

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 91707

Channel 218

### **Description of Exhibit 12 Contents**

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

**Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.**

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

*[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.*

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dB $\mu$  F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

**Note: The quadrangle and aerial photo indicate the presence of unpaved county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

## Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
1132665	BLED20060602AAY	KMEO	63	63
	Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour			<b>63</b>

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **63 dBμ**, this makes the proposed translator's worst-case interfering contour **103 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **785.2 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population"). Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

**Note: The quadrangle and aerial photo indicate the presence of unpaved county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

**Antenna Manufacturer:** TEL  
**Antenna Model:** ANT90D  
**CORAGL:** 10 m  
**Maximum ERP:** 0.25 kW  
**Interfering Contour:** 103 dBμ  
**Max Int. Contour Distance:** 785.2 m

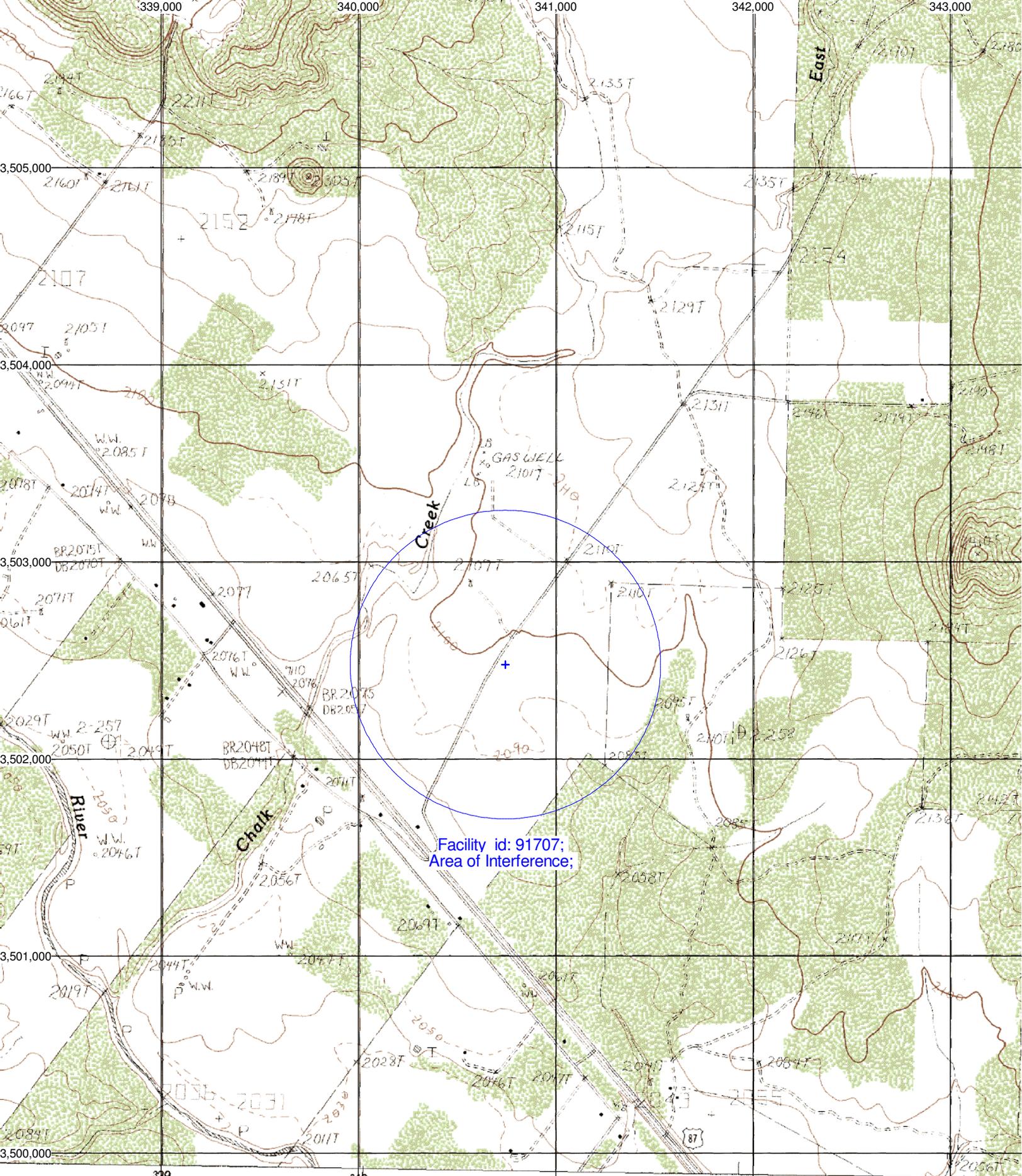
**Adjacent Channel Study  
For Station K218CW, Facility\_id: 91707**

**Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1132665	90953	BLED	20060602AAY	KMEO	AMERICAN FAMILY ASSOCIATION	C3	MERTZON	TX	LIC	6.5	758	220	2	28.4	1.4918
1286337	120615	BLED	20080324AJA	KLTP	EDUCATIONAL MEDIA FOUNDATION	C3	SAN ANGELO	TX	LIC	2.915	790	215	3	28.4	0
143411	10952	BLFT	19900102TB	K215BH	CHRISTIAN BROADCASTING COMPANY, INC.	D	SAN ANGELO	TX	LIC	0.316	759	215	3	28.9	0
1278050	172164	BNPED	20071022ASU	NEW	SANTA RITA RADIO	C3	EDEN	TX	APP	11.5	707	218	0	67.7	0
1179954	171016	BSFH	20061218AEO	NEW	KM COMMUNICATIONS, INC.	C3	SWEETWATER	TX	APP	0	0	221	3	95	0
1128344	82866	BLED	20060502ABB	KBCX	AMERICAN FAMILY ASSOCIATION	A	BIG SPRING	TX	LIC	1	876	218	0	95.2	0
1183180	171016	BNPH	20070502ADT	NEW	KM COMMUNICATIONS, INC.	C3	TRENT	TX	APP	15.5	688	221	3	120.8	0

**Intermediate Frequencies (53 and 54 channels difference):**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
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SCALE 1:24 000

