

EXHIBIT #C  
MODIFY BLH-19971024KC  
WFLB LICENSE  
LIMITED PARTNERSHIP  
WFLB (FM) RADIO STATION  
LAURINBURG, NORTH CAROLINA  
April 2012



CHUCK BRITT AND ASSOCIATES, INC.

Field Services Report: WFLB Laurinburg, NC

March 23<sup>nd</sup>, 2012

Buddy Smith

## **Purpose:**

Record the Harmonic and Spurious Emissions for WFLB-FM.

## **Work Performed:**

03/23/2012

I traveled to the WFLB/WKML transmitter site and met Mr. Van Clough around 1:00 PM. We discussed the measurements needed and then got started.

I recorded the data for both stations.

Then packed up the test equipment and traveled back to Stanley, NC.

## **Measurement Methodology:**

The following measurements were made using an Agilent E4402B Spectrum Analyzer. A sample was taken from a port just after the transmitter's harmonic filter. Prior to taking the measurements, the level of the fundamental frequency for WFLB was measured (**Figure 1**) to establish the baseline level for reference. A tunable notch filter was then inserted between the output of the transmitter's harmonic filter and the spectrum analyzer to attenuate the fundamental frequency to minimize any receiver induced intermodulation products generated in the spectrum analyzer.

WFLB 96.5 MHz	Measured	Actual dB Down	Required
Carrier = 96.5 MHz, reference level <b>Figure 1-WFLB Fundamental</b>	+5.5 dB	N/A	N/A
120 kHz-600 kHz from carrier <b>Figure 2</b>	-89.9 dB	-95.4 dB	-25 dB
193 MHz (96.5 MHz from carrier) <b>Figure 3-WFLB FM 2<sup>nd</sup> Harmonic</b>	-87.8 dB	-93.3 dB	-80 dB
289.5 MHz (193 MHz from carrier) <b>Figure 4-WFLB FM 3<sup>rd</sup> Harmonic</b>	-91.3 dB	-96.8 dB	-80 dB
386.0 MHz (289.5 MHz from carrier) <b>Figure 5-WFLB FM 4<sup>th</sup> Harmonic</b>	-91.9 dB	-97.4 dB	-80 dB
482.5 MHz (386.0 MHz from carrier) <b>Figure 6-WFLB FM 5<sup>th</sup> Harmonic</b>	-92.0 dB	-97.5 dB	-80 dB

WFLB 95.7 MHz Additional Test	Measured	Actual dB Down	Required
94.1 MHz (-2.4 MHz from carrier) <b>Figure 7</b>	-106.4 dB	-111.9 dB	-80 dB
94.9 MHz (-1.6 MHz from carrier) <b>Figure 8</b>	-95.2 dB	-100.7 dB	-80 dB
97.3 MHz (+800 kHz from carrier) <b>Figure 9</b>	-93.1 dB	-98.6 dB	-80 dB
98.1 MHz (+1.6 MHz from carrier) <b>Figure 10</b>	-105.2 dB	-110.7 dB	-80 dB

Figure 1

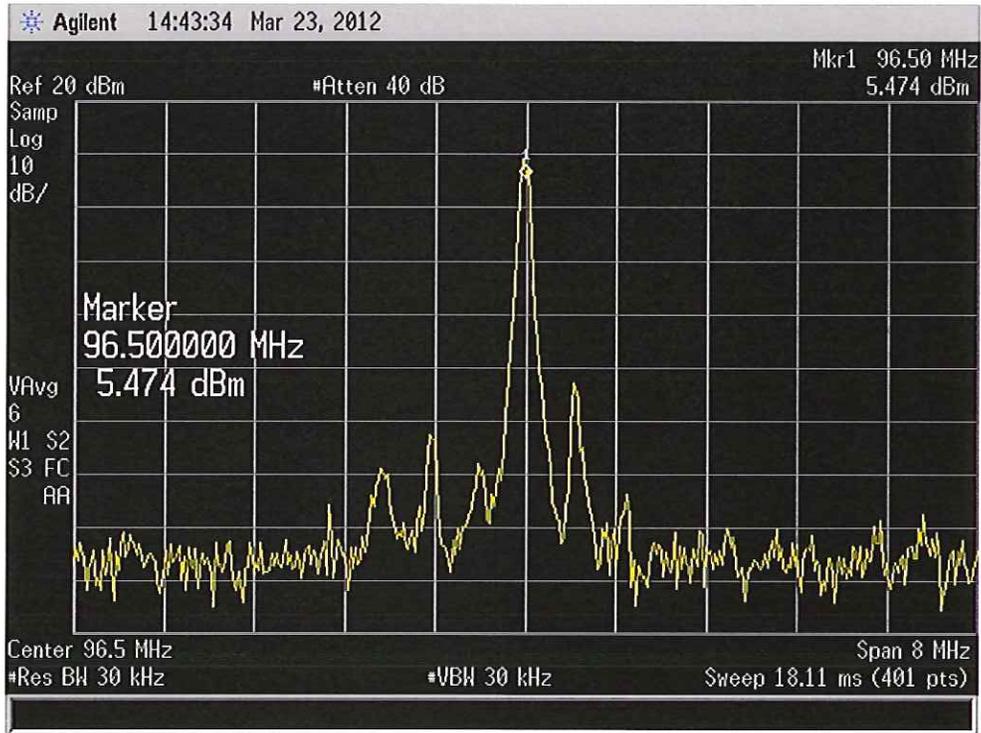


Figure 2

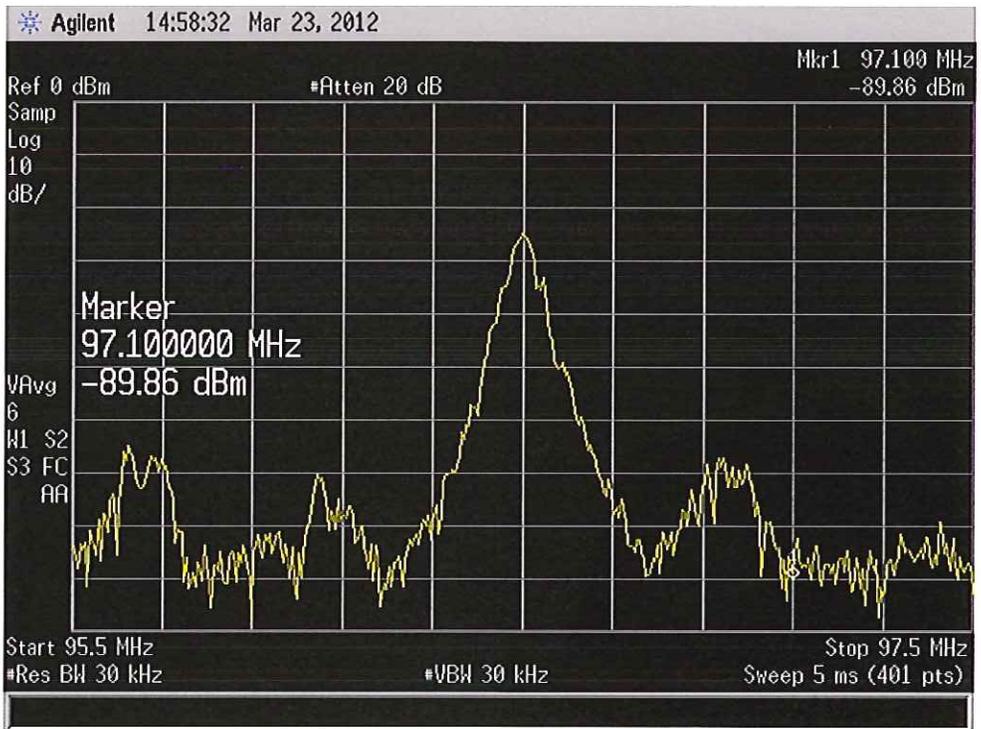


Figure 3

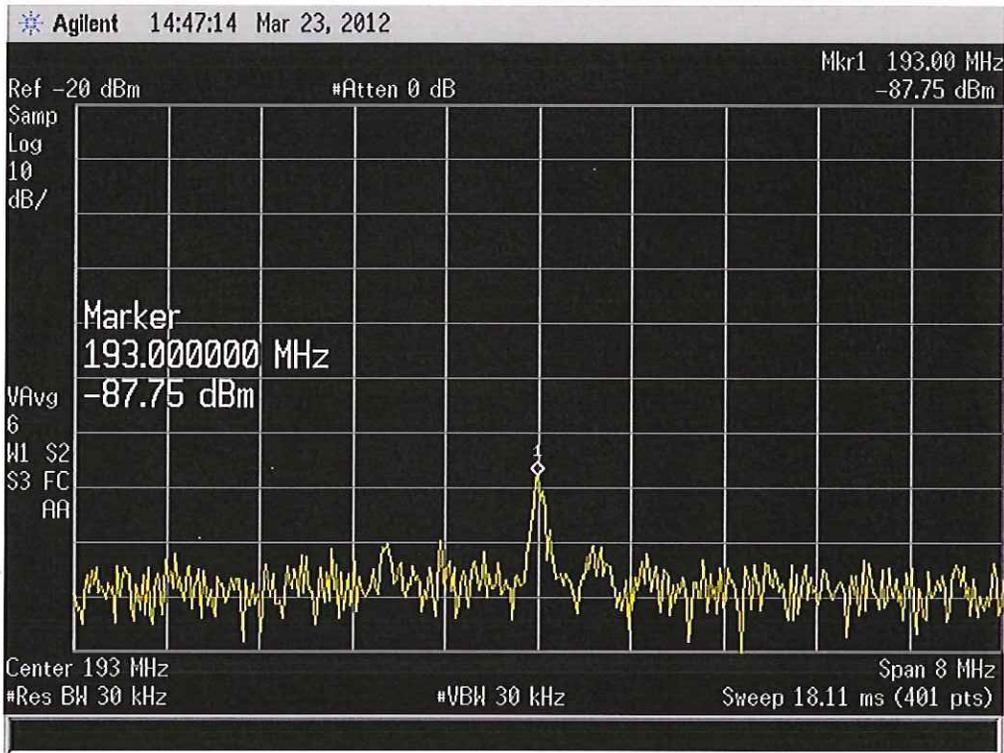


Figure 4

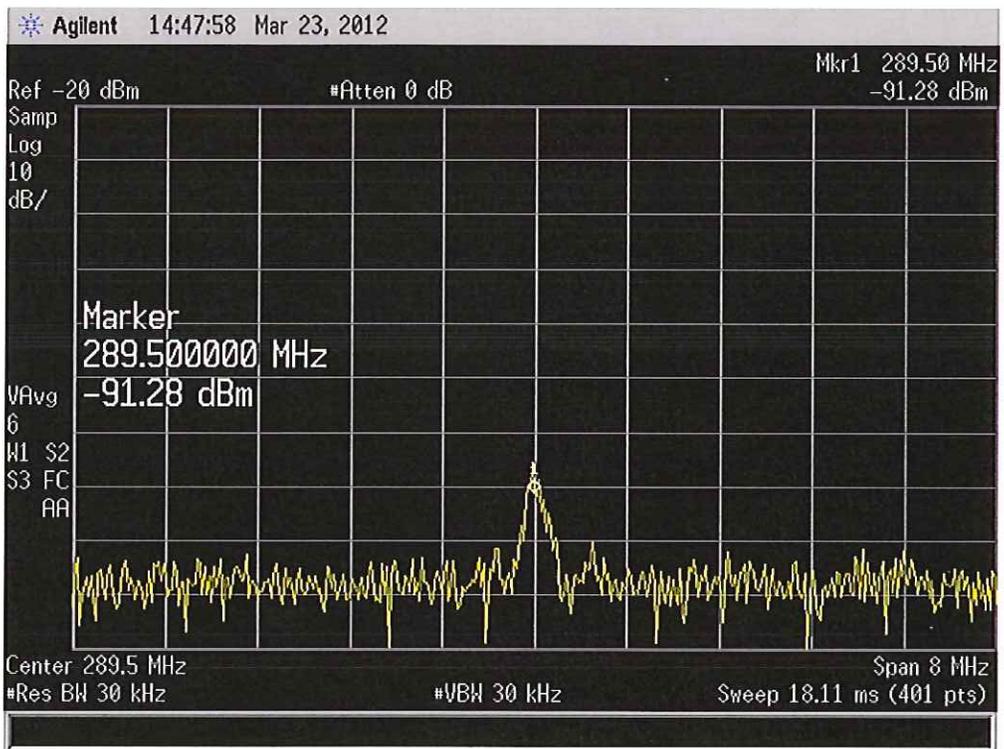


Figure 5

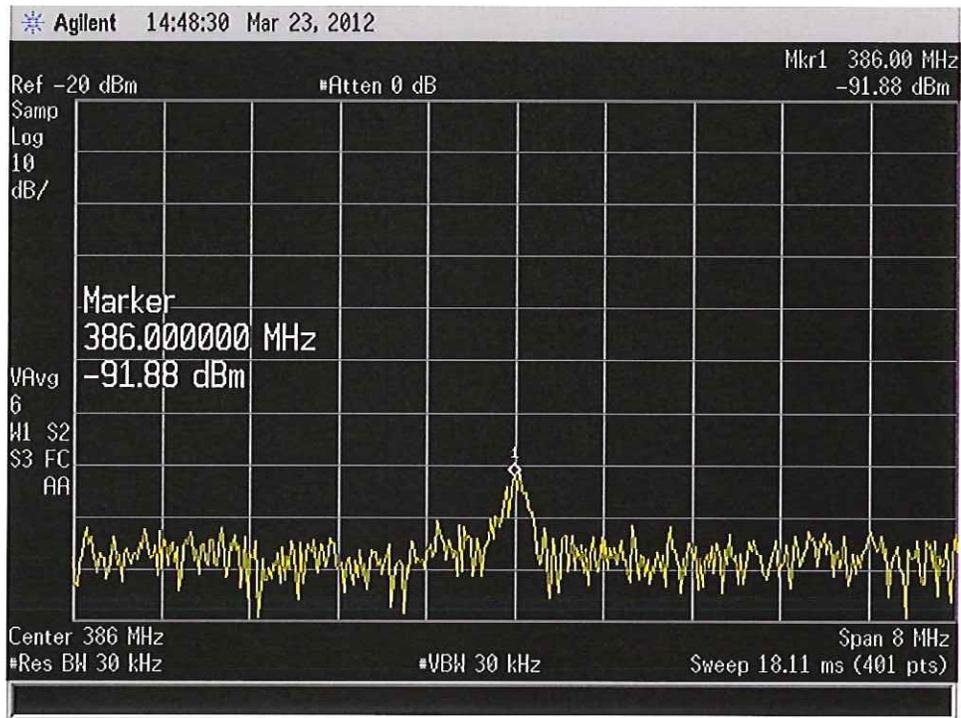


Figure 6

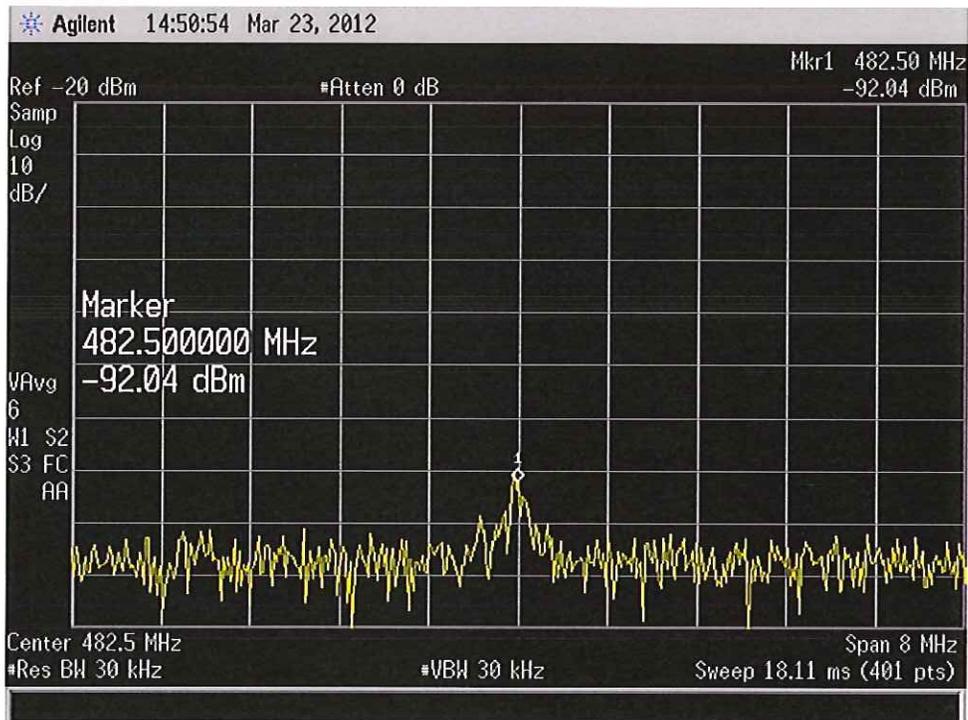


Figure 7

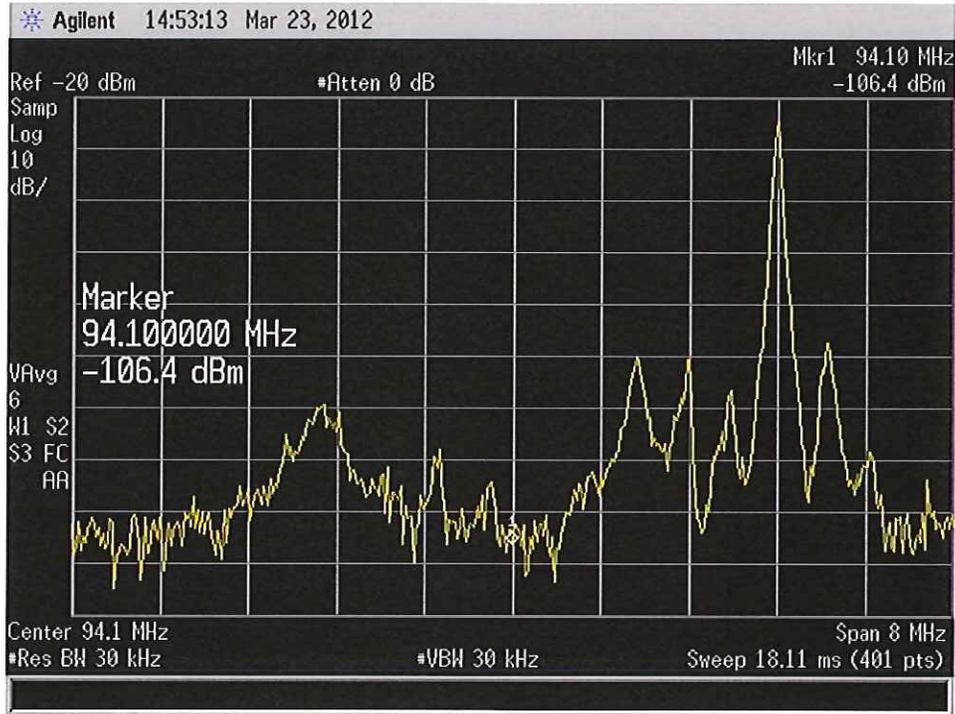


Figure 8

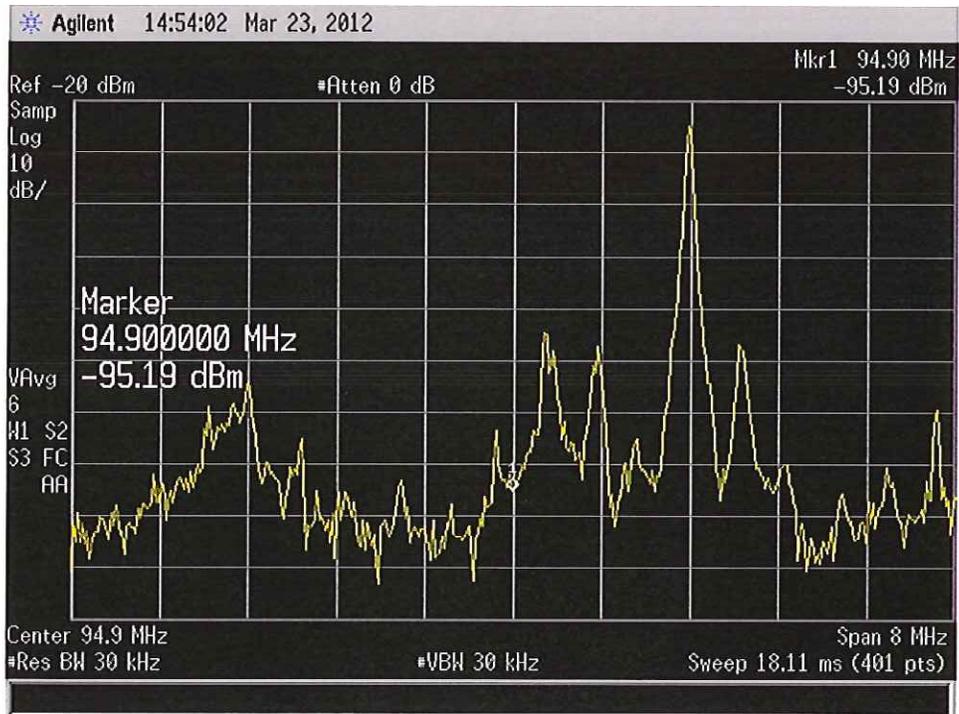


Figure 9

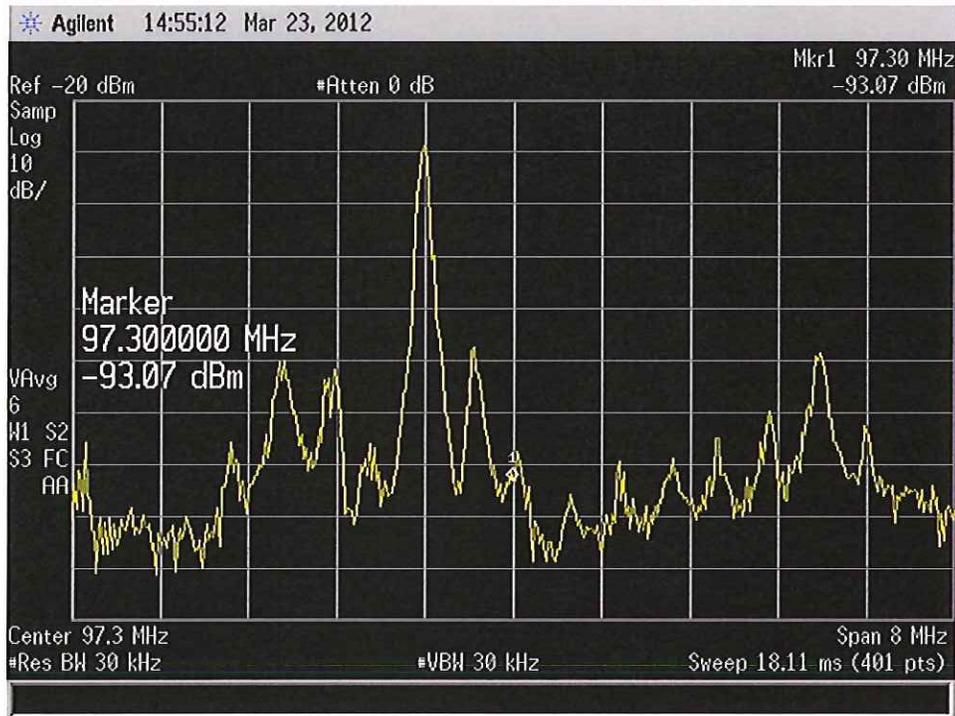
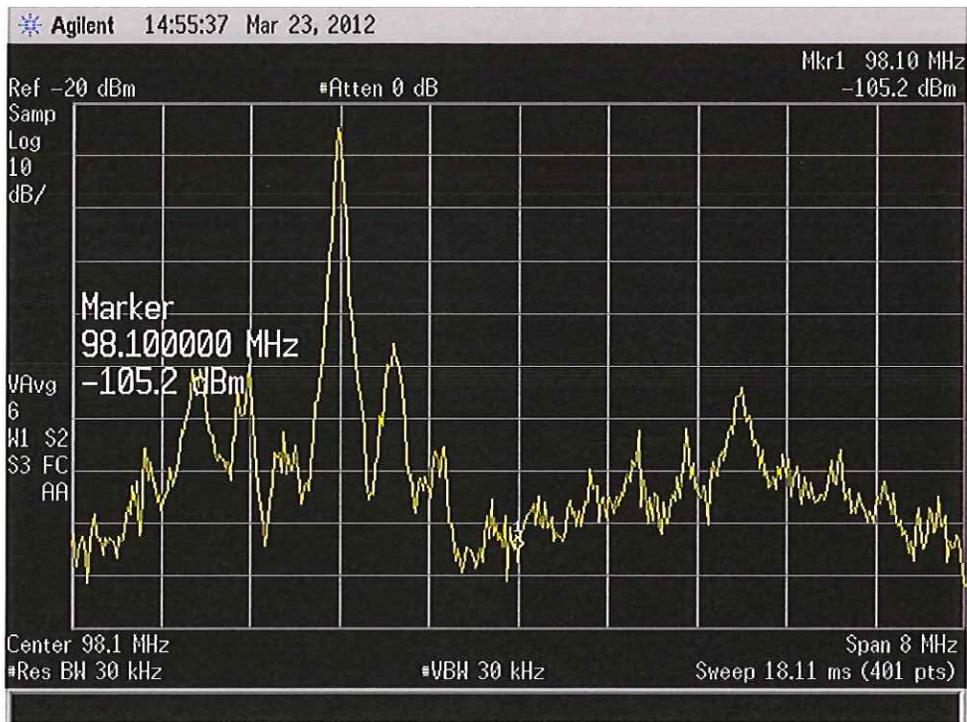


Figure 10



## Measurement Results:

The second through fifth harmonics of WFLB-FM were measured. In each case, as shown in the charts and plots above, the harmonics of the WFLB transmitter are attenuated well below the -80 dB level as required by the commission's rules.

Also, a series of frequencies which are removed from the fundamental station carrier in steps of +/- 800 kHz were made to insure no spurious emissions were being created as a result of the combined system. These measurements are included in the charts and plots above and all fall well below the requirement of -80dB.