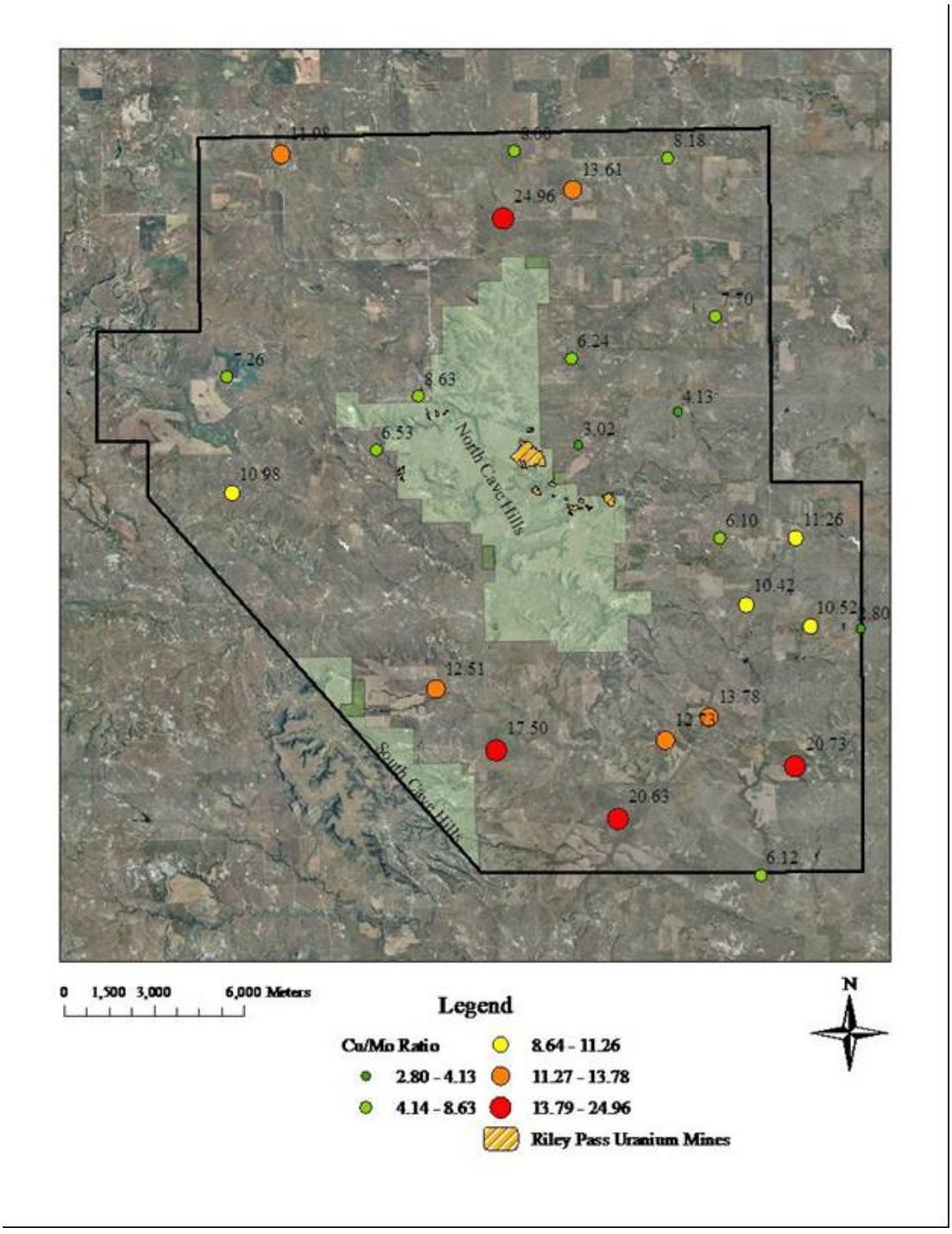

Figure 8.11: Copper/molybdenum ratio distribution from soil dust analysis.

Figure 8.12: Ambient atmospheric dust sampler NCH-AD-2 with bird-proofing installed on the upper rim.

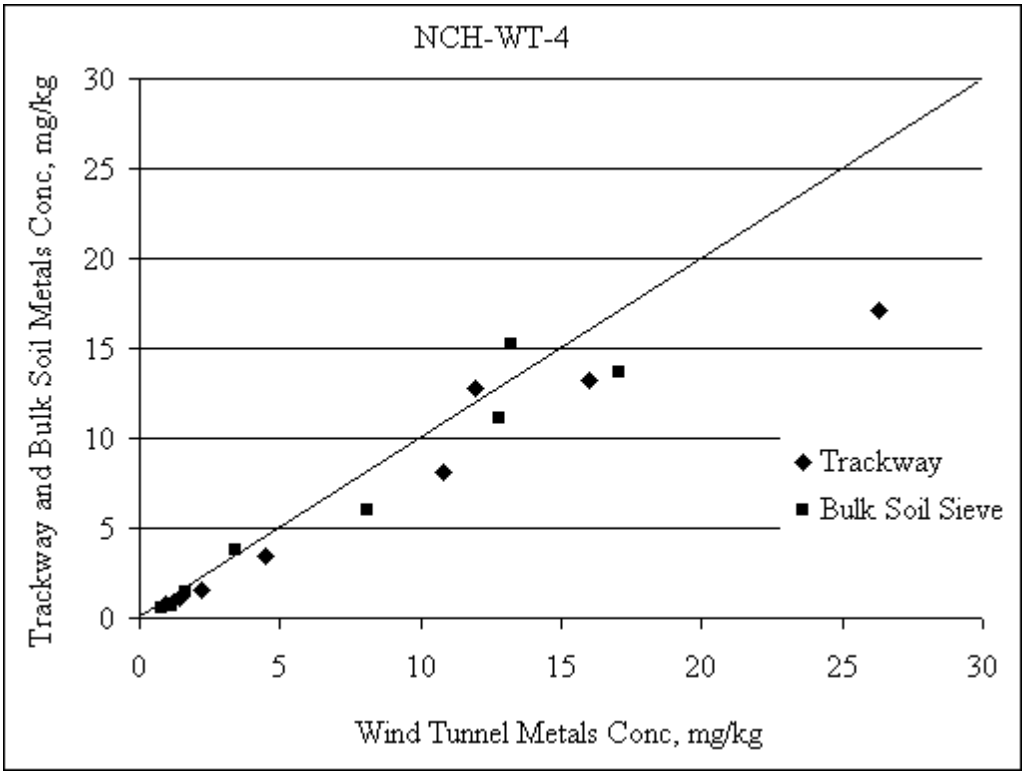

Figure 8.13: Data from three methods that were used to collect the fine dust at site NCH-WT-4, a wind tunnel, a soil scoop on the wind tunnel trackway, and a sieving of a bulk soil sample. Data are metals concentrations in mg/kg.

Figure 9.1: A major gully has cut a broad swath through the mine spoils below the major discharge point on the bench of Bluff B.

Figure 9.2: Deep gully cut into gentle slope at the base of Bluff B; this gully connects directly to the much broader gully in Fig. 9.2.

Figure 9.3: Shallowing of gully at USFS-administered/private land interface to knee-deep; note smaller side channel flowing into major gully just above fenceline.

Figure 9.4: Shallow bed of major discharge channel just above Riley Pass Road**.** Note cobbles and gravel representative of bluff spoil material. Blue instrument is the hand-held X-ray fluorescence spectrometer.

Figure 9.5: Incipient gullying on Gene Feist property.

Figure 9.6: Washover fan of silt and sand below mine spoils of Bluff B

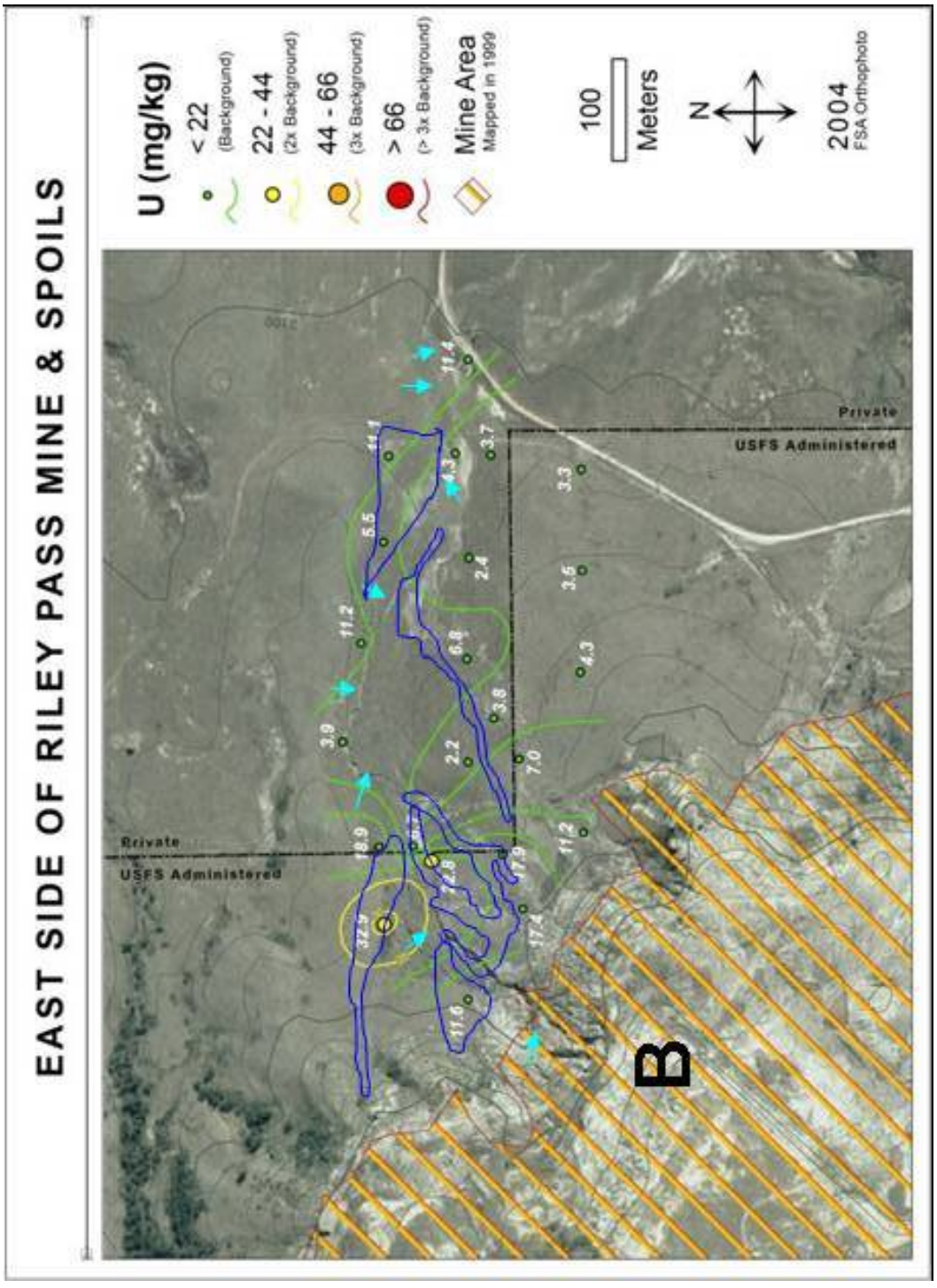

Figure 9.7: Uranium concentrations of the soil survey on the east side of Bluff B. Colored contour lines are drawn in 10mg/kg intervals; white numbers represent the absolute uranium concentrations at each sampling location. Areas outlined in blue delineate washover sediments and turquoise colored arrows point to the major gully described within the text.

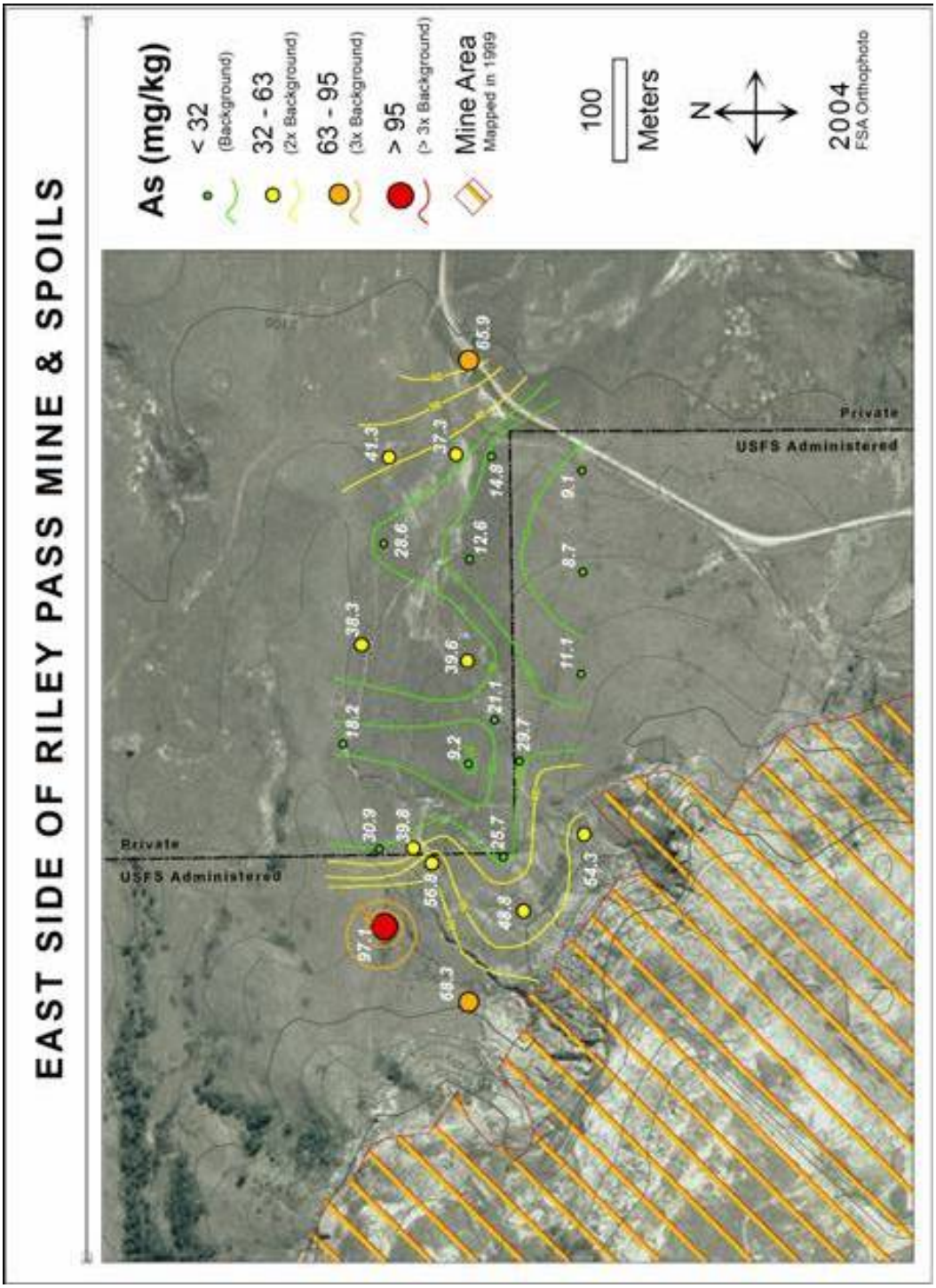

Figure 9.8: Arsenic concentrations of the soil survey on the east side of Bluff B. Colored contour lines are drawn in 10mg/kg intervals; white numbers represent the absolute arsenic concentrations at each sampling location.

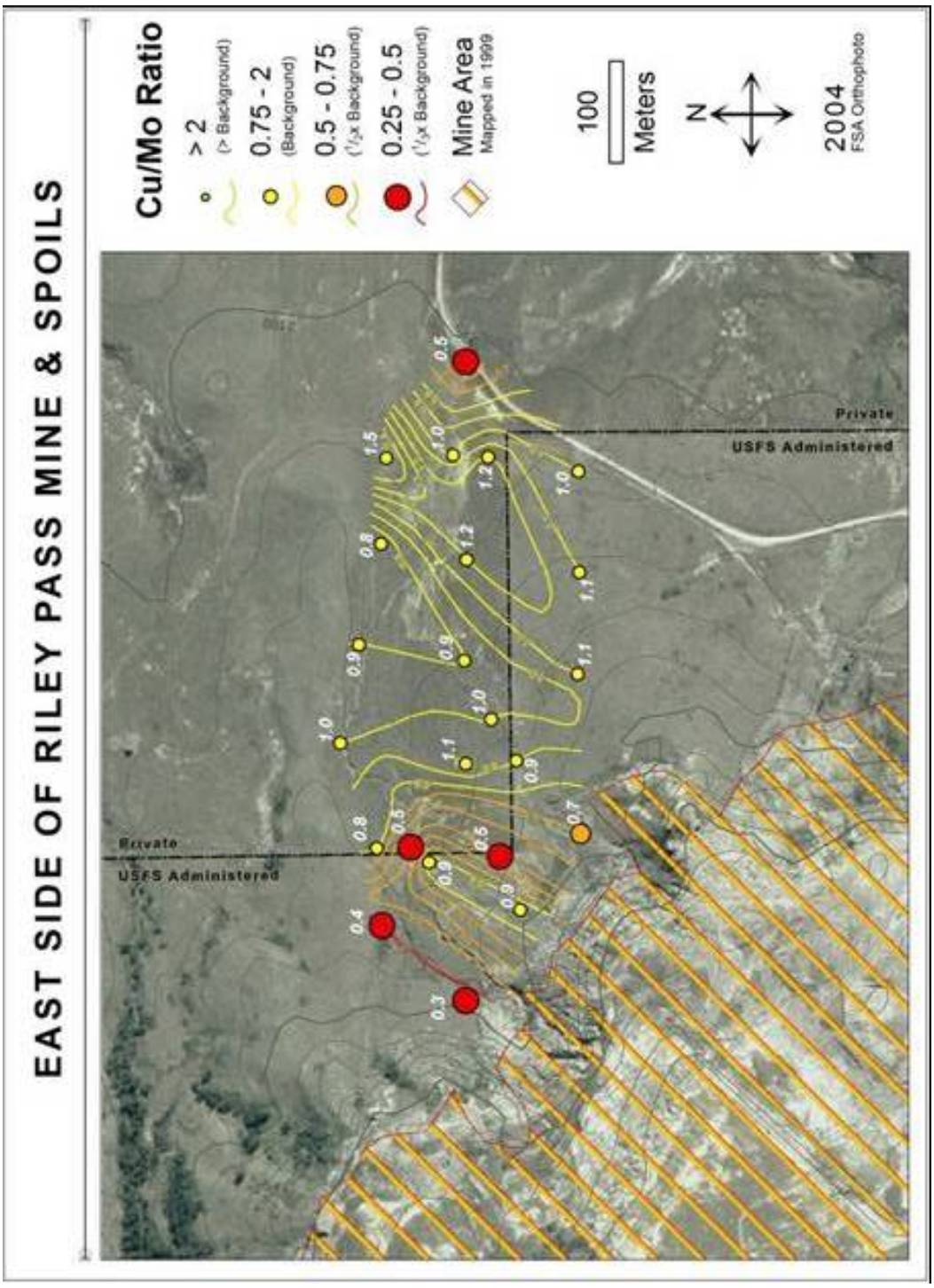

Figure 9.9: Copper/molybdenum ratios of the soil survey on the east side of Bluff B. Colored contour lines are drawn in 0.1 intervals; white numbers represent the absolute Copper/molybdenum ratios at each sampling location

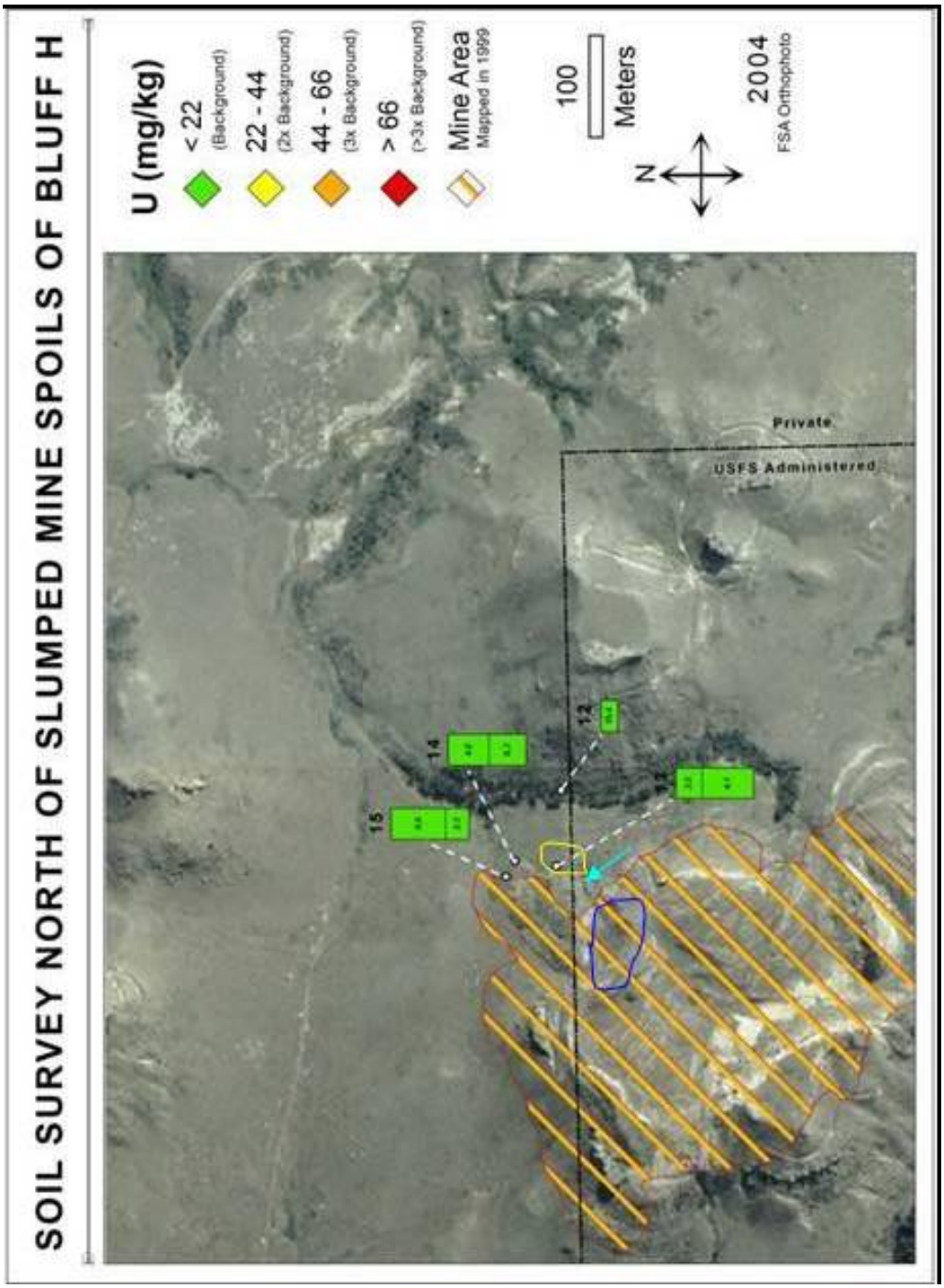

Figure 9.10: Uranium concentrations of three soil cores around the toe of a large slide mass on the northeast side of Bluff H. Bars are divided into upper and lower sampling intervals; numbers above bars indicate site number, numbers within the bar show the absolute uranium concentration in mg/kg for each sample. Area outlined in blue delineate crater-like head scarp; turquoise colored arrow points to the erosional gully; and area with yellow outline circumscribes washover fan originating at the mouth of the gully. Site #12 is represents drainage sediments and is shown for reference only

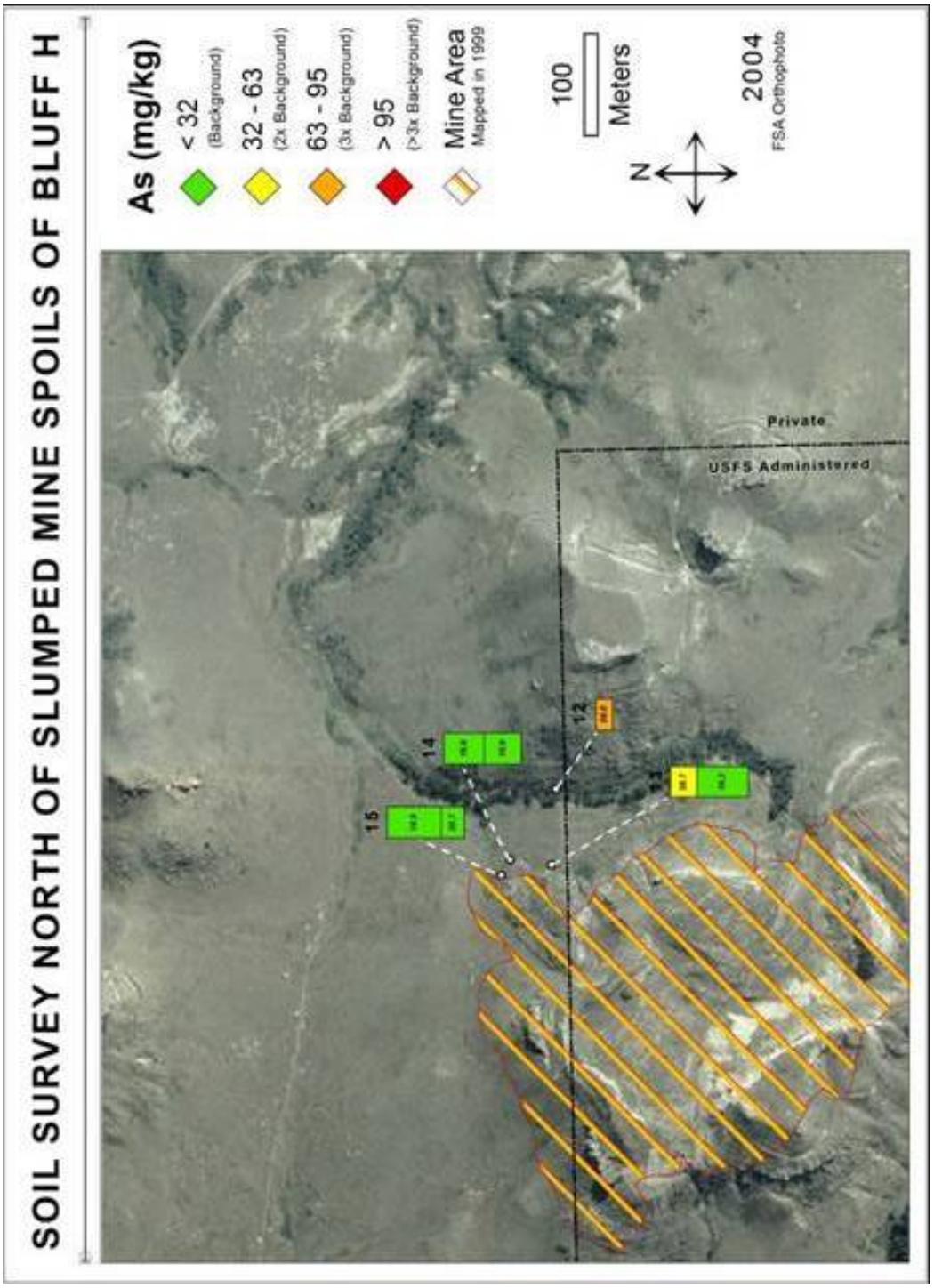

Figure 9.11: Arsenic concentrations of three soil cores collected around the toe of a large slide mass on the northeast side of Bluff H. Site #12 represents drainage sediments and is shown for reference only.

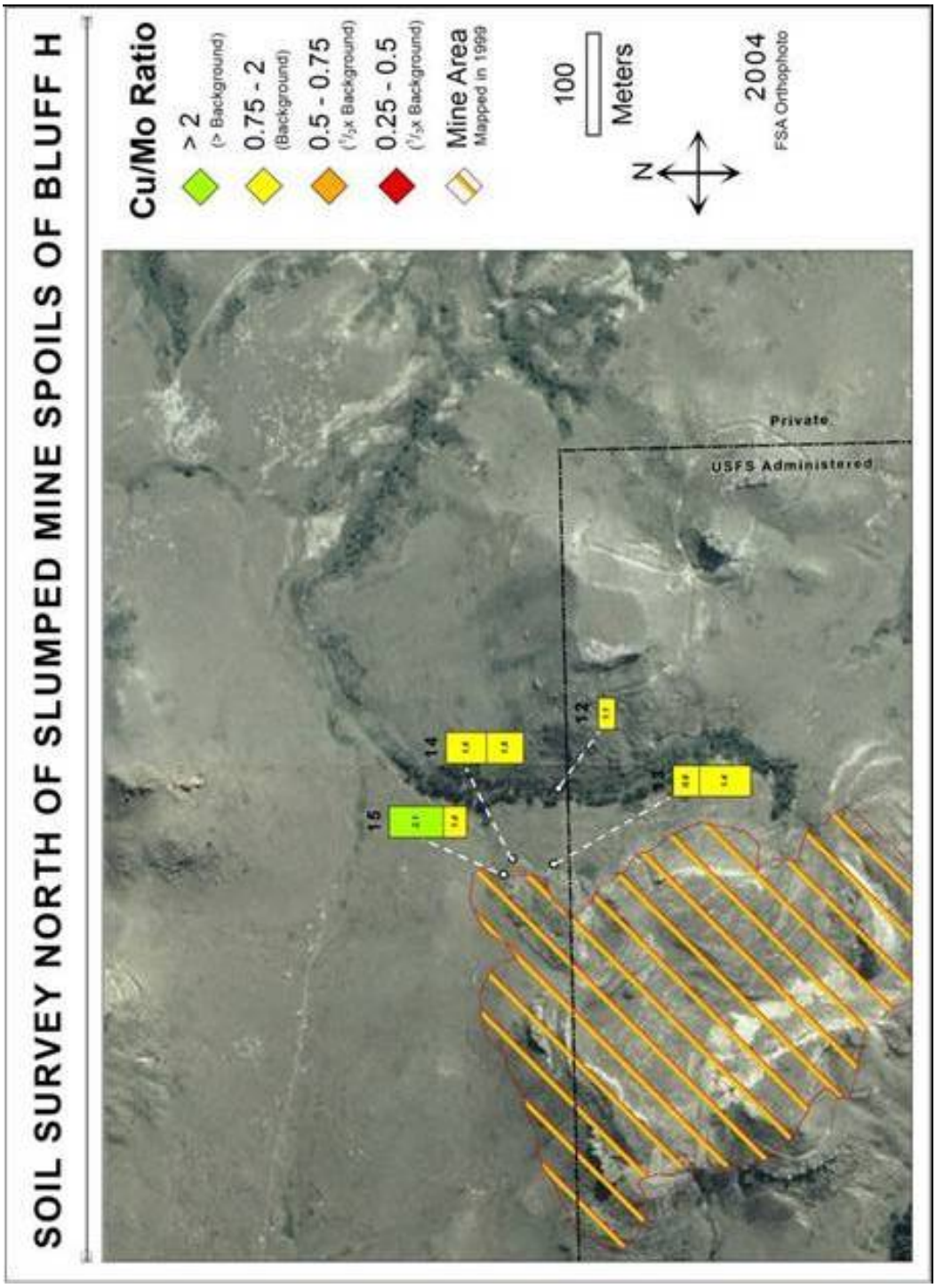

Figure 9.12: Copper/molybdenum ratios of three soil cores collected around the toe of a large slide mass on the northeast side of Bluff H. Site #12 is represents drainage sediments and is shown for reference only.

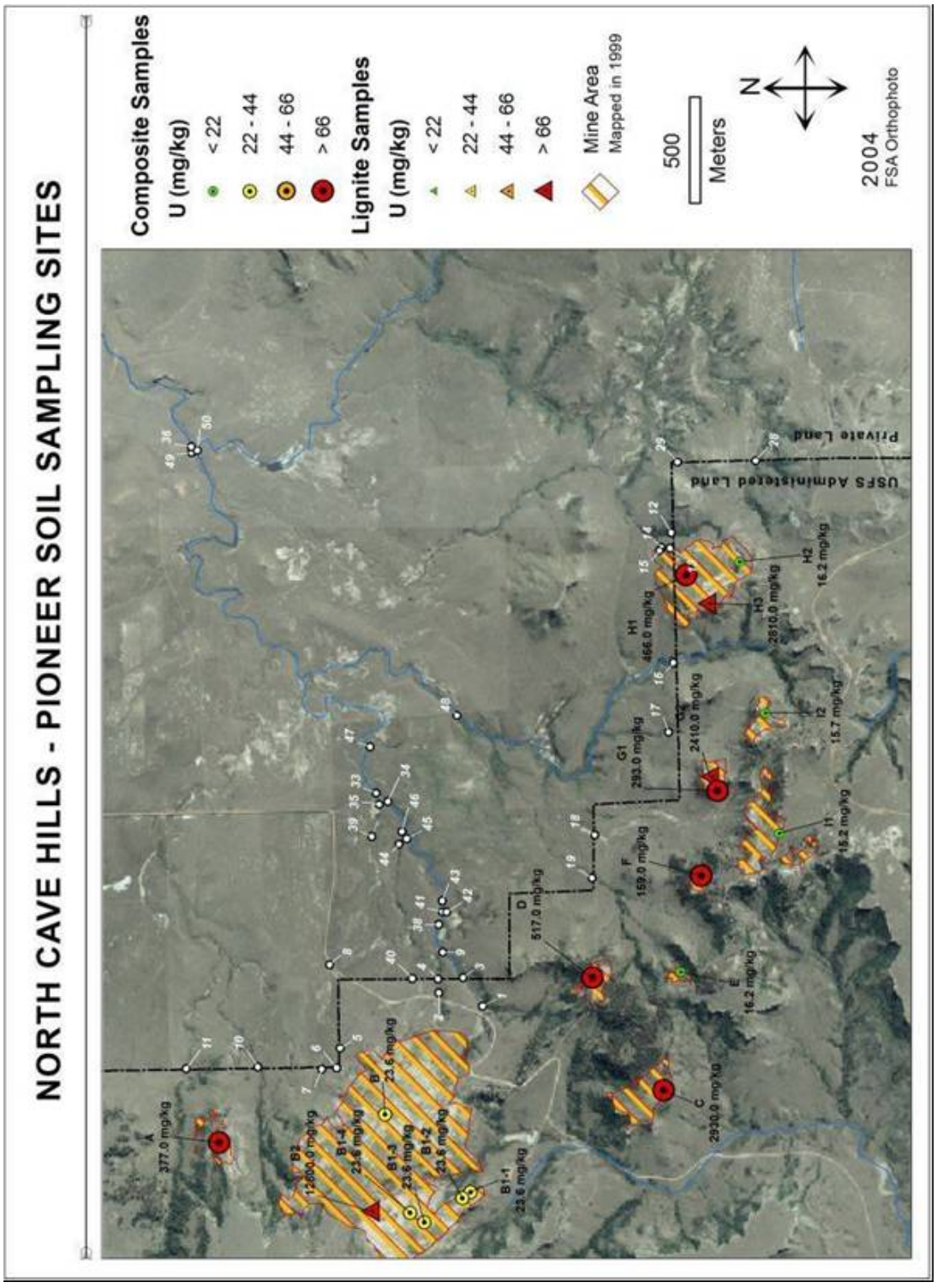

Figure 9.13: Uranium concentrations for Bluffs A-I soil sampling sites of the Pioneer (2005) study

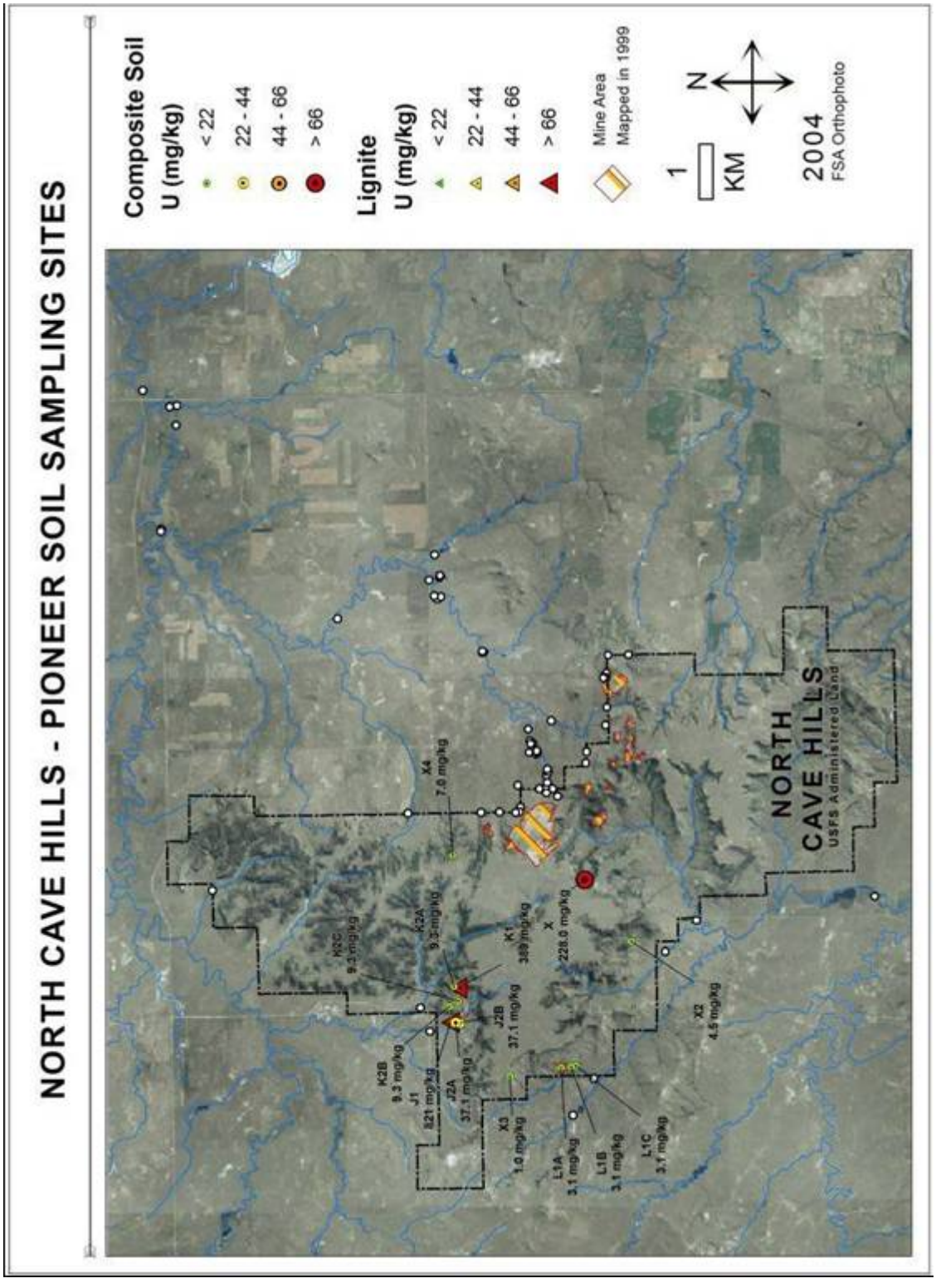

Figure 9.14: Uranium concentrations for background and Bluffs J – L soil samples listed in the Pioneer (2005) study.

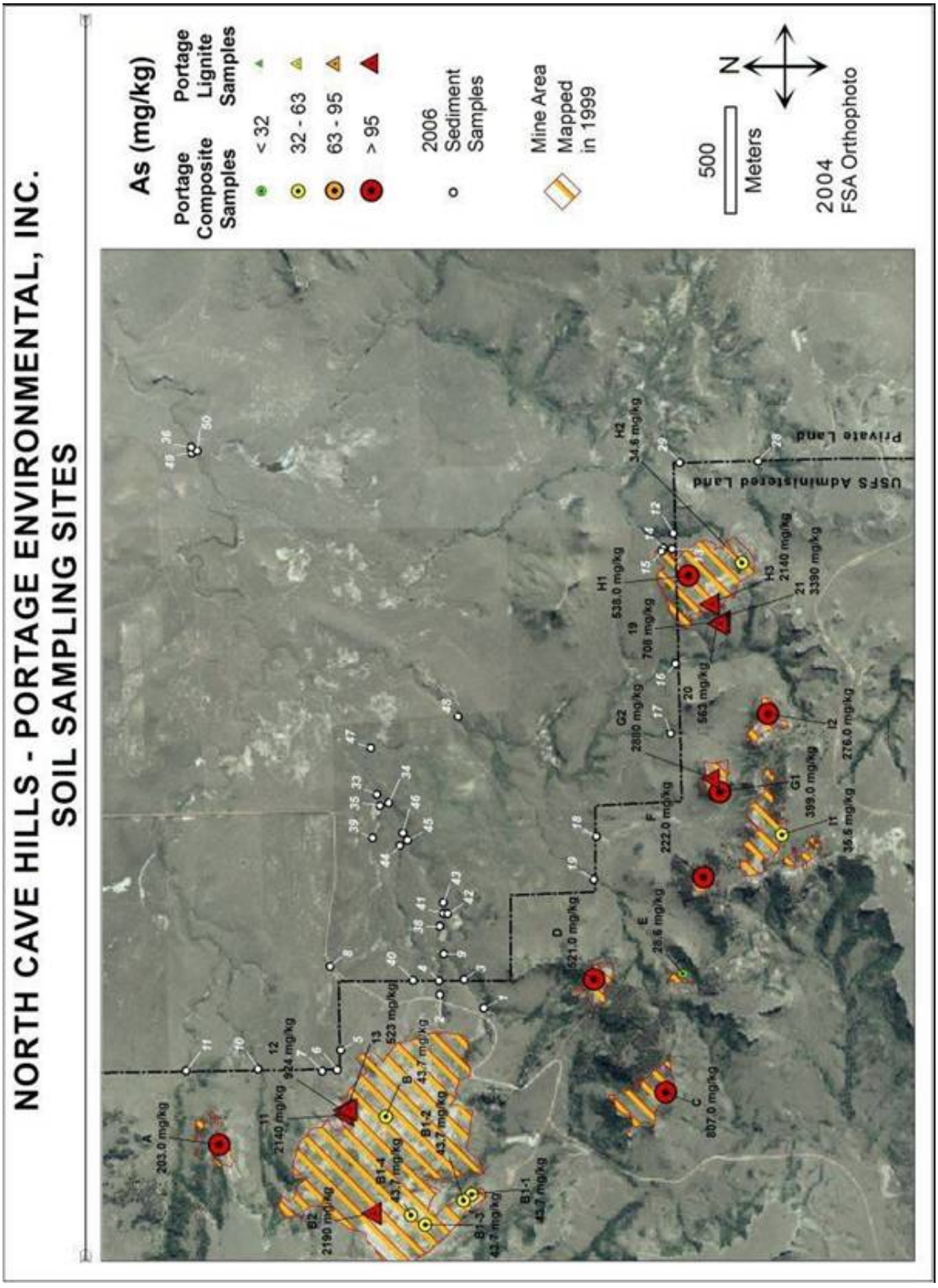

Figure 9.15: Arsenic concentrations for Bluffs A-I soil sampling sites listed in the Pioneer (2005) study.

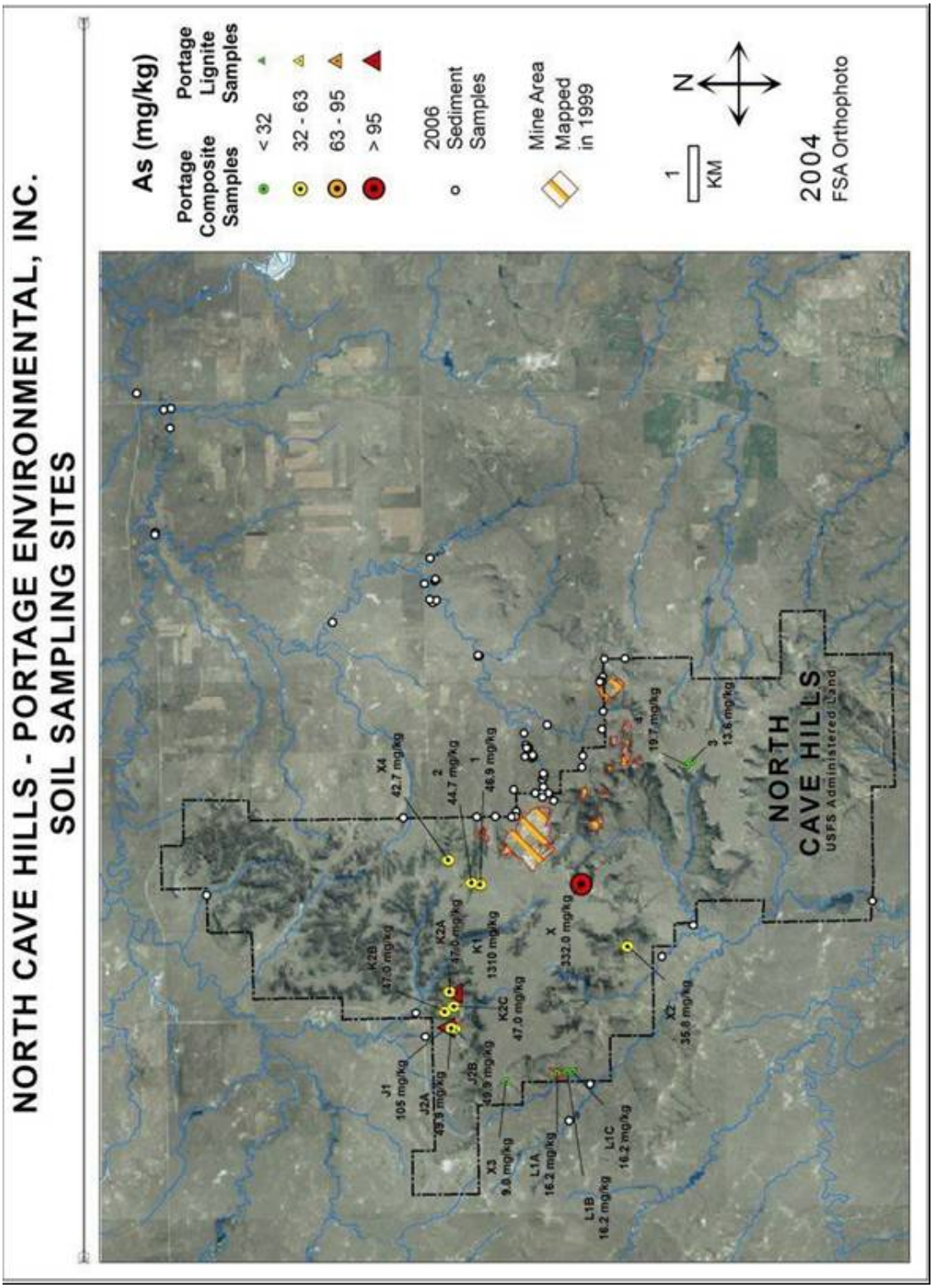

Figure 9.16: Arsenic concentrations for background and Bluff J – L soil samples listed in the Pioneer (2005) study.

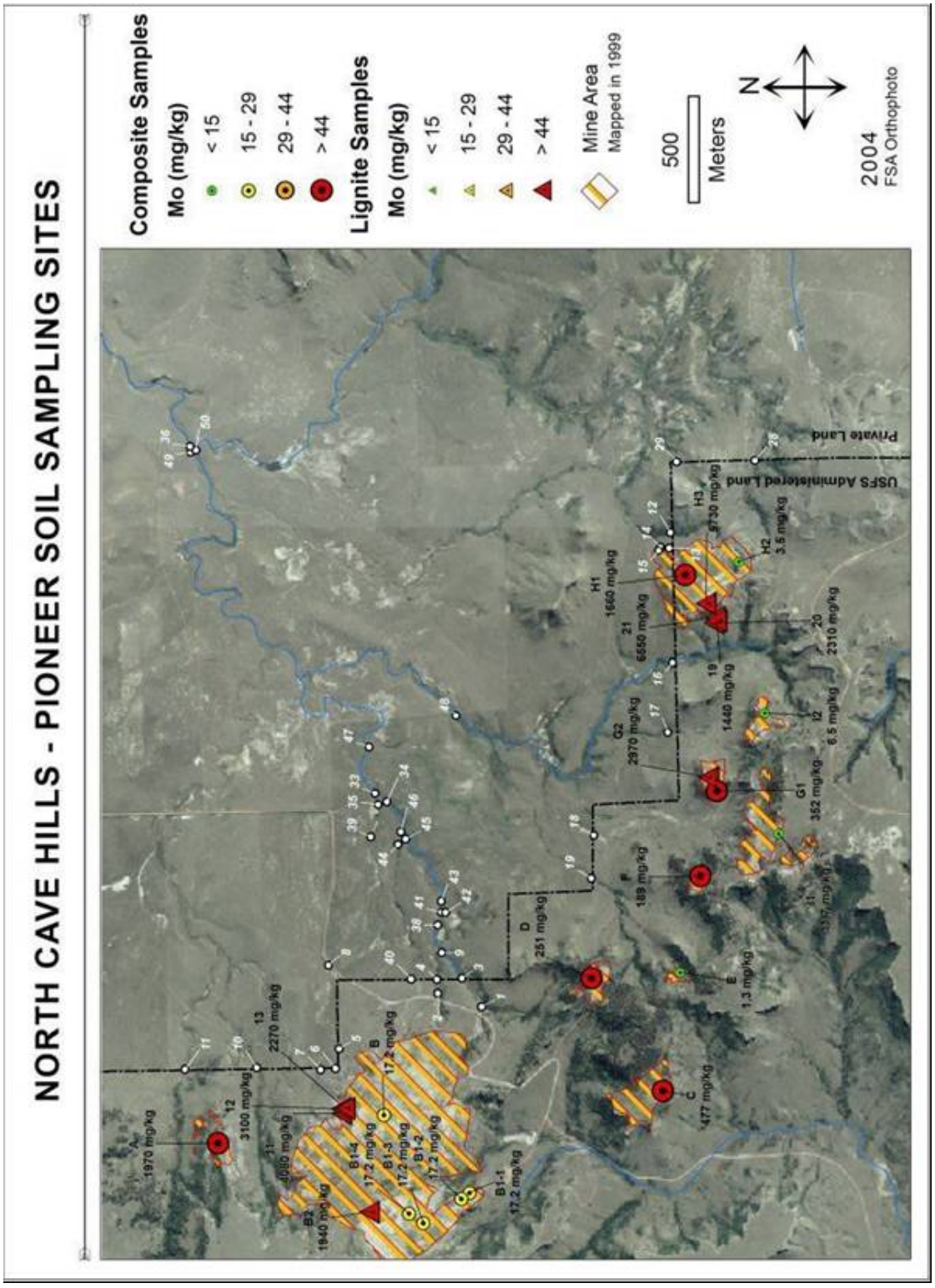

Figure 9.17: Molybdenum concentrations for Bluff A – I soil sample listed in the Pioneer (2005) study.

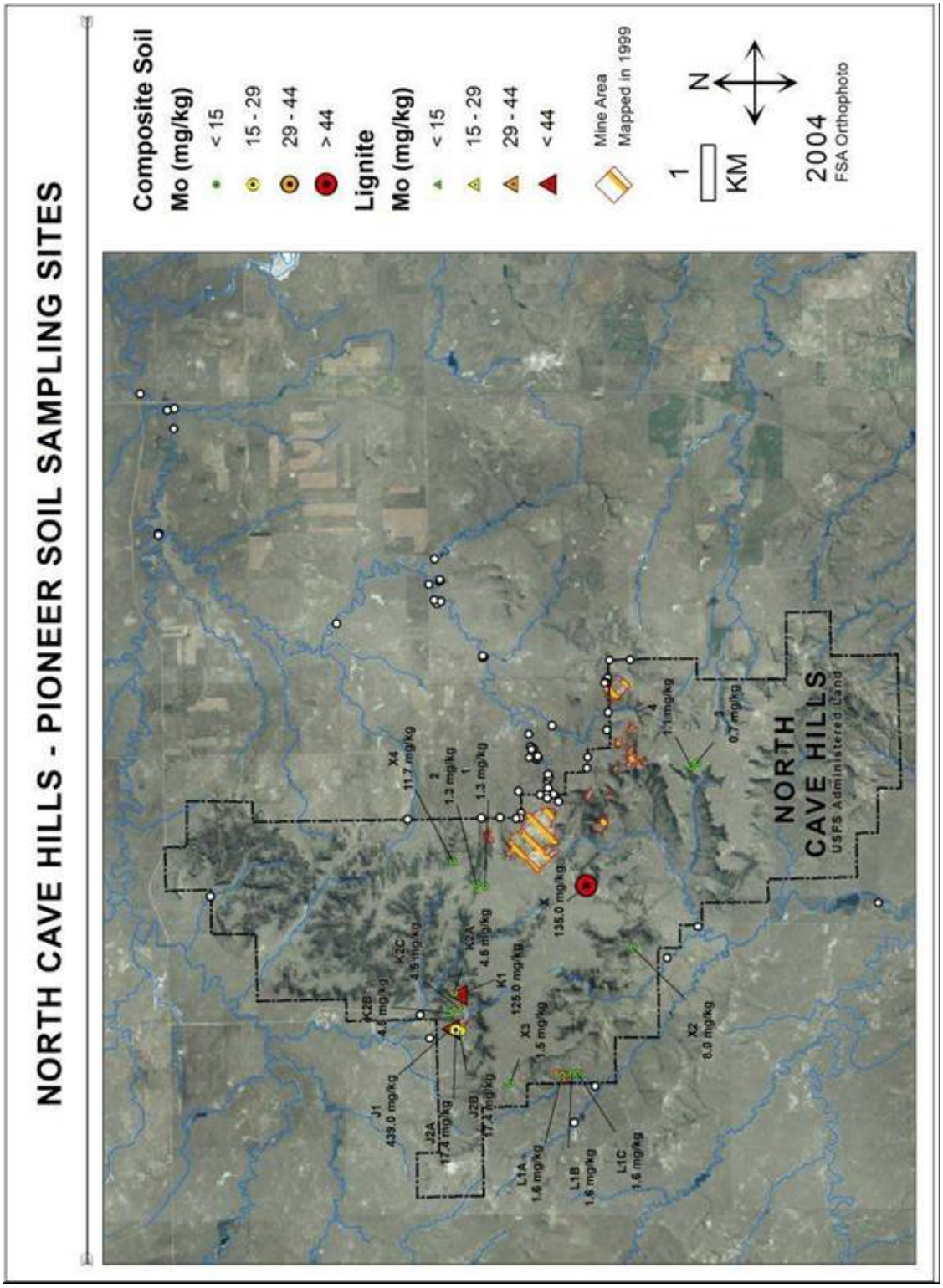

Figure 9.18: Molybdenum concentrations for background and Bluff J – L soil samples listed in the Pioneer (2005) study.

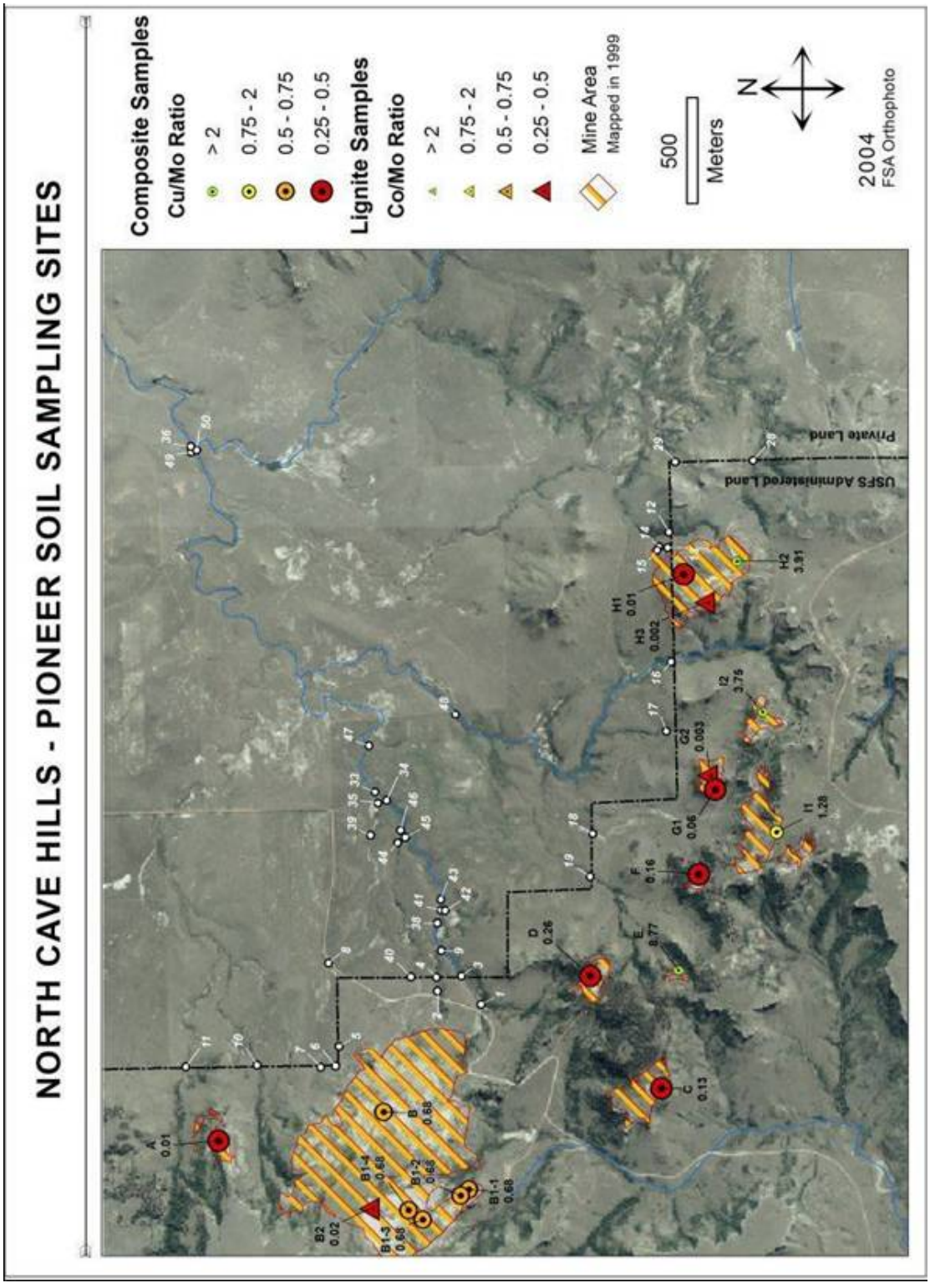

Figure 9.19: Copper/molybdenum ratios for Bluff A – I soil sample listed in the Pioneer (2005) study.

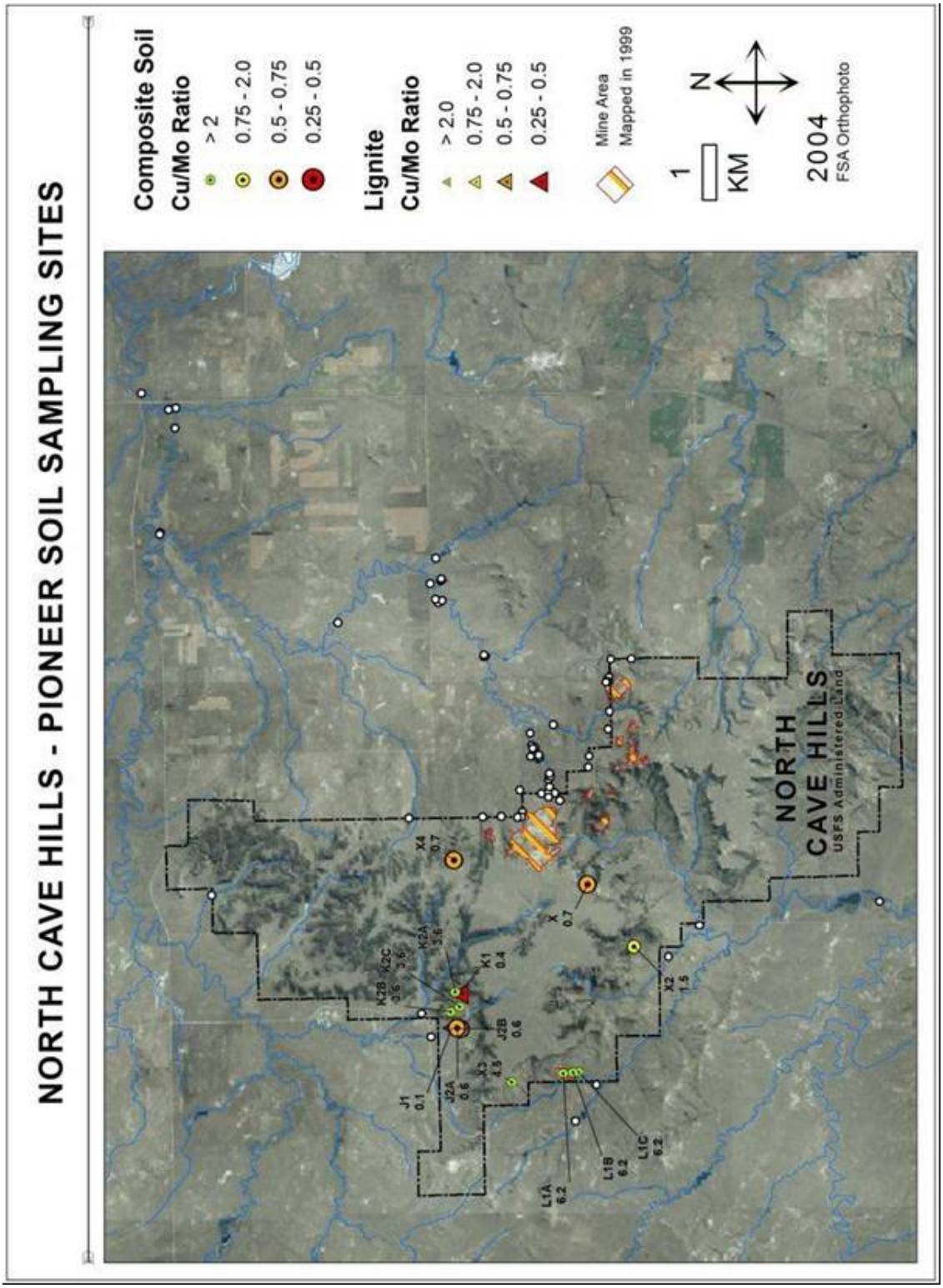

Figure 9.20: Copper/molybdenum ratios for background and Bluff J – L soil samples listed in the Pioneer (2005) study.

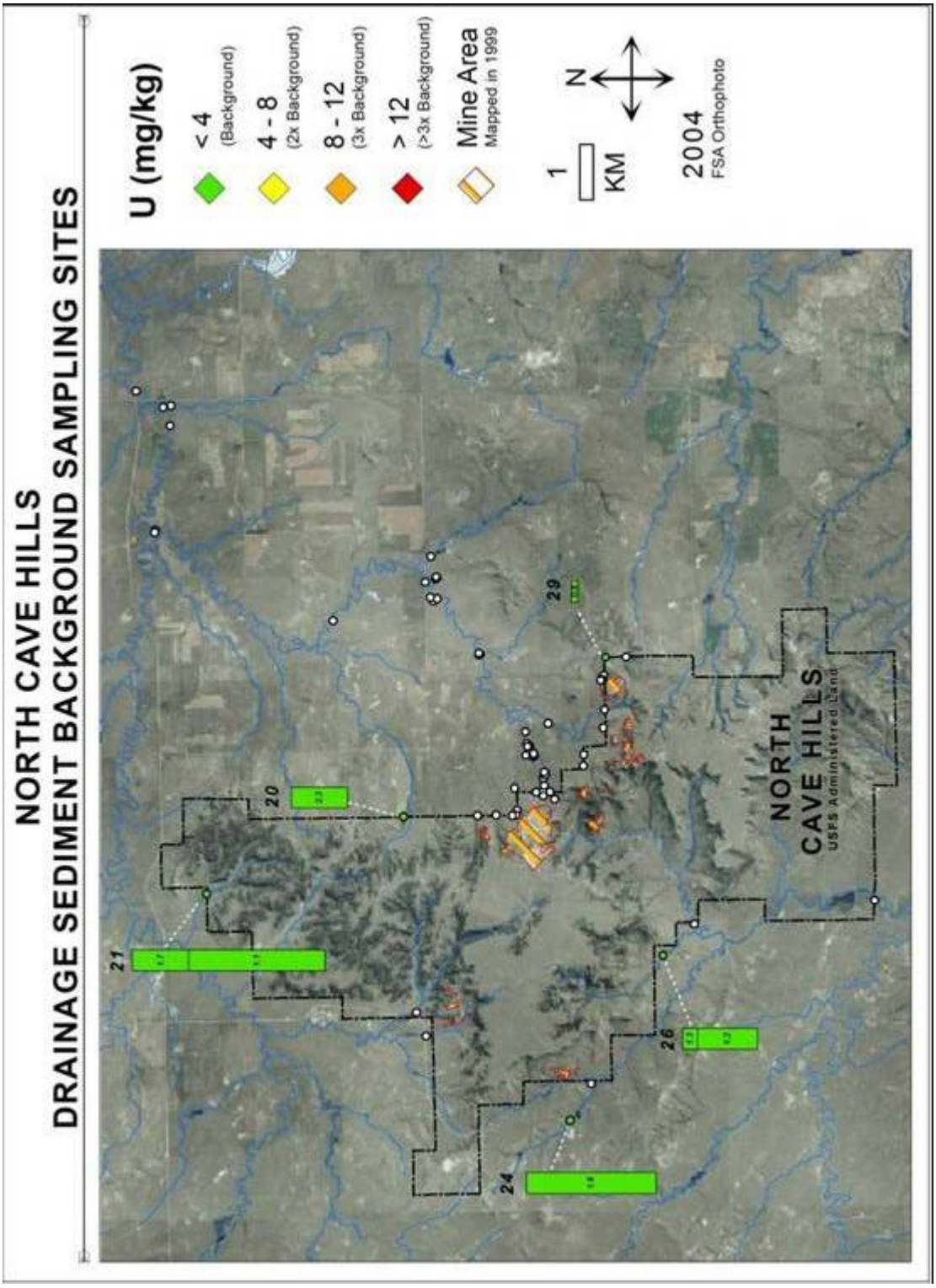

Figure 10.1: Locations of background sampling sites used for establishing background concentrations in drainage sediments. Bar length is proportional to core length. Horizontal division within bars indicates composite sampling intervals; numbers show the uranium concentration in mg/kg.

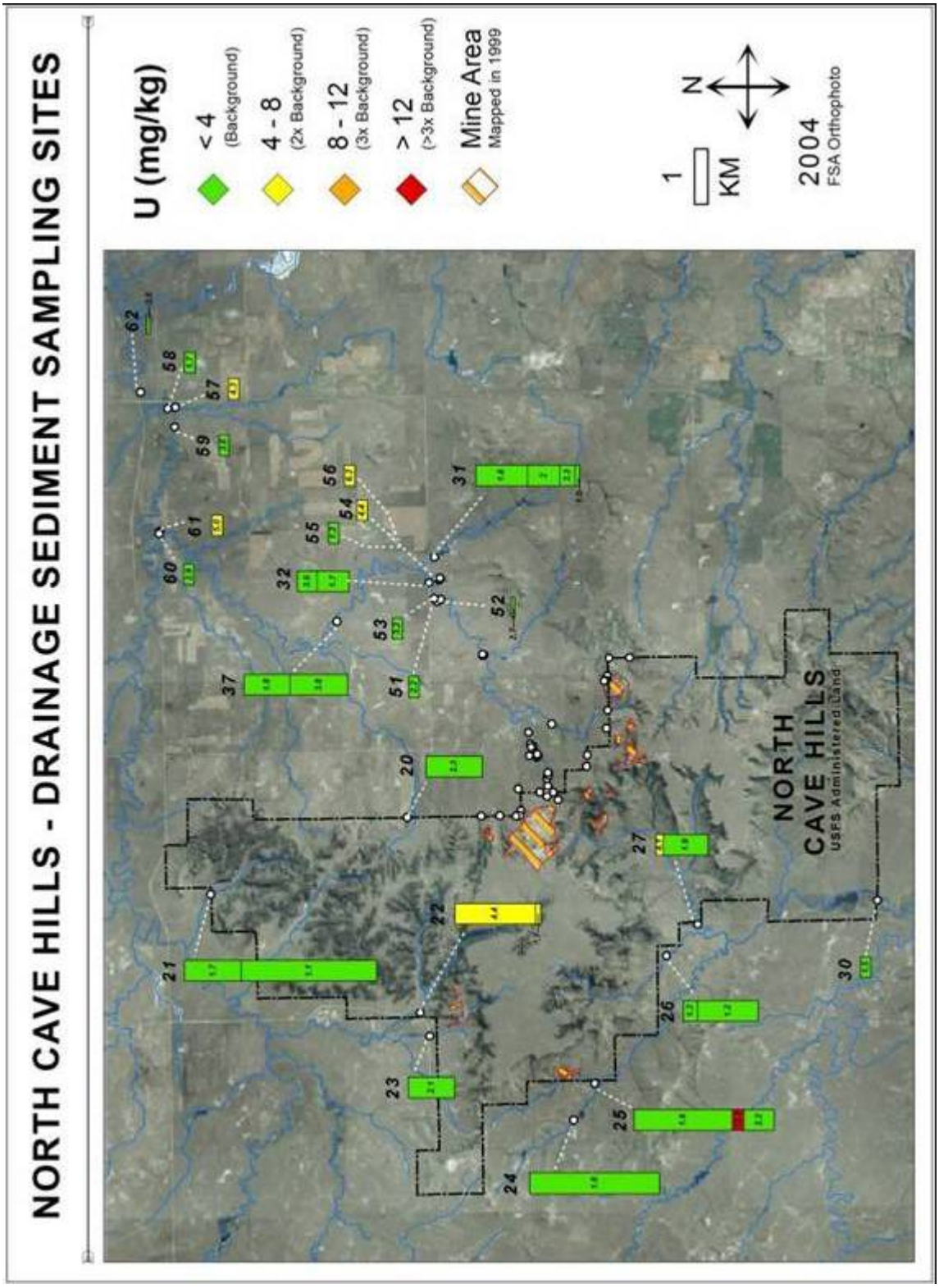

Figure 10.2: Locations and uranium concentrations in drainage samples. Bar length is proportional to core length. Horizontal division within bars indicates composite sampling intervals; numbers show the uranium concentration in mg/kg.

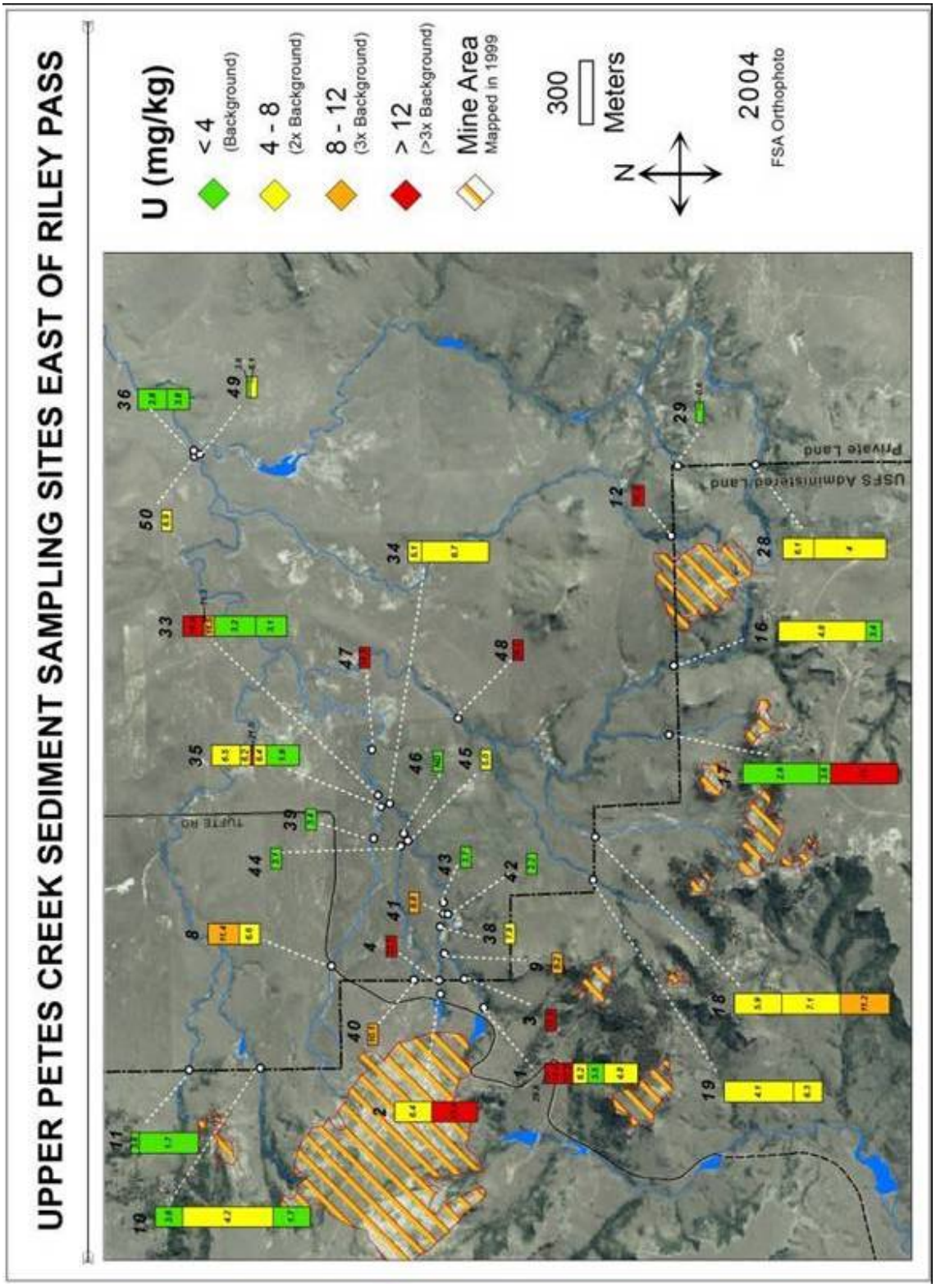

Figure 10.3: Locations and uranium concentrations of core samples in the upper Pete's Creek drainage

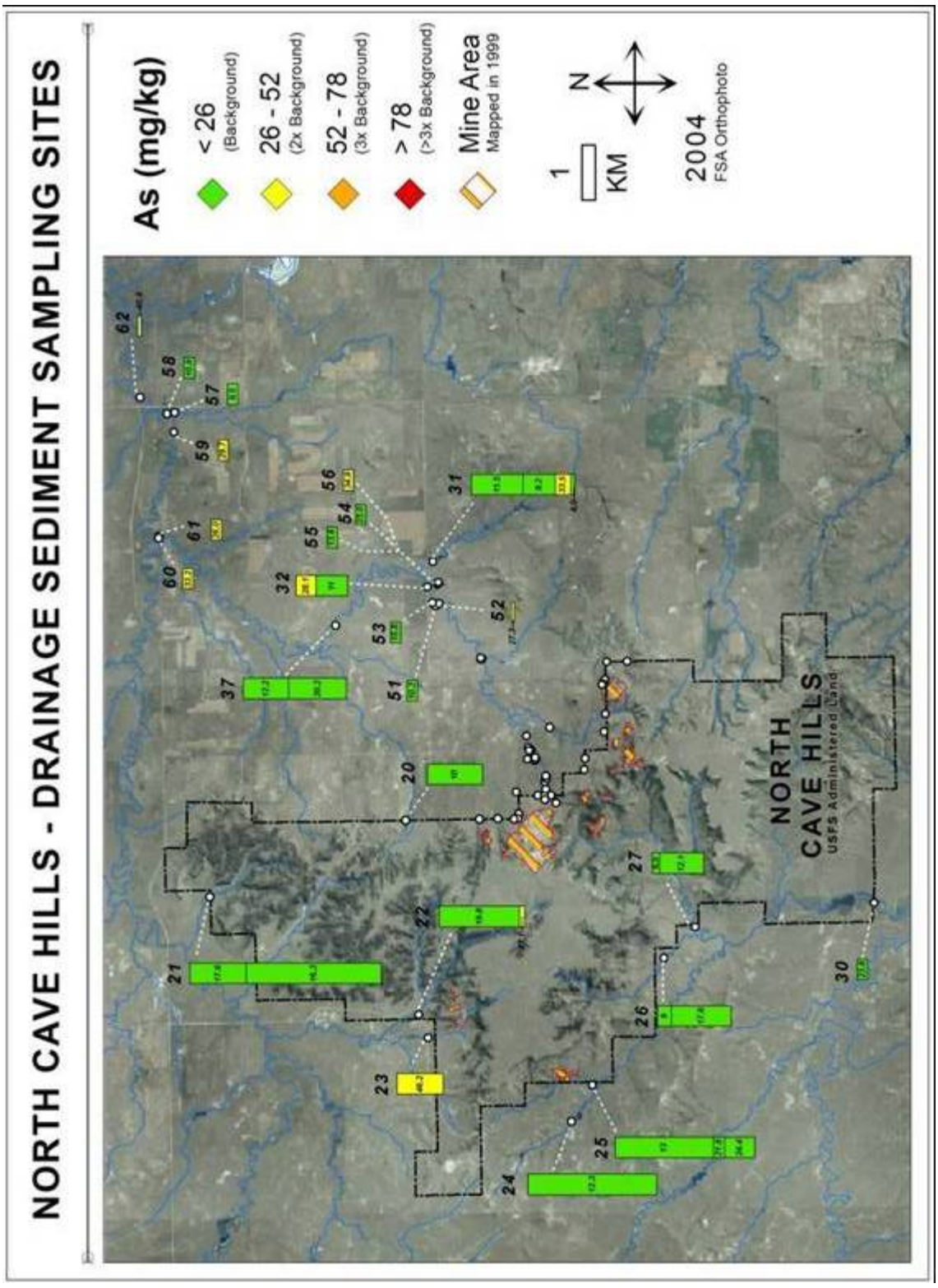

Figure 10.4: Sampling locations and arsenic concentrations of drainage samples. Bar length is proportional to core length. Horizontal division within bars indicates composite sampling intervals; numbers show the arsenic concentration in mg/kg.

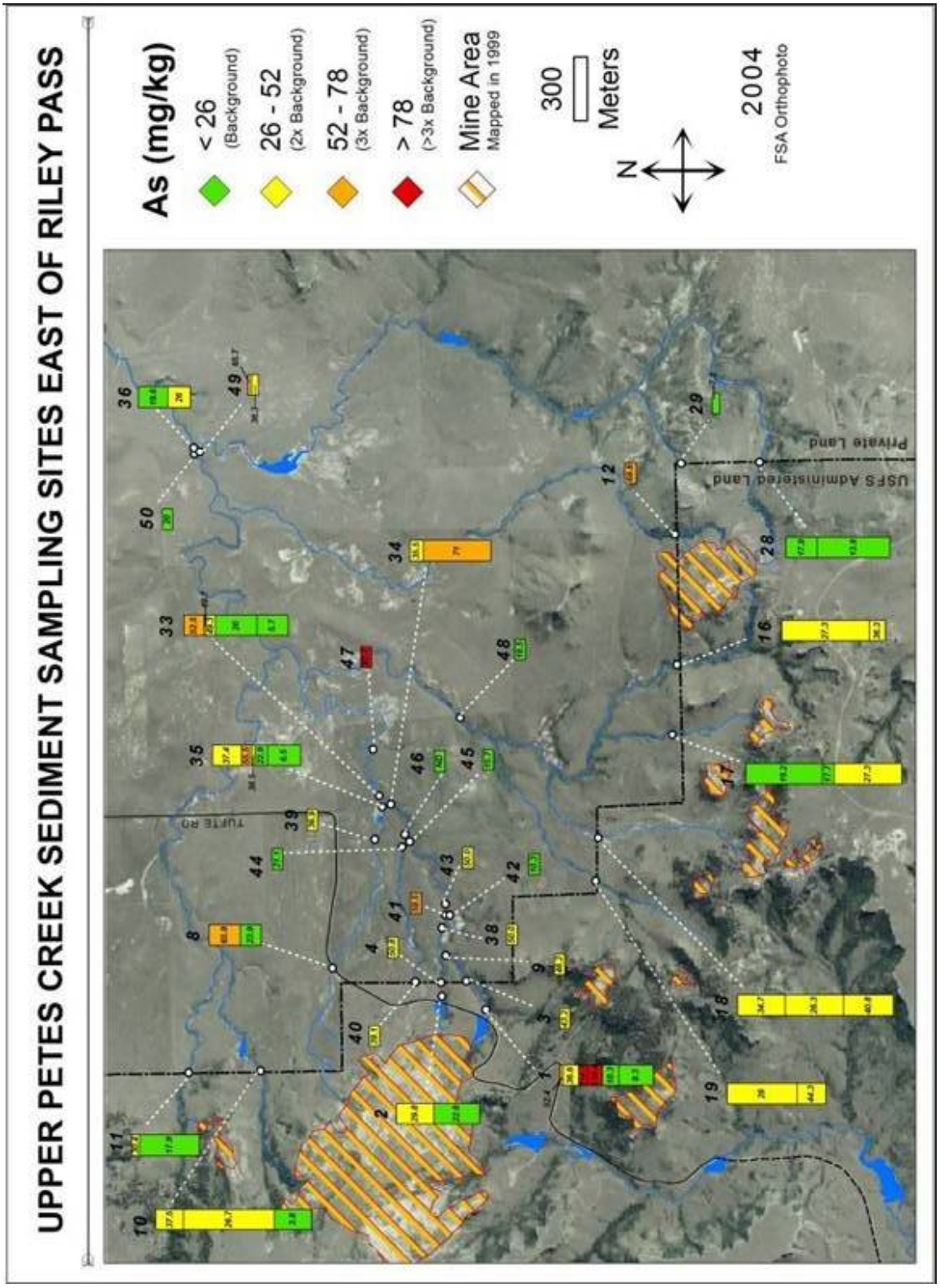

Figure 10.5: Locations and arsenic concentrations of sediment samples in the upper Pete's Creek drainage

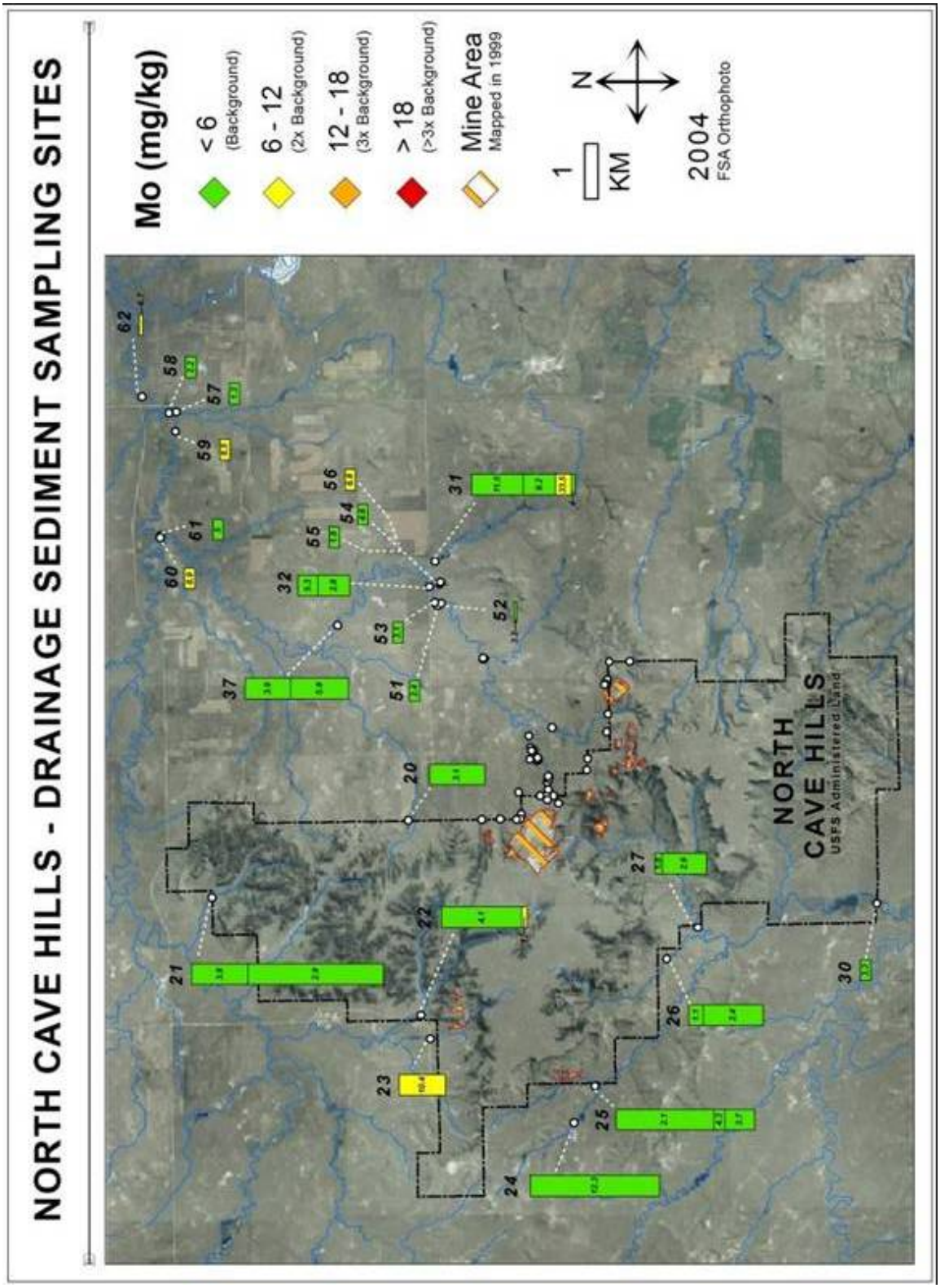

Figure 10.6: Sampling locations and molybdenum concentrations of drainage samples.

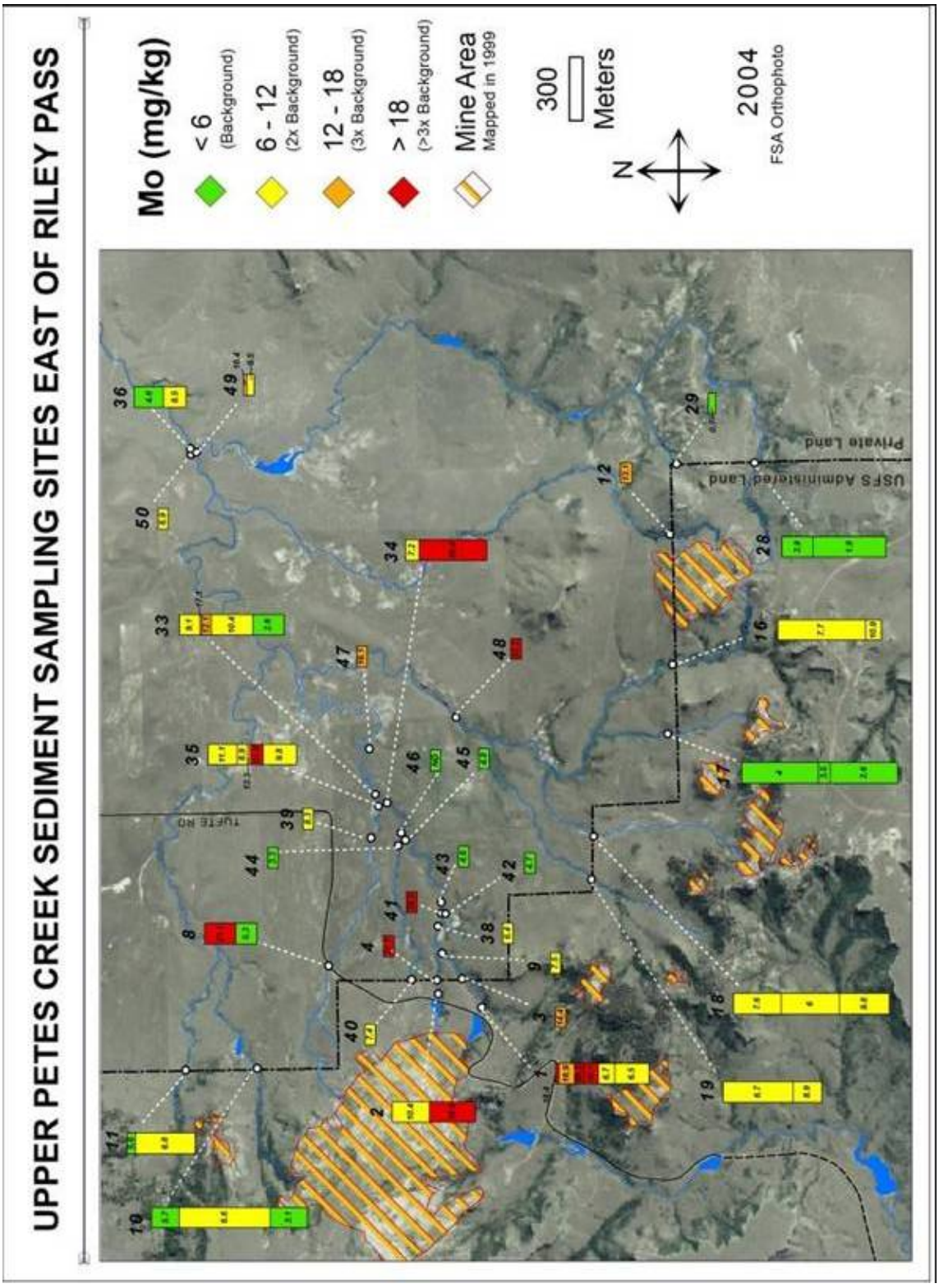

Figure 10.7: Sampling locations and molybdenum concentrations in the upper Pete's Creek drainage.

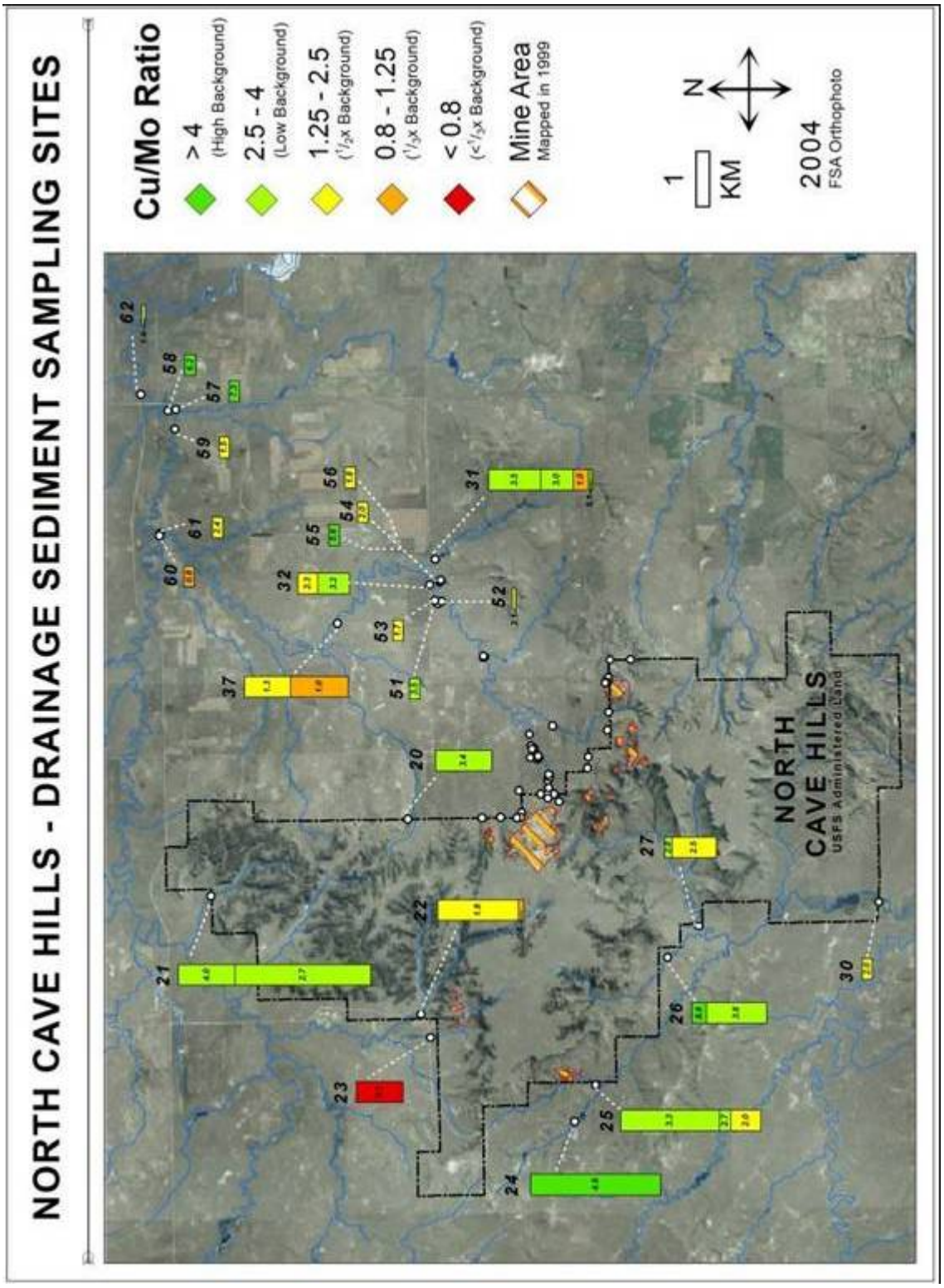

Figure 10.8: Locations and copper/molybdenum ratios of sediment samples. Bar length is proportional to core length. Horizontal division within bars indicates composite sampling intervals; numbers show the copper/molybdenum ratio.

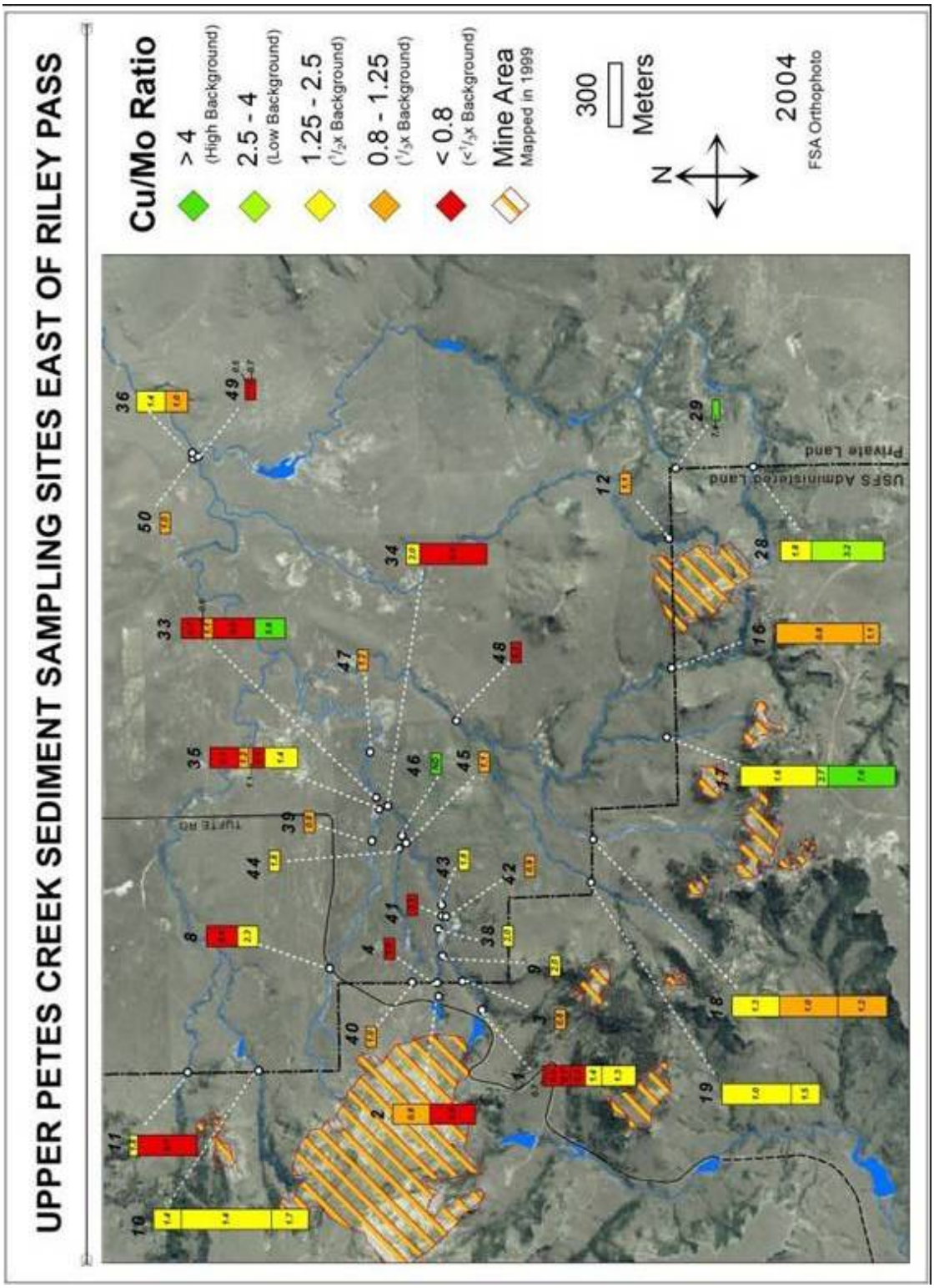

Figure 10.9: Locations and copper/molybdenum ratios of sediment samples in the upper Pete's Creek drainage

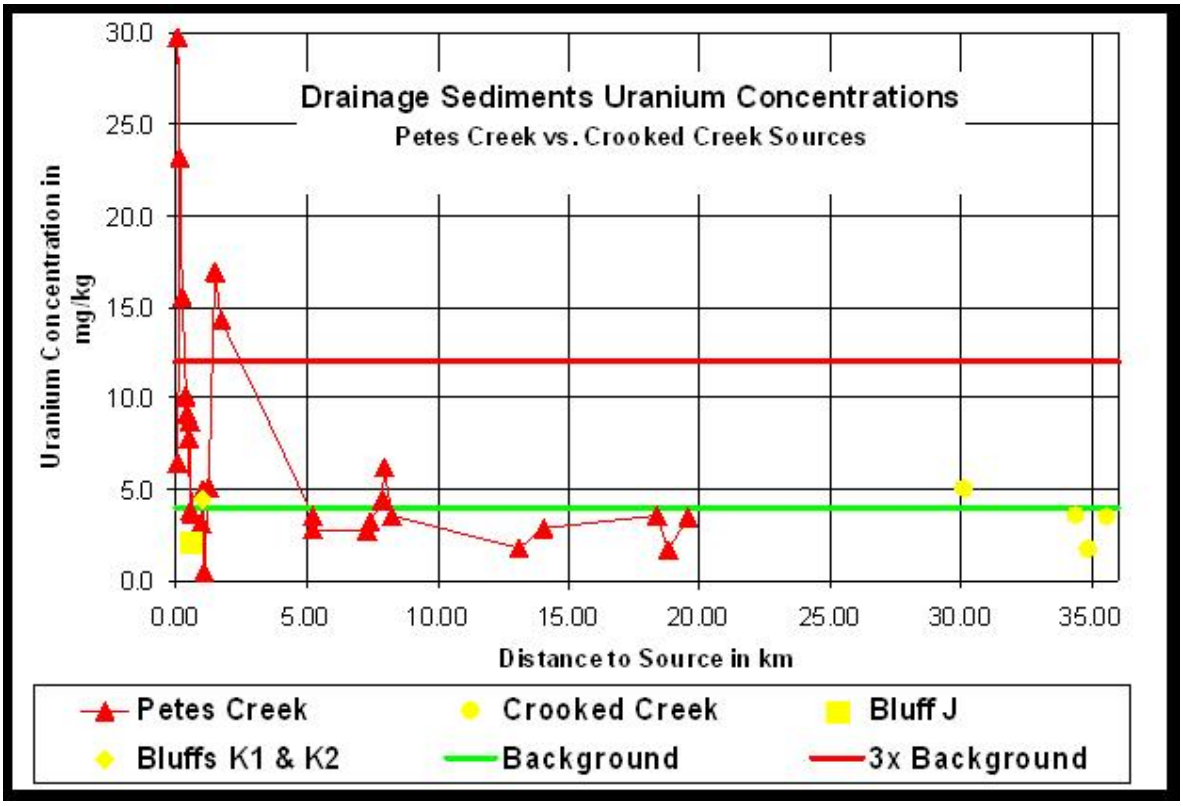

Figure 10.10: Uranium concentrations of sediment samples plotted against their distance to potential sources. Samples in the lower part of the drainage might plot twice at the same concentration, but at different distances to the two major source areas.

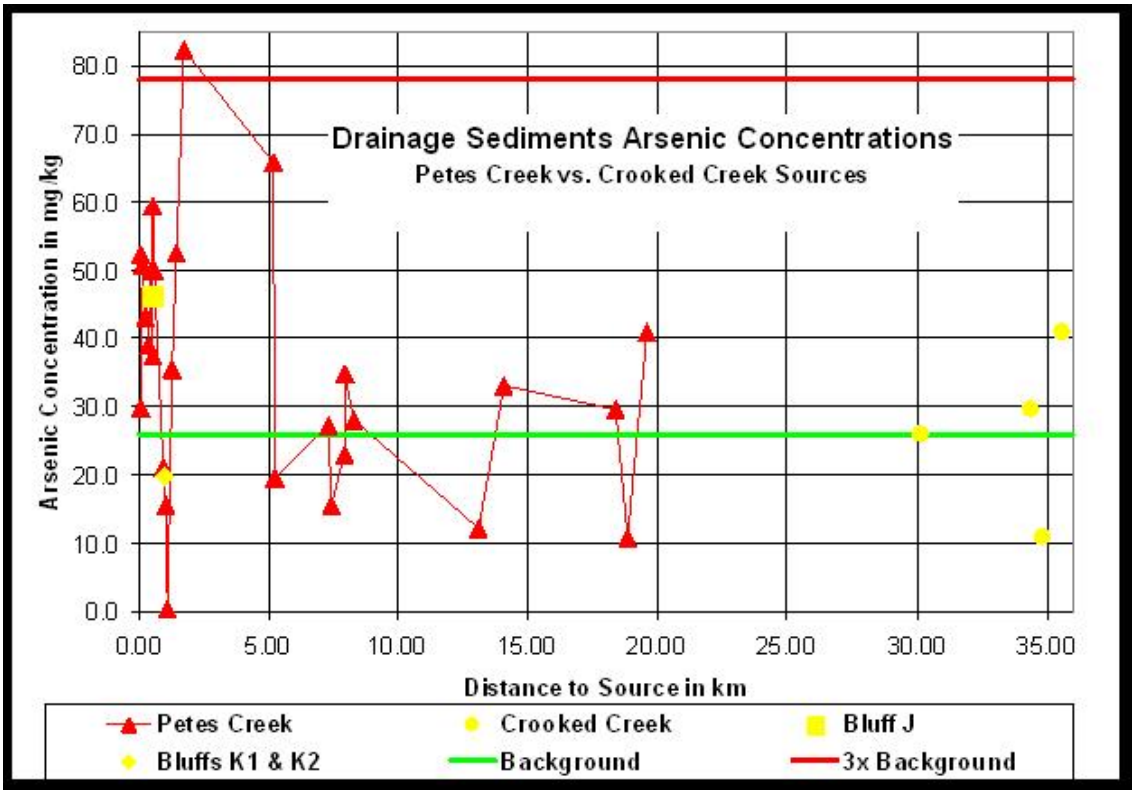

Figure 10.11: Arsenic concentrations of sediment samples plotted against their distance to potential sources.

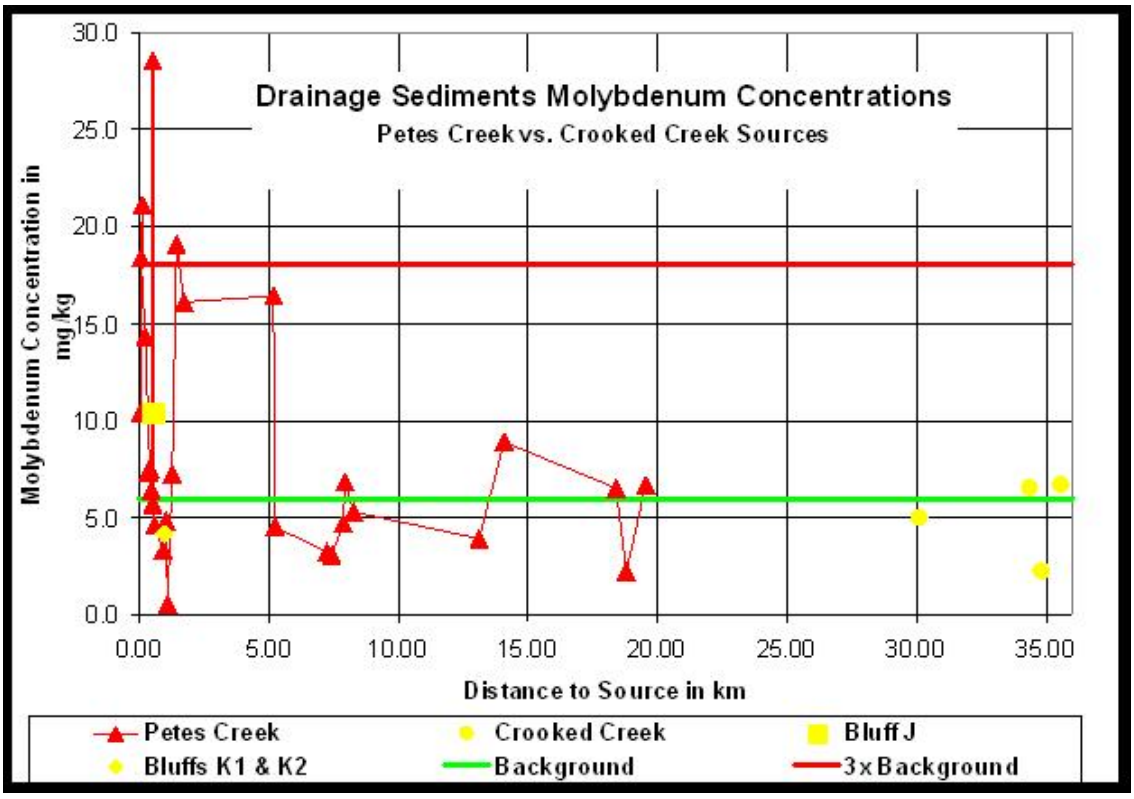

Figure 10.12: Molybdenum concentrations of sediment samples plotted against their distance to potential sources.

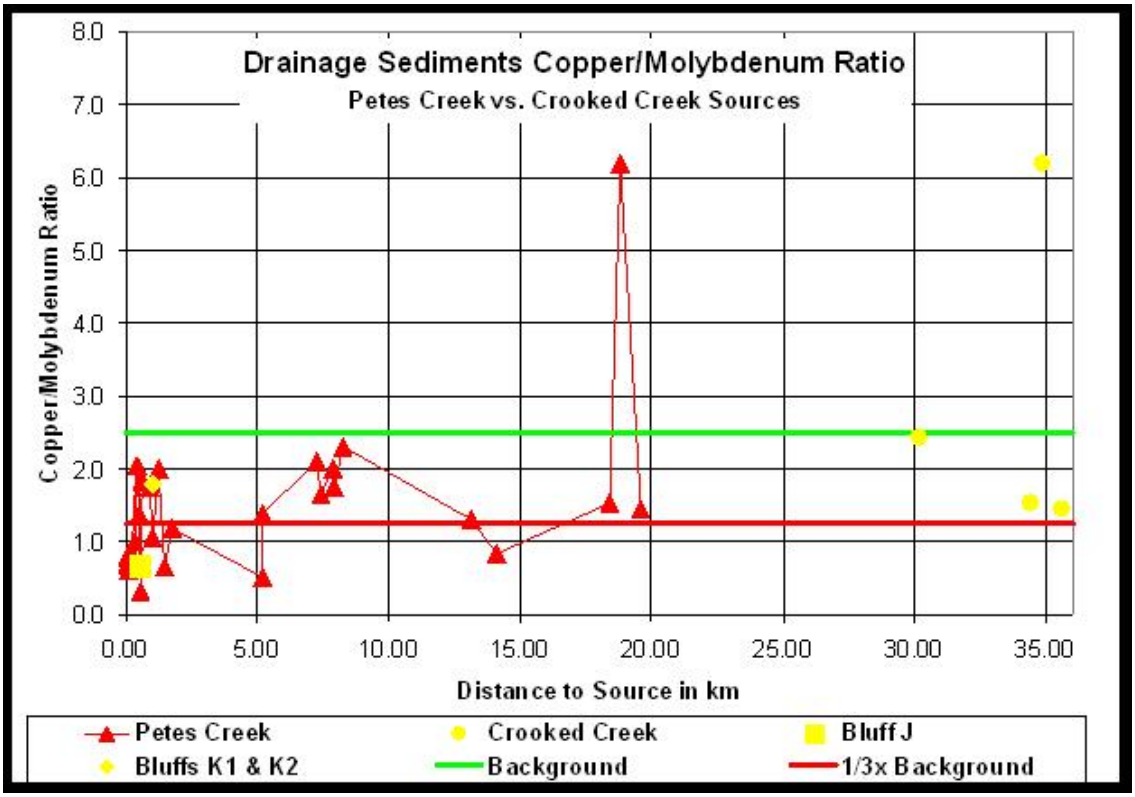

Figure 10.13: Copper/molybdenum ratios of sediment samples plotted against their distance to potential sources

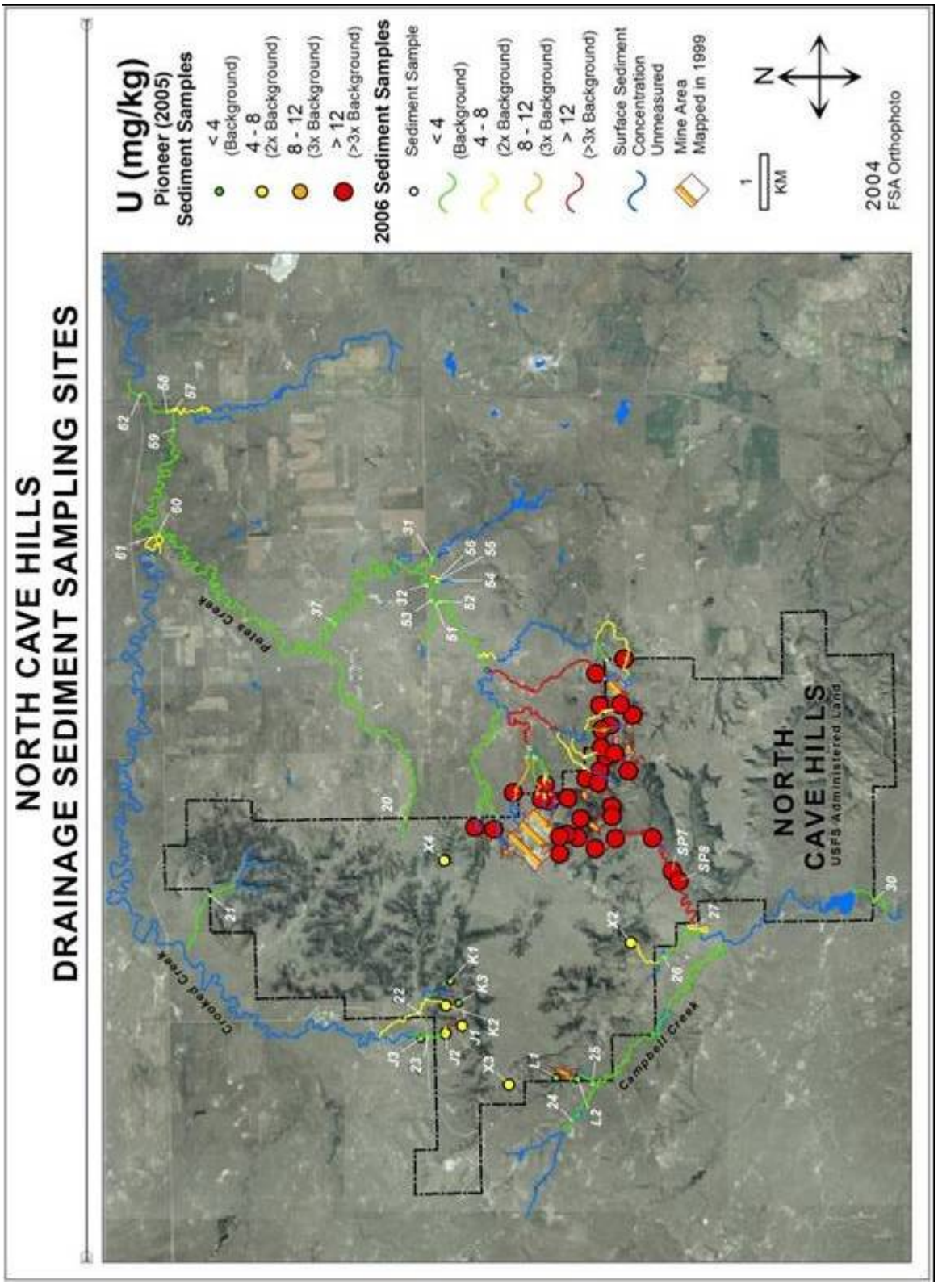

Figure 10.14: Uranium concentration in stream sediments potentially affected by abandoned mine sites.

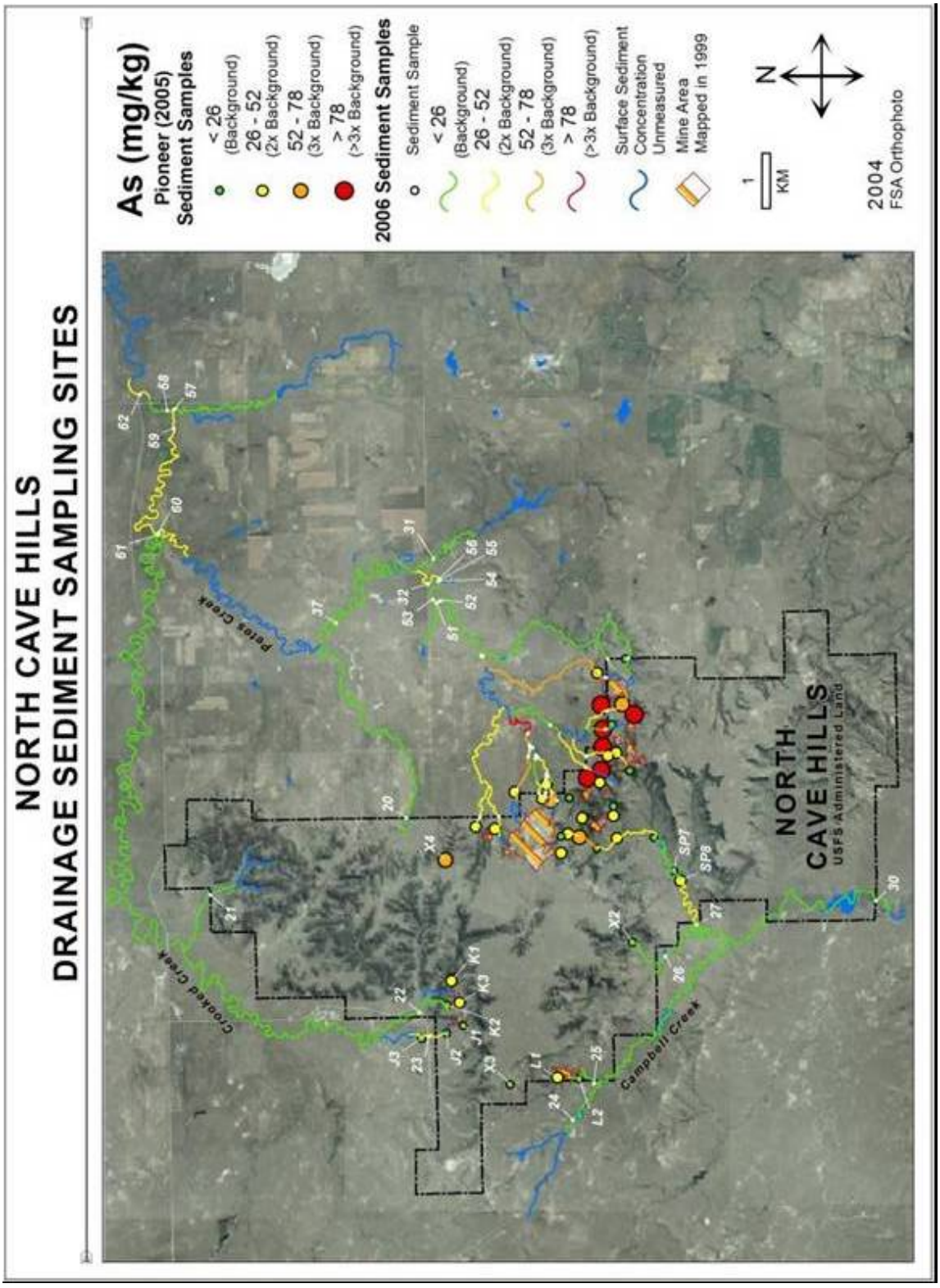

Figure 10.15: Arsenic concentration in stream sediments potentially affected by abandoned mine sites.

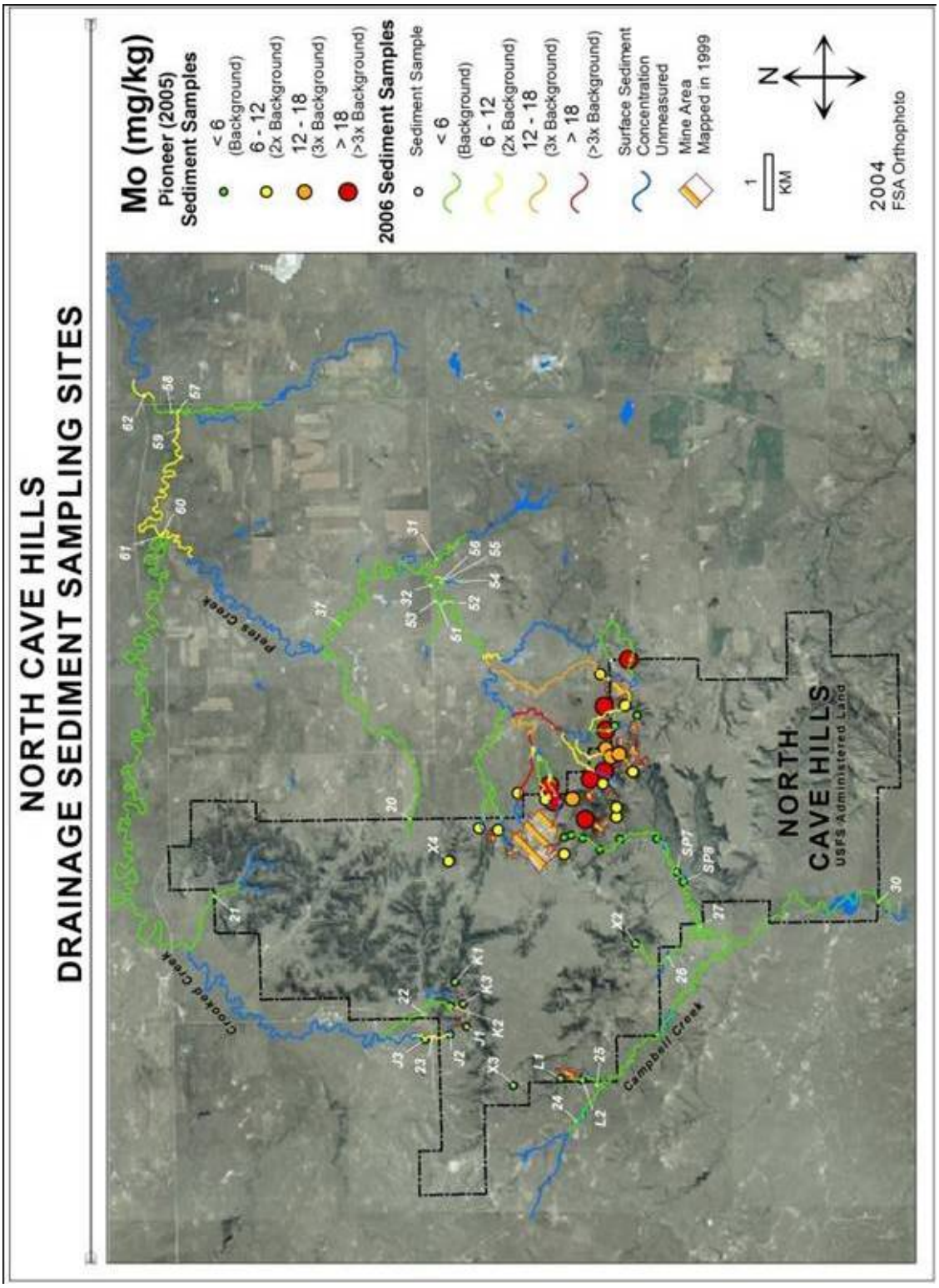

Figure 10.16: Molybdenum concentration in stream sediments potentially affected by abandoned mine sites.

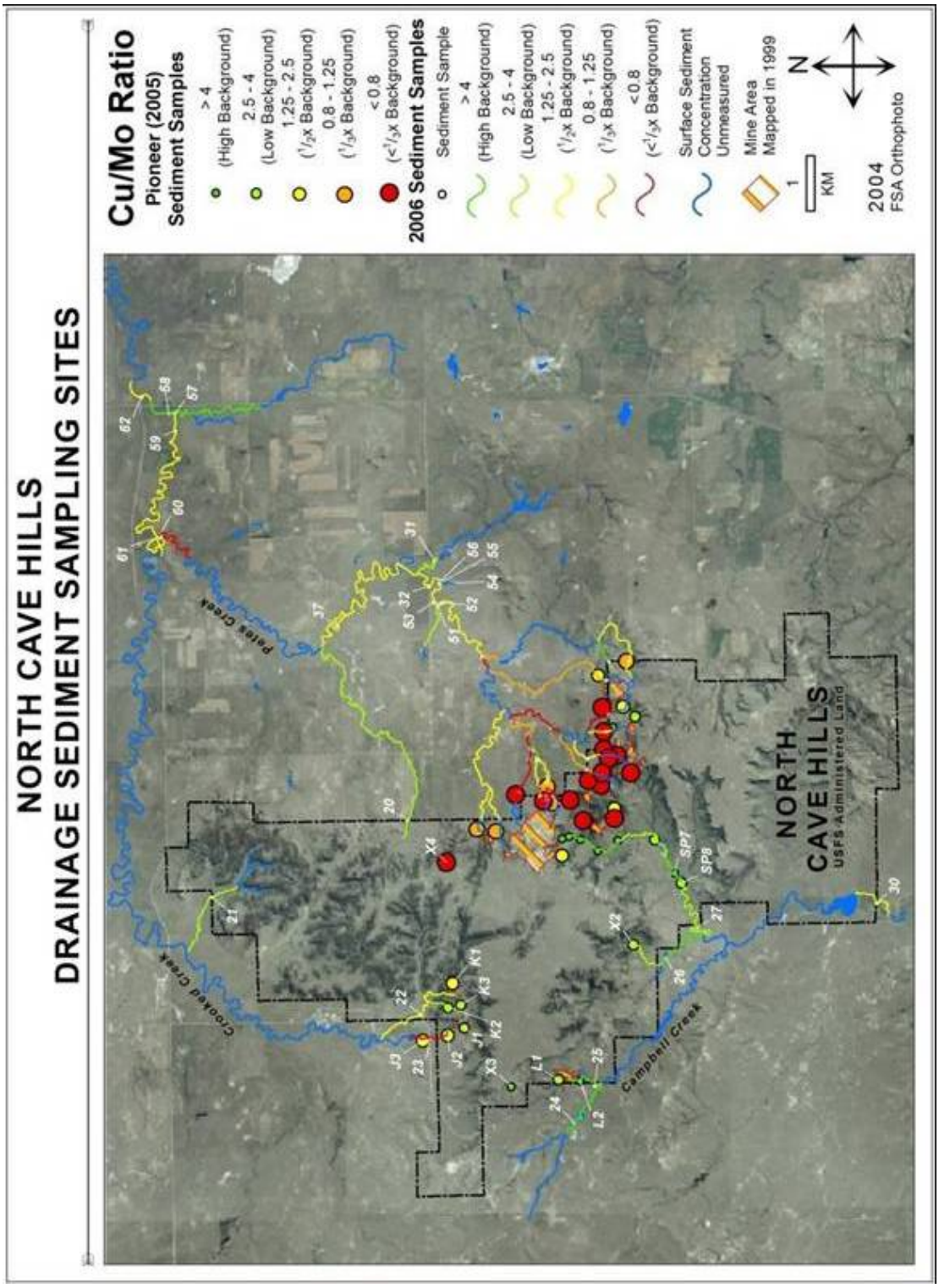

Figure 10.17: Copper/molybdenum ratios in stream sediments potentially affected by abandoned mine sites.

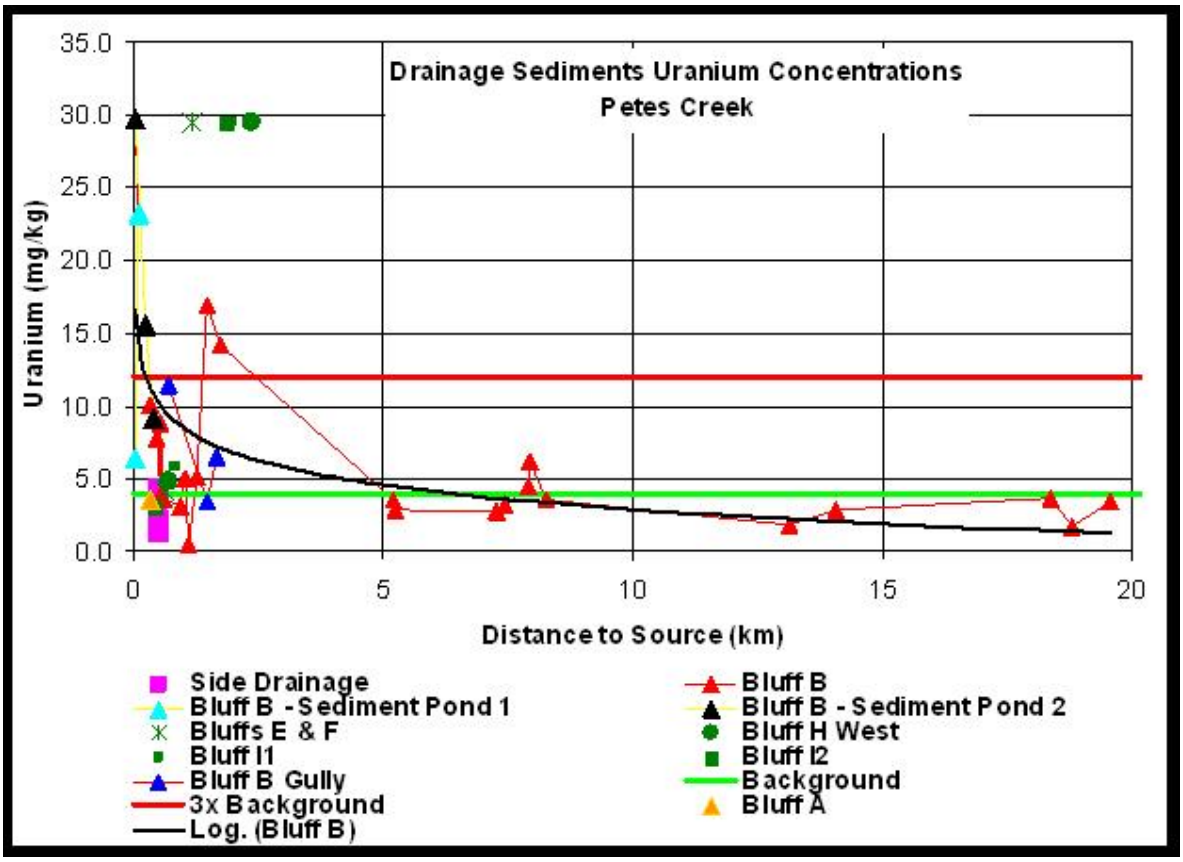

Figure 10.18: Uranium concentrations of sediment samples plotted against their distance to potential sources in the Pete's Creek drainage. Samples in the lower part of the drainage might plot several times at the same concentration, but at different distances to various source areas. Side drainages are plotted arbitrarily at 0.5 km distance because they are not related to any of the sources.

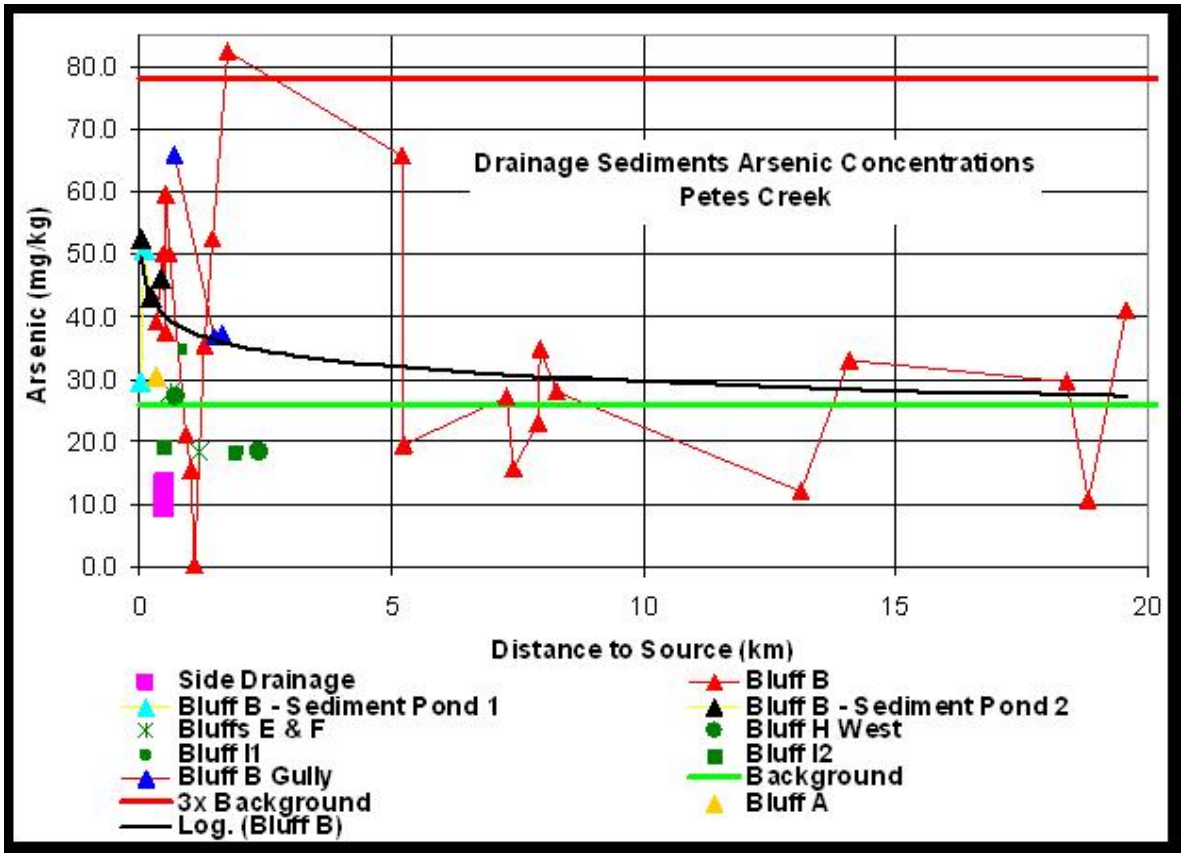

Figure 10.19: Arsenic concentrations of sediment samples plotted against their distance to potential sources in the Pete's Creek drainage.

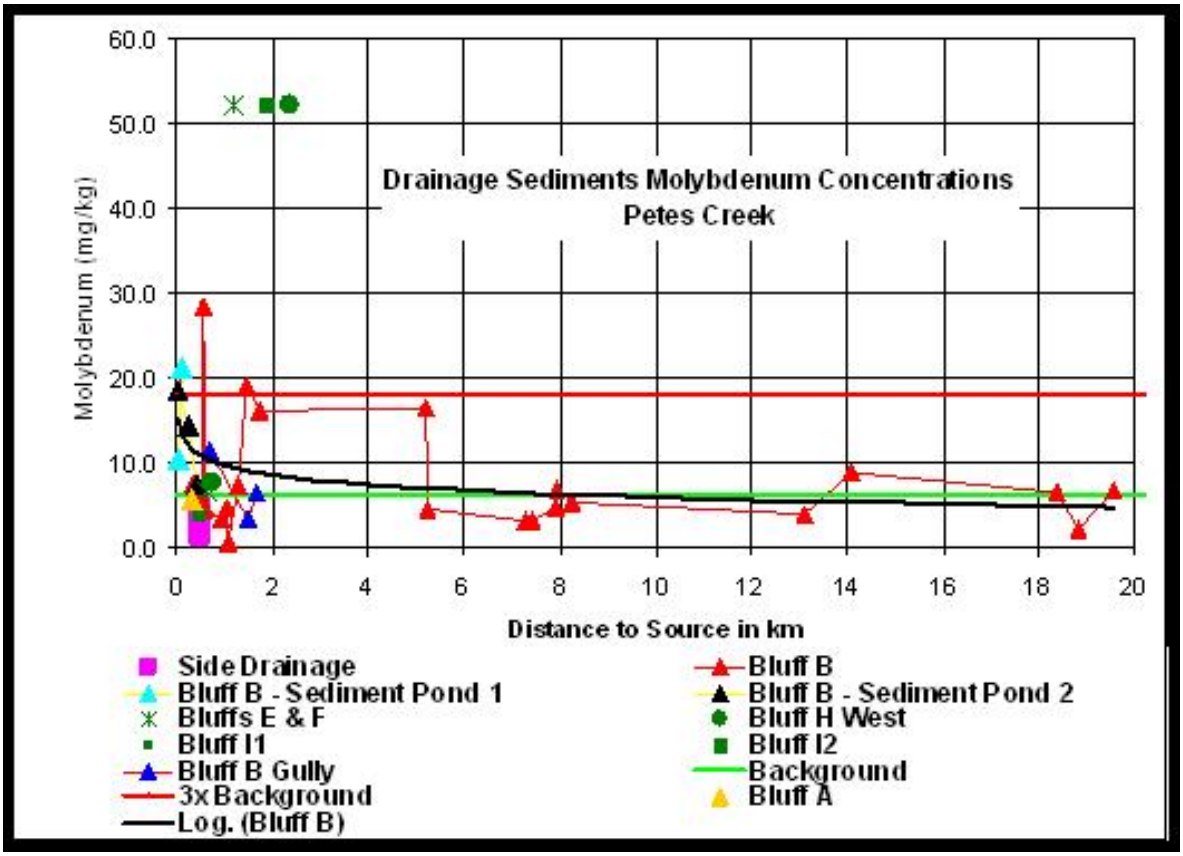

Figure 10.20: Molybdenum concentrations of sediment samples plotted against their distance to potential sources in the Pete's Creek drainage. The three data points plotted above 50 mg/kg originate from the same sample and represent the distances to three different sources.

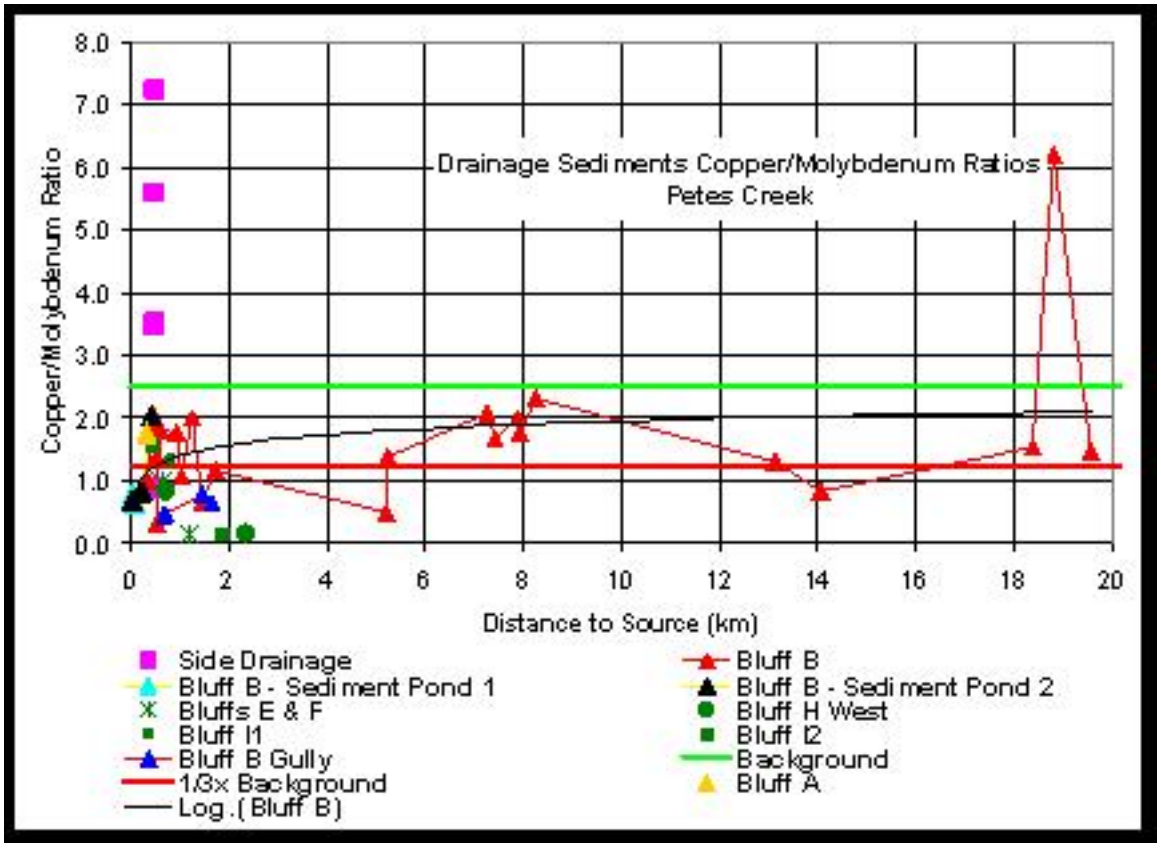

Figure 10.21: Copper/molybdenum ratios of sediment samples plotted against their distance to potential sources in the Pete's Creek drainage. The three data points plotting close to a zero ratio originate from the same sample and represent the distances to three different sources.

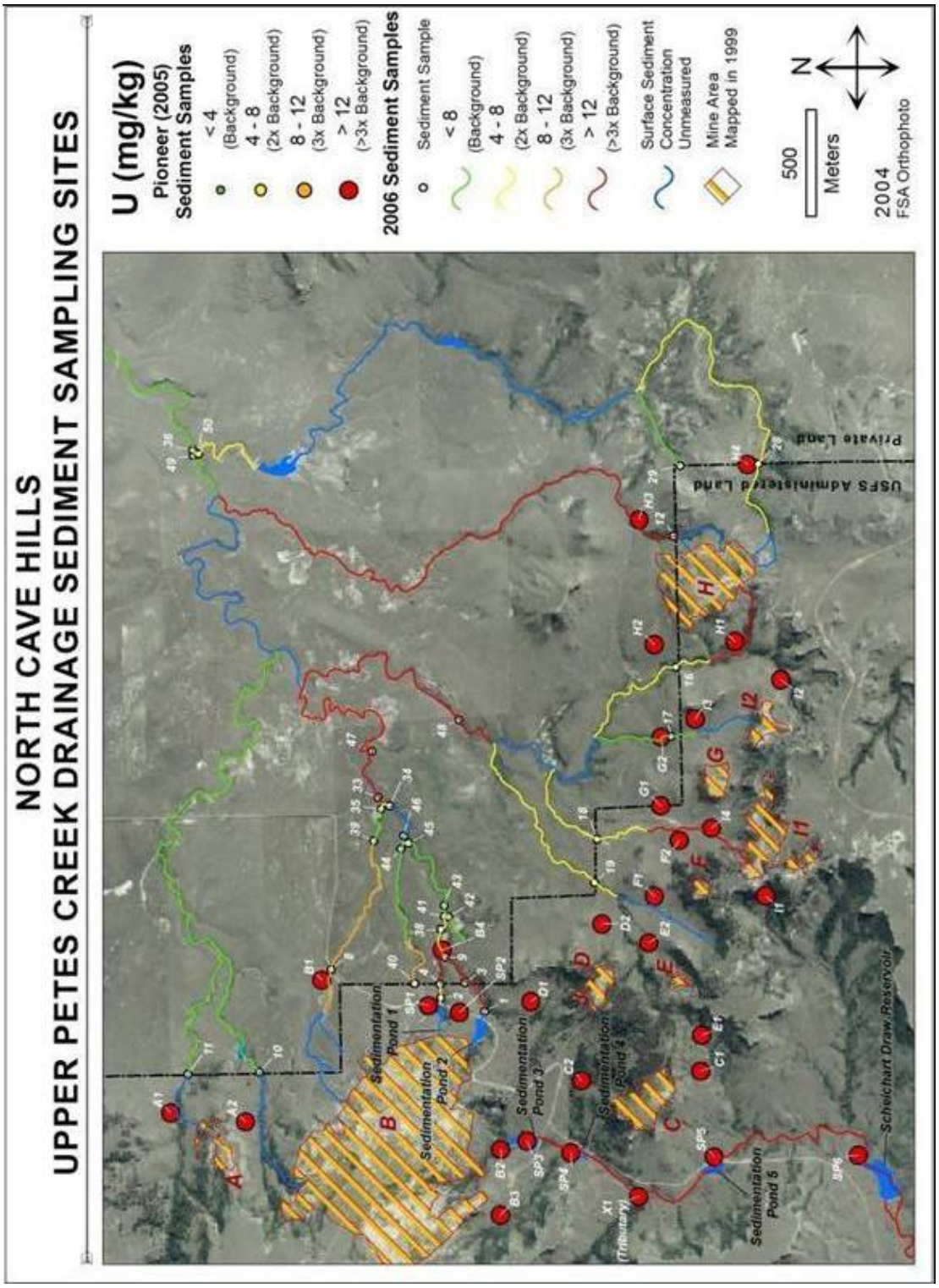

Figure 10.22: Uranium concentration of stream sediments in the upper Pete's Creek drainage

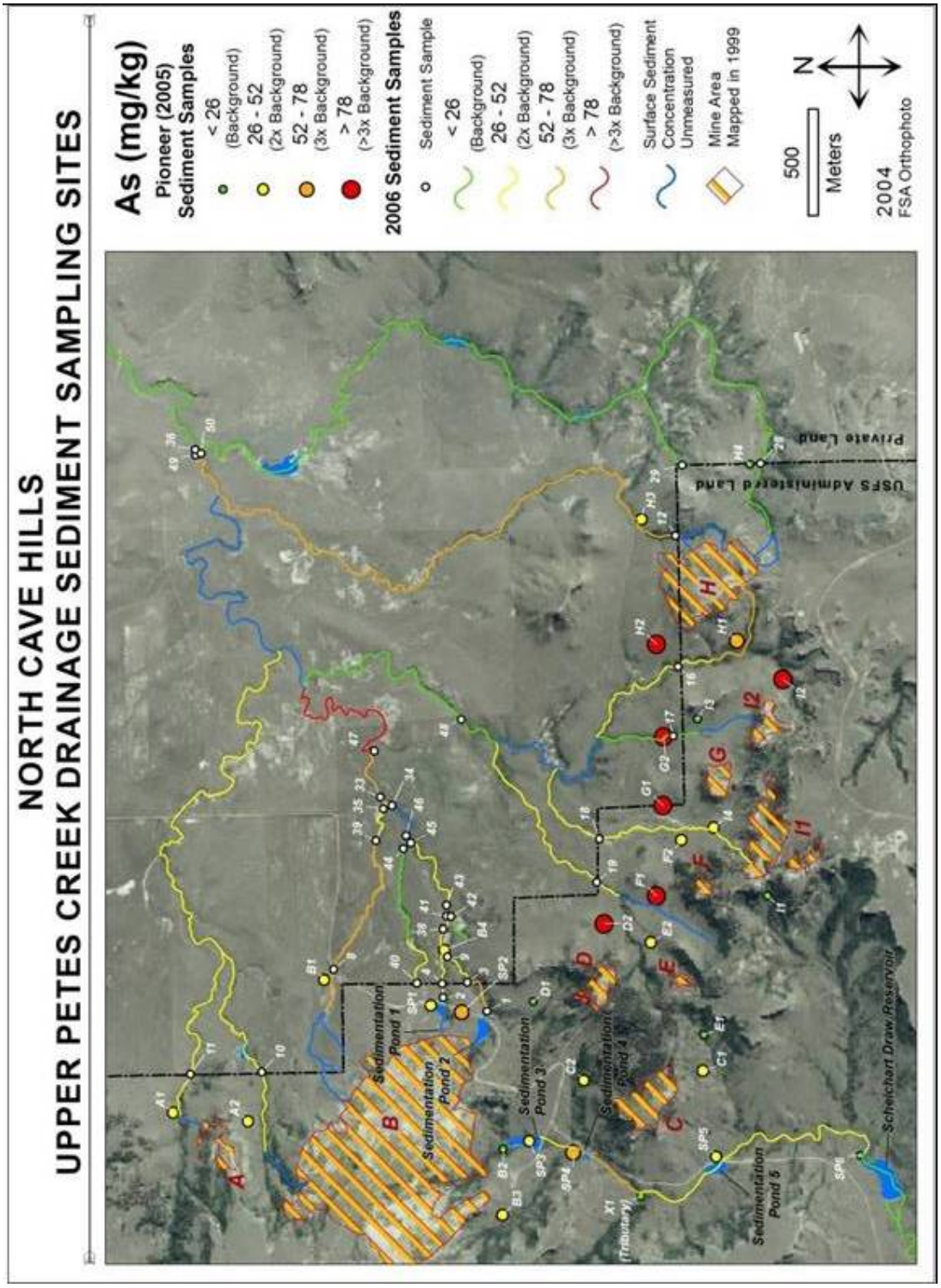

Figure 10.23: Arsenic concentration of stream sediments in the upper Pete's Creek drainage.

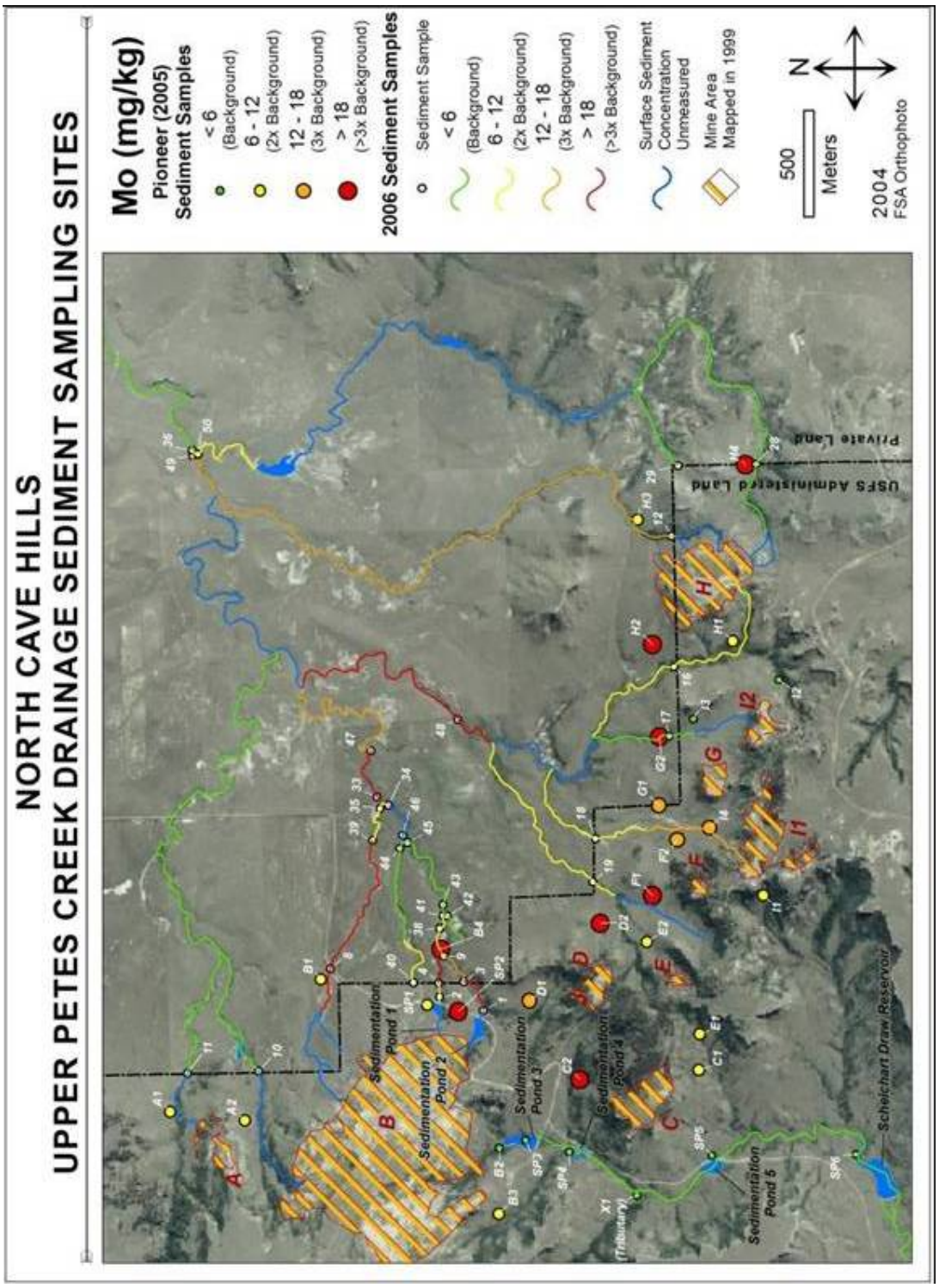

Figure 10.24: Molybdenum concentrations of stream sediments in the upper Pete's Creek drainage

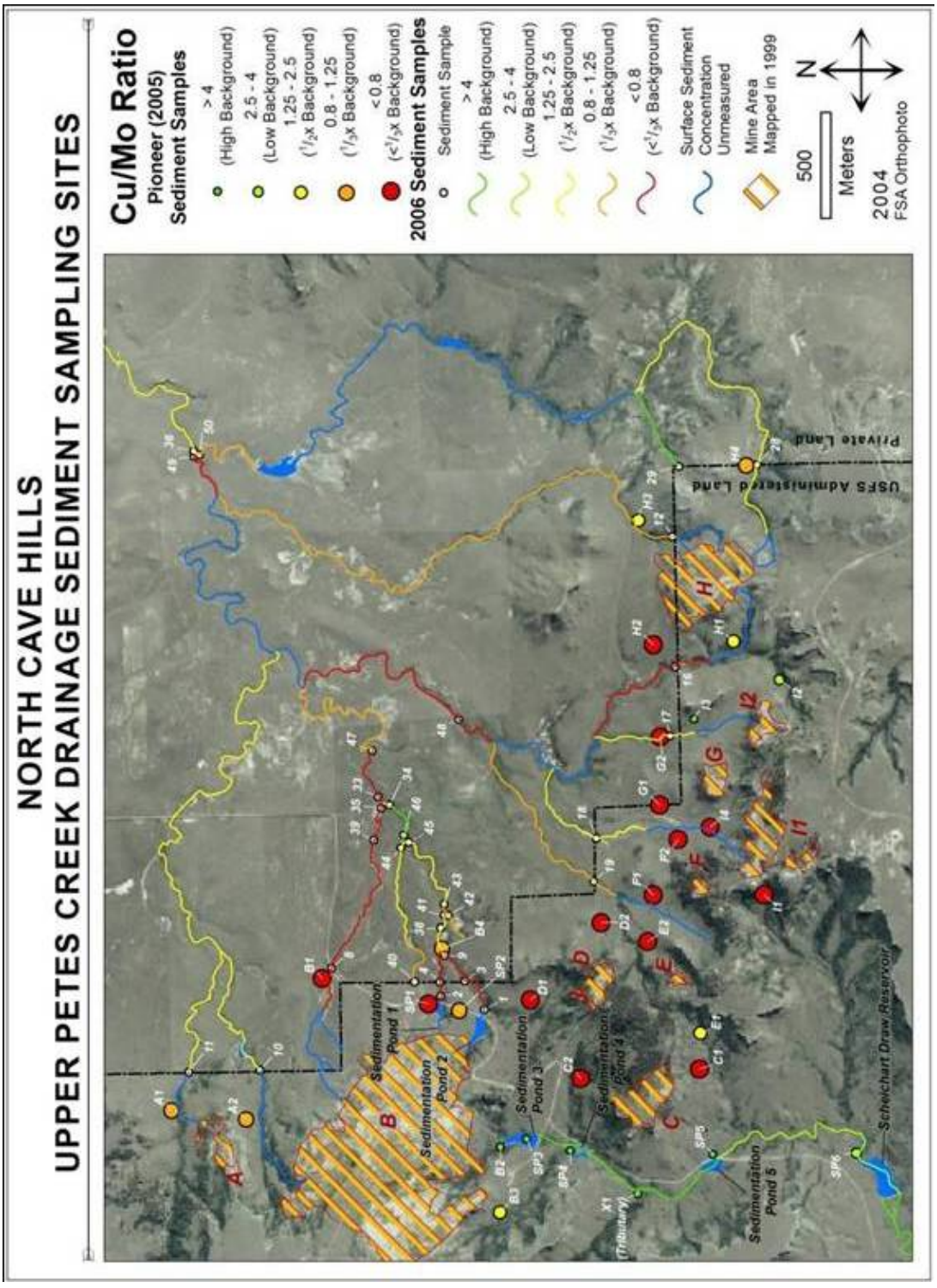

Figure 10.25: Copper/molybdenum ratios of stream sediments in the upper Pete's Creek drainage

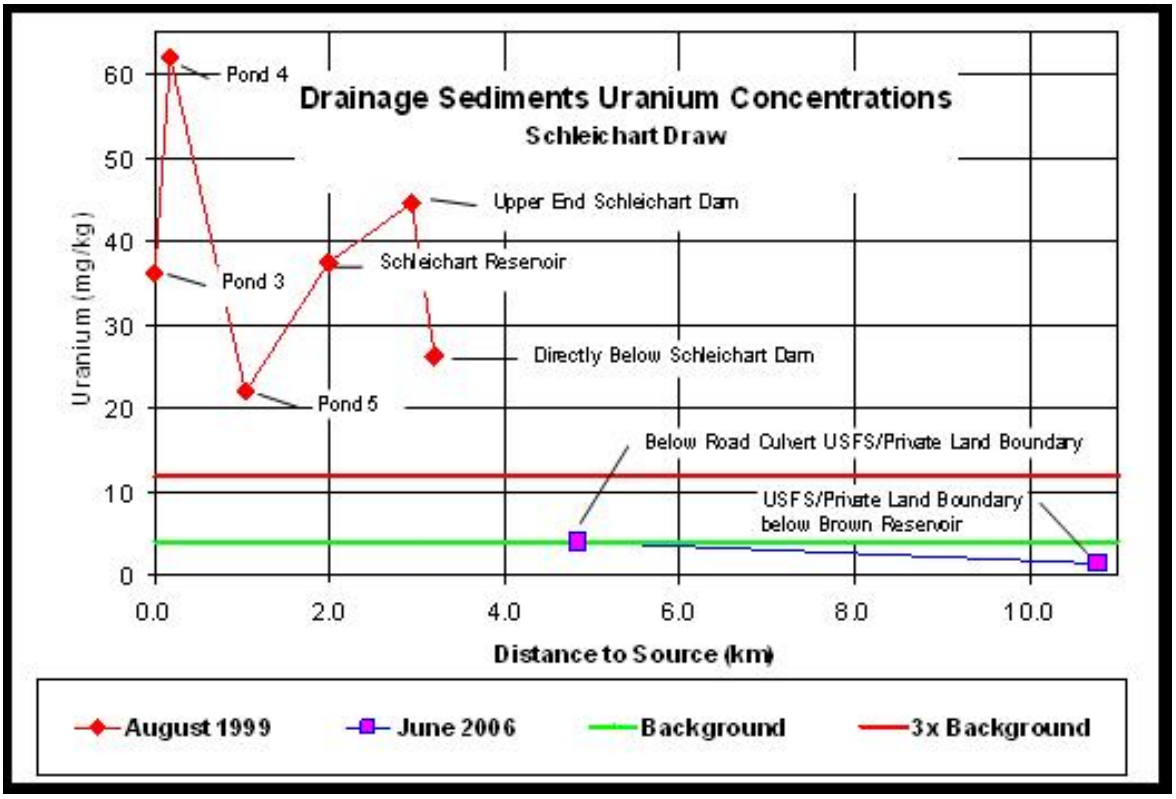

Figure 10.26: Uranium concentrations of sediment samples plotted against their distance to potential sources in the Schleichart Draw.

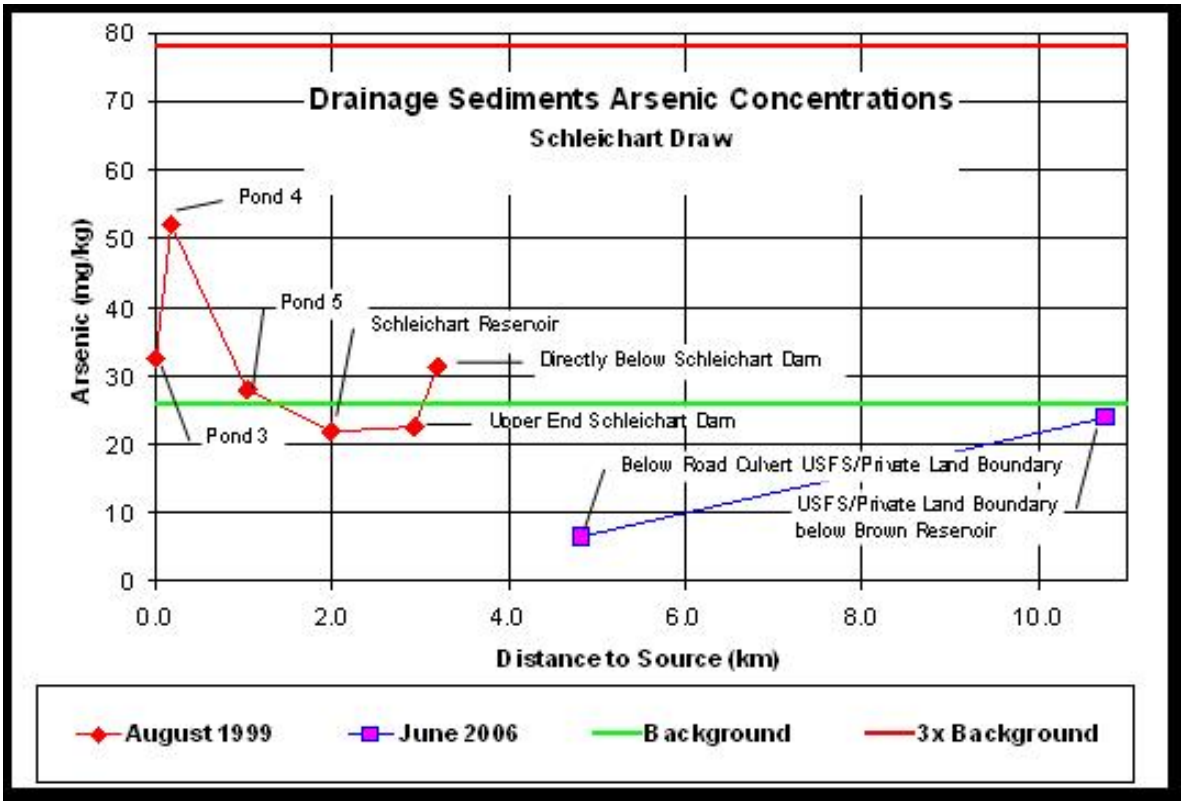

Figure 10.27: Arsenic concentrations of sediment samples plotted against their distance to potential sources in the Schleichart Draw.

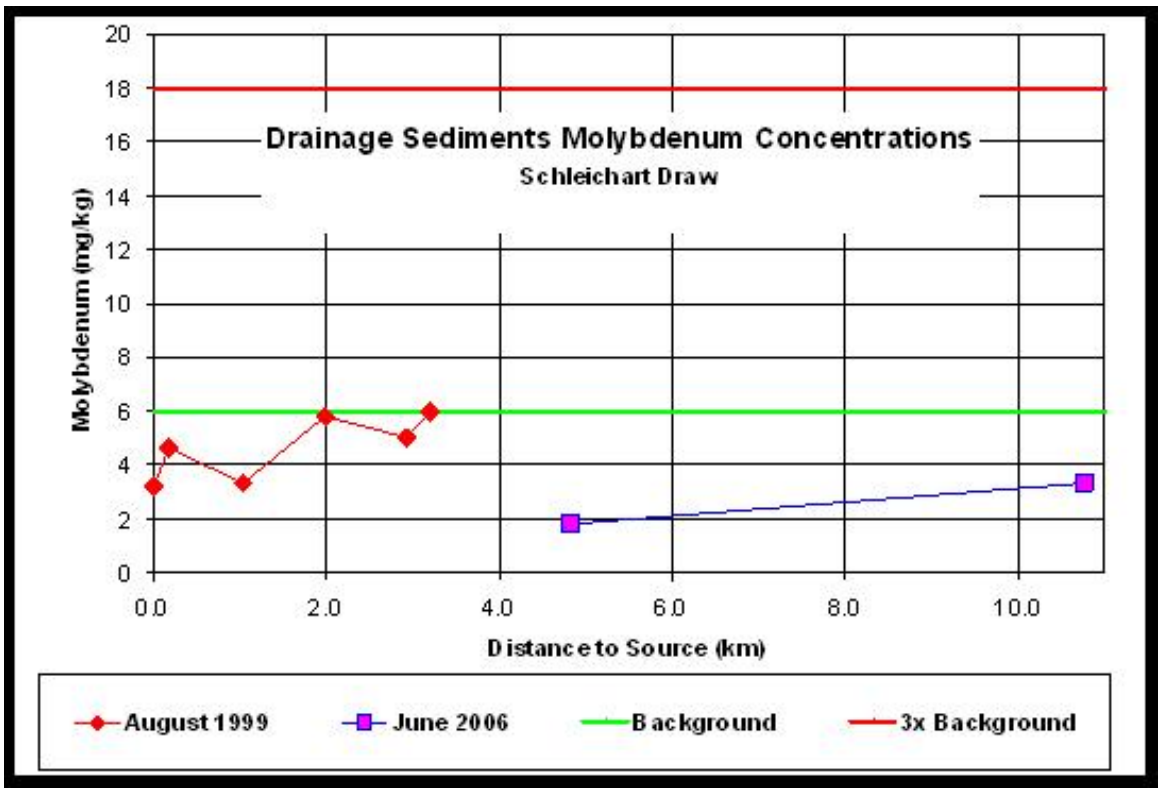

Figure 10.28: Molybdenum concentrations of sediment samples plotted against their distance to potential sources in the Schleichart Draw.

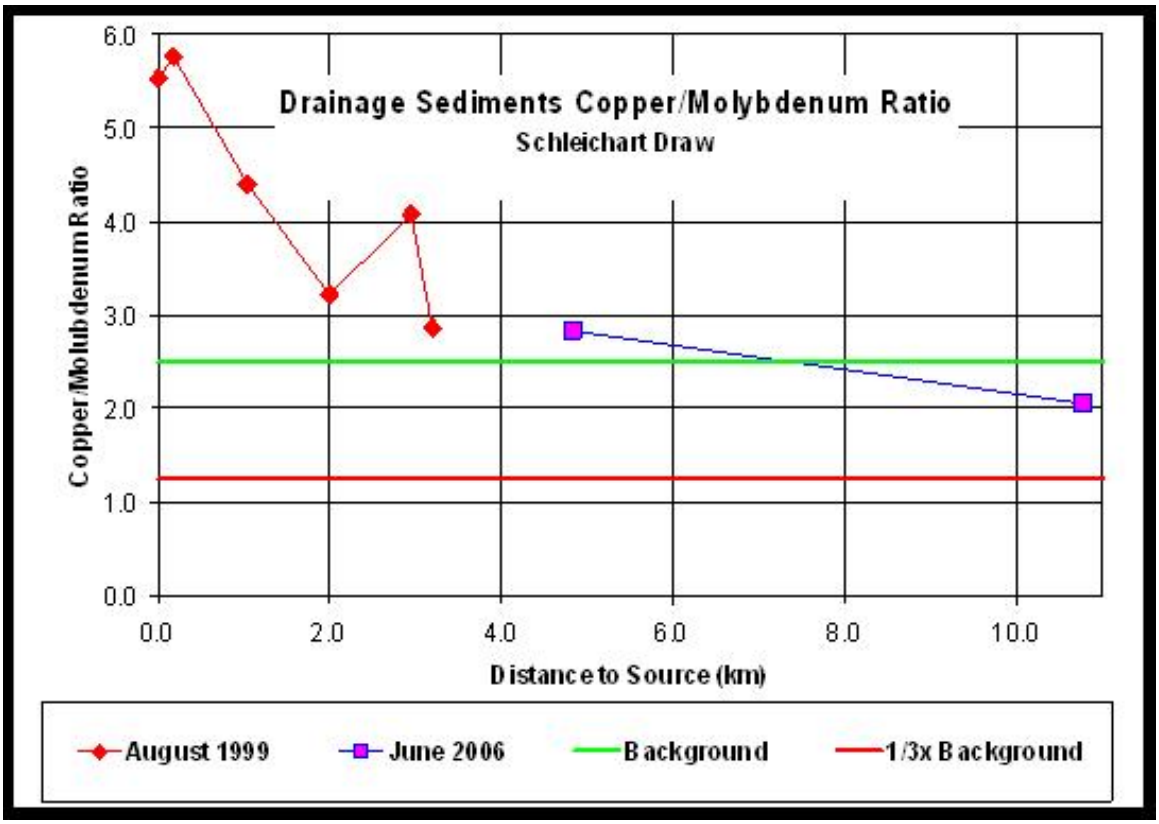

Figure 10.29: Copper/molybdenum ratios of sediment samples plotted against their distance to potential sources in the Schleichart Draw.

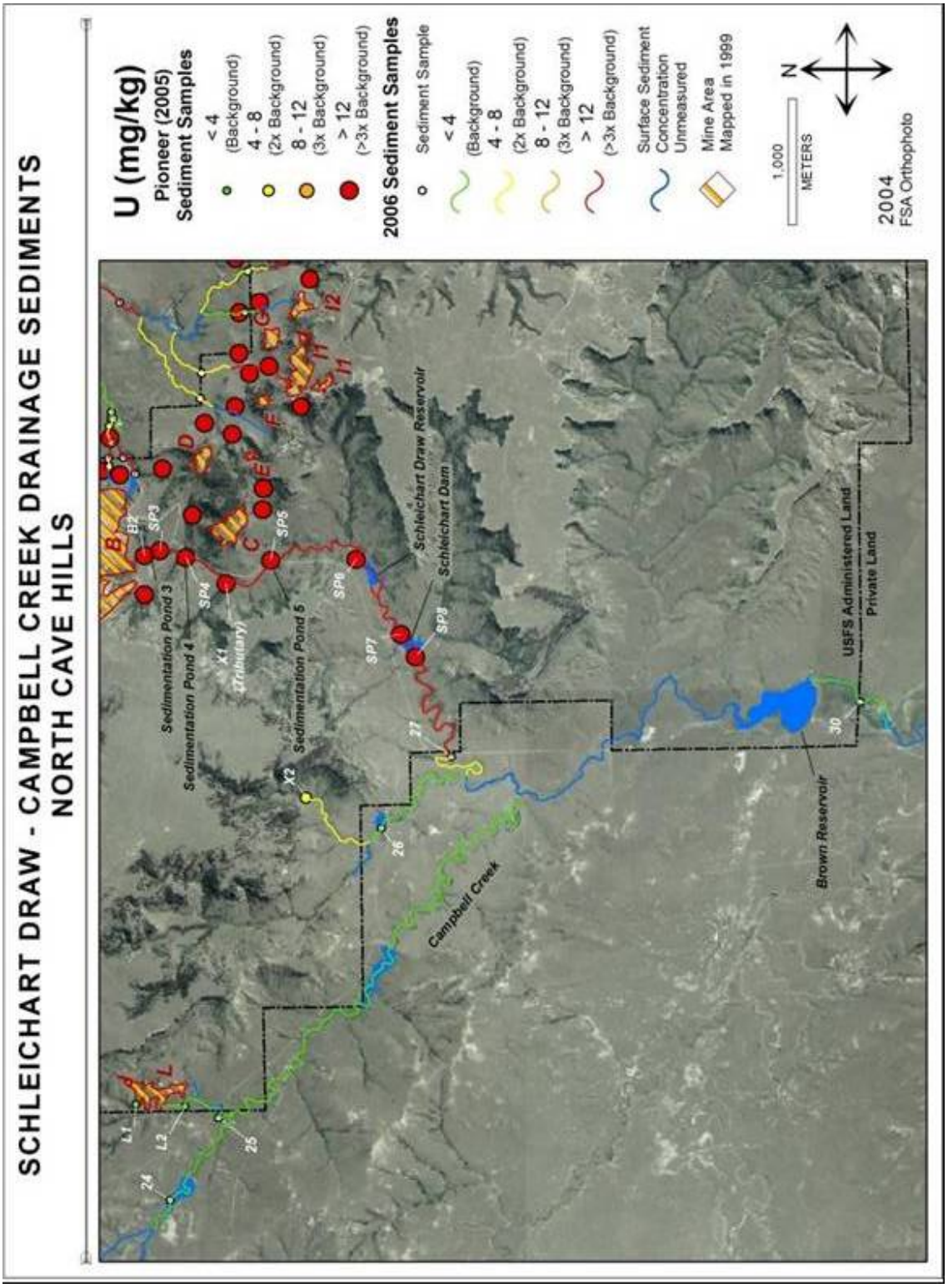

Figure 10.30: Uranium concentrations of stream sediments in Schleichart Draw.

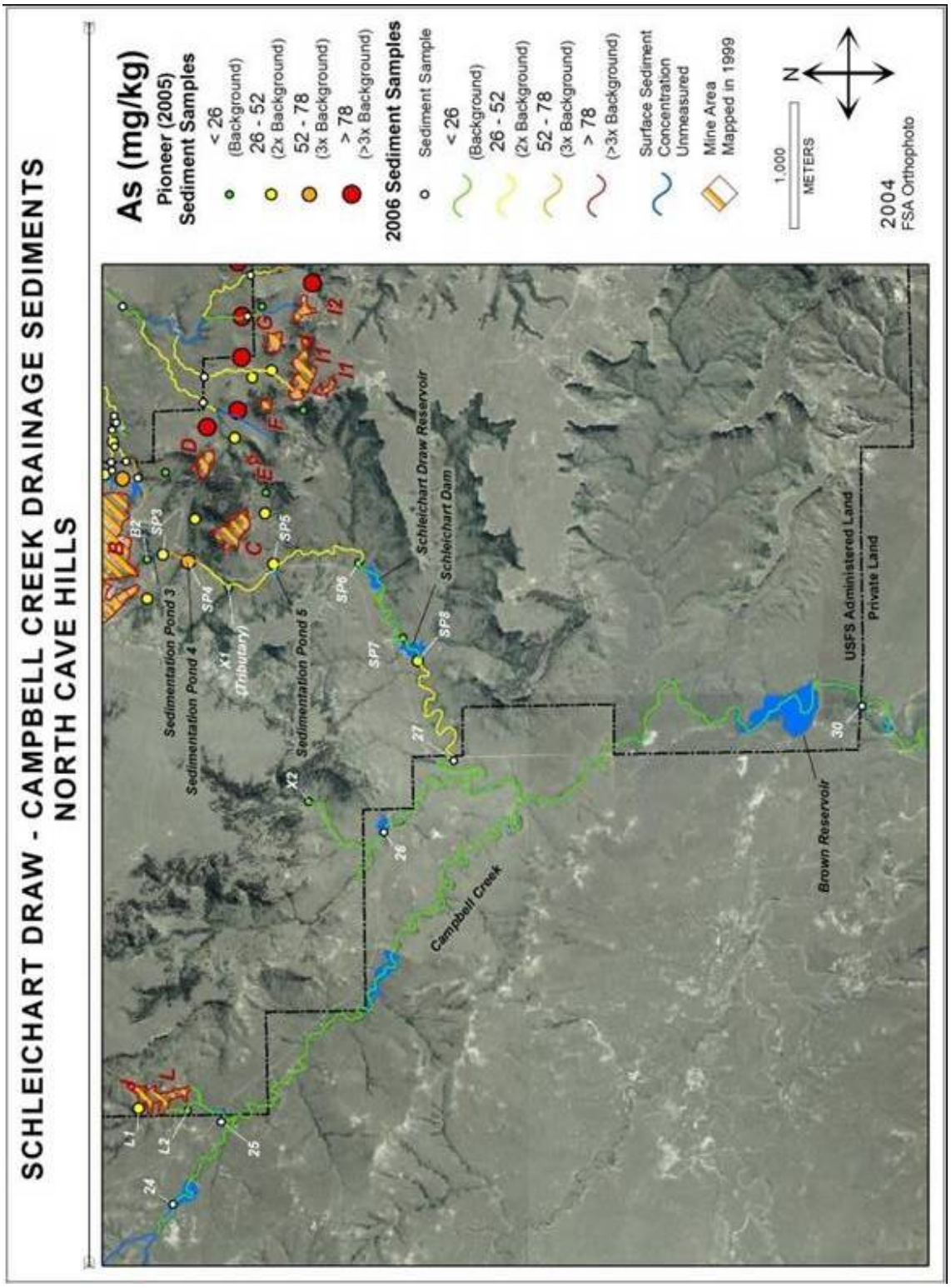

Figure 10.31: Arsenic concentrations of stream sediments in Schleichart Draw.

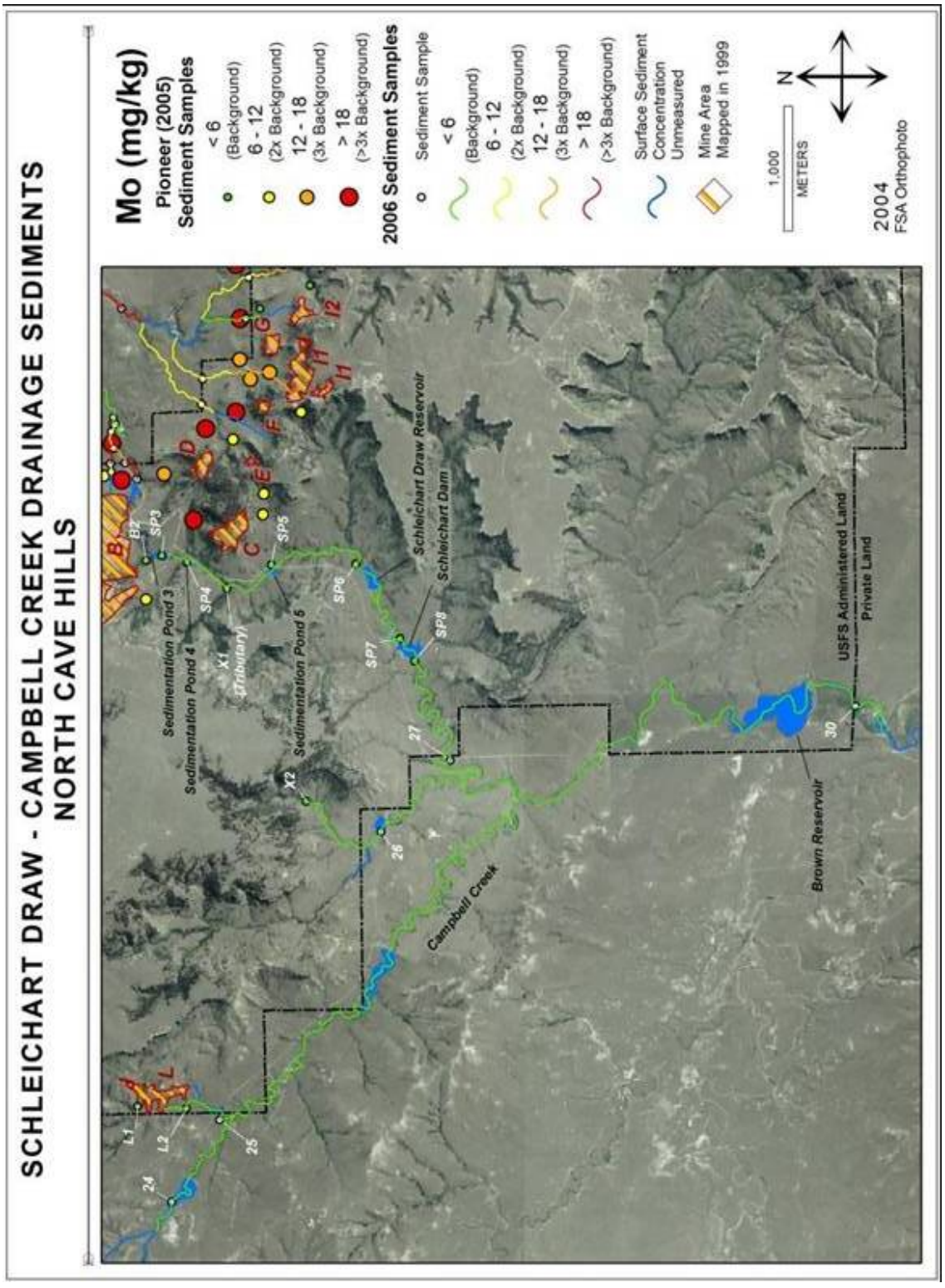

Figure 10.32: Molybdenum concentrations of stream sediments in Schleichart Draw.

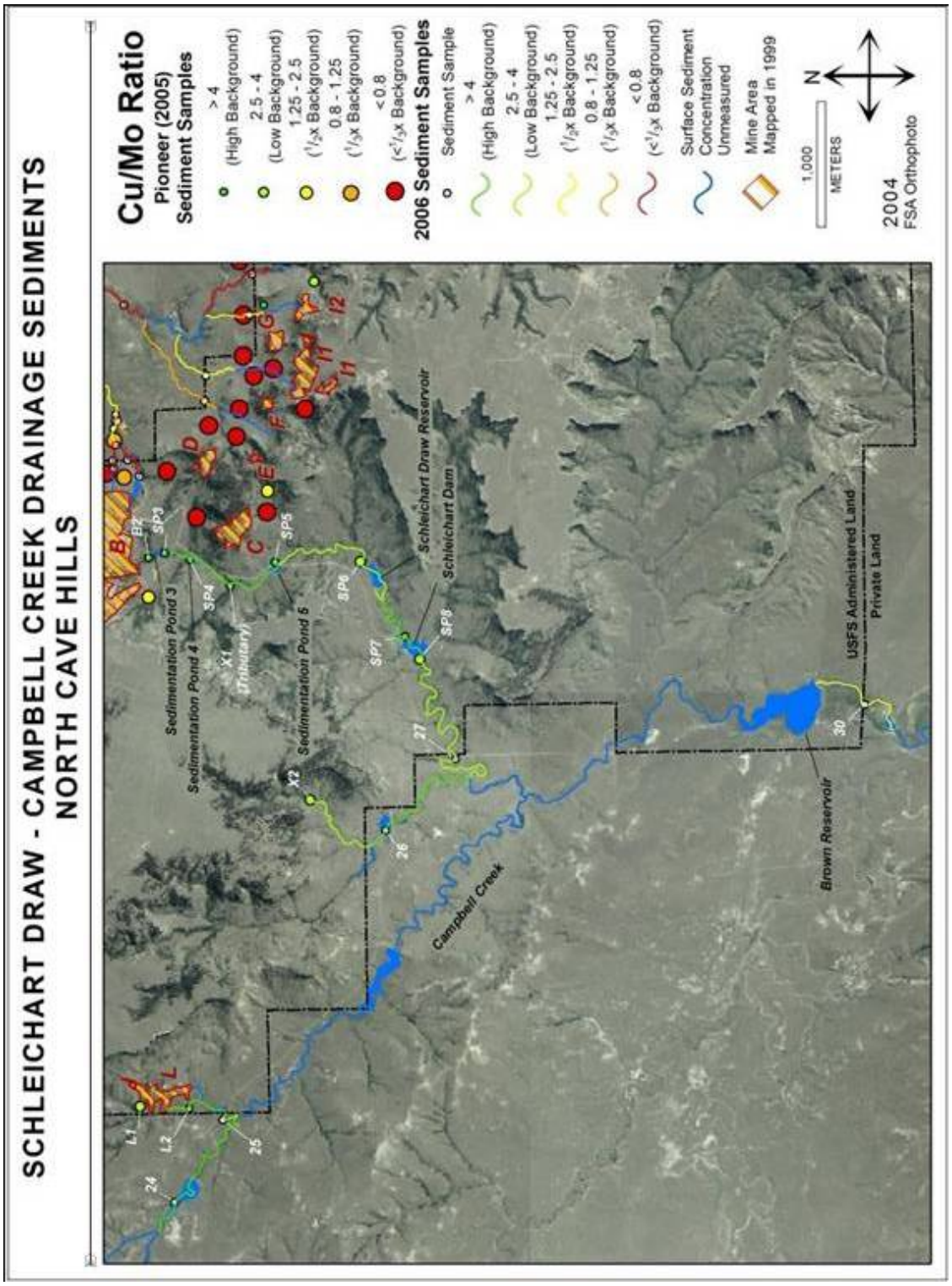

Figure 10.33: Copper/molybdenum ratios of stream sediments in Schleichart Draw.

Figure 10.34: Flow through missing-rivet holes in standpipe of Sedimentation Pond #2.

Figure 10.35: Rusted out or missing rivet holes in standpipe of Pond #1.

Figure 10.36: Water elevation adjustment due to missing rivet holes in standpipe of Pond #1.

Figure 10.37: Pronounced clay dispersion in runoff water from the mine spoils of Bluffs E, F and I2.