

**Appendix B – products of commonly encountered low and high explosives**

| <i>LOW EXPLOSIVES</i>         |                                                             |                                                                                              |
|-------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <i>NAME</i>                   | <i>.MAJOR COMPONENTS</i>                                    | <i>MAJOR COMBUSTION PRODUCTS/RESIDUES</i>                                                    |
| BLACK POWDER                  | $\text{NO}_3^-$ , S                                         | $\text{NO}_3^-$ , $\text{NO}_2^-$ , $\text{SO}_4^{2-}$ , $\text{ClO}_3^-$                    |
| PYRODEX                       | $\text{NO}_3^-$ , $\text{ClO}_4^-$ , S                      | $\text{NO}_3^-$ , $\text{NO}_2^-$ , $\text{SO}_4^{2-}$ , $\text{ClO}_3^-$ , $\text{ClO}_4^-$ |
| MILITARY FLASH POWDER         | $\text{ClO}_3^-$ or $\text{ClO}_4^-$ , $\text{NO}_3^-$ , AL | $\text{NO}_3^-$ , SO/-, $\text{ClO}_4^-$ , CL-AL                                             |
| PHOTO FLASH POWDER            | $\text{ClO}_3^-$ or $\text{ClO}_4^-$ , AL                   | $\text{ClO}_3^-$ , $\text{ClO}_4^-$ , AL                                                     |
| SMOKELESS POWDER-SINGLE BASED | NITROCELLULOSE                                              | NITROCELLULOSE                                                                               |
| SMOKELESS POWDER-DOUBLE BASED | NITROCELLULOSE<br>NITROGLYCERINE                            | NITROCELLULOSE<br>NITROGLYCERINE                                                             |

| <i>HIGH EXPLOSIVES</i> |                                                                                         |                                                                                                          |
|------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <i>NAME</i>            | <i>.MAJOR COMPONENTS</i>                                                                | <i>.MAJOR COMBUSTION PRODUCTS/RESIDUES</i>                                                               |
| ANFO.                  | $\text{NH}_4\text{NO}_3$ , FUEL OIL                                                     | $\text{NO}_3^-$ , $\text{NO}_2^-$ , FUEL OIL                                                             |
| SLURRAN 806            | $\text{NO}_3^-$ , $\text{ClO}_4^-$ , AL, GEL MIXING AGENT                               | $\text{NO}_3^-$ , $\text{NO}_2^-$ , $\text{ClO}_3^-$ , $\text{ClO}_4^-$ , AL                             |
| C-4                    | HMX, RDX                                                                                | HMX, RDX                                                                                                 |
| DYNAMITES              | $\text{NO}_3^-$ , NITROGLYCERINE., ADDITIVE (e.g. NITRIC ESTERS), or/and NITROCELLULOSE | $\text{NO}_3^-$ , $\text{NO}_2^-$ , NITROGLYCERINE, ADDITIVE (e.g. NITRIC ESTERS), or/and NITROCELLULOSE |