

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
NEW FM STATION (FACILITY ID 171012)  
HEBBRONVILLE, TEXAS

MAY 1, 2007

CH 254C3 13 KW 140 M

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Technical Narrative

This Technical Exhibit of which this narrative is part was prepared in support of an application for a new FM station at Hebbroville, Texas (MM-FM603-A in FCC Auction 70. The FCC requires that a 301 “long-form” application be filed by May 2, 2007, specifying the new facility.

Proposed Facilities

This application proposes to modify the station class to Channel 254C3 employing the “one-step” upgrade allotment process. The proposed NAD27 site coordinates (and allotment reference coordinates) are 27-29-44 N, 98-43-31 W (see Figure 1). It is proposed to operate with a non-directional ERP of 13 kW and antenna HAAT of 140 meters (equivalent to maximum Class C3 facilities). A sketch of the proposed structure is shown in Figure 2. The Federal Aviation Administration (FAA) is being notified of the proposed structure and once a *Determination of No Hazard* is issued, the tower will be registered with the FCC.

Proposed Coverage Analysis

Figure 3 is a map showing the 23.2 kilometer, allotment reference circle, along with the predicted FCC coverage contours for the proposed operation. Both the allotment

reference circle and the FCC predicted 70 dBu coverage contour will encompass the entire Hebbronville city limits as derived from 2000 U.S. Census data.

The overall average HAAT (140 meters, rounded to the nearest meter) was determined using the N.G.D.C. 30-second terrain database and 8 evenly spaced radials (every 45 degrees of azimuth).

#### Allocation Study

Channel 254C3 at the proposed site will satisfy the Commission's minimum separation distance requirements, specified in Section 73.207(b) of the Rules, to all assignments (see Figure 4).

#### Mexican Coordination

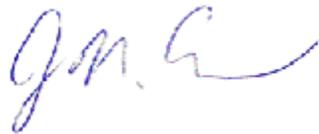
The vacant allotment for channel 254 at Hebbronville, Texas has already been coordinated with Mexico based on a Class A facility from the allotment reference coordinates. This herein proposal is to upgrade to a Class C3 facility from a location 18 kilometers north, which is further away from the Mexican border. This proposal also meets all the minimum separation requirements based on the U.S./Mexican Agreement (see Figure 4). If coordination with Mexico is required, it is respectfully requested.

#### Radiofrequency Electromagnetic Field Exposure

The proposed FM facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Based on the FCC's FM Model program using a 4-bay (or higher gain) "rototiller" antenna, the calculated power density at a point 2 meters above ground level will not exceed  $0.005 \text{ mW/cm}^2$ , which is less than 5% of the FCC's recommended limit of  $0.2 \text{ mW/cm}^2$  for FM channels, applicable to general population/uncontrolled exposure areas.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed operation appears to be otherwise categorically excluded from environmental processing.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.

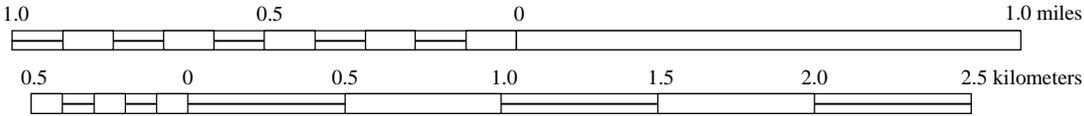
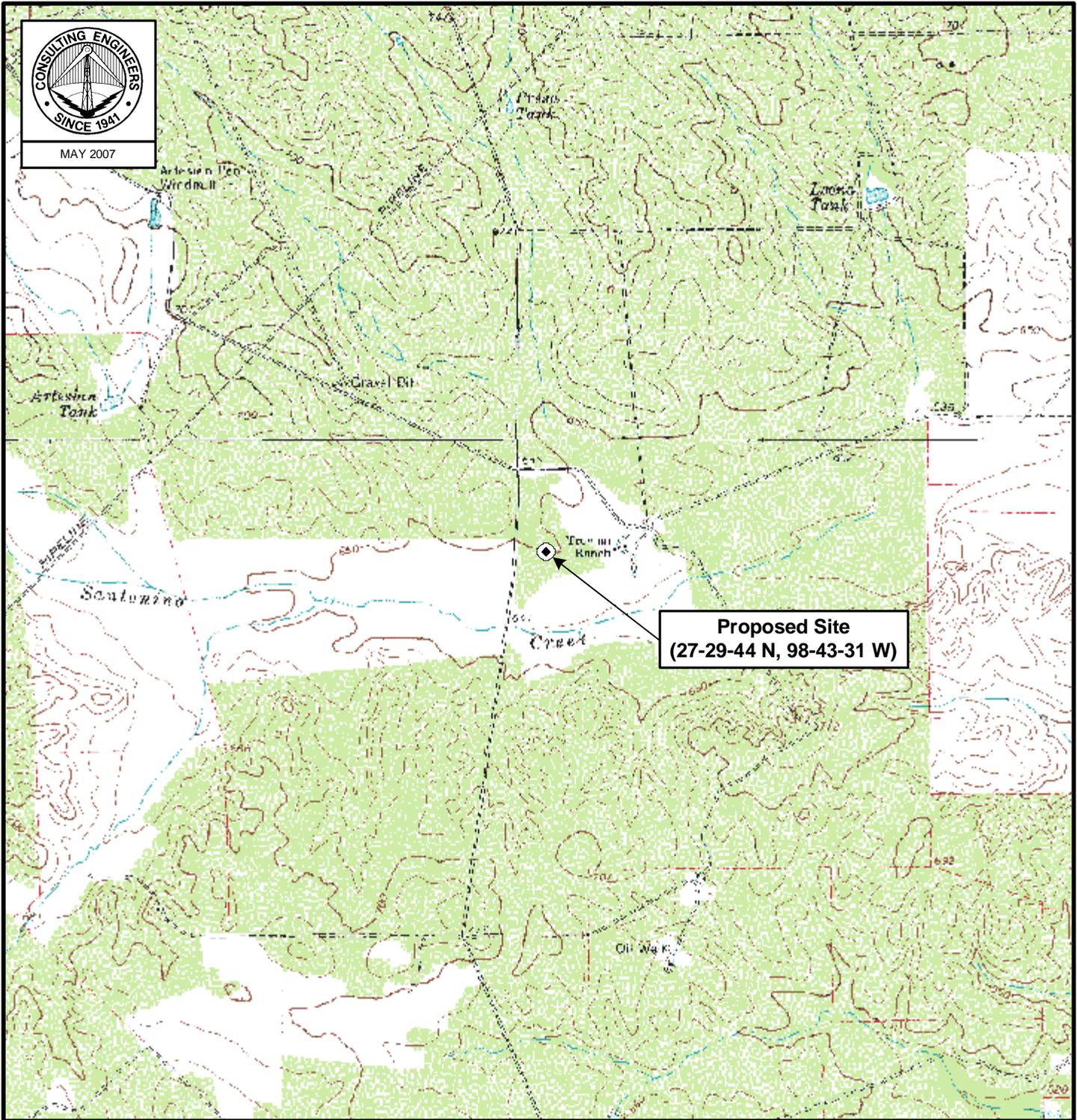


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May 1, 2007

Figure 1



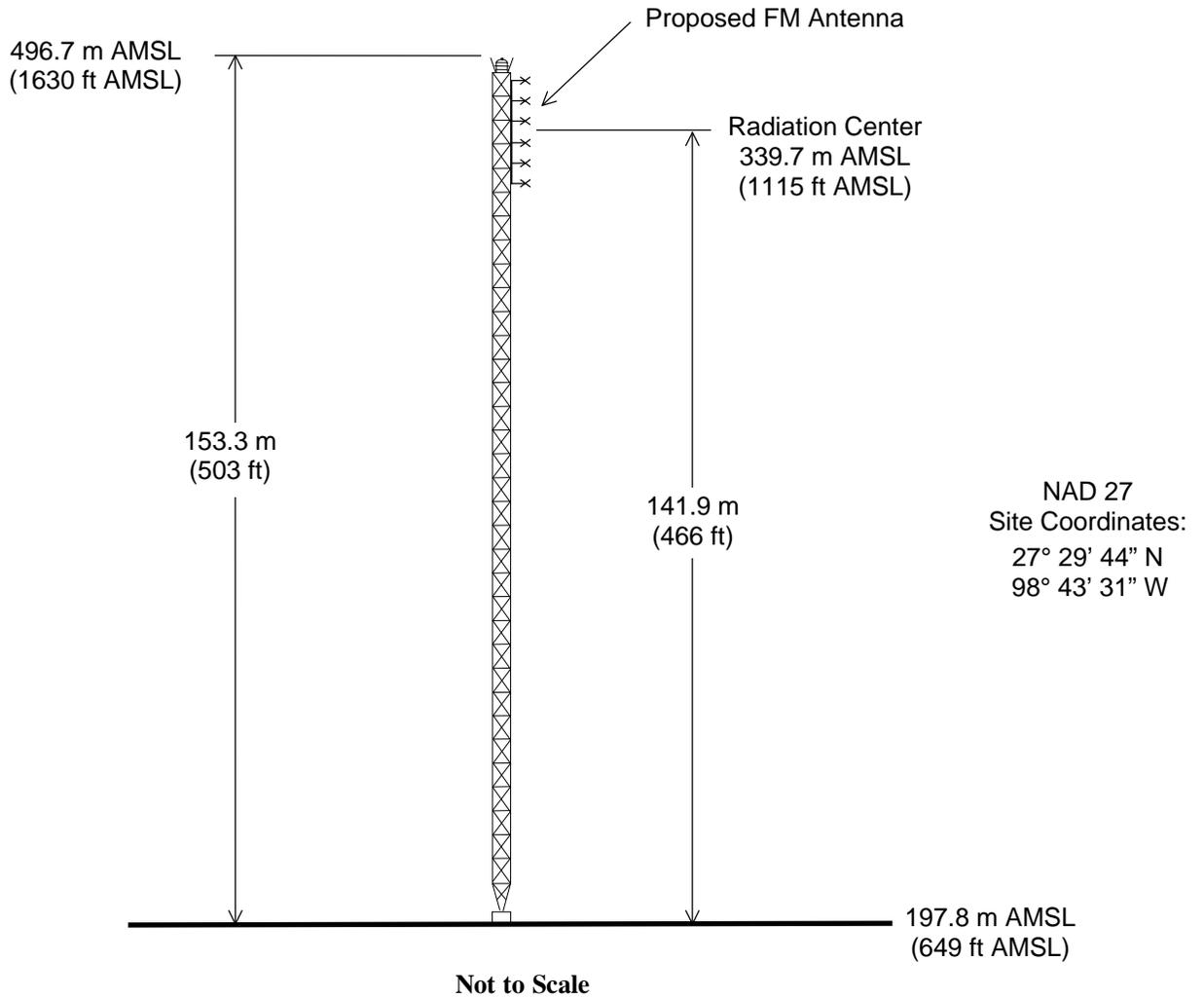
**PROPOSED TRANSMITTER SITE**

NEW FM STATION

HEBRONVILLE, TEXAS

CH 254C3 13 kW 140 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida



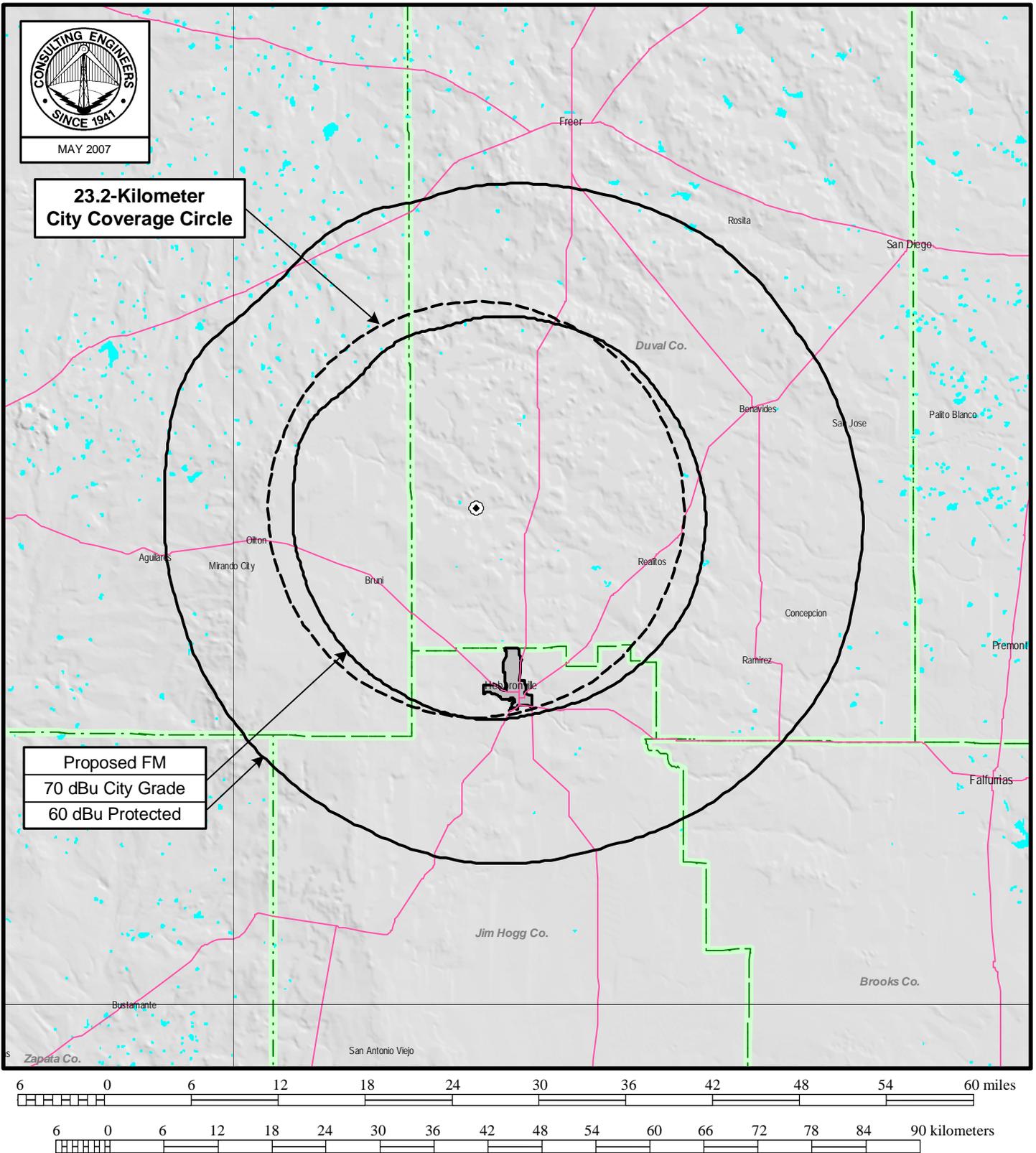
## PROPOSED ANTENNA AND SUPPORTING STRUCTURE

NEW FM STATION

HEBBRONVILLE, TEXAS

CH 254C3 13 KW 140 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



## **PREDICTED COVERAGE CONTOURS**

**NEW FM STATION**

**HEBRONVILLE, TEXAS**

**CH 254C3 13 KW 140 M**

du Treil, Lundin & Rackley, Inc Sarasota, Florida

# FM Study

du Treil, Lundin, &amp; Rackley, Inc., Sarasota, Florida

**Station Channel:** 254      **Station Coordinates:** 027-29-44 098-43-31**Class:** C3      **Buffer Distance:** 50 km**Comment:** Proposed Transmitter Site

Callsign	Status	Channel	Service	Freq.	City		State	Co.	Rec Type	Latitude	Dist. (km)	Sep. (km)	Spacing (km)	
Facility ID	ARN			Class	DA	Ant ID	ERP (kW)	HAAT (m)	73.215	Longitude	Bear. (deg)	73.215 (km)	Comment	
<b>KRRG</b>	LIC	251	FM	98.1	LAREDO									
19544	BLH	19821108BB		C1			100	213		N	099-31-19	272.21	70	<b>CLOSE</b>
<b>KGBT-FM</b>	LIC	253	FM	98.5	MCALLEN									
6662	BLH	19950330KB		C	N		100	304		N	097-49-18	149.4	165	<b>CLOSE</b>
	VAC	254	FA	98.7	HEBBRONVILLE									
0	RM	10244		A							027-20-15	18.31		
											098-46-45	196.85		
<b>NEW</b>	APP	254	FM	98.7	HEBBRONVILLE									
171012	BSFH	20061218AEK		A							027-20-15	18.31		
											098-46-45	196.85		
<b>KTXN-FM</b>	LIC	254	FM	98.7	VICTORIA									
13984	BLH	19850402KR		C1			100	77		N	097-03-45	47.67	200	<b>CLOSE</b>
<b>KLMO-FM</b>	CP	255	FM	98.9	DILLEY									
16931	BPH	20060410AAV		C1	D	72565	60	269		Y	099-16-47	341.48	133	<b>CLEAR</b>
<b>KLMO-FM</b>	LIC	255	FM	98.9	DILLEY									
16931	BLH	20050324ABT		C1	D	38079	92	220		Y	099-16-47	341.48	133	<b>CLEAR</b>
<b>KRYS-FM</b>	LIC	256	FM	99.1	CORPUS CHRISTI									
55162	BLH	20020220AAD		C1	N		100	284		N	097-38-17	74.84	70	<b>CLEAR</b>
<b>XHNKFM</b>		257	FA	99.3	NUEVO LAREDO									
95454				B							027-29-34	78.1	71	7.1
											099-30-56	269.96		<b>CLOSE</b>
<b>XHNKFM</b>		257	FM	99.3	NUEVO LAREDO									
95454				B			9.55	35		N	099-30-56	269.96		<b>CLOSE</b>