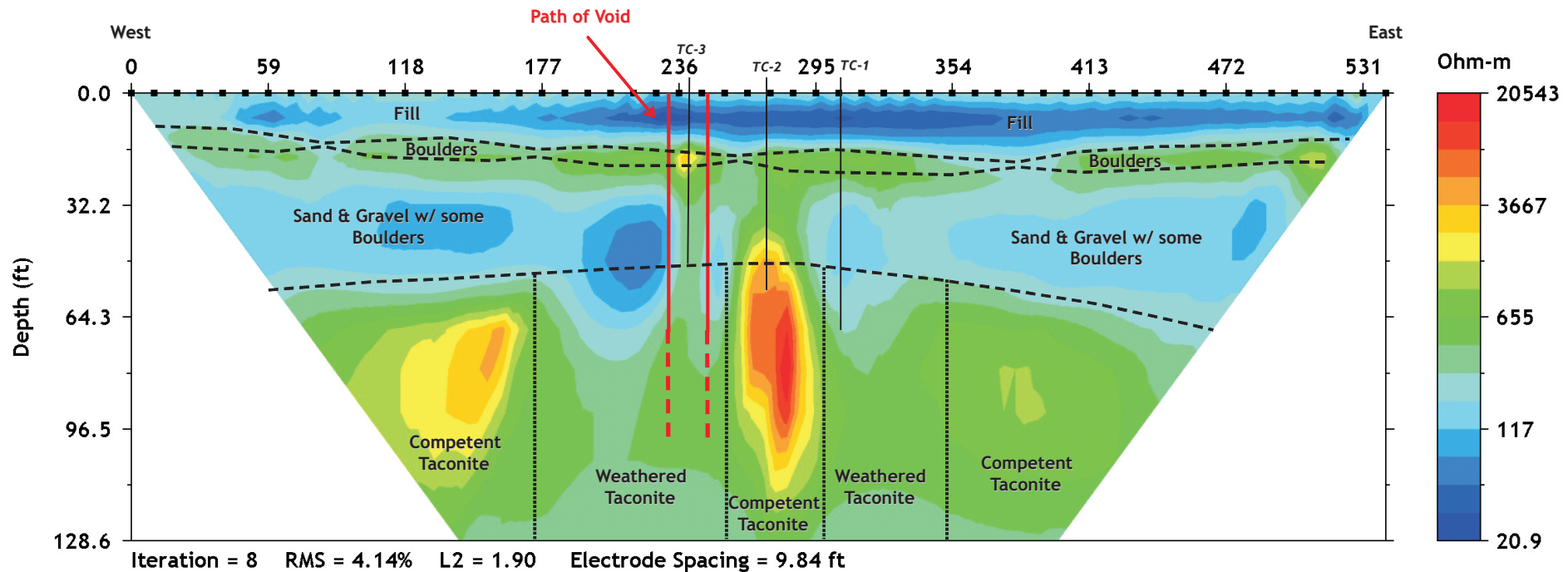


## Road Subsidence Geotechnical Investigation in Historic Iron Ore Mining Area



Resistivity Imaging was performed to help characterize a roadway area that was subject to collapse and settling problems resulting from historic iron ore mine workings. The goal was to map the extent of the detected collapse zone for roadway remediation purposes. Borings were taken after the resistivity profiling within and alongside of the collapse to calibrate the image to the in-situ lithologies.

**Objective:** Roadway geotechnical survey for collapse features due to old mines  
**Survey date:** May, 2007  
**Survey site:** Hibbing, Minnesota, USA  
**Instrument:** SuperSting R8/IP with 56 electrodes at 3m spacing  
**Electrode array:** Dipole-dipole  
**Processing:** Inversion of data using EarthImager 2D inversion software  
**Units:** Feet and Ohmmeter

Data courtesy of the Minnesota Dept. of Transportation, MN USA



SuperSting 8-channel Resistivity Instrument  
by



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