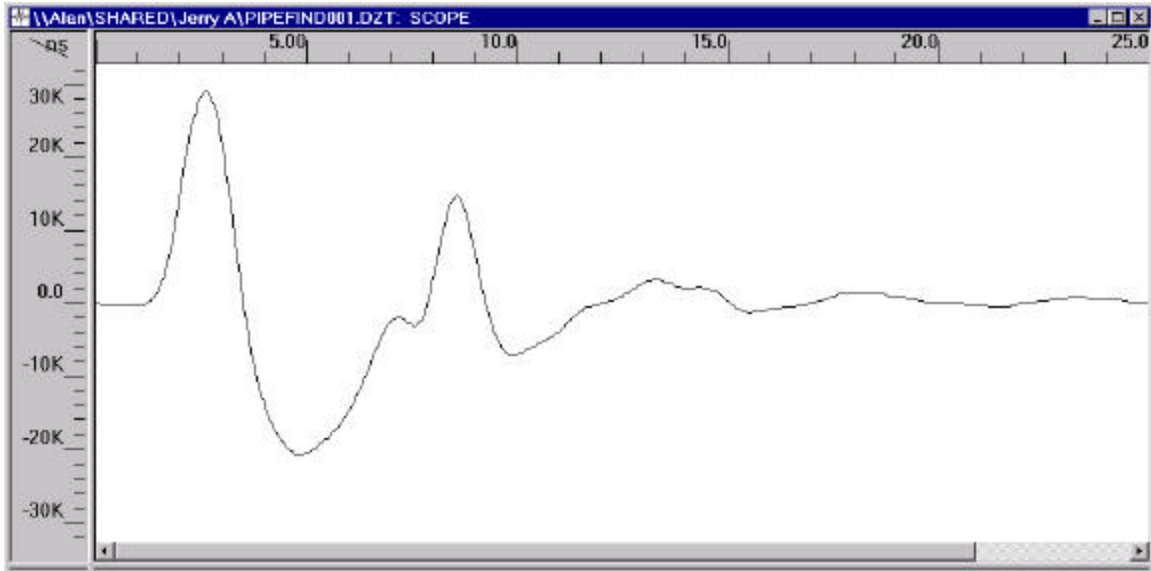


Re: FCC ID QF7INTERRAGATOR
Applicant: Geophysical Survey Systems, Inc.
Correspondence Reference Number: 23858
731 Confirmation Number: EA363608

1) Please characterize the pulse. What is the pulse width? What is the frequency of the pulse? Or is the frequency of the pulse pseudorandom?

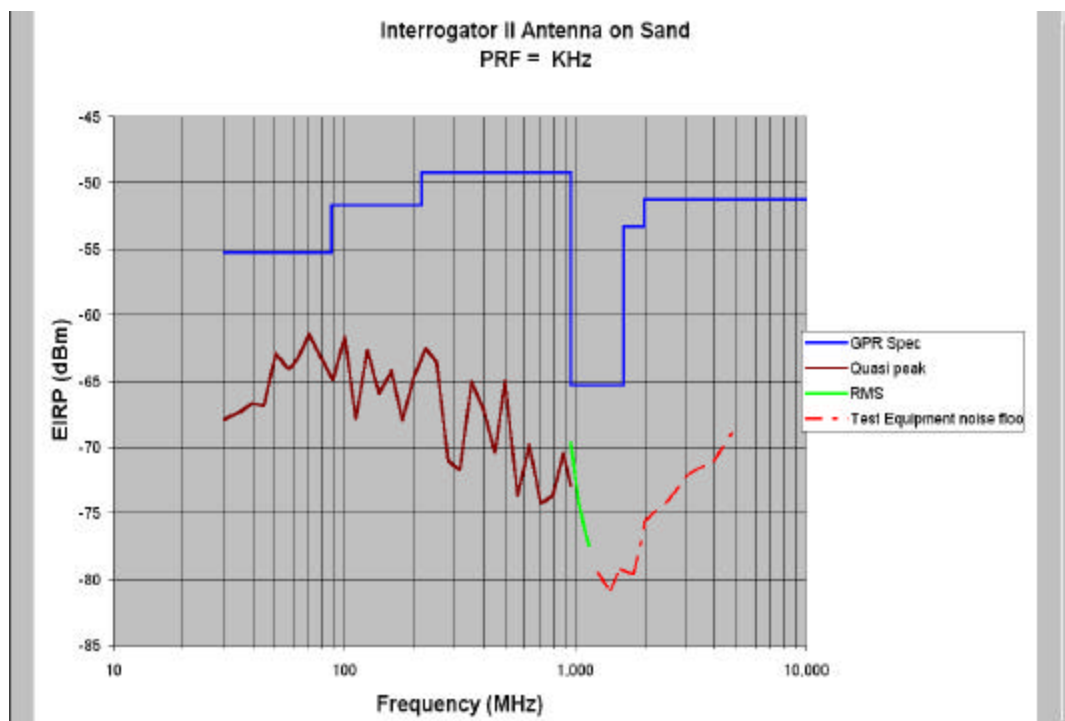
A photo of the pulse is given below. The pulse width is approximately 3 ns. The PRF is a fixed 100 KHz. There is no randomizing.



This picture has the antenna 1 meter above a reflective plate. The first pulse is the direct coupling between transmitter and receiver, and the second pulse is that reflected from the plate. The horizontal scale is in nanoseconds.

3) Upload a plot and table of data to show the -10 dB points. The plot should consist of max hold PEAK detector field strength level measured in any direction versus frequency. The field strength measurement for these points must account for non-linearities across the band that would be on the spectrum plot (ie: antenna and amplifier is not equal across the band). Ensure that the frequency range tested is wide enough to include the widest points of the electronic signature that are 10 dB down from the highest peak level. Do not use Horn antennas since Horn antennas are mounted 1 meter above the ground are directed above the EUT.

All of our data has already been corrected for antenna, amplifier, cables, etc. The resulting spectrum is attached. As seen from the plot and table below, the peak is at 70.31 MHz, and the -10dB point is at 889.5 MHz. All of this data was taken with the log-periodic antenna.



QP<=1GHz	
f (MHz)	EIRP
30.050	-67.863
35.500	-67.315
39.800	-66.681
44.660	-66.884
50.100	-62.914
57.200	-64.064
63.100	-63.255
70.310	-61.409
79.400	-63.282
89.420	-64.899
99.970	-61.603
112.000	-67.828
126.000	-62.644
141.000	-65.917
160.000	-64.195
178.000	-67.963
200.000	-64.658
224.000	-62.515
251.000	-63.522
282.000	-71.019
316.000	-71.708
355.000	-65.062
398.000	-67.085
447.000	-70.401
495.400	-64.950
562.300	-73.664
631.000	-69.830
708.000	-74.249
794.000	-73.676
889.500	-70.494
959.800	-72.927

5) Provide photo's of the Sample board without the shielding.

While photographing the sample board without the shield, it was discovered that one of the original photographs was mis-labeled. The complete set of all photographs is attached as INTERRAGATOR INTERNAL PHOTOS REV B.pdf.

7) Indicate compliance with 15.503(f).

Attached are the first two pages of the user's manual indicating compliance with 15.503(f).