

This application is for a MIL-STD-188-125-1 Continuous Wave Immersion (CWI) and Shielding Effectiveness (SE) test that is required to perform MIL-STD-188-125-1 CWI testing for the Fort Scott Water Utility in Fort Scott KS. This test is in support of the Defense Threat Reduction Agency's EMREP program and is designed to provide real world test data for critical infrastructure facilities to the government. The testing will occur at the following coordinates in and around the town of Fort Scott, KS:

- Water Treatment Plant 37.830209, -94.716230
- River Intake Station 37.836670, -94.719887
- College Booster Pump Station 37.814428, -94.713826
- Davis Lift Station 37.845205, -94.700162
- Wastewater Treatment Plan 37.850486, -94.695712
- Field Map Location 37.853504, -94.694204

Each "transmission" will occur for a short interval at a total number of discrete frequencies (approximately 800) distributed evenly in log (frequency) space over the range of 100 kHz to approximately 20 MHz (the "low frequency" band) and 20 MHz to 1000 MHz (the "high frequency" band). The list or set of frequencies within each band and the associated transmissions are identified as a "sweep." For each sweep the transmissions will sequentially occur at each frequency in the list, starting with the first and progressing to the last in the list. The length of transmission at each discrete frequency will be approximately 30 milliseconds.

An individual sweep covering either the low or high frequency band will take on the order of 10 seconds. At the conclusion of the sweep data is transferred from the test equipment (an Agilent E5071C OREQ network analyser) to the controlling laptop PC and preparations are made for the next sweep (moving measurement probes, annotating the test log book, and so forth).

The sweep repeat rate or rate at which any individual frequency in a sweep will be revisited is thus variable.

Attached is a sample frequency list that is generally used by Jaxon Engineering and Maintenance.