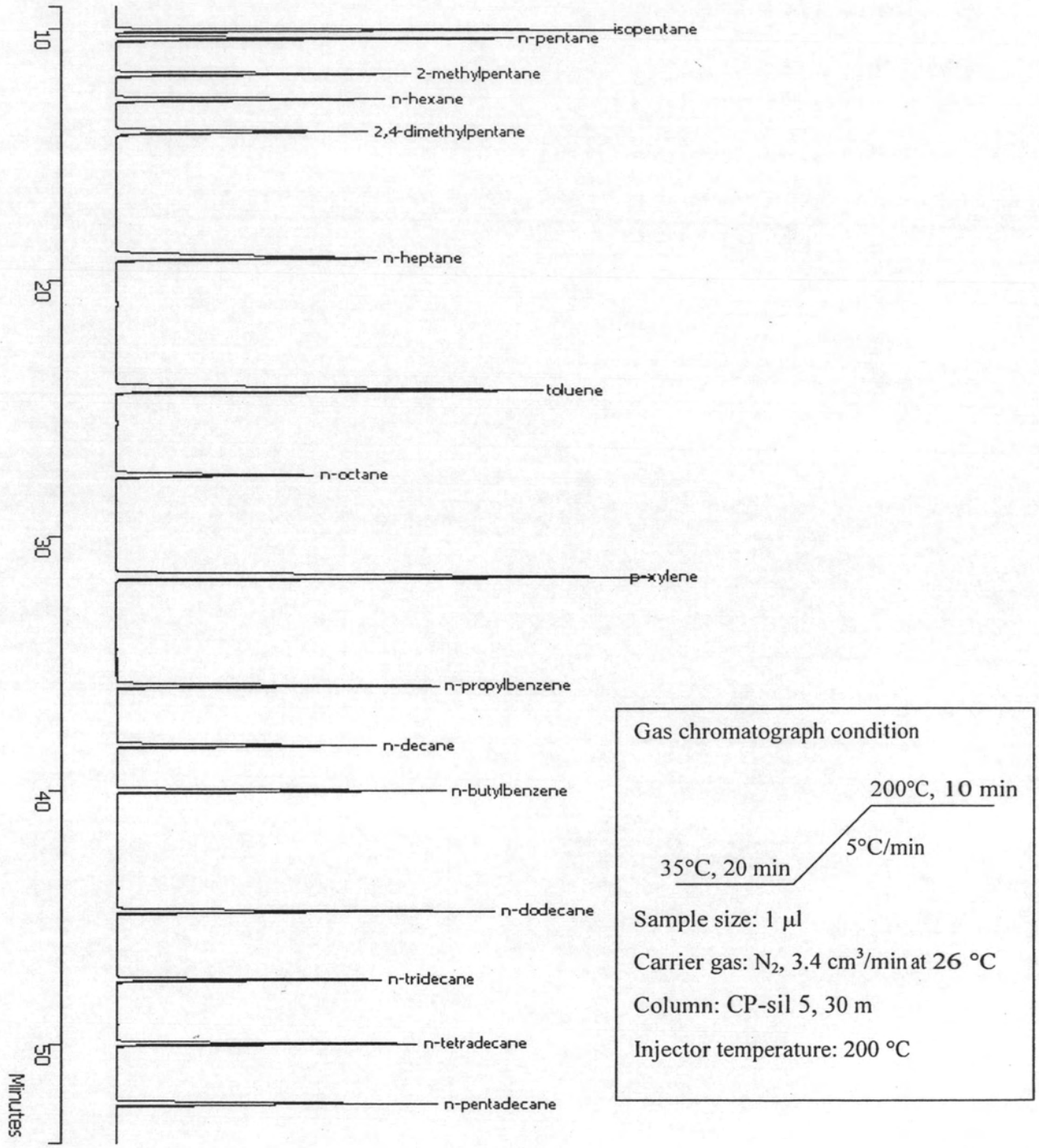

Figure A-3 Gas chromatogram of standard gasoline (SUPELCO).

VITAE

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