Compositions of Gunshot Residue Particles

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UNIQUE:	CHARACTERISTIC (especially if spheroidal) BUT NOT UNIQUE:
· Pb, Sb, Ba	· Pb, Sb
· Ba, Ca, Si, WITH TRACE S	· Pb, Ba
· Ba, Ca, Si, WITH TRACE Pb, if Cu, Zn absent ***	· Pb if Fe, P absent
· Sb, Ba	· Ba if S absent or trace only*
	· Sb (rare)

ANY OF THE ABOVE MAY ALSO CONTAIN ONLY THE FOLLOWING ELEMENTS (if not excluded in statements above):

· Si, Ca, Al, Cu, Fe, S, P (rare), Zn (only with Cu), Ni (rare, only with Cu, Zn), K, Cl.

· The presence of any other element usually indicates non-gunshot origin.

*Larger amounts of S with Ba suggest non-gunshot origin

**Sn possible in obsolete ammunition

***With Cu, Zn, found in studgun residue