



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

May 19, 2009

NCDOT Contracted GeoEnvironmental Firms


Re: **Geophysical Surveys to Identify USTs**

Dear Firm:

In an effort to obtain more consistence comments regarding Underground Storage Tanks (USTs) found in existing and proposed DOT right of way during geophysical surveys, the attached table has been developed from comments solicited from several firms with in-house geophysical experience. Three levels of confidence have been defined in the enclosed table. The terms "Known", "Probable", or "Possible" are to be used when describing tanks in the text and figures of all future site assessment reports involving USTs. Report figures are to include magnetic contours and radar profiles for any anomaly ranked "Possible UST" or higher.

These terms are to be used knowing that regardless of the certainty of the tank, exceptions to the rule exist and the only way to be 100 percent certain is by excavation. Further investigation may be recommended by the geophysicist based on the findings. This policy is in no way intended to be a substitute for the good judgment of a highly trained and experienced geophysicist.

Sincerely,

  
Cyrus F. Parker, LG, PE  
GeoEnvironmental Supervisor  
Geotechnical Engineering Unit

Enclosure

cc:  
GeoEnvironmental Section Project Managers  
Mohammed Mulla, PE, Assistant State Geotechnical Engineer

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# Geophysical Surveys for Underground Storage Tanks on NCDOT Projects

High Confidence	Intermediate Confidence	Low Confidence	No Confidence
<p><b>Known UST</b> Active tank - spatial location, orientation, and approximate depth determined by geophysics.</p>	<p><b>Probable UST</b> Sufficient geophysical data from both magnetic and radar surveys that is characteristic of a tank. Interpretation may be supported by physical evidence such as fill/vent pipe, metal cover plate, asphalt/concrete patch, etc.</p>	<p><b>Possible UST</b> Sufficient geophysical data from either magnetic or radar surveys that is characteristic of a tank. Additional data is not sufficient enough to confirm or deny the presence of a UST.</p>	<p>Anomaly noted but not characteristic of a UST. Should be noted in the text and may be called out in the figures at the geophysicist's discretion.</p>