

- **Test Setup:** The Milltronics IQ160 was located outside the tank pointed to the measuring receiving antenna (Spectrum Technologies International DRH-0118, (1 – 18 GHz) at a distance of 30 cm. The spectrum analyzer was set at MAX HOLD with the other settings that can be seen on the plot.

Notes:

- Please note that this plot is only for study of the signal characteristics. The rf level is not corrected to the actual reading wrt. antenna factor, Duty Cycle (0.075%), Pulse Desensitization Factor (+43 dB) and etc.....
- Since the actual peak level of the fundamental is greater than what we observed in the plot, the reasonable attenuation of the EMI receiver (spacing between the reference level of the spectrum analyzer and the observed peak of the spectrum) is maintained to avoid saturation which can effect the signal spectrum characteristics received by the EMI receiver.
- The transmitter is designed with the highpass filter which cuts off any emissions below 5.45 GHz to avoid any emissions falling inside the 5.35-5.46 GHz. In addition, the transmitter is required to be installed with the antenna enclosed inside the metal tank; therefore, ther is more protection for rf emissions fall inside the restricted band is provided.

