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ASA, CSSA, & SSSA International Annual Meeting
Nov. 2-5, 2014 | Long Beach, CA

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168-4 **Mighty Manganese Oxides in Central Pennsylvania Soils.**

Poster Number **1364**

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Monday, November 3, 2014

Long Beach Convention Center, Exhibit Hall ABC

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The impacts of early industrial activity in Central Pennsylvania still lay right beneath the forest floor. Once the home to some of the richest iron seams in the country, small forges were common across the landscape. Refining of the iron ore or smelting released large amounts of atmospheric manganese into the surrounding environment more than a century ago. Yet, the manganese is still concentrated in the top five centimeters of the soil profile at levels over 10,000 ppm, below this region concentrations rapidly decreases to background levels. The use of x-ray diffraction (XRD) and x-ray absorption spectroscopy (XAS) mapping provided critical insights into the cycling of manganese in the environment.

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