FM SPURIOUS & HARMONIC EMISSIONS MEASUREMENTS (SEC 73.317)

Technician: Dave Allen **Date:** 8/2/2017 **Time:** 4:14 PM

Call Letters: KOXE-FM **Location:** Brownwood, Texas **Frequency:** 101.3

RF Bandwidth Measurement:

Equipment Used: Rigol DSA815

Serial Number: DSA8A182501050

Date of Calibration: 6/26/2016

Transmitter: Make: Nautel Model: NV20LT Serial Number: B0214

TPO: 21.00 KW

Results:

	Reading	dB down	
Unmodulated Carrier	17.35		dBm UMC
120 kHz-240 kHz	-7.74	-25.09	(Min -25dB below UMC)
240 kHz-600 kHz	-52.93	-70.28	(Min -35dB below UMC)
Above 600 kHz	-69	-86.35	(Min -80 dB below UMC)

Active Subcarriers: Frequency 1) 57 Injection 1) % 4

Frequency 2) n a Injection 2) %

Notes: Used the customer Bird sample section.

Pass/Fail: PASS Signed: Dave Allen

Sec. 73.317 FM Transmission System Requirements

(a) FM broadcast stations employing transmitters authorized after January 1, 1960, must maintain the bandwidth occupied by their emissions in accordance with the specification detailed below. FM broadcast stations employing transmitters installed or type accepted before January 1, 1960, must achieve the highest degree of compliance with these specifications practicable with their existing equipment. In either case, should harmful interference to other authorized stations occur, the licensee shall correct the problem promptly or cease operation.

(b) Any emission appearing on a frequency removed from the carrier by between 120 kHz and 240 kHz inclusive must be attenuated at least 25 dB below the level of the unmodulated carrier. Compliance with this requirement will be deemed to show the occupied bandwidth to be 240 kHz or less.

(c) Any emission appearing on a frequency removed from the carrier by more than 240 kHz and up to and including 600 kHz must be attenuated at least 35 dB below the level of the unmodulated carrier.

(d) Any emission appearing on a frequency removed from the carrier by more than 600 kHz must be attenuated at least 43+10 Log10 (Power, in watts) dB below the level of the unmodulated carrier, or 80 dB, whichever is the lesser attenuation.