3.51 -B → (.1159 g H_2O)(.1005 g CHO)(.2829 g CO_2)

$$.2829\ g\ CO_2 \left|\frac{1\ mol\ CO_2}{44\ g\ CO_2}\right|\frac{1\ mol\ C}{1\ mol\ CO_2}\left|\frac{12\ g}{1\ mol\ C}\right| = .077\ g\ C$$

.006 mol C

$$.1159\ g\ H_2O \left|\frac{1\ mol\ H_2O}{18\ g\ H_2O}\right|\frac{2\ mol\ H}{1\ mol\ H_2O}\left|\frac{1\ g\ H}{1\ mol\ H}\right| = .0128\ g\ H$$

.0128 mol H

Initial mass − (mass C + mass H)

$.1005 - (.077 + .0128) = .0107\ g\ O$

$$\text{moles O} = .0107\ g\ O \left|\frac{1\ mol\ O}{16\ g}\right| = .000669$$

moles O

Moles C = .006 ⇒ 10

Moles H = .0128 / .000669 ≈ 20

Moles O = .000669 / .000669 = 1

EF = MF = $C_{10}H_{20}O$ = 156 g