Quick Quiz: Analytical Techniques
(and some stuff from before)

1.

$$R_f = \frac{23}{32} = 0.72$$

2.   9 min. Component B is less polar than component A.

3.

The wavelength chosen for analysis can only be absorbed by lead (not by the contaminating elements).

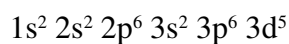4.   Atomic absorption spectroscopy.

5.
   (a)

   10 ppm = 10 mg L^{-1}
   $\therefore$ 0.010 g L^{-1}

   (b)

   M_{CH4} = 12.01 + (1.008×4) = 16.042 g mol^{-1}
   0.010 ÷ 16.042 = 6.2×10^{-4} mol L^{-1}

6.
   (a)

   $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 3d^5$

   (b)

   The converter catalyses reactions that react CO and NO to make N_2