

## SUPPLEMENTARY DATA

### Can Isotopes Be Used as Lead Tracers in Shooting-Range Soils?

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Tables: 2.

**Table S1.** Operating parameter settings of the Thermo-Finnigan Neptune MC-ICP-MS and instrumental parameters for isotope ratio analysis.

<b>General instruments parameter</b>	
R.F. Power (W)	1200
Sample gas flow rate (L min <sup>-1</sup> )	1.0
Cooling gas flow rate (L min <sup>-1</sup> )	15.0
Sample flow (ul/min)	100
<b>Isotope ratio conditions</b>	
Acquisition mode	Static
Number of isotopes	<sup>204</sup> Pb, <sup>206</sup> Pb, <sup>207</sup> Pb, <sup>208</sup> Pb
Setting time of magnet (s)	5
Sample time (min)	5
Integration time (sec)	4.13
Runs/passes	50
Analysis time (min)	3.5
Correction lawn	Exponential
Drift correction	Bracketing standards
<b>Faraday cup configuration for solution</b>	
Cup	Mass
L3	<sup>202</sup> Hg <sup>+</sup>
L2	<sup>203</sup> Ti <sup>+</sup>
L1	<sup>204</sup> Pb <sup>+</sup>
C	<sup>204</sup> Hg <sup>+</sup>
H1	<sup>205</sup> Ti <sup>+</sup>
H2	<sup>206</sup> Pb <sup>+</sup>
H3	<sup>207</sup> Pb <sup>+</sup>
	<sup>208</sup> Pb

**Table S2.** Pb stable isotope ratios in reference material SRM 981 (NIST).

Isotope ratio	SRM 981 (NIST)	
	Certified value	Measured value (N=20)
<sup>204</sup> Pb/ <sup>206</sup> Pb	0.059042 ± 0.000037	0.05882 ± 0.00230
<sup>207</sup> Pb/ <sup>206</sup> Pb	0.91464 ± 0.00033	0.91147 ± 0.00003
<sup>208</sup> Pb/ <sup>206</sup> Pb	2.1681 ± 0.008	2.16268 ± 0.00009