

L.U.S.T.LINE

A Report On Federal & State Programs To Control Leaking Underground Storage Tanks



SPECIAL APPENDIX to Michigan's Noninvasive UST Assessment

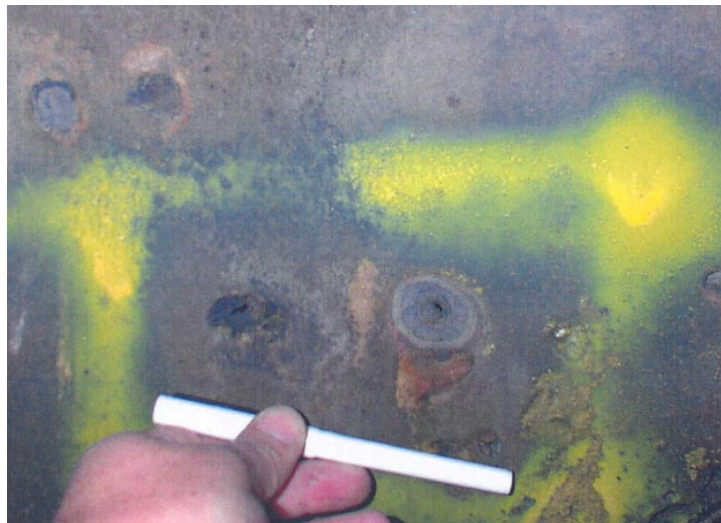
ODYSSEY

by Dan Yordanich

The following photos are a supplement to the *LUSTLine* 51 article "Michigan's Noninvasive UST Assessment Odyssey" and help illustrate the article. The article can be downloaded at www.neiwpc.com/lustline.htm.



1 Potential "rust plugs."



#3 Perforations in tank wall.



2 : Perforation in endcap.



#4 Tank walls out of round



#5 Split weld seam or crack in tank wall.



#8 In cases where the non-invasive assessment methodology may have predicted the USTs to be suitable for the installation of a cathodic protection system, it still did not address the need to provide striker plates in USTs to prevent holes being formed under the drop tubes. The non-invasive assessment of this tank predicted uniform corrosion.



#6 Pitting corrosion and preferential corrosion of the weld seam along the endcap weld.



#9 Pitting along damaged area penetrated about 1/4" into the metal. The non-invasive assessment of this tank predicted uniform corrosion.



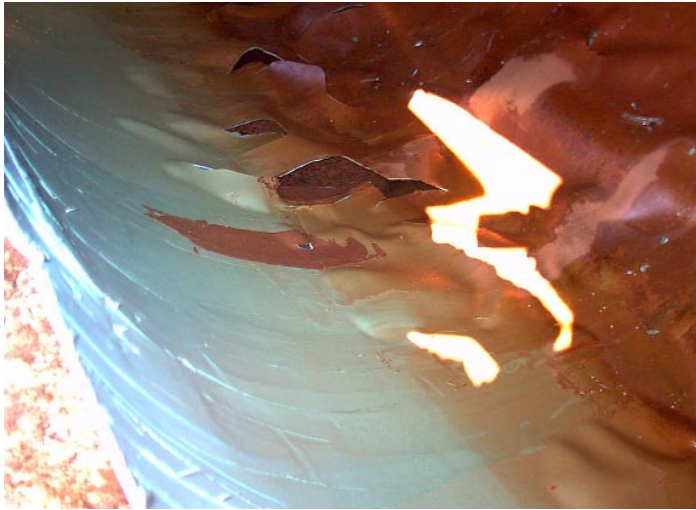
#7 Internal corrosion so severe the tank could not be repaired for lining. The assessment of this tank predicted uniform corrosion.



#10 STI-P3 tank in good condition.



#12 Internal corrosion and pitting.



#11 In many cases where tanks were previously lined and subsequently upgraded by cathodic protection, the lining had failed due to cracking, blistering, or product incompatibility. In many of these instances these tanks had been repaired and lined as a result of a previous failure.



#13 During inspections of excavated USTs we found that damage to the asphaltic or dielectric coating on the outer surface of an UST that occurred during installation could cause preferential corrosion where the bare metal was exposed to the corrosion processes.