

THUNDERHEAD HILLS RESISTIVITY SURVEY

SPRING 2007



The City of Edmond, Oklahoma is a rapidly growing community. Brisk residential and commercial development is occurring at locations that were once sites of extensive oil and gas drilling and production activity. In many cases homeowners are completing private water wells for irrigation and recreational use. The city is in the process of planning the expansion of its municipal water well field to meet rising demand due to increased population growth.

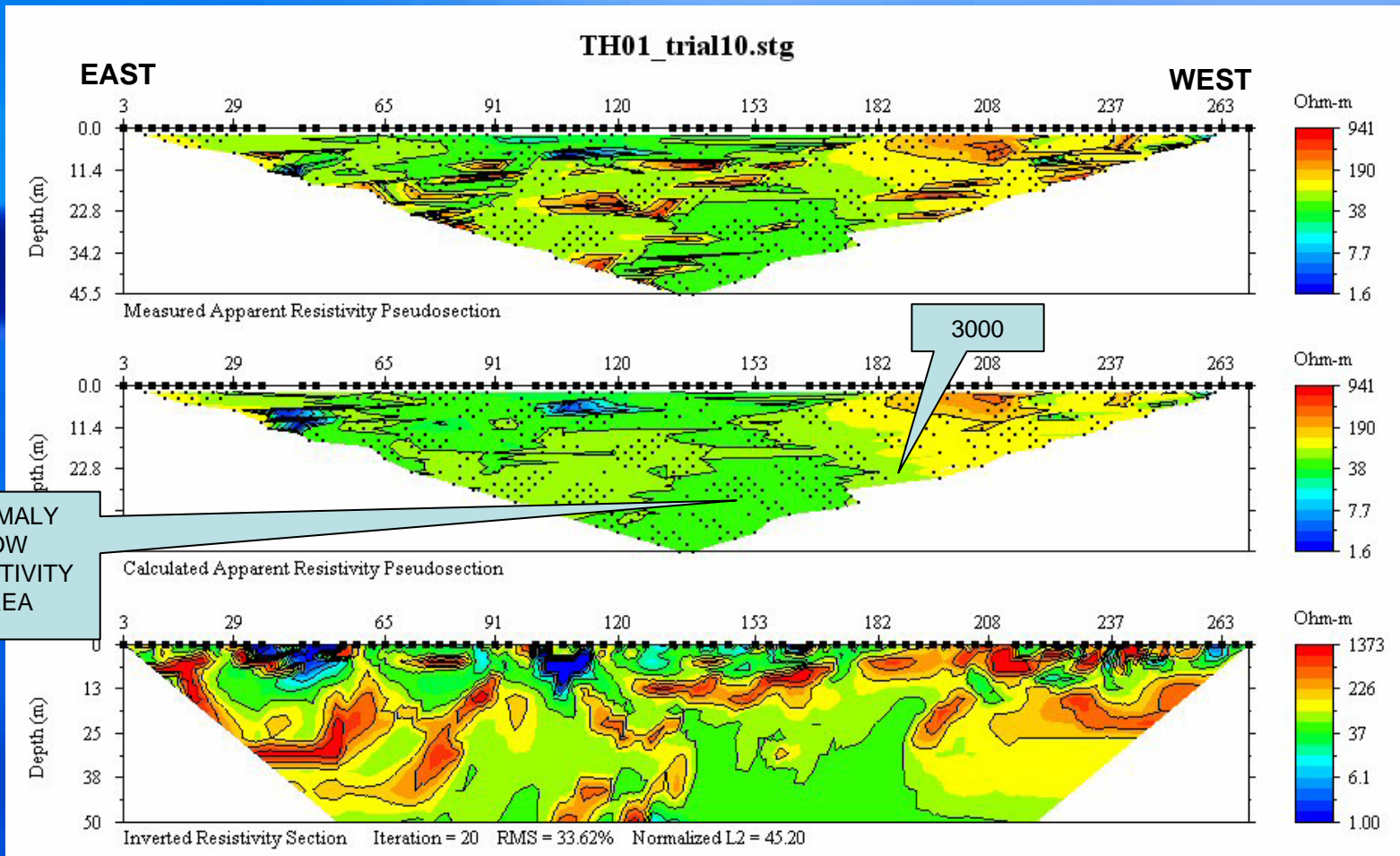
In the Thunderhead Hills Addition to the City of Edmond (project area), private water wells have been contaminated with brine.

The specific purpose of this particular project is to delineate fully the extent of the salt-water contamination at the Thunderhead Hills site in Edmond, Oklahoma and to identify the source of the contamination.

On January 21, 2007 a resistivity line was acquired along Timothy Lane in the Thunderhead Hills addition, Edmond OK. The data was very noisy, possibly due to external factors such as snow and ice. On February 20, the line was repeated on Timothy Lane. This data file had some technical glitches that are being reviewed by AGI. We are waiting for those issues before we process that line.

(Okay, this project is not starting out easy.....)

January 20 Timothy Lane



Summary: There is a marked contrast between higher resistivity in the west side of the line and the east side of the line. The west side is consistent with the presence of dry bedrock, seen at the surface. The center and east side of the line show very low resistivities consistent with the 1999 geochemistry. The well log at 3000 Timothy Lane (@ 190) shows the salt at about 100-150' (33-50 meters). This is about 50 ohm-meters on the resistivity line.

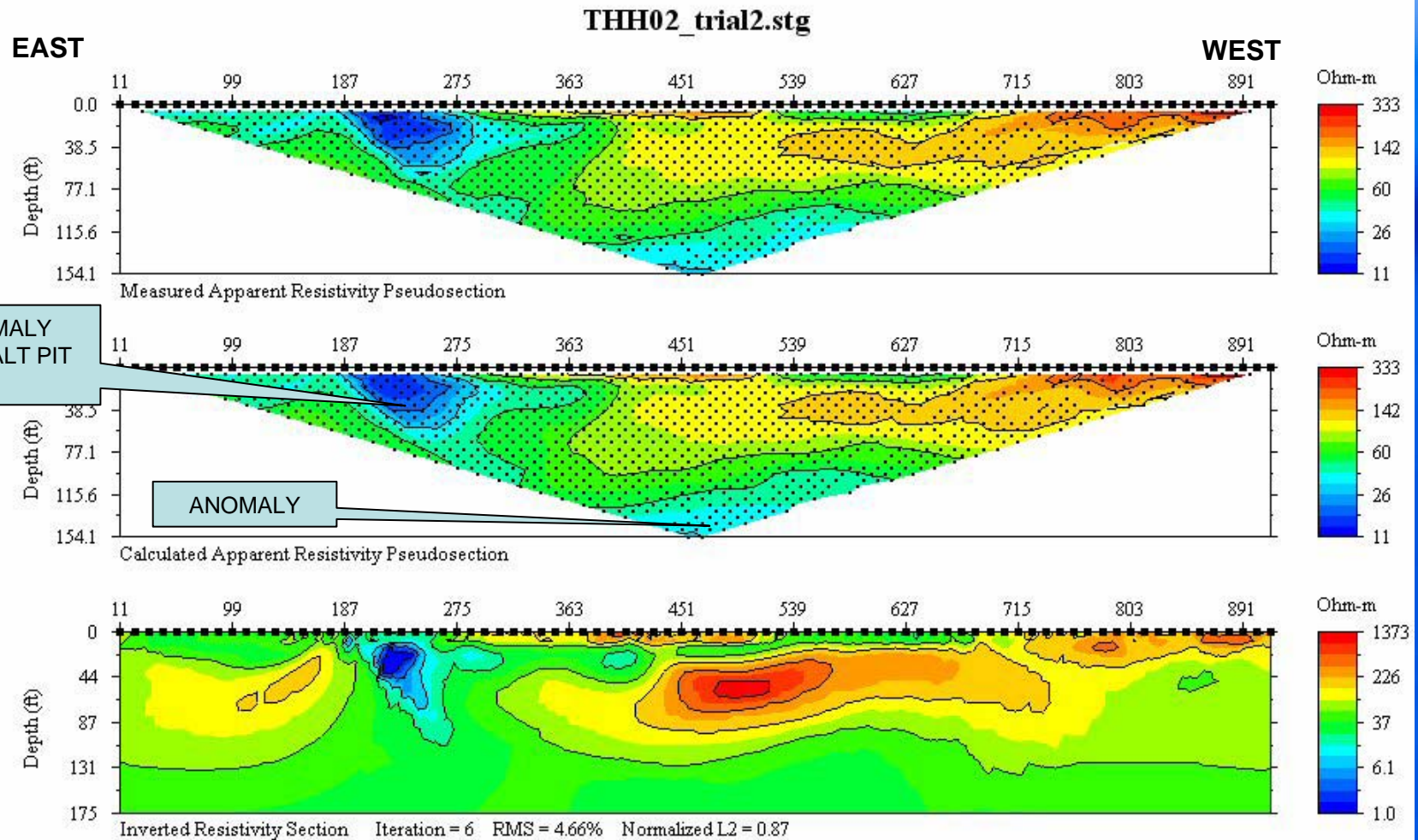
One of the problems with the urban environment is the presence of driveways and streets. Short of drilling holes through the driveway (which most homeowners would take a dim view of), we had to come up with a way of acquiring data without losing fold. The first Timothy Way Line had 12 electrodes on driveways, resulting in an automatic 15% loss of data....

A new market for Pampers???
(hey, it works!!)

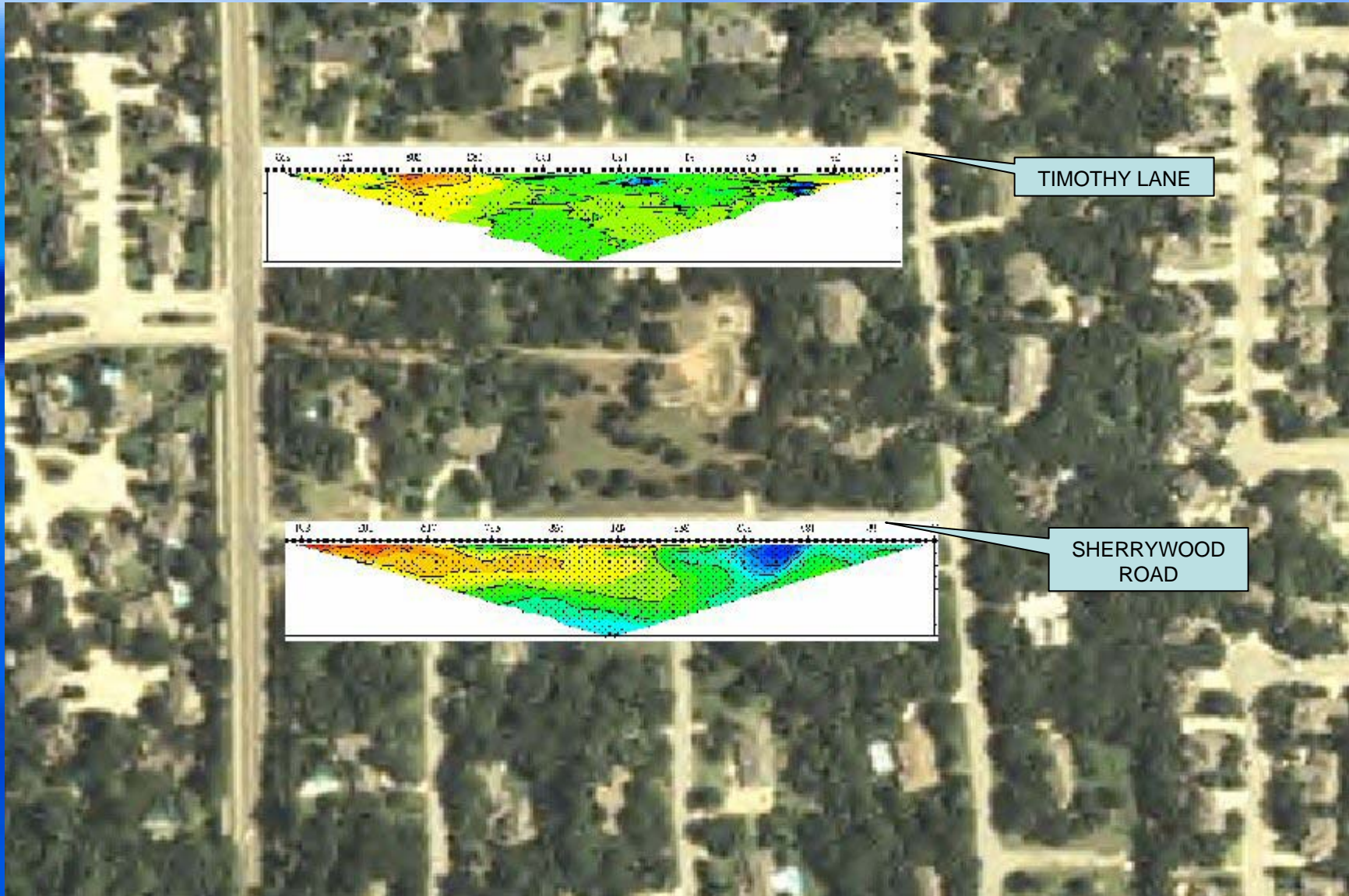


On February 21, 2007 a resistivity line was acquired along Sherrywood Road. The data is excellent and suggests revising our interpretation of the geochemistry.

Feb 21 Sherrywood Road



Summary: There is a distinct surface anomaly at Line #200 and deeper in the section at Line #400-600. The data strongly suggests at this point that we are looking at a surficial salt problem that is migrating deeper due to the presence of two water wells that have penetrated the pit.....



TIMOTHY LANE

SHERRYWOOD ROAD



AERIAL VIEW WITH LINE OVERLAYS

**REMEMBER: THIS IS A ONE-LINE
INTERPRETATION, SOON TO BE REJECTED....**

Next Line: South Church Property

