

Doug Vernier - Telecommunications Consultants
721 W. First St., Suite A, Cedar Falls, IA 50613

Channel Study

Regents Of The University Of New Mexico

REFERENCE CH# 220A - 91.9 MHz, Pwr= 0.1 kW, HAAT= -11.4 M, COR= 2089 M
35 37 59.0 N.
105 14 10.0 W.
Average Protected F(50-50)= 5.64 km

DISPLAY DATES
DATA 02-19-08
SEARCH 02-19-08

CH CITY	CALL	TYPE STATE	ANT DCX	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
220A KRRE Las Vegas		APP NM	DCX	0.0 0.0	0.00 BMPED20071129ABY	35 37 59.0 105 14 10.0	0.100 -2	10.1 2098	3.1 Regents Of The University	-13.29*	-13.29* 1.
220A KRRE Las Vegas		CP NM	DCX	150.2 330.3	6.22 BNPED20000118ABX	35 35 04.0 105 12 07.0	0.100 -36	10.1 2007	3.1 Regents Of The University	-14.70*	-33.62 2.
220C3 KRAR Español a		CP NM	—	308.8 128.4	92.60	36 09 08.0 106 02 21.0	8.700 164	94.6 2083	32.5	-6.03*	46.88 3.
220C3 KRAR Español a		CP NM	_CX	308.8 128.4	92.60 BMPED20071129ABO	36 09 08.0 106 02 21.0	5.900 162	88.3 2083	29.7 Regents Of The University	0.21	49.39
222C KRST« Albuquerque Grandfathered at 22.0kw ERP & 1268m HAAT		LIC NM	_CN	247.5 66.8	119.64 BMLH19900424KH	35 12 55.0 106 27 02.0	22.000 1268	9.4 3284	91.7 Citadel Broadcasting Compa	95.0R	24.6M
218C KFLQ Albuquerque		LIC NM	_CX	247.4 66.7	119.68 BLED20040419ABM	35 12 51.0 106 27 02.0	20.000 1232	8.9 3252	90.1 Family Life Broadcasting S	105.11	28.84
220A KNLK Santa Rosa		LIC NM	_CX	146.1 326.4	90.53 BLED20040830ABI	34 57 20.0 104 40 53.0	0.100 -8	18.6 1473	5.6 Board Of Education Of The	60.31	48.89
220C3 KXFR Socorro Amended 990217		CP NM	_CX	230.1 49.1	212.39 BPED19980826MG	34 23 44.0 107 00 42.0	25.000 74	129.9 1749	52.0 Family Stations, Inc.	74.52	141.45

Terrain database is USGS 03 SEC Distance + R = 73.215 or FCC Spacings in KM, Distance + M = Margin in KM
In & Out distances between contours are shown at closest points. Reference zone = 2. With 3rd Adj Channels.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.
"«" = Station meets FCC minimum distance spacing for its class.
Reference station has protected zone issue: AM tower

1. KRRE Application being amended
2. KRRE existing C.P.
3. KRAR This CP has been modified to reduce ERP to 5.9 kW (This is an old record which should be removed from the CDBS)

HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "*** IN ***" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "*** OUT ***" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Under the "AZIMUTH" column, the first row of numbers indicate the True North bearings from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station.

The columns labeled "INT" and "PRO" contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships and relationships with commercial channel stations the minimum spacings the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The call letters of stations meeting the minimum separation distances will be flagged by the characters "<<" appended to the end of the call letters. The "^" character appended to the call letters means the station has been "max-classed" according to the provisions of section 73.525 of the Rules.

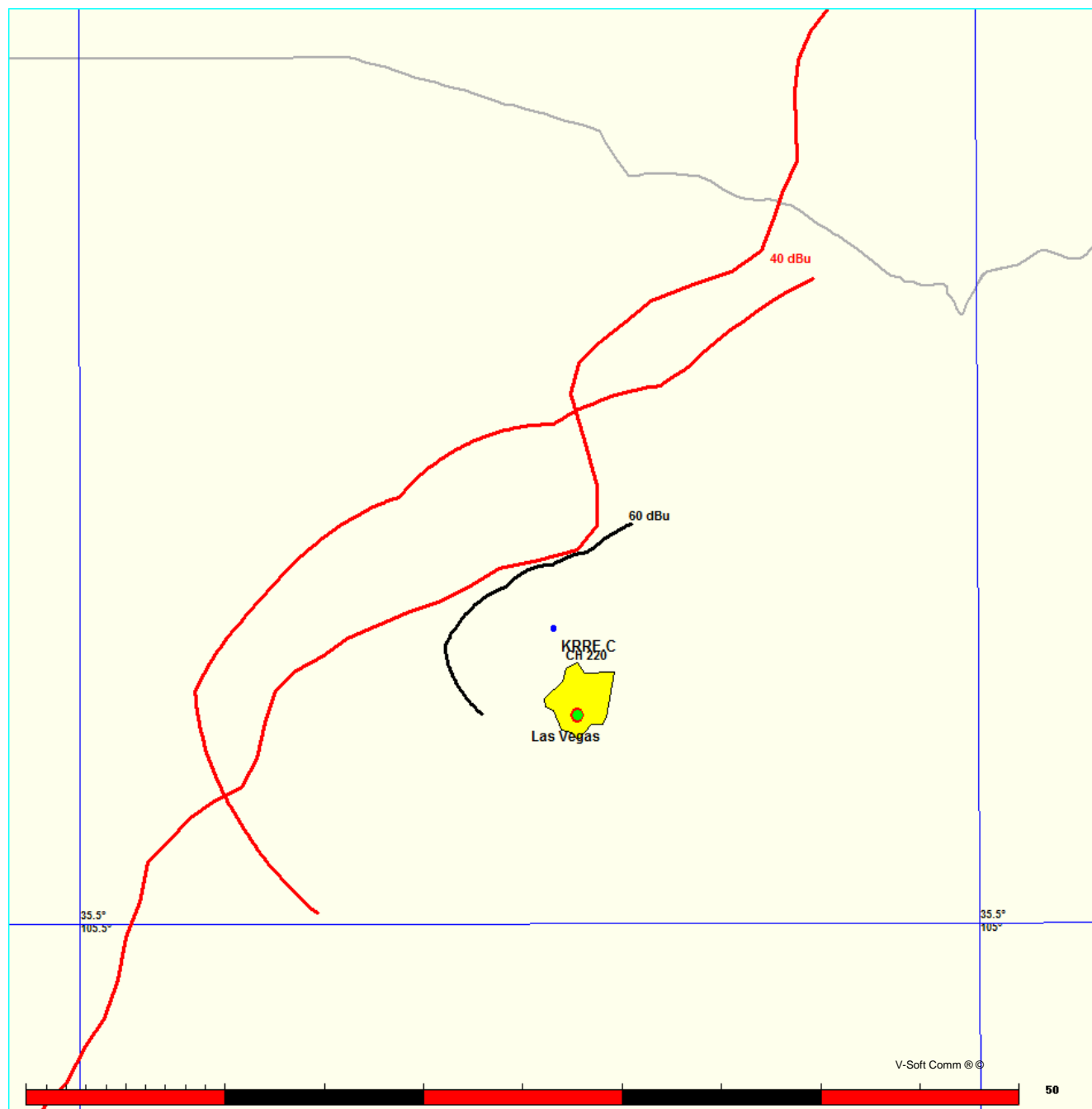
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N" or left blank.

Allocation Study - Zoomed in
Regents Of The University Of New Mexico

FMCommander Single Allocation Study
02-19-2008

KRRE.C CH 220 A
0.1 kW 2089 M COR DA
Prot. = 60 dBu
Intef. = 40 dBu

KRAR-C CH 220 C3 BMPED20071129ABO
5.9 kW, 2083 M COR
Prot. = 60 dBu
Intef. = 40 dBu



02-19-2008

USGS 03 SEC Terrain Data

FMOver Analysis

KRRE.C

Channel = 220A

Max ERP = 0.1 kW

RCAMSL = 2089 M

N. Lat. 35 37 59.0

W. Lng. 105 14 10.0

Protected

60 dBu

KRAR-C

BMPED20071129ABO

Channel = 220C3

Max ERP = 5.9 kW

RCAMSL = 2083 M

N. Lat. 36 09 08.0

W. Lng. 106 02 21.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
249.0	000.1000	-0095.0	005.6	131.5	005.9000	0098.6	089.9	38.99
250.0	000.1000	-0097.3	005.6	131.4	005.9000	0098.8	089.8	39.02
251.0	000.0996	-0099.2	005.6	131.4	005.9000	0098.9	089.7	39.05
252.0	000.0992	-0101.8	005.6	131.4	005.9000	0099.1	089.6	39.08
253.0	000.0988	-0106.4	005.6	131.3	005.9000	0099.2	089.5	39.10
254.0	000.0984	-0110.6	005.6	131.3	005.9000	0099.4	089.5	39.13
255.0	000.0980	-0113.5	005.6	131.3	005.9000	0099.5	089.4	39.16
256.0	000.0976	-0115.6	005.6	131.2	005.9000	0099.7	089.3	39.19
257.0	000.0972	-0117.7	005.6	131.2	005.9000	0099.9	089.2	39.22
258.0	000.0968	-0119.4	005.6	131.1	005.9000	0100.1	089.2	39.25
259.0	000.0964	-0121.7	005.6	131.1	005.9000	0100.3	089.1	39.28
260.0	000.0960	-0124.3	005.6	131.1	005.9000	0100.5	089.0	39.31
261.0	000.0922	-0127.0	005.5	131.0	005.9000	0100.8	089.0	39.33
262.0	000.0884	-0130.9	005.5	130.9	005.9000	0101.2	088.9	39.36
263.0	000.0846	-0135.3	005.4	130.9	005.9000	0101.5	088.9	39.38
264.0	000.0810	-0140.7	005.3	130.8	005.9000	0101.8	088.9	39.40
265.0	000.0774	-0145.2	005.3	130.7	005.9000	0102.2	088.9	39.43
266.0	000.0740	-0149.6	005.2	130.6	005.9000	0102.6	088.8	39.45
267.0	000.0706	-0153.3	005.2	130.6	005.9000	0102.9	088.8	39.47
268.0	000.0672	-0156.6	005.1	130.5	005.9000	0103.3	088.8	39.49
269.0	000.0640	-0160.2	005.0	130.4	005.9000	0103.7	088.8	39.51
270.0	000.0608	-0164.3	005.0	130.4	005.9000	0104.1	088.8	39.53
271.0	000.0584	-0171.1	004.9	130.3	005.9000	0104.4	088.8	39.55
272.0	000.0560	-0177.8	004.9	130.2	005.9000	0104.8	088.8	39.57
273.0	000.0536	-0182.9	004.8	130.2	005.9000	0105.1	088.7	39.59
274.0	000.0513	-0191.2	004.7	130.1	005.9000	0105.5	088.7	39.60
275.0	000.0490	-0196.4	004.7	130.0	005.9000	0105.8	088.7	39.62
276.0	000.0468	-0197.7	004.6	130.0	005.9000	0106.1	088.7	39.63
277.0	000.0446	-0198.0	004.6	129.9	005.9000	0106.5	088.7	39.65
278.0	000.0425	-0195.4	004.5	129.8	005.9000	0106.8	088.8	39.66
279.0	000.0404	-0188.6	004.4	129.8	005.9000	0107.1	088.8	39.67
280.0	000.0384	-0177.9	004.4	129.7	005.9000	0107.3	088.8	39.68
281.0	000.0369	-0163.5	004.4	129.7	005.9000	0107.6	088.8	39.69
282.0	000.0354	-0148.7	004.3	129.6	005.9000	0107.8	088.8	39.70
283.0	000.0339	-0137.6	004.3	129.6	005.9000	0108.0	088.8	39.71
284.0	000.0325	-0126.9	004.2	129.5	005.9000	0108.2	088.8	39.72
285.0	000.0311	-0116.7	004.2	129.4	005.9000	0108.4	088.8	39.72

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
286.0	000.0297	-0116.5	004.1	129.4	005.9000	0108.7	088.8	39.73
287.0	000.0284	-0119.4	004.1	129.3	005.9000	0108.9	088.8	39.73
288.0	000.0270	-0122.7	004.0	129.3	005.9000	0109.1	088.9	39.74
289.0	000.0258	-0125.1	004.0	129.2	005.9000	0109.4	088.9	39.75
290.0	000.0245	-0126.8	003.9	129.2	005.9000	0109.6	088.9	39.75
291.0	000.0235	-0128.7	003.9	129.1	005.9000	0109.8	088.9	39.76
292.0	000.0226	-0134.7	003.9	129.1	005.9000	0110.0	088.9	39.76
293.0	000.0216	-0140.1	003.8	129.0	005.9000	0110.2	088.9	39.76
294.0	000.0207	-0142.7	003.8	129.0	005.9000	0110.4	089.0	39.76
295.0	000.0198	-0135.9	003.7	128.9	005.9000	0110.5	089.0	39.76
296.0	000.0189	-0137.9	003.7	128.9	005.9000	0110.6	089.0	39.76
297.0	000.0181	-0148.2	003.6	128.8	005.9000	0110.7	089.0	39.76
298.0	000.0172	-0159.6	003.6	128.8	005.9000	0110.8	089.1	39.76
299.0	000.0164	-0168.5	003.6	128.7	005.9000	0110.9	089.1	39.75
300.0	000.0156	-0177.4	003.5	128.7	005.9000	0111.0	089.1	39.74
301.0	000.0150	-0188.5	003.5	128.7	005.9000	0111.0	089.2	39.74
302.0	000.0144	-0197.7	003.4	128.6	005.9000	0111.1	089.2	39.73
303.0	000.0138	-0203.0	003.4	128.6	005.9000	0111.1	089.2	39.73
304.0	000.0132	-0209.9	003.4	128.5	005.9000	0111.2	089.2	39.72
305.0	000.0126	-0210.7	003.3	128.5	005.9000	0111.3	089.3	39.72
306.0	000.0120	-0203.9	003.3	128.5	005.9000	0111.4	089.3	39.71
307.0	000.0115	-0194.1	003.3	128.4	005.9000	0111.5	089.3	39.71
308.0	000.0110	-0185.7	003.2	128.4	005.9000	0111.6	089.4	39.70
309.0	000.0104	-0183.7	003.2	128.3	005.9000	0111.7	089.4	39.70
310.0	000.0099	-0183.9	003.1	128.3	005.9000	0111.8	089.5	39.69
311.0	000.0099	-0188.8	003.1	128.3	005.9000	0112.0	089.5	39.70
312.0	000.0099	-0192.5	003.1	128.2	005.9000	0112.2	089.5	39.71
313.0	000.0099	-0200.7	003.1	128.2	005.9000	0112.4	089.5	39.72
314.0	000.0099	-0210.3	003.1	128.2	005.9000	0112.7	089.5	39.72
315.0	000.0099	-0210.5	003.1	128.1	005.9000	0112.9	089.5	39.73
316.0	000.0099	-0206.1	003.1	128.1	005.9000	0113.1	089.5	39.74
317.0	000.0099	-0210.0	003.1	128.1	005.9000	0113.3	089.5	39.75
318.0	000.0099	-0212.4	003.1	128.0	005.9000	0113.6	089.5	39.76
319.0	000.0099	-0212.3	003.1	128.0	005.9000	0113.8	089.5	39.76
320.0	000.0099	-0215.3	003.1	128.0	005.9000	0114.1	089.5	39.77
321.0	000.0099	-0213.2	003.1	127.9	005.9000	0114.3	089.5	39.78
322.0	000.0099	-0203.5	003.1	127.9	005.9000	0114.6	089.5	39.79
323.0	000.0099	-0191.3	003.1	127.9	005.9000	0114.8	089.6	39.79
324.0	000.0099	-0178.6	003.1	127.8	005.9000	0115.1	089.6	39.80
325.0	000.0099	-0167.4	003.1	127.8	005.9000	0115.4	089.6	39.81
326.0	000.0099	-0155.2	003.1	127.8	005.9000	0115.7	089.6	39.82
327.0	000.0099	-0144.7	003.1	127.7	005.9000	0116.0	089.6	39.83
328.0	000.0099	-0134.4	003.1	127.7	005.9000	0116.3	089.6	39.83
329.0	000.0099	-0122.8	003.1	127.7	005.9000	0116.5	089.7	39.84
330.0	000.0099	-0110.9	003.1	127.6	005.9000	0116.8	089.7	39.85
331.0	000.0099	-0100.0	003.1	127.6	005.9000	0117.1	089.7	39.85
332.0	000.0099	-0092.9	003.1	127.6	005.9000	0117.4	089.7	39.86
333.0	000.0099	-0086.9	003.1	127.5	005.9000	0117.6	089.7	39.86
334.0	000.0099	-0078.8	003.1	127.5	005.9000	0117.9	089.8	39.87
335.0	000.0099	-0070.2	003.1	127.5	005.9000	0118.2	089.8	39.87
336.0	000.0099	-0066.6	003.1	127.4	005.9000	0118.4	089.8	39.88

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
337.0	000.0099	-0063.7	003.1	127.4	005.9000	0118.7	089.9	39.88
338.0	000.0099	-0057.3	003.1	127.4	005.9000	0119.0	089.9	39.89
339.0	000.0099	-0047.6	003.1	127.3	005.9000	0119.2	089.9	39.89
340.0	000.0099	-0037.1	003.1	127.3	005.9000	0119.5	089.9	39.89
341.0	000.0099	-0031.1	003.1	127.3	005.9000	0119.7	090.0	39.89
342.0	000.0099	-0027.2	003.1	127.3	005.9000	0120.0	090.0	39.90
343.0	000.0099	-0024.9	003.1	127.2	005.9000	0120.2	090.0	39.90
344.0	000.0099	-0022.6	003.1	127.2	005.9000	0120.5	090.1	39.90
345.0	000.0099	-0019.1	003.1	127.2	005.9000	0120.7	090.1	39.90
346.0	000.0099	-0016.5	003.1	127.1	005.9000	0121.0	090.1	39.90
347.0	000.0099	-0012.9	003.1	127.1	005.9000	0121.3	090.2	39.91
348.0	000.0099	-0009.6	003.1	127.1	005.9000	0121.5	090.2	39.91
349.0	000.0099	-0006.4	003.1	127.1	005.9000	0121.8	090.2	39.91
350.0	000.0099	-0004.4	003.1	127.0	005.9000	0122.0	090.3	39.91
351.0	000.0099	-0000.2	003.1	127.0	005.9000	0122.3	090.3	39.91
352.0	000.0099	0003.6	003.1	127.0	005.9000	0122.5	090.3	39.91
353.0	000.0099	0005.1	003.1	127.0	005.9000	0122.8	090.4	39.91
354.0	000.0099	0006.1	003.1	126.9	005.9000	0123.0	090.4	39.91
355.0	000.0099	0006.2	003.1	126.9	005.9000	0123.3	090.5	39.91
356.0	000.0099	0007.3	003.1	126.9	005.9000	0123.5	090.5	39.90
357.0	000.0099	0007.0	003.1	126.9	005.9000	0123.7	090.5	39.90
358.0	000.0099	0006.8	003.1	126.8	005.9000	0123.9	090.6	39.90
359.0	000.0099	0008.1	003.1	126.8	005.9000	0124.2	090.6	39.90
000.0	000.0099	0008.7	003.1	126.8	005.9000	0124.4	090.7	39.89
001.0	000.0104	0010.2	003.2	126.8	005.9000	0124.8	090.7	39.91
002.0	000.0110	0011.8	003.2	126.7	005.9000	0125.2	090.7	39.92
003.0	000.0115	0012.4	003.3	126.7	005.9000	0125.6	090.7	39.93
004.0	000.0120	0012.8	003.3	126.6	005.9000	0126.0	090.8	39.94
005.0	000.0126	0013.7	003.3	126.6	005.9000	0126.3	090.8	39.94
006.0	000.0132	0014.2	003.4	126.6	005.9000	0126.7	090.8	39.95
007.0	000.0138	0015.1	003.4	126.5	005.9000	0127.0	090.9	39.95
008.0	000.0144	0016.3	003.4	126.5	005.9000	0127.4	090.9	39.96
009.0	000.0150	0017.9	003.5	126.5	005.9000	0127.7	090.9	39.96

02-19-2008 USGS 03 SEC Terrain Data

KRAR-C BMPED20071129ABO
 Channel = 220C3
 Max ERP = 5.9 kW
 RCAMSL = 2083 M
 N. Lat. 36 09 08.0
 W. Lng. 106 02 21.0
 Protected
 60 dBu

KRRE.C
 Channel = 220A
 Max ERP = 0.1 kW
 RCAMSL = 2089 M
 N. Lat. 35 37 59.0
 W. Lng. 105 14 10.0
 Interfering
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
068.0	005.9000	0171.5	036.3	331.7	000.0099	-0094.6	080.9	09.84
069.0	005.9000	0186.5	037.6	332.6	000.0099	-0089.6	080.1	10.01
070.0	005.9000	0199.5	038.7	333.3	000.0099	-0084.8	079.3	10.16
071.0	005.9000	0208.7	039.4	333.7	000.0099	-0081.3	078.5	10.31
072.0	005.9000	0206.8	039.2	333.5	000.0099	-0082.8	077.9	10.44
073.0	005.9000	0197.6	038.5	332.9	000.0099	-0087.3	077.4	10.54
074.0	005.9000	0186.2	037.6	332.2	000.0099	-0092.0	076.9	10.63
075.0	005.9000	0176.5	036.7	331.5	000.0099	-0096.2	076.4	10.71
076.0	005.9000	0169.1	036.0	330.8	000.0099	-0102.0	076.0	10.79
077.0	005.9000	0160.6	035.1	330.0	000.0099	-0110.5	075.7	10.85
078.0	005.9000	0151.3	034.1	329.1	000.0099	-0120.8	075.4	10.90
079.0	005.9000	0139.3	032.7	328.0	000.0099	-0134.3	075.4	10.91
080.0	005.9000	0126.2	031.3	326.8	000.0099	-0146.8	075.4	10.90
081.0	005.9000	0114.8	030.0	325.8	000.0099	-0157.2	075.5	10.89
082.0	005.9000	0106.8	029.1	325.0	000.0099	-0167.7	075.4	10.90
083.0	005.9000	0093.0	027.2	323.6	000.0099	-0183.1	075.9	10.81
084.0	005.9000	0087.7	026.5	322.9	000.0099	-0192.2	075.9	10.82
085.0	005.9000	0079.0	025.2	321.9	000.0099	-0204.1	076.2	10.76
086.0	005.9000	0075.1	024.6	321.4	000.0099	-0209.8	076.2	10.76
087.0	005.9000	0077.0	024.9	321.4	000.0099	-0210.0	075.6	10.86
088.0	005.9000	0078.7	025.2	321.3	000.0099	-0210.4	075.1	10.95
089.0	005.9000	0075.7	024.7	320.9	000.0099	-0213.8	075.1	10.96
090.0	005.9000	0073.3	024.4	320.5	000.0099	-0214.9	075.0	10.98
091.0	005.9000	0075.1	024.7	320.4	000.0099	-0215.1	074.5	11.07
092.0	005.9000	0078.0	025.1	320.4	000.0099	-0215.0	073.9	11.19
093.0	005.9000	0076.1	024.8	320.0	000.0099	-0215.4	073.7	11.21
094.0	005.9000	0075.9	024.8	319.8	000.0099	-0215.1	073.4	11.26
095.0	005.9000	0081.6	025.6	320.0	000.0099	-0215.3	072.5	11.42
096.0	005.9000	0095.8	027.6	320.9	000.0099	-0213.8	070.8	11.74
097.0	005.9000	0109.1	029.4	321.6	000.0099	-0208.3	069.2	12.03
098.0	005.9000	0117.9	030.4	321.8	000.0099	-0205.4	068.1	12.23
099.0	005.9000	0121.2	030.7	321.7	000.0099	-0206.7	067.5	12.34
100.0	005.9000	0127.3	031.4	321.7	000.0099	-0206.5	066.6	12.49
101.0	005.9000	0127.7	031.4	321.4	000.0099	-0209.9	066.2	12.56

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
102.0	005.9000	0130.0	031.7	321.2	000.0099	-0212.1	065.7	12.66
103.0	005.9000	0131.7	031.9	320.9	000.0099	-0213.7	065.2	12.76
104.0	005.9000	0129.4	031.6	320.4	000.0099	-0215.2	065.1	12.78
105.0	005.9000	0129.8	031.7	320.0	000.0099	-0215.3	064.7	12.84
106.0	005.9000	0129.1	031.6	319.5	000.0099	-0214.4	064.5	12.89
107.0	005.9000	0124.8	031.1	318.9	000.0099	-0212.1	064.6	12.87
108.0	005.9000	0120.9	030.7	318.3	000.0099	-0212.5	064.7	12.85
109.0	005.9000	0120.3	030.6	317.9	000.0099	-0212.1	064.5	12.89
110.0	005.9000	0122.7	030.9	317.6	000.0099	-0211.6	064.0	12.98
111.0	005.9000	0126.8	031.3	317.3	000.0099	-0211.1	063.4	13.10
112.0	005.9000	0131.6	031.9	317.0	000.0099	-0210.3	062.7	13.24
113.0	005.9000	0131.2	031.8	316.6	000.0099	-0207.9	062.5	13.28
114.0	005.9000	0132.1	031.9	316.1	000.0099	-0206.3	062.2	13.34
115.0	005.9000	0132.7	032.0	315.7	000.0099	-0206.7	061.9	13.39
116.0	005.9000	0126.6	031.3	315.0	000.0099	-0210.6	062.4	13.30
117.0	005.9000	0116.7	030.2	314.2	000.0099	-0211.3	063.2	13.13
118.0	005.9000	0107.9	029.2	313.5	000.0099	-0206.0	064.1	12.97
119.0	005.9000	0104.1	028.7	313.0	000.0099	-0200.5	064.4	12.90
120.0	005.9000	0100.4	028.2	312.5	000.0099	-0195.9	064.8	12.83
121.0	005.9000	0098.2	027.9	312.0	000.0099	-0192.4	065.0	12.80
122.0	005.9000	0100.9	028.3	311.6	000.0099	-0190.8	064.5	12.88
123.0	005.9000	0112.2	029.7	311.3	000.0099	-0190.0	063.1	13.16
124.0	005.9000	0123.5	031.0	311.0	000.0099	-0188.9	061.8	13.42
125.0	005.9000	0131.0	031.8	310.6	000.0099	-0186.8	060.9	13.59
126.0	005.9000	0130.5	031.7	310.1	000.0099	-0184.2	060.9	13.59
127.0	005.9000	0122.4	030.9	309.5	000.0102	-0183.0	061.8	13.53
128.0	005.9000	0113.8	029.9	309.0	000.0104	-0183.7	062.7	13.45
129.0	005.9000	0110.3	029.5	308.5	000.0107	-0184.2	063.1	13.47
130.0	005.9000	0106.0	029.0	308.1	000.0109	-0185.4	063.7	13.46
131.0	005.9000	0100.8	028.3	307.7	000.0111	-0187.8	064.4	13.41
132.0	005.9000	0096.5	027.7	307.3	000.0113	-0191.4	065.0	13.38
133.0	005.9000	0092.8	027.2	306.9	000.0115	-0195.1	065.5	13.35
134.0	005.9000	0091.3	027.0	306.5	000.0118	-0198.8	065.8	13.38
135.0	005.9000	0088.7	026.6	306.2	000.0120	-0202.6	066.2	13.37
136.0	005.9000	0088.8	026.7	305.8	000.0122	-0205.7	066.3	13.44
137.0	005.9000	0093.3	027.3	305.3	000.0125	-0209.3	065.8	13.63
138.0	005.9000	0099.2	028.1	304.7	000.0128	-0211.8	065.1	13.87
139.0	005.9000	0102.8	028.6	304.2	000.0131	-0210.8	064.8	14.03
140.0	005.9000	0100.7	028.3	303.8	000.0133	-0208.5	065.2	14.03
141.0	005.9000	0099.9	028.2	303.4	000.0135	-0205.5	065.4	14.05
142.0	005.9000	0101.4	028.4	303.0	000.0138	-0202.7	065.4	14.15
143.0	005.9000	0102.7	028.5	302.5	000.0141	-0200.7	065.4	14.23
144.0	005.9000	0111.0	029.6	301.7	000.0145	-0195.5	064.7	14.51
145.0	005.9000	0117.4	030.3	301.1	000.0149	-0189.1	064.2	14.72
146.0	005.9000	0127.6	031.4	300.2	000.0155	-0179.8	063.4	15.02
147.0	005.9000	0135.8	032.3	299.4	000.0161	-0170.8	062.9	15.30
148.0	005.9000	0140.5	032.9	298.7	000.0167	-0166.0	062.7	15.49
149.0	005.9000	0147.8	033.7	297.8	000.0174	-0157.9	062.3	15.75
150.0	005.9000	0151.7	034.1	297.1	000.0179	-0150.0	062.2	15.90
151.0	005.9000	0156.4	034.7	296.4	000.0186	-0141.7	062.1	16.06
152.0	005.9000	0160.9	035.2	295.7	000.0192	-0137.0	062.1	16.22

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
153.0	005.9000	0166.9	035.8	294.9	000.0199	-0136.2	062.0	16.40
154.0	005.9000	0173.5	036.5	294.0	000.0207	-0142.7	061.9	16.59
155.0	005.9000	0181.6	037.2	293.1	000.0215	-0140.6	061.7	16.78
156.0	005.9000	0189.4	037.8	292.3	000.0223	-0136.5	061.7	16.94
157.0	005.9000	0194.1	038.2	291.6	000.0229	-0131.7	061.9	17.03
158.0	005.9000	0197.8	038.5	291.0	000.0235	-0128.6	062.2	17.08
159.0	005.9000	0203.4	039.0	290.3	000.0242	-0126.8	062.4	17.17
160.0	005.9000	0209.5	039.4	289.5	000.0251	-0126.5	062.7	17.27
161.0	005.9000	0214.9	039.8	288.9	000.0259	-0124.6	062.9	17.36
162.0	005.9000	0220.4	040.2	288.2	000.0268	-0123.1	063.3	17.43
163.0	005.9000	0226.4	040.6	287.5	000.0277	-0121.3	063.6	17.51
164.0	005.9000	0231.0	041.0	286.9	000.0285	-0119.1	064.0	17.55
165.0	005.9000	0235.9	041.3	286.3	000.0292	-0117.7	064.5	17.58
166.0	005.9000	0240.8	041.6	285.8	000.0300	-0115.6	065.0	17.61
167.0	005.9000	0245.8	041.9	285.2	000.0308	-0115.6	065.4	17.63
168.0	005.9000	0249.5	042.2	284.8	000.0314	-0118.7	066.0	17.62
169.0	005.9000	0253.2	042.4	284.3	000.0321	-0123.5	066.6	17.60
170.0	005.9000	0259.5	042.8	283.7	000.0329	-0130.0	067.1	17.61
171.0	005.9000	0264.5	043.1	283.2	000.0336	-0135.3	067.6	17.60
172.0	005.9000	0268.4	043.3	282.8	000.0342	-0139.5	068.3	17.57
173.0	005.9000	0273.0	043.6	282.4	000.0349	-0144.0	068.9	17.54
174.0	005.9000	0277.1	043.9	282.0	000.0355	-0149.3	069.5	17.50
175.0	005.9000	0280.6	044.1	281.6	000.0360	-0154.5	070.2	17.44
176.0	005.9000	0284.9	044.4	281.2	000.0366	-0160.0	070.9	17.39
177.0	005.9000	0290.8	044.8	280.8	000.0372	-0166.8	071.5	17.35
178.0	005.9000	0299.1	045.3	280.2	000.0381	-0174.6	072.2	17.32
179.0	005.9000	0307.1	045.8	279.8	000.0389	-0181.0	072.9	17.30
180.0	005.9000	0313.5	046.2	279.3	000.0398	-0185.4	073.6	17.26
181.0	005.9000	0318.6	046.5	279.0	000.0404	-0188.5	074.4	17.19
182.0	005.9000	0322.7	046.7	278.7	000.0410	-0190.8	075.1	17.11
183.0	005.9000	0325.8	046.9	278.5	000.0414	-0192.4	075.9	17.01
184.0	005.9000	0328.8	047.1	278.3	000.0418	-0193.6	076.7	16.90
185.0	005.9000	0331.1	047.2	278.2	000.0421	-0194.4	077.6	16.77
186.0	005.9000	0333.8	047.4	278.1	000.0424	-0195.1	078.4	16.65
187.0	005.9000	0336.9	047.6	277.9	000.0427	-0195.8	079.2	16.52
188.0	005.9000	0339.8	047.8	277.8	000.0430	-0196.3	080.0	16.38