

Engineering Statement In Response to  
Letter of Deficiency Dated  
April 18, 2012  
KRCM, Shenandoah, Texas  
BP-201201110AFY

Engineering Statement

On April 18, 2012, Commission Staff issued a Letter of Deficiency regarding the above cited application by AM Station KRCM at Shenandoah, Texas seeking to make changes in the station's power, transmitter site and antenna system. Stating that a preliminary review by Commission staff had discovered a potential violation of FCC rules in that the proposed 0.025 mV/m Daytime contour of the proposed KRCM facility would receive contour overlap from the licensed 0.5 mV/ m Daytime contour of AM station KBWD at Brownwood, Texas in violation of Section 73.37 of the Commission's rules.

In response, the applicant engaged the services of Mr. Robert Morrow to conduct a series of field strength readings on KBWD to establish actual conductivity along radials having bearing on depicted groundwave overlap between KBWD and the proposed KRCM facilities. Readings were taken on April 20, 2012 and April 21, 2012 along radials bearing 95.0° T and 115.0° T commencing near the KBWD site and extending to approximately 112 km from that site. Readings were taken at intervals indicated in FCC rules, the resulting measurements thence being tabulated and plotted against the FCC Family of Curves for frequencies 1340 kHz to 1420 kHz to establish conductivity along the two bearings (+/- 10.0°) cited above and the contours of KBWD 0.50 mV/m and 0.025 mV/m Daytime contours being determined using the conductivities established by those readings. The resulting contour were then plotted against the proposed corresponding contours from the KRCM application and it was established that no prohibited overlap will occur as a result of the grant of the proposed KRCM antenna system.

This amendment contains:

1. A copy of the letter of deficiency dated April 18, 2012.
2. A copy of the Family of Curves utilized in plotting the KBWD readings
3. A copy of the readings, distances and times for the readings along the two bearings 95.0° T and 115.0° T

4. A logarithmic curve page upon which the readings achieved on KBWD are plotted and appropriate conductivities assigned
5. a conductivity report showing the conductivity utilized as a result of the readings along and ten (10) degrees +/- either side of the radial utilized in the exhibit.
6. A copy of the resulting coverage map for KBWD and the proposed KRCM coverage map indicating no prohibited overlap.

The applicant represents the deficiency question between KBWD and KRCM has been favorably disposed of and the application is now in compliance with all Commission rules and should be granted.

Respectfully Submitted,

  
Bob Morrow, Technical Consultant

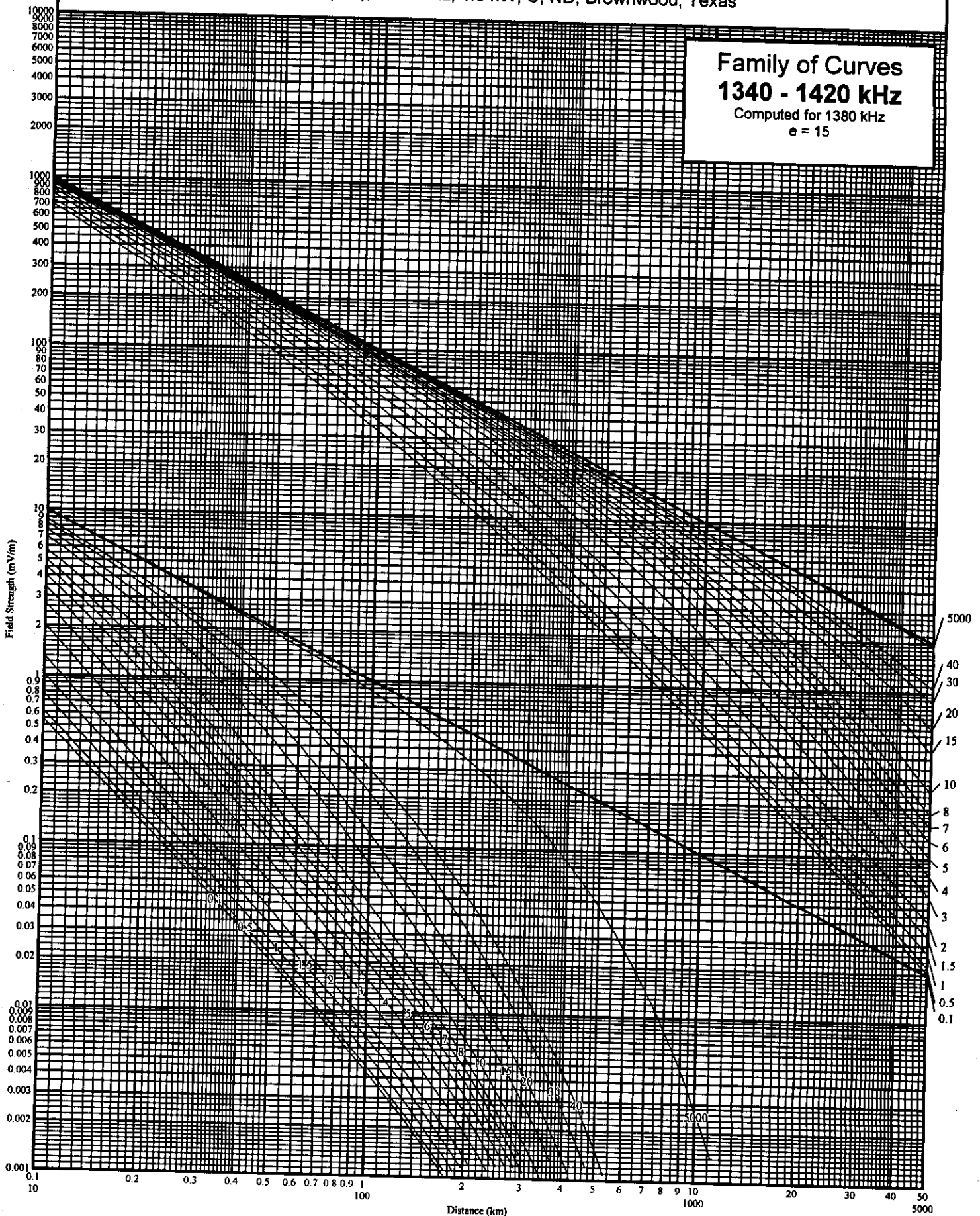
April 23, 2012

# Groundwave Field Strength vs. Distance

Inverse Distance Field: 100.0 mV/m@1km  
KBWD (AM), 1380 kHz, 1.0 kW, U, ND, Brownwood, Texas

Family of Curves  
1340 - 1420 kHz

Computed for 1380 kHz  
 $e = 15$



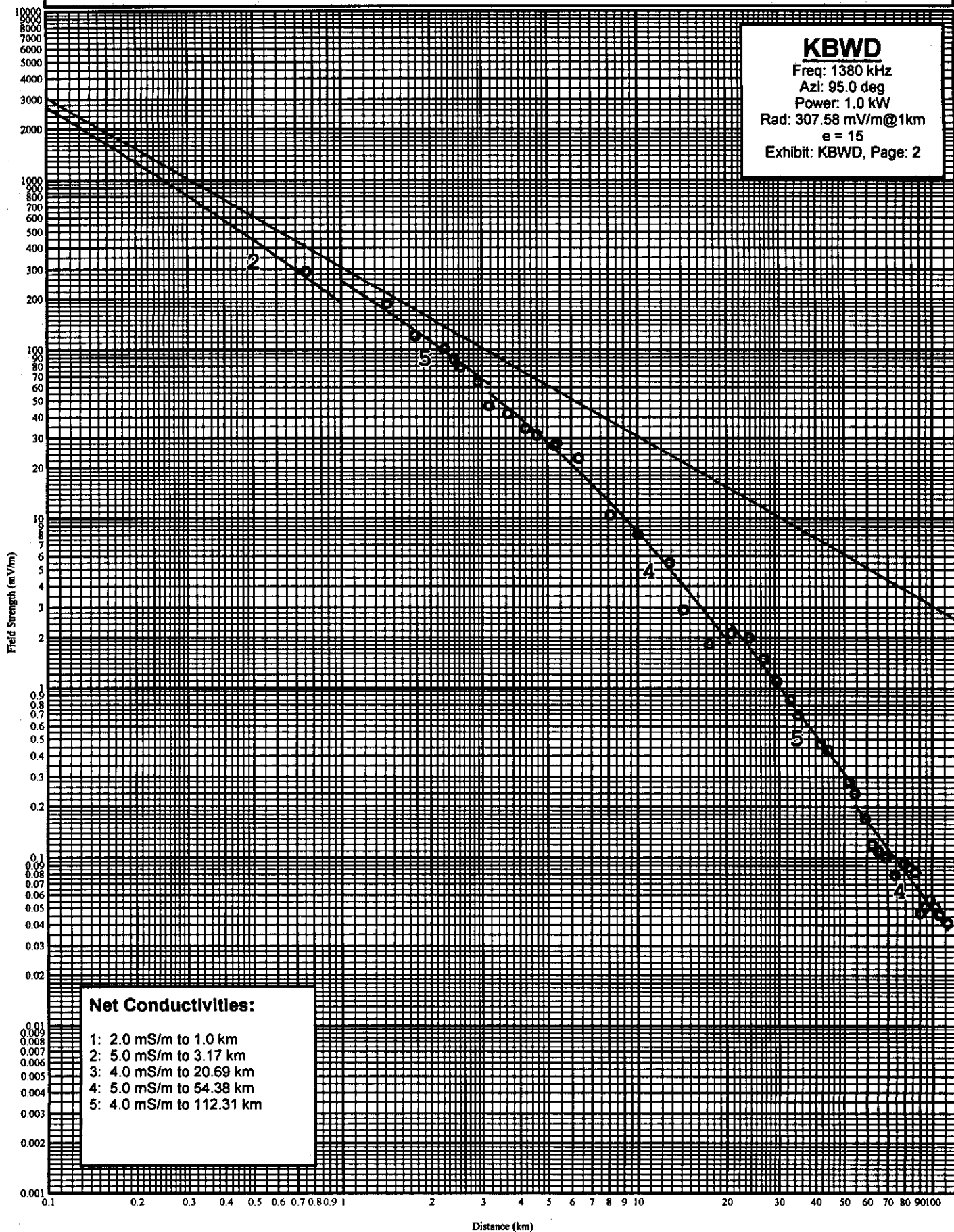
DAIJ Media, LLC  
KRCM (AM), 1380 kHz, CP - 2.8 kW, ND-D  
Shenandoah, Texas  
Exhibit: KBWD, Page: 1

KBWD (AM), 1380 kHz, 1.0 kW, U, ND  
Brownwood, Texas  
Measurements for 95.0 degrees.

Point Number	Distance (km)	(mi)	Field (mV/m)	Notes	Date	Time
-----	-----	-----	-----	-----	-----	-----
1	0.76	0.47	291.000		4/20/2012	0909
2	1.43	0.89	187.000		4/20/2012	0913
3	1.78	1.11	121.000		4/20/2012	0919
4	2.24	1.39	101.000		4/20/2012	0923
5	2.41	1.50	86.900		4/20/2012	0930
6	2.53	1.57	79.400		4/20/2012	0941
7	2.90	1.80	64.300		4/20/2012	0947
8	3.17	1.97	46.500		4/20/2012	0954
9	3.67	2.28	41.800		4/20/2012	0959
10	4.21	2.62	34.000		4/20/2012	1006
11	4.60	2.86	31.000		4/20/2012	1016
12	5.28	3.28	27.200		4/20/2012	1032
13	5.35	3.32	28.000		4/20/2012	1028
14	6.35	3.95	22.700		4/20/2012	1035
15	8.10	5.03	10.500		4/20/2012	1043
16	10.07	6.26	8.100		4/20/2012	1049
17	12.87	8.00	5.500		4/20/2012	1058
18	14.31	8.89	2.900		4/20/2012	1104
19	17.51	10.88	1.800		4/20/2012	1110
20	20.69	12.86	2.100		4/20/2012	1118
21	23.73	14.75	2.000		4/20/2012	1123
22	26.68	16.58	1.500		4/20/2012	1138
23	29.51	18.34	1.100		4/20/2012	1142
24	32.89	20.44	0.860		4/20/2012	1159
25	35.00	21.75	0.690		4/20/2012	1314
26	41.55	25.82	0.470		4/20/2012	1255
27	41.73	25.93	0.470		4/20/2012	1225
28	44.29	27.52	0.430		4/20/2012	1232
29	51.88	32.24	0.280		4/20/2012	1232
30	54.38	33.79	0.240		4/20/2012	1355
31	58.90	36.60	0.170		4/20/2012	1402
32	61.96	38.50	0.120		4/20/2012	1414
33	65.18	40.50	0.110		4/20/2012	1427
34	69.32	43.07	0.100		4/20/2012	1438
35	74.70	46.42	0.079		4/20/2012	1438
36	79.96	49.68	0.092		4/20/2012	1455
37	83.47	51.87	0.088		4/20/2012	1506
38	87.89	54.61	0.082		4/20/2012	1518
39	90.60	56.30	0.047		4/20/2012	1524
40	94.50	58.72	0.051		4/20/2012	1536
41	98.41	61.15	0.057		4/20/2012	1547
42	102.40	63.63	0.051		4/20/2012	1556
43	105.68	65.67	0.046		4/20/2012	1605
44	112.91	70.16	0.041		4/20/2012	1622

# KBWD AM Measured Field Strength

Shown With Matching Conductivity Curves  
KBWD (AM), 1380 kHz, 1.0 kW, ND-D, Brownwood, Texas



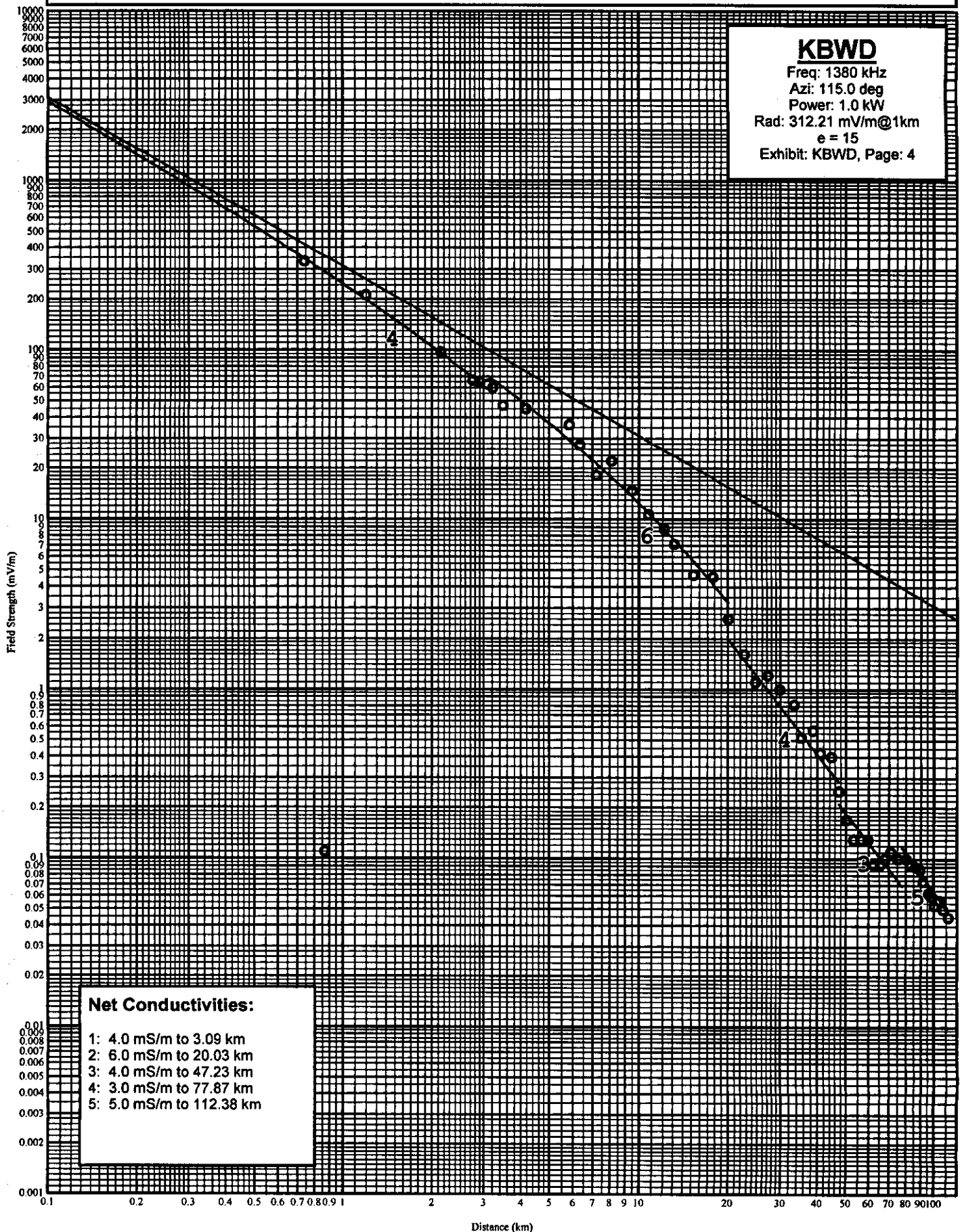
DAIJ Media, LLC  
KRCM (AM), 1380 kHz, CP - 2.8 kW, ND-D  
Shenandoah, Texas  
Exhibit: KBWD, Page: 3

KBWD (AM), 1380 kHz, 1.0 kW, U, ND  
Brownwood, Texas  
Measurements for 115.0 degrees.

Point Number	Distance (km) (mi)		Field (mV/m)	Notes	Date	Time
-----	-----	-----	-----	-----	-----	-----
1	0.74	0.46	333.000		4/21/2012	1543
2	0.87	0.54	111.000		4/21/2012	1036
3	1.20	0.75	211.000		4/21/2012	1542
4	2.15	1.34	97.400		4/21/2012	1535
5	2.76	1.71	66.300		4/21/2012	1527
6	2.91	1.81	65.000		4/21/2012	1521
7	3.09	1.92	62.400		4/21/2012	1513
8	3.22	2.00	60.000		4/21/2012	1505
9	3.49	2.17	47.000		4/21/2012	1457
10	4.18	2.60	44.800		4/21/2012	1450
11	5.84	3.63	36.300		4/21/2012	1442
12	6.35	3.95	27.500		4/21/2012	1435
13	7.23	4.49	18.100		4/21/2012	1428
14	8.12	5.05	22.000		4/21/2012	1420
15	9.53	5.92	14.800		4/21/2012	1418
16	10.78	6.70	10.700		4/21/2012	1406
17	12.22	7.59	8.800		4/21/2012	1358
18	13.19	8.20	7.100		4/21/2012	1350
19	15.31	9.51	4.700		4/21/2012	1343
20	17.79	11.05	4.600		4/21/2012	1336
21	20.02	12.44	2.600		4/21/2012	1330
22	22.62	14.06	1.600		4/21/2012	1322
23	24.72	15.36	1.100		4/21/2012	1313
24	27.29	16.96	1.200		4/21/2012	1304
25	29.86	18.55	1.000		4/21/2012	1258
26	33.41	20.76	0.810		4/21/2012	1250
27	35.29	21.93	0.520		4/21/2012	1242
28	38.68	24.03	0.570		4/21/2012	1234
29	41.09	25.53	0.420		4/21/2012	1225
30	44.73	27.79	0.400		4/21/2012	1218
31	47.23	29.35	0.250		4/21/2012	1205
32	50.32	31.27	0.170		4/21/2012	1153
33	53.22	33.07	0.130		4/21/2012	1140
34	56.63	35.19	0.130		4/21/2012	1134
35	59.51	36.98	0.130		4/21/2012	1124
36	62.37	38.75	0.092		4/21/2012	1117
37	65.78	40.87	0.092		4/21/2012	1106
38	68.00	42.25	0.100		4/21/2012	1059
39	71.17	44.22	0.110		4/21/2012	1053
40	75.21	46.73	0.100		4/21/2012	1045
41	80.67	50.13	0.100		4/21/2012	1024
42	83.34	51.79	0.092		4/21/2012	1018
43	86.60	53.81	0.090		4/21/2012	1018
44	89.69	55.73	0.087		4/21/2012	1012
45	92.12	57.24	0.074		4/21/2012	1006
46	95.75	59.50	0.063		4/21/2012	0958
47	97.81	60.78	0.060		4/21/2012	0950
48	100.51	62.45	0.053		4/21/2012	0940
49	104.59	64.99	0.057		4/21/2012	0934
50	108.00	67.11	0.050		4/21/2012	0929
51	112.38	69.83	0.045		4/21/2012	0921

# KBWD AM Measured Field Strength

Shown With Matching Conductivity Curves  
KBWD (AM), 1380 kHz, 1.0 kW, ND-D, Brownwood, TX



DAIJ Media, LLC  
 KRCM (AM), 1380 kHz, CP - 2.8 kW, ND-D  
 Shenandoah, Texas  
 Exhibit: KBWD, Page: 5

KBWD (AM), 1380 kHz, 1.0 kW-D, 0.50 kW-N, U, ND  
 Brownwood, Texas  
 Measurements for 115.0 degrees.

GROUND CONDUCTIVITY REPORT

Lat : 31-42-36.0 N  
 Lon : 98-57-36.0 W  
 Radius : 200.0

\* Includes measured conductivity data

30 deg:	200.37,	15.0						
35 deg:	199.89,	15.0						
40 deg:	200.03,	15.0						
45 deg:	200.30,	15.0						
50 deg:	200.39,	15.0						
55 deg:	200.22,	15.0						
60 deg:	200.42,	15.0						
65 deg:	200.36,	15.0						
70 deg:	200.09,	15.0						
75 deg:	199.89,	15.0						
80 deg:	200.43,	15.0						
85 deg:	1.00,	2.0*	3.17,	5.0*	20.69,	4.0*	54.38,	5.0*
	112.31,	4.0*	200.02,	15.0				
90 deg:	1.00,	2.0*	3.17,	5.0*	20.69,	4.0*	54.38,	5.0*
	112.31,	4.0*	200.39,	15.0				
95 deg:	1.00,	2.0*	3.17,	5.0*	20.69,	4.0*	54.38,	5.0*
	112.31,	4.0*	199.93,	15.0				
100 deg:	1.00,	2.0*	3.17,	5.0*	20.69,	4.0*	54.38,	5.0*
	112.31,	4.0*	200.08,	15.0				
105 deg:	1.00,	2.0*	3.09,	4.0*	3.17,	5.0*	20.03,	6.0*
	20.69,	4.0*	47.23,	40.0*	54.38,	5.0*	77.87,	3.0*
	112.31,	4.0*						
	112.38,	5.0*	157.47,	15.0	200.37,	30.0		
110 deg:	3.09,	4.0*	20.03,	6.0*	47.23,	40.0*	77.87,	3.0*
	112.38,	5.0*	155.97,	15.0	200.10,	30.0		
115 deg:	3.09,	4.0*	20.03,	6.0*	47.23,	40.0*	77.87,	3.0*
	112.38,	5.0*	155.98,	15.0	200.19,	30.0		
120 deg:	3.09,	4.0*	20.03,	6.0*	47.23,	40.0*	77.87,	3.0*
	112.38,	5.0*	157.93,	8.0	199.57,	30.0		
125 deg:	3.09,	4.0*	20.03,	6.0*	47.23,	40.0*	77.87,	3.0*
	112.38,	5.0*	161.03,	8.0	199.76,	30.0		
130 deg:	24.87,	15.0	168.85,	8.0	200.27,	30.0		
135 deg:	19.55,	15.0	177.93,	8.0	199.24,	30.0	199.80,	15.0
140 deg:	17.28,	15.0	186.77,	8.0	191.67,	30.0	200.23,	15.0
145 deg:	13.87,	15.0	199.73,	8.0	199.73,	15.0		
150 deg:	10.64,	15.0	199.95,	8.0				
155 deg:	10.30,	15.0	200.10,	8.0				
160 deg:	10.01,	15.0	200.09,	8.0				
165 deg:	8.89,	15.0	199.54,	8.0				
170 deg:	7.66,	15.0	7.79,	8.0	8.70,	15.0	199.58,	8.0
175 deg:	7.66,	15.0	200.16,	8.0				



Map Indicating Proposed KRCM (AM) .5 mV/m and .025 mV/m Daytime  
Versus Licensed KBWD (AM) .5 mV/m and .025 mV/m Daytime, Brownwood, TX  
April 2012 Amended

