$$\left\{ \mathbb{E}\left[a_i\, b_i,\ x_i\, y_i,\ \frac{1}{\sqrt{B_i}} + \frac{\left(2\, a_i - x_i^2\, y_i^2\right)\epsilon}{4\sqrt{B_i}} + O[\epsilon]^2 \right],\ \mathbb{E}\left[-a_j\, b_j, \right.\right.$$

$$\left.\left. -\frac{x_j\, y_j}{B_j},\ \sqrt{B_j} + \frac{\left(-2\, a_j\, B_j^2 - 4\, a_j\, B_j\, x_j\, y_j - 3\, x_j^2\, y_j^2\right)\epsilon}{4\, B_j^{3/2}} + O[\epsilon]^2 \right] \right\}$$