

TECHNICAL EXHIBIT  
APPLICATION FOR MODIFICATION OF  
DTV CONSTRUCTION PERMIT  
STATION KWHB-DT  
FACILITY ID: 37099  
TULSA, OKLAHOMA  
CH 48 29 KW (MAX-DA) 460 M

Technical Narrative

This Technical Exhibit supports application for modification of construction permit for DTV station KWHB-DT at Tulsa, Oklahoma. Specifically this application has been prepared to correct the antenna radiation center height above ground level (RCAGL) on the FCC Form 301 in the KWHB-DT construction permit (BPCDT-20041004ACR). No other changes are proposed.

Station KWHB-DT is currently authorized by construction permit (BPCDT-20041004ACR) to operate on channel 48 with a maximum directional antenna effective radiated power (ERP) of 29 kilowatts (kW) and an antenna height above average terrain (HAAT) of 460 meters. Apart from the RCAGL correction on the FCC Form 301, no other changes are proposed. It is noted that the engineering prepared for the KWHB-DT construction permit was correctly based on a RCAGL of 434 meters and a radiation center above mean sea level of 651 meters, however the value for the RCAGL on the Form 301 was incorrectly listed as 247 meters. It appears that this instant application complies with all applicable rules and regulations of the Federal Communications Commission.

This application can be accepted for filing as it does not request a change which is considered "frozen" by the FCC's Public Notice (DA 04-2446) released August 3, 2004, *Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes*.

Response to Paragraph 4 - Antenna Structure Registration Number

Specifically, it is proposed to operate from the currently licensed KWHB(TV) transmitter site with a Dielectric TFU-24DSC-R C170 directional antenna. The maximum directional ERP will be decreased to 29 kW and the antenna HAAT will be increased to 460 meters. The Dielectric TFU-24DSC-R C170 directional antenna will be side-mounted on the existing 559-meter tower. The FCC Tower Registration number for the existing structure is 1011355.

The tower location is uniquely described by the following geographic coordinates (NAD 27) :

36° 01' 15" North Latitude  
95° 40' 32" West Longitude

Response to Paragraph 10 - Directional Antenna Data

Figure 1 provides both a tabulation and graph of the horizontal and vertical relative field patterns for the proposed antenna.

Response to Paragraph 12 - City Coverage

Figure 2 is a map showing the DTV predicted coverage contours. The map provides the predicted 41 dBu f(50,90) noise-limited contour and 48 dBu f(50,90) city grade contour. The extent of the contours has been calculated using the normal FCC prediction method. The Tulsa city limits were derived from information contained in the 2000 U.S. Census for Oklahoma. As shown, the 48 dBu contour encompasses the entire city limits of Tulsa.

In addition, the combined noise-limited service area of KWHB-DT's DTV Allotment and authorized construction permit is also shown on the map. As can be seen, the proposed 41 dBu

(noise limited) contour is fully encompassed by the allotted/authorized noise-limited envelope, and therefore there is no increase in service area.

NTSC/DTV/Class A Allocation Considerations

Figure 3 is a DTV channel 48 separation study toward other NTSC and DTV allotments based on a 50 kilometer "buffer". Although the separation requirements are only applicable to new DTV allotments, they can be used as an indication of which stations have the potential of receiving interference from the proposed channel 48 DTV operation.

An interference analysis has been conducted using the procedures outlined in the FCC's OET-69 bulletin, which demonstrates that the proposal complies with the interference protection provisions of Section 73.623(c)(2).<sup>1</sup> Interference calculations for the proposed KWHB-DT operation are summarized below with respect to all authorized NTSC, DTV, and Class A facilities.

The study indicated that the KWHB-DT operation is not involved in prohibited contour overlap to any Class A stations, and as a result, is not predicted to cause any interference to Class A stations. It is also apparent that the KWHB-DT proposal on channel 48 complies with the FCC's interference standards towards all authorized NTSC and DTV assignments.

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<sup>1</sup> The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. A Sun based processor computer system was employed.

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<b>Protected Station</b>	<b>Facility</b>	<b>Ch.</b>	<b>City, State</b>	<b>FCC Service Population</b>	<b>Proposed Interference Population</b>	<b>% of Baseline</b>
KKAF-CA	LIC	33	SILOAM SPRINGS, AR			NONE
KHBS	LIC	40	FORT SMITH, AR			NONE
KTFO	LIC	41	TULSA, OK			NONE
KTPX	LIC	44	OKMULGEE, OK			NONE
KLOT-LP	CP	45	TULSA, OK			NONE
KPBI-CA	LIC	46	FORT SMITH, AR			NONE
KWHB	LIC	47	TULSA, OK			NONE
TKA-DT	PLN	48	TOPEKA, KS			NONE
KSTR-TV	LIC	48	IRVING, TX			NONE
KHSX-DT	PLN	48	IRVING, TX			NONE
KGEB	CP	49	TULSA, OK	763,509	-4,858	-0.636
KWMJ-DT	PLN	49	TULSA, OK	763,509	-578	-0.076
KSJF-CA	CP	50	POTEAU, OK			NONE

Objectionable Interference

There are no known authorized full service AM stations within 5 kilometers (3 miles) of the KWHB-DT transmitter site. Figure 4 is a list of authorized full service FM, NTSC and DTV stations within 16 kilometers (10 miles) of the proposed DTV site.

Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems, which are a result of its proposed DTV operation.

The proposed transmitter site is more than 1,200 kilometers from the Canadian border. The proposed transmitter site is more than 875 kilometers from the US/Mexican border area. The closest FCC monitoring station is at Grand Island, NE, located 595 kilometers to the north-northeast. The proposed DTV site is outside the National Radio Quiet Zone (VA/WVA), the closest point being more than 1,300 kilometers to the northeast. The closest point of the Table Mountain Radio Quiet Zone (CO) is

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more than 950 kilometers to the northwest. The closest radio astronomy site operating on TV channel 37 is at North Liberty, IA, located more than 730 kilometers to the northwest. These separations are sufficient to not be a concern for coordination purposes.

## Response to Paragraph 13 - Environmental Protection Act

The proposed facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields<sup>2</sup>. The power density at the base of the tower was calculated using the appropriate procedures contained in the Bulletin.

The proposed KWHB-DT antenna will be side mounted on the existing KWHB-DT tower. Figure 4 contains the horizontal and vertical pattern data for the proposed Dielectric directional antenna. The antenna center of radiation is located 434 meters above ground level. The calculated power density at 2 meters above ground level (AGL) was calculated using the appropriate equation contained in the Bulletin. Using a "worst-case" vertical relative field value of 1.0, the calculated power density at 2 meters above the ground is 0.0052 milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ), which is 1.16% of the Commission's recommended limit of 0.45  $\text{mW}/\text{cm}^2$  for channel 48, applicable to uncontrolled exposure areas. Since this is below the responsibility threshold of 5%, it is believed that this proposal is in compliance with the FCC's RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, in the event that workers or other authorized personal enter the restricted area or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency

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<sup>2</sup> OET Bulletin 65, Second Edition 97-01, August, 1997.

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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 stations are at reduced power or shut down.

It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be provided to the FCC by the tower owner as part of the tower registration process.



Jerome J. Manarchuck

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Ave.  
Sarasota, Oklahoma 34237

October 28, 2004



Proposal Number

**DCA-10665**

Date

**3-Sep-04**

Call Letters

**KWHB-DT**

Channel

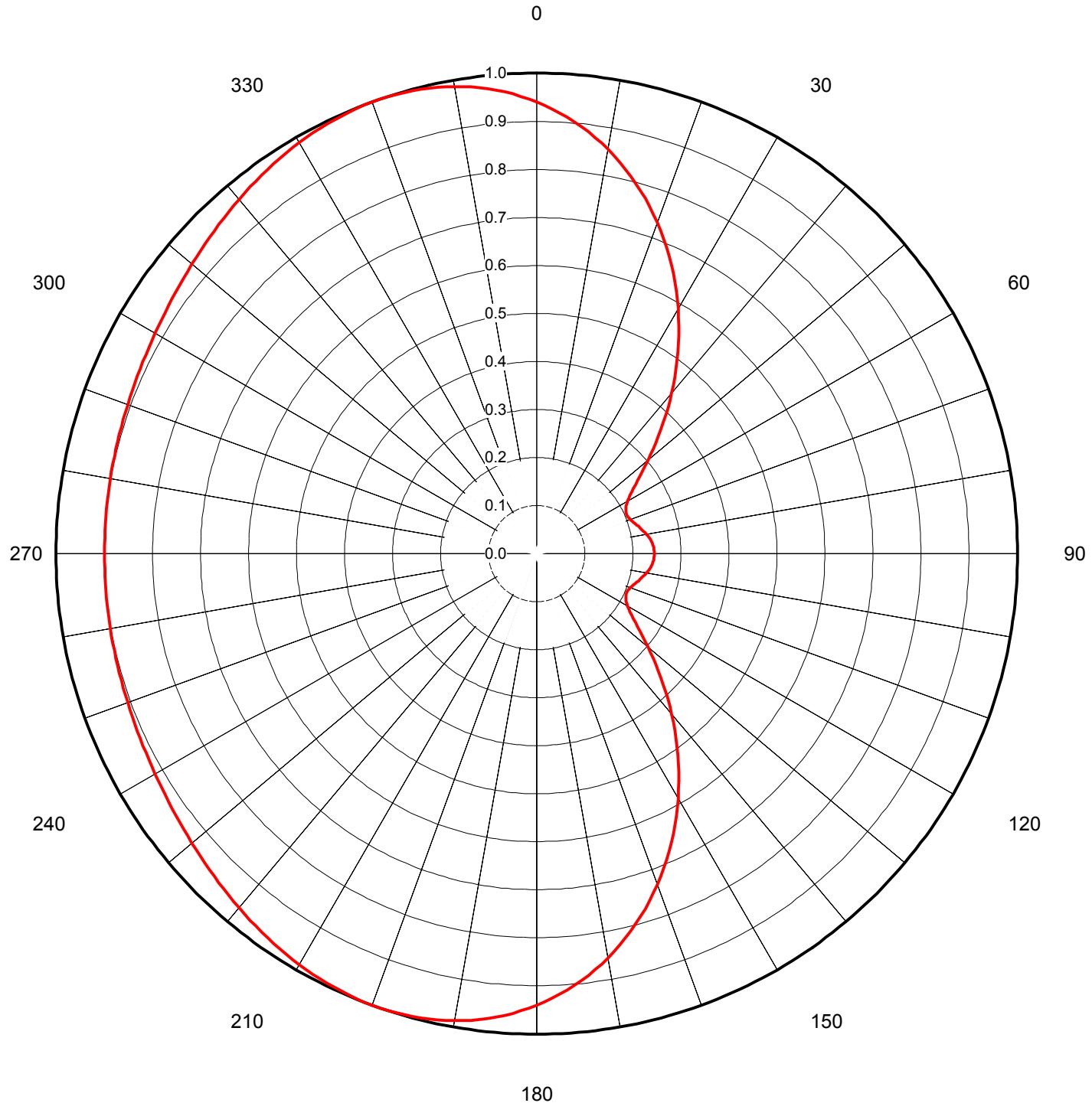
**48**

Location

**Tulsa, OK**

Customer

Antenna Type

**TFU-24DSC-R C170 DC****AZIMUTH PATTERN**Gain **1.70**  
Calculated / Measured  
**( 2.30 dB)**  
**Calculated**Frequency  
Drawing #  
**677.00 MHz**  
**TFU-C170-48**



Proposal Number  
Date  
Call Letters  
Location  
Customer  
Antenna Type

Figure 1, Sheet 2 of 4

**DCA-10665**

**3-Sep-04**

**KWHB-DT**

Channel

**48**

**Tulsa, OK**

**TFU-24DSC-R C170 DC**

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-C170-48**

Angle	Field																
0	0.940	45	0.365	90	0.245	135	0.365	180	0.940	225	0.949	270	0.899	315	0.949		
1	0.933	46	0.352	91	0.244	136	0.379	181	0.946	226	0.946	271	0.899	316	0.952		
2	0.925	47	0.338	92	0.244	137	0.393	182	0.952	227	0.944	272	0.899	317	0.954		
3	0.918	48	0.326	93	0.243	138	0.407	183	0.958	228	0.941	273	0.899	318	0.957		
4	0.910	49	0.313	94	0.242	139	0.422	184	0.963	229	0.939	274	0.899	319	0.960		
5	0.901	50	0.302	95	0.241	140	0.437	185	0.968	230	0.936	275	0.900	320	0.963		
6	0.893	51	0.290	96	0.240	141	0.451	186	0.973	231	0.934	276	0.900	321	0.965		
7	0.883	52	0.280	97	0.238	142	0.466	187	0.977	232	0.932	277	0.900	322	0.968		
8	0.874	53	0.269	98	0.236	143	0.482	188	0.981	233	0.930	278	0.900	323	0.971		
9	0.864	54	0.260	99	0.234	144	0.497	189	0.984	234	0.928	279	0.900	324	0.973		
10	0.854	55	0.251	100	0.232	145	0.512	190	0.987	235	0.926	280	0.900	325	0.976		
11	0.843	56	0.243	101	0.229	146	0.527	191	0.990	236	0.924	281	0.901	326	0.978		
12	0.832	57	0.235	102	0.227	147	0.543	192	0.992	237	0.922	282	0.901	327	0.981		
13	0.821	58	0.229	103	0.224	148	0.558	193	0.994	238	0.920	283	0.901	328	0.983		
14	0.809	59	0.223	104	0.222	149	0.573	194	0.996	239	0.918	284	0.902	329	0.986		
15	0.797	60	0.218	105	0.219	150	0.588	195	0.997	240	0.917	285	0.902	330	0.988		
16	0.785	61	0.214	106	0.216	151	0.604	196	0.998	241	0.915	286	0.903	331	0.990		
17	0.773	62	0.210	107	0.214	152	0.619	197	0.999	242	0.914	287	0.903	332	0.992		
18	0.760	63	0.207	108	0.211	153	0.634	198	1.000	243	0.912	288	0.904	333	0.993		
19	0.747	64	0.206	109	0.209	154	0.648	199	1.000	244	0.911	289	0.905	334	0.995		
20	0.733	65	0.204	110	0.207	155	0.663	200	1.000	245	0.910	290	0.905	335	0.996		
21	0.720	66	0.204	111	0.206	156	0.677	201	1.000	246	0.909	291	0.906	336	0.997		
22	0.706	67	0.204	112	0.205	157	0.692	202	0.999	247	0.908	292	0.907	337	0.998		
23	0.692	68	0.205	113	0.204	158	0.706	203	0.998	248	0.907	293	0.908	338	0.999		
24	0.677	69	0.206	114	0.204	159	0.720	204	0.997	249	0.906	294	0.909	339	1.000		
25	0.663	70	0.207	115	0.204	160	0.733	205	0.996	250	0.905	295	0.910	340	1.000		
26	0.648	71	0.209	116	0.206	161	0.747	206	0.995	251	0.905	296	0.911	341	1.000		
27	0.634	72	0.211	117	0.207	162	0.760	207	0.993	252	0.904	297	0.912	342	1.000		
28	0.619	73	0.214	118	0.210	163	0.773	208	0.992	253	0.903	298	0.914	343	0.999		
29	0.604	74	0.216	119	0.214	164	0.785	209	0.990	254	0.903	299	0.915	344	0.998		
30	0.588	75	0.219	120	0.218	165	0.797	210	0.988	255	0.902	300	0.917	345	0.997		
31	0.573	76	0.222	121	0.223	166	0.809	211	0.986	256	0.902	301	0.918	346	0.996		
32	0.558	77	0.224	122	0.229	167	0.821	212	0.983	257	0.901	302	0.920	347	0.994		
33	0.543	78	0.227	123	0.235	168	0.832	213	0.981	258	0.901	303	0.922	348	0.992		
34	0.527	79	0.229	124	0.243	169	0.843	214	0.978	259	0.901	304	0.924	349	0.990		
35	0.512	80	0.232	125	0.251	170	0.854	215	0.976	260	0.900	305	0.926	350	0.987		
36	0.497	81	0.234	126	0.260	171	0.864	216	0.973	261	0.900	306	0.928	351	0.984		
37	0.482	82	0.236	127	0.269	172	0.874	217	0.971	262	0.900	307	0.930	352	0.981		
38	0.466	83	0.238	128	0.280	173	0.883	218	0.968	263	0.900	308	0.932	353	0.977		
39	0.451	84	0.240	129	0.290	174	0.893	219	0.965	264	0.900	309	0.934	354	0.973		
40	0.437	85	0.241	130	0.302	175	0.901	220	0.963	265	0.900	310	0.936	355	0.968		
41	0.422	86	0.242	131	0.313	176	0.910	221	0.960	266	0.899	311	0.939	356	0.963		
42	0.407	87	0.243	132	0.326	177	0.918	222	0.957	267	0.899	312	0.941	357	0.958		
43	0.393	88	0.244	133	0.338	178	0.925	223	0.954	268	0.899	313	0.944	358	0.952		
44	0.379	89	0.244	134	0.352	179	0.933	224	0.952	269	0.899	314	0.946	359	0.946		

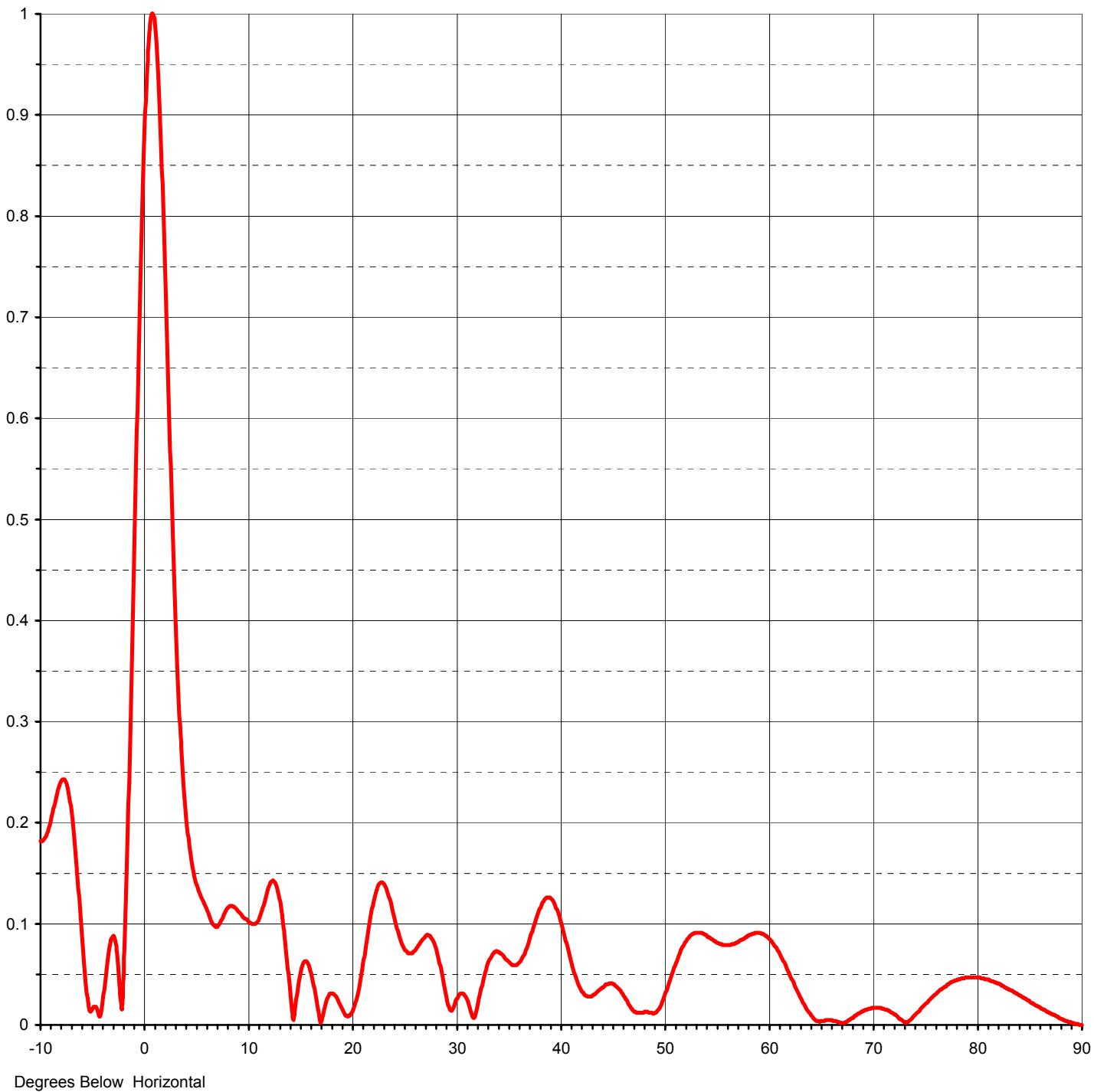


Figure 1, Sheet 3 of 4

Proposal Number **DCA-10665**  
Date **3-Sep-04**  
Call Letters **KWHB-DT** Channel **48**  
Location **Tulsa, OK**  
Customer  
Antenna Type **TFU-24DSC-R C170 DC**

### ELEVATION PATTERN

RMS Gain at Main Lobe **17.50 ( 12.43 dB )** Beam Tilt **0.75 deg**  
RMS Gain at Horizontal **13.70 ( 11.37 dB )** Frequency **677.00 MHz**  
Calculated / Measured **Calculated** Drawing # **24Q175075-90**



Degrees Below Horizontal



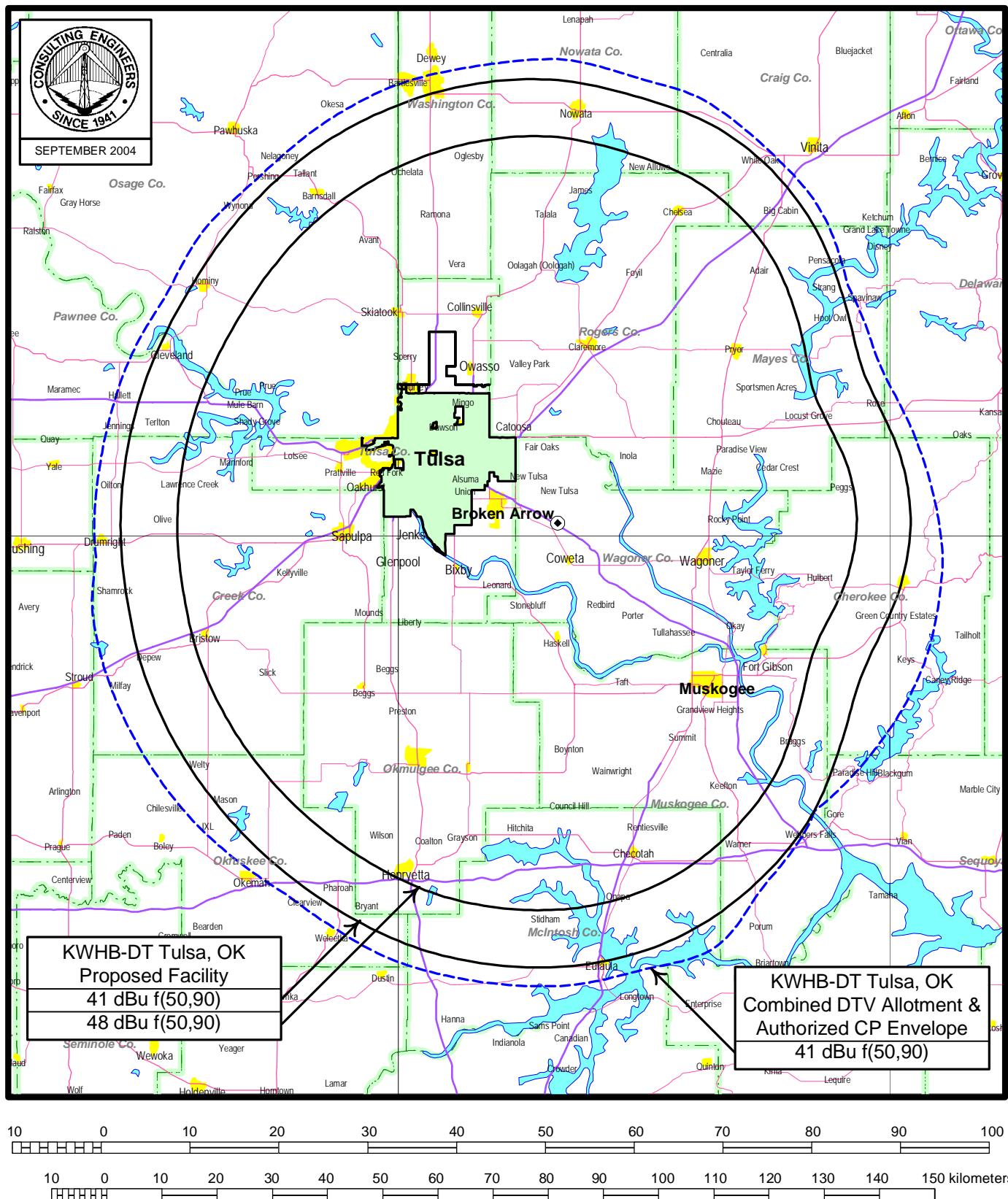
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 Customer  
 Antenna Type **TFU-24DSC-R C170 DC**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **24Q175075-90**

Angle	Field										
-10.0	0.182	2.4	0.587	10.6	0.100	30.5	0.031	51.0	0.058	71.5	0.014
-9.5	0.186	2.6	0.517	10.8	0.101	31.0	0.026	51.5	0.071	72.0	0.010
-9.0	0.202	2.8	0.451	11.0	0.103	31.5	0.011	52.0	0.082	72.5	0.006
-8.5	0.225	3.0	0.391	11.5	0.118	32.0	0.016	52.5	0.088	73.0	0.003
-8.0	0.241	3.2	0.339	12.0	0.136	32.5	0.039	53.0	0.091	73.5	0.005
-7.5	0.239	3.4	0.295	12.5	0.142	33.0	0.059	53.5	0.091	74.0	0.010
-7.0	0.209	3.6	0.258	13.0	0.128	33.5	0.070	54.0	0.089	74.5	0.016
-6.5	0.154	3.8	0.228	13.5	0.091	34.0	0.072	54.5	0.085	75.0	0.021
-6.0	0.086	4.0	0.204	14.0	0.040	34.5	0.069	55.0	0.082	75.5	0.026
-5.5	0.027	4.2	0.185	14.5	0.012	35.0	0.063	55.5	0.080	76.0	0.031
-5.0	0.016	4.4	0.169	15.0	0.048	35.5	0.059	56.0	0.079	76.5	0.035
-4.5	0.013	4.6	0.156	15.5	0.063	36.0	0.061	56.5	0.080	77.0	0.039
-4.0	0.025	4.8	0.146	16.0	0.054	36.5	0.069	57.0	0.082	77.5	0.042
-3.5	0.068	5.0	0.138	16.5	0.030	37.0	0.082	57.5	0.085	78.0	0.044
-3.0	0.088	5.2	0.132	17.0	0.002	37.5	0.099	58.0	0.088	78.5	0.046
-2.8	0.082	5.4	0.127	17.5	0.022	38.0	0.114	58.5	0.090	79.0	0.047
-2.6	0.066	5.6	0.123	18.0	0.031	38.5	0.124	59.0	0.091	79.5	0.047
-2.4	0.039	5.8	0.118	18.5	0.028	39.0	0.126	59.5	0.090	80.0	0.047
-2.2	0.016	6.0	0.113	19.0	0.017	39.5	0.119	60.0	0.086	80.5	0.046
-2.0	0.059	6.2	0.108	19.5	0.009	40.0	0.104	60.5	0.080	81.0	0.045
-1.8	0.123	6.4	0.103	20.0	0.012	40.5	0.085	61.0	0.072	81.5	0.043
-1.6	0.198	6.6	0.099	20.5	0.028	41.0	0.065	61.5	0.062	82.0	0.041
-1.4	0.282	6.8	0.097	21.0	0.055	41.5	0.047	62.0	0.051	82.5	0.038
-1.2	0.373	7.0	0.097	21.5	0.088	42.0	0.035	62.5	0.039	83.0	0.035
-1.0	0.467	7.2	0.100	22.0	0.118	42.5	0.029	63.0	0.029	83.5	0.032
-0.8	0.562	7.4	0.104	22.5	0.137	43.0	0.028	63.5	0.019	84.0	0.029
-0.6	0.655	7.6	0.109	23.0	0.140	43.5	0.032	64.0	0.011	84.5	0.026
-0.4	0.741	7.8	0.113	23.5	0.129	44.0	0.037	64.5	0.004	85.0	0.023
-0.2	0.819	8.0	0.116	24.0	0.109	44.5	0.040	65.0	0.004	85.5	0.020
0.0	0.886	8.2	0.118	24.5	0.089	45.0	0.041	65.5	0.005	86.0	0.017
0.2	0.938	8.4	0.118	25.0	0.076	45.5	0.037	66.0	0.005	86.5	0.014
0.4	0.975	8.6	0.117	25.5	0.071	46.0	0.031	66.5	0.003	87.0	0.011
0.6	0.996	8.8	0.115	26.0	0.073	46.5	0.022	67.0	0.002	87.5	0.009
0.8	1.000	9.0	0.112	26.5	0.080	47.0	0.014	67.5	0.004	88.0	0.006
1.0	0.987	9.2	0.110	27.0	0.087	47.5	0.012	68.0	0.007	88.5	0.004
1.2	0.959	9.4	0.107	27.5	0.088	48.0	0.012	68.5	0.011	89.0	0.002
1.4	0.917	9.6	0.105	28.0	0.078	48.5	0.012	69.0	0.014	89.5	0.001
1.6	0.864	9.8	0.105	28.5	0.058	49.0	0.011	69.5	0.016	90.0	0.000
1.8	0.801	10.0	0.103	29.0	0.032	49.5	0.016	70.0	0.017		
2.0	0.732	10.2	0.101	29.5	0.014	50.0	0.028	70.5	0.017		
2.2	0.660	10.4	0.100	30.0	0.024	50.5	0.043	71.0	0.016		

**Figure 2**



## PREDICTED FCC COVERAGE CONTOURS

DTV STATION KWHB-DT

TULSA, OKLAHOMA

CH 48 29 KW (MAX-DA) 460 M

Figure 3

CDBS TV/DTV SEPARATION STUDY

Job Title: KWHB-DT Separation Study  
 Channel: 48  
 Type: DT

Separation Buffer: 50 km  
 Coordinates: 36-01-15 95-40-32  
 Zone: II

Call Id	City St	File Status	Channel Num	ERP Zone	DA HAAT	Latitude Id	Longitude	Bear	Dist. (km)	Req. min	Req. max
KKAF-C 52432	SILOAM AR	SPRI LIC	BLTTL C	33(Z) 20000707AE	16.700 19560	D 094-30-55	36-09-07	81.7	105.5 8.91	0.0 Class A	0.0
KHBS 60353	FORT AR	SMITH LIC	BMLCT C	40(-) 20030514AD	3160.000 II	D 610 19233	35-04-16	139.2	138.8 42.22	24.1 Clear	96.6
KTFO 54420	TULSA OK	LIC C	BLCT 19810323KF	41(+) II	1350.000 866	N 46189	36-01-10	95.2	1.7 22.39	24.1 Clear	96.6
KTPX 7078	OKMULGEE OK	LIC C	BLCT 19970630KF	44(-) II	5000.000 277	D 18934	35-50-02	242.9	45.5 21.41	24.1 Short	96.6
KLOT-L 31369	TULSA OK	CP C	BPTTL 20040211AA	45(Z)	25.000 20398	D 095-59-25	36-09-01	297.1	31.8 7.68	0.0 Class A	0.0
KPBI-C 52429	FORT AR	SMITH LIC	BLTTL C	46(+) 20020220AA	32.000 18080	D 094-21-54	35-26-50	117.9	134.6 37.96	0.0 Class A	0.0
KWHB 37099	TULSA OK	LIC C	BLCT 19850701KF	47(Z) II	1660.000 460	D 18214	36-01-15	96.4	0.0 12.00	12.0 Close	106.0
DKWHB	TULSA OK	DTV		48( ) II	50.000 460	D 095-40-32	36-01-15	90.1	0.0 223.70	223.7 223.7	
KWHB 37099	TULSA OK	CP C	BPCDT 19991005AB	48( ) II	300.000 270.9	D 34548	35-59-52	231.9	4.2 219.54	223.7 223.7	
DKWMJ	TULSA OK	DTV		49( ) II	50.000 182	D 095-57-11	36-02-34	275.7	25.1 1.13	24.0 110.0	
KGEB 24485	TULSA OK	CP C	BPCDT 19991026AB	49( ) II	50.000 182	N 28873	36-02-35	275.7	25.1 1.13	24.0 110.0	
KSJF-C 52425	POTEAU OK	CP C	BPTTL 20010328AA	50(Z)	37.300 19515	D 094-40-47	35-04-17	139.2	138.7 42.15	0.0 Class A	0.0
KNWA-T 29557	ROGERS AR	LIC C	BLCT 19921005KH	51(-) II	182.000 143	N 094-06-05	36-12-15	81.3	143.2 46.59	24.1 Clear	96.6

***du Treil, Lundin, and Rackley*****KWHB-DT CP MOD Site****Coordinates: 36-01-15 095-40-32 Channel Range: -****Range: 16**

Date: 9/28/2004

**CDBS Tv Inquiry List**

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Rec Type	Facility Id	Call	Status	Chan	Svc Class	Class	City	St	DA	Latitude	Longitude	ERP (kW)	HAAT (m)	RCAMSL (m)	Bearing	Dist. (km)
C	59439	KJRH	LIC	56	DT		TULSA	OK	N	36-01-15	095-40-32	800.000	505	698	0	0
C	66195	KOED-T	CP	38	DT		TULSA	OK	N	36-01-15	095-40-32	1000.00	395.8	589	0	0
C	35434	KOTV	CP	55	DT		TULSA	OK	D	36-01-15	095-40-32	970.000	490.4	685	0	0
C	59439	KJRH	LIC	2	TV		TULSA	OK	N	36-01-15	095-40-32	100.000	558	751	0	0
C	66195	KOED-T	LIC	11	TV		TULSA	OK		36-01-15	095-40-32	316.000	521	716	0	0
C	35434	KOTV	LIC	6	TV		TULSA	OK		36-01-15	095-40-32	100.000	573	769	0	0
C	37099	KWHB	LIC	47	TV		TULSA	OK	D	36-01-15	095-40-32	1660.00	460	651	0	0
C	84209	961001	APP	63	TV		TULSA	OK	D	36-01-15	095-40-33	5000.00	329	521	269.8	0.03
C	11910	KOKI-T	LIC	22	DT		TULSA	OK	N	36-01-36	095-40-44	1000.00	400	592	335.1	0.71
C	54420	KTFO	LIC	42	DT		TULSA	OK	N	36-01-36	095-40-44	900.000	381	572	335.1	0.71
C	11910	KOKI-T	LIC	23	TV		TULSA	OK	N	36-01-36	095-40-44	3160.00	400	592	335.1	0.71
C	54420	KTFO	LIC	41	TV		TULSA	OK	N	36-01-10	095-39-24	1350.00	866	1056	95.19	1.71
C	84212	961001	APP	63	TV		TULSA	OK	N	36-00-16	095-39-25	1550.00	321	512	137.4	2.47
C	37099	KWHB	CP	48	DT		TULSA	OK	D	35-59-52	095-42-43	300.000	270.9	468	231.9	4.16
C	35685	KTUL	LIC	8	TV		TULSA	OK	N	35-58-09	095-36-55	316.000	578	762	136.6	7.9
C	35685	KTUL	LIC	10	DT		TULSA	OK	D	35-58-08	095-36-55	6.900	542.3	727	136.7	7.92
C	127522	NEW	APP	26	DM		TULSA	OK	D	36-04-56	095-45-27	200.000	94	295	312.8	10.05

***du Treil, Lundin, and Rackley*****KWHB-DT CP MOD Site****Coordinates: 36-01-15 095-40-32 Frequency Range: -****Range: 16**

Date: 9/28/2004

**CDBS FM Inquiry List**

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Rec Type	Fac Id	Call	Status	Chan	Svc Class	Class	City	St	DA	Latitude	Longitude	ERP (kW)	HAAT (m)	RCAMSL (m)	Bear	Dist. (km)
C	81517	KWTU	CP	204	FM	C2	TULSA	OK	N	36-01-15	095-40-32	5.000	325.0	519.0	0.0	0.0
C	66586	KWGS	LIC	208	FM	C1	TULSA	OK		36-01-15	095-40-32	50.000	325.0	519.0	0.0	0.0
C	14429	KNYD	LIC	213	FM	C	BROKEN	OK	D	36-01-15	095-40-32	100.000	499.0	689.0	0.0	0.0
C	9801	KJSR	LIC	277	FM	C	TULSA	OK	N	36-01-10	095-39-24	100.000	390.0	579.0	95.2	1.7
C	59979	KMYZ-F	LIC	283	FM	C1	PRYOR	OK		36-01-10	095-39-24	70.000	344.0	533.0	95.2	1.7