**Case Number:**

 **Forensic Scientist:**

 **Date:**

**Yield Calculations**

**Methamphetamine HCl from (Pseudo)ephedrine HCl or (Pseudo)ephedrine Sulfate**

*Molecular Weight (Pseudo)ephedrine HCl = 201.7 g/mol*

*1 mol (Pseudo)ephedrine HCl = 1 mol Methamphetamine HCl*

*Molecular Weight Methamphetamine HCl = 185.7 g/mol*

*Molecular Weight (Pseudo)ephedrine Sulfate = 428.5 g/mol*

*1 mol (Pseudo)ephedrine Sulfate = 2 mol Methamphetamine HCl*

*Hydrochloride:*

*X g of Methamphetamine HCl = (# g (Pseudo)ephedrine HCl at scene) (185.7 g/mol Meth HCl)*

 *201.7 g/mol (Pseudo)ephedrine HCl*

*Sulfate:*

*X g of Methamphetamine HCl = (# g (Pseudo)ephedrine sulfate at scene) (185.7 g/mol Meth HCl) (2 mol Meth HCl)*

 *(428.5 g/mol (Pseudo)ephedrine sulfate) (1mol (Pseudo)ephedrine sulfate)*

*This formula calculates a 100% yield.*