

Doug Vernier - Telecommunications Consultants
 721 W. First St, Suite A, Cedar Falls, Iowa 50613
 Calvary Chapel Of Costa Mesa
 Minimum Spacings Study

REFERENCE		DISPLAY DATES
33 42 40.0 N.	CLASS = B Int = B	DATA 09-01-07
117 31 55.0 W.	Current Spacings	SEARCH 09-02-07
----- Channel 300 - 107.9 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
KWVE	LIC-Z 300B	San Clemente	CA 0.0	0.00	240.5	-240.50
KWVE.C	CP 300B	San Clemente	CA 190.9	31.62	240.5	-208.88
KUZZ-FM	LIC 300B	Bakersfield	CA 330.4	221.40	240.5	-19.10**
KCDZ	LIC-N 299B1	Twentynine Palms	CA 67.8	132.83	144.5	-11.67*
One-Step Application From Channel 299A						
KLVE	LIC 298B	Los Angeles	CA 319.5	75.79	73.5	2.29
GRANDFATHERED AT 29.5KW @ 914M HAAT						
XHSLRFM	OPE 300C1	San Luis Rio Colora	SO 117.9	295.00	269.5	25.50
Proposed by Mexico 960329-Accepted by Commission 960623						
AL1501	AL 300C1	San Luis Rio Colora	SO 117.9	295.00	269.5	25.50
AL9531	AL 300C1	San Luis Rio Colora	SO 117.9	295.00	269.5	25.50
Proposed by Mexico 950815-Accepted by Commission 960124						
XHSLRFM	OPE 300C1	San Luis Rio Colora	SO 117.9	295.00	269.5	25.50
AL6788	AL 300C1	San Luis Rio Colora	SO 117.9	295.00	269.5	25.50
AL8543	AL 299AA	Tecate	BN 146.0	151.81	124.5	27.31

 Reference station has protected zone issue: Mexico

* 73.215 Shortspace protected by contour, ** See waiver request

Calvary Chapel Of Costa Mesa
Single Channel Study Contour-to-Contour
CH# 300B - 107.9 MHz, Pwr= 0.53 kW, HAAT= 1156.0 M, COR= 1774 M
Average Protected F(50-50)= 65.8 km

DISPLAY DATES
DATA 09-01-07
SEARCH 09-02-07

REFERENCE
33 42 40.0 N.
117 31 55.0 W.

CH CITY	CALL	TYPE STATE	ANT AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
300B San Clemente	KWVE	LIC_ZC_ CA	0.0 0.0	0.00 BLH20000711AAY	33 42 40.0 117 31 55.0	0.530 1156	11.6 1774	55.1 Calvary Chapel Of Costa Me	210.5R	-210.5M @
300B San Clemente	KWVE	CP_CX CA	190.9 10.8	31.63 BPH20051024ABK	33 25 52.0 117 35 47.0	49.000 152	11.6 294	55.1 Calvary Chapel Of Costa Me	210.5R	-178.9M @
298B Los Angeles GRANDFATHERED AT 29.5KW @ 914M HAAT	KLVE«	LIC_CN CA	319.5 139.2	75.80 BMLH19950612KB	34 13 44.0 118 04 02.0	29.500 914	22.1 1811	114.8 Klve-fm License Corp.	-6.11	-42.01****
300B Bakersfield	KUZZ-FM^	LIC_CN CA	330.4 149.7	221.41 BLH19940302KD	35 26 20.0 118 44 24.0	50.000 150	169.1 864	62.4 Owens One Company, Inc	-8.28< #	20.01
299B1 Twentynine Palms One-Step Application From Channel 299A	KCDZ	LIC_NCN CA	67.8 248.6	132.83 BLH19971231KD	34 09 15.0 116 11 50.0	6.700 93	50.8 971	26.5 Morongo Basin Broadcasting	15.07	16.30
299A Tijuana	XHRST-FM«	OPE_CN BN	161.8 342.1	142.04	32 29 40.0 117 03 30.0	3.000 100	61.2 199	30.1	15.23	34.73****
299A Tijuana 5/22/2007: Notified operating parameters in 12/12/2005 letter. 5/24/2007: IB accepted operating parameters in letter dated 5/23/2007.	XHRST-FM«	OPE_CN BN	161.8 342.1	143.26	32 29 02.0 117 03 17.0	0.830 192	55.7 296	27.2	21.95	38.85****
300C1 San Luis Rio Colorado	AL1501«	AL_	117.9 299.4	295.01	32 26 27.0 114 45 21.0	100.000 299	206.3 337	73.2	29.29	106.68****
300C1 San Luis Rio Colorado Proposed by Mexico 950815-Accepted by Commission 960124	AL9531«	AL_	117.9 299.4	295.01	32 26 27.0 114 45 21.0	100.000 299	206.3 337	73.2	29.29	106.68****
300C1 San Luis Rio Colorado	AL6788«	AL_	117.9 299.4	295.01	32 26 27.0 114 45 21.0	100.000 299	206.3 337	73.2	29.29	106.68****

Terrain database is USGS 03 SEC

ERP and HAAT are on direct line to and from reference station.

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.

***** and "<" = Station meets FCC minimum distance spacing for its class.

"<" = Contour Overlap

^ = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements

Reference station has protected zone issue: Mexico

@ Applicant's station and C.P.

Please see applicant's waiver request

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 spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined 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 are the average heights of eight standard radials as found in the Commission's records, unless otherwise noted in which case 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 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".

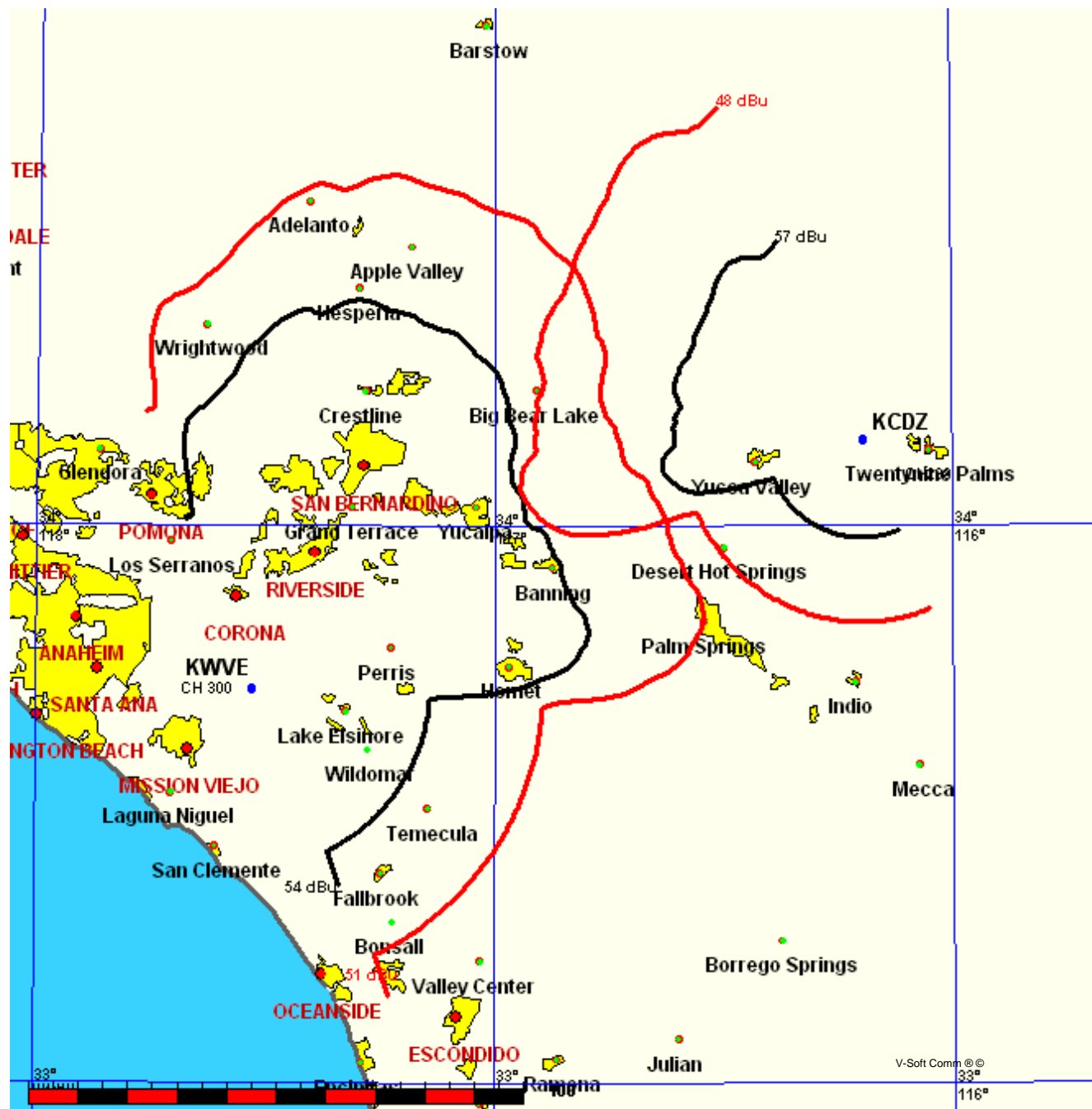
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will 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".

Calvary Chapel Of Costa Mesa
Relationship with KCDZ - USGS 03 Arc-Second Terrain Data

FMCommander Single Allocation Study
09-11-2007

KWVE CH 300 B
0.53 kW 1774 M COR
Prot. = 54 dBu
Intef. = 51 dBu

KCDZ CH 299 B1 BLH19971231KD
6.7 kW, 971 M COR
Prot. = 57 dBu
Intef. = 48 dBu



09-11-2007

USGS 03 SEC Terrain Data

FMOver Analysis

KWVE

Channel = 300B

Max ERP = 0.53 kW

RCAMSL = 1774 M

N. Lat. 33 42 40.0

W. Lng. 117 31 55.0

Protected

54 dBu

KCDZ

BLH19971231KD

Channel = 299B1

Max ERP = 6.7 kW

RCAMSL = 971 M

N. Lat. 34 09 15.0

W. Lng. 116 11 50.0

Interfering

48 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
008.0	000.5300	1275.6	067.7	279.3	006.7000	0122.9	115.0	34.76
009.0	000.5300	1275.4	067.7	279.3	006.7000	0122.9	113.8	34.98
010.0	000.5300	1270.1	067.6	279.3	006.7000	0122.9	112.6	35.20
011.0	000.5300	1271.8	067.6	279.3	006.7000	0122.9	111.4	35.43
012.0	000.5300	1281.9	067.8	279.3	006.7000	0122.9	110.2	35.66
013.0	000.5300	1296.5	068.0	279.4	006.7000	0122.9	109.0	35.90
014.0	000.5300	1308.0	068.2	279.4	006.7000	0122.9	107.8	36.15
015.0	000.5300	1316.2	068.3	279.5	006.7000	0122.9	106.6	36.41
016.0	000.5300	1323.9	068.4	279.4	006.7000	0122.9	105.4	36.67
017.0	000.5300	1326.1	068.5	279.4	006.7000	0122.9	104.2	36.93
018.0	000.5300	1326.2	068.5	279.3	006.7000	0122.9	103.1	37.20
019.0	000.5300	1323.9	068.4	279.1	006.7000	0122.8	101.9	37.47
020.0	000.5300	1323.2	068.4	279.0	006.7000	0122.9	100.7	37.75
021.0	000.5300	1325.5	068.5	278.9	006.7000	0122.9	099.6	38.04
022.0	000.5300	1328.7	068.5	278.7	006.7000	0123.1	098.4	38.34
023.0	000.5300	1331.7	068.6	278.6	006.7000	0123.3	097.2	38.65
024.0	000.5300	1332.3	068.6	278.4	006.7000	0123.7	096.1	38.96
025.0	000.5300	1330.0	068.5	278.2	006.7000	0124.4	094.9	39.29
026.0	000.5300	1329.0	068.5	277.9	006.7000	0125.2	093.8	39.63
027.0	000.5300	1329.5	068.5	277.7	006.7000	0125.9	092.7	39.96
028.0	000.5300	1332.4	068.6	277.5	006.7000	0126.3	091.5	40.29
029.0	000.5300	1336.5	068.6	277.2	006.7000	0126.6	090.4	40.62
030.0	000.5300	1340.0	068.7	277.0	006.7000	0127.0	089.3	40.95
031.0	000.5300	1342.2	068.7	276.7	006.7000	0127.6	088.2	41.29
032.0	000.5300	1339.9	068.7	276.3	006.7000	0128.5	087.1	41.63
033.0	000.5300	1333.2	068.6	275.9	006.7000	0128.4	086.1	41.92
034.0	000.5300	1327.8	068.5	275.4	006.7000	0127.1	085.1	42.16
035.0	000.5300	1325.2	068.5	275.0	006.7000	0126.9	084.1	42.44
036.0	000.5300	1323.5	068.4	274.6	006.7000	0127.6	083.1	42.77
037.0	000.5300	1323.8	068.4	274.1	006.7000	0128.3	082.0	43.09
038.0	000.5300	1322.2	068.4	273.6	006.7000	0129.3	081.1	43.43
039.0	000.5300	1314.1	068.3	273.1	006.7000	0129.8	080.2	43.71
040.0	000.5300	1306.3	068.2	272.5	006.7000	0129.7	079.3	43.96
041.0	000.5300	1296.0	068.0	271.8	006.7000	0127.9	078.5	44.12
042.0	000.5300	1287.9	067.9	271.2	006.7000	0127.1	077.7	44.33
043.0	000.5300	1276.3	067.7	270.5	006.7000	0127.5	076.9	44.57
044.0	000.5300	1262.4	067.5	269.8	006.7000	0127.9	076.2	44.80

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
045.0	000.5300	1251.7	067.3	269.1	006.7000	0128.0	075.5	45.02
046.0	000.5300	1248.7	067.3	268.4	006.7000	0127.0	074.8	45.19
047.0	000.5300	1241.3	067.2	267.6	006.7000	0127.9	074.1	45.45
048.0	000.5300	1227.0	066.9	266.8	006.7000	0133.1	073.5	45.88
049.0	000.5300	1207.4	066.6	265.9	006.7000	0140.2	073.0	46.38
050.0	000.5300	1192.1	066.4	265.1	006.7000	0144.8	072.6	46.76
051.0	000.5300	1184.2	066.3	264.3	006.7000	0147.0	072.0	47.04
052.0	000.5300	1178.9	066.2	263.4	006.7000	0148.1	071.5	47.26
053.0	000.5300	1174.8	066.1	262.6	006.7000	0149.2	071.0	47.48
054.0	000.5300	1174.3	066.1	261.8	006.7000	0150.3	070.4	47.71
055.0	000.5300	1175.5	066.1	260.9	006.7000	0150.1	069.9	47.87
056.0	000.5300	1171.9	066.1	260.0	006.7000	0147.7	069.5	47.88
057.0	000.5300	1168.2	066.0	259.1	006.7000	0144.7	069.1	47.86
058.0	000.5300	1164.3	065.9	258.2	006.7000	0141.4	068.7	47.79
059.0	000.5300	1160.0	065.9	257.3	006.7000	0137.8	068.4	47.70
060.0	000.5300	1160.6	065.9	256.4	006.7000	0133.8	068.1	47.60
061.0	000.5300	1165.4	066.0	255.4	006.7000	0129.2	067.7	47.48
062.0	000.5300	1172.5	066.1	254.5	006.7000	0123.8	067.3	47.31
063.0	000.5300	1176.7	066.1	253.6	006.7000	0117.8	067.1	47.09
064.0	000.5300	1175.3	066.1	252.6	006.7000	0108.9	066.9	46.64
065.0	000.5300	1173.4	066.1	251.6	006.7000	0097.2	066.8	46.00
066.0	000.5300	1175.5	066.1	250.6	006.7000	0085.2	066.6	45.29
067.0	000.5300	1175.8	066.1	249.6	006.7000	0071.0	066.6	44.38
068.0	000.5300	1178.7	066.2	248.6	006.7000	0058.2	066.5	43.50
069.0	000.5300	1178.2	066.2	247.6	006.7000	0043.8	066.5	42.24
070.0	000.5300	1174.9	066.1	246.6	006.7000	0028.9	066.6	40.78
071.0	000.5300	1174.6	066.1	245.6	006.7000	0016.4	066.7	40.77
072.0	000.5300	1174.6	066.1	244.7	006.7000	0007.0	066.9	40.74
073.0	000.5300	1175.1	066.1	243.7	006.7000	-0000.5	067.0	40.71
074.0	000.5300	1179.2	066.2	242.7	006.7000	-0006.5	067.2	40.68
075.0	000.5300	1180.4	066.2	241.7	006.7000	-0009.8	067.4	40.64
076.0	000.5300	1181.5	066.2	240.8	006.7000	-0016.5	067.7	40.59
077.0	000.5300	1186.7	066.3	239.8	006.7000	-0024.3	068.0	40.54
078.0	000.5300	1194.1	066.4	238.9	006.7000	-0034.9	068.2	40.50
079.0	000.5300	1197.4	066.5	237.9	006.7000	-0044.7	068.6	40.43
080.0	000.5300	1197.6	066.5	237.0	006.7000	-0050.1	069.0	40.35
081.0	000.5300	1197.5	066.5	236.2	006.7000	-0055.7	069.5	40.27
082.0	000.5300	1194.0	066.4	235.3	006.7000	-0057.4	070.0	40.17
083.0	000.5300	1187.6	066.3	234.5	006.7000	-0056.1	070.7	40.05
084.0	000.5300	1179.6	066.2	233.8	006.7000	-0054.4	071.4	39.93
085.0	000.5300	1171.7	066.1	233.0	006.7000	-0055.5	072.1	39.80
086.0	000.5300	1164.2	065.9	232.3	006.7000	-0059.8	072.8	39.67
087.0	000.5300	1152.9	065.7	231.7	006.7000	-0064.0	073.6	39.52
088.0	000.5300	1136.5	065.5	231.1	006.7000	-0067.0	074.5	39.36
089.0	000.5300	1118.4	065.2	230.5	006.7000	-0071.1	075.5	39.18
090.0	000.5300	1102.6	064.9	230.0	006.7000	-0076.5	076.4	39.01
091.0	000.5300	1089.3	064.6	229.5	006.7000	-0080.9	077.3	38.84
092.0	000.5300	1069.9	064.3	229.1	006.7000	-0083.1	078.4	38.64
093.0	000.5300	1049.5	063.9	228.7	006.7000	-0084.7	079.4	38.43
094.0	000.5300	1034.4	063.6	228.3	006.7000	-0085.2	080.4	38.24
095.0	000.5300	1021.7	063.4	227.9	006.7000	-0084.3	081.4	38.04

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
096.0	000.5300	1008.4	063.1	227.5	006.7000	-0082.7	082.4	37.84
097.0	000.5300	0995.1	062.8	227.1	006.7000	-0081.0	083.4	37.63
098.0	000.5300	0984.0	062.6	226.8	006.7000	-0080.3	084.4	37.43
099.0	000.5300	0973.8	062.4	226.4	006.7000	-0080.3	085.4	37.23
100.0	000.5300	0968.5	062.3	226.1	006.7000	-0081.2	086.3	37.03
101.0	000.5300	0966.2	062.3	225.7	006.7000	-0083.7	087.2	36.84
102.0	000.5300	0963.6	062.2	225.3	006.7000	-0085.6	088.2	36.65
103.0	000.5300	0960.1	062.1	225.0	006.7000	-0085.4	089.1	36.45
104.0	000.5300	0952.2	062.0	224.7	006.7000	-0084.4	090.2	36.25
105.0	000.5300	0943.1	061.8	224.5	006.7000	-0083.6	091.2	36.03
106.0	000.5300	0939.9	061.7	224.2	006.7000	-0083.3	092.2	35.83
107.0	000.5300	0942.1	061.8	223.9	006.7000	-0083.6	093.1	35.64
108.0	000.5300	0947.1	061.9	223.5	006.7000	-0085.3	094.0	35.45
109.0	000.5300	0951.1	062.0	223.2	006.7000	-0087.1	095.0	35.26
110.0	000.5300	0950.2	061.9	223.0	006.7000	-0087.8	096.0	35.05
111.0	000.5300	0942.2	061.8	222.8	006.7000	-0088.1	097.1	34.84
112.0	000.5300	0933.5	061.6	222.7	006.7000	-0088.2	098.1	34.62
113.0	000.5300	0923.9	061.4	222.6	006.7000	-0088.0	099.2	34.41
114.0	000.5300	0910.6	061.1	222.5	006.7000	-0087.9	100.3	34.19
115.0	000.5300	0892.0	060.7	222.6	006.7000	-0088.0	101.5	33.96
116.0	000.5300	0869.8	060.2	222.7	006.7000	-0088.2	102.6	33.73
117.0	000.5300	0851.3	059.8	222.8	006.7000	-0088.2	103.8	33.50
118.0	000.5300	0836.0	059.4	222.8	006.7000	-0088.1	104.9	33.28
119.0	000.5300	0824.4	059.1	222.8	006.7000	-0088.0	105.9	33.06
120.0	000.5300	0814.3	058.8	222.9	006.7000	-0088.0	107.0	32.85
121.0	000.5300	0820.0	058.9	222.7	006.7000	-0088.2	108.0	32.66
122.0	000.5300	0828.8	059.2	222.5	006.7000	-0087.8	109.0	32.46
123.0	000.5300	0838.0	059.4	222.2	006.7000	-0087.7	109.9	32.27
124.0	000.5300	0846.9	059.6	222.0	006.7000	-0087.8	110.9	32.07
125.0	000.5300	0858.8	059.9	221.8	006.7000	-0088.4	111.9	31.88
126.0	000.5300	0867.6	060.2	221.7	006.7000	-0089.0	113.0	31.68
127.0	000.5300	0870.2	060.2	221.6	006.7000	-0089.4	114.0	31.47
128.0	000.5300	0871.8	060.3	221.5	006.7000	-0089.6	115.1	31.27

09-11-2007 USGS 03 SEC Terrain Data

KCDZ BLH19971231KD
 Channel = 299B1
 Max ERP = 6.7 kW
 RCAMSL = 971 M
 N. Lat. 34 09 15.0
 W. Lng. 116 11 50.0
 Protected
 57 dBu

KWVE
 Channel = 300B
 Max ERP = 0.53 kW
 RCAMSL = 1774 M
 N. Lat. 33 42 40.0
 W. Lng. 117 31 55.0
 Interfering
 51 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
189.0	006.7000	-0248.3	019.5	075.6	000.5300	1181.1	124.1	40.36
190.0	006.7000	-0246.5	019.5	075.6	000.5300	1181.0	123.8	40.45
191.0	006.7000	-0239.7	019.5	075.5	000.5300	1181.0	123.5	40.54
192.0	006.7000	-0236.7	019.5	075.5	000.5300	1180.9	123.2	40.63
193.0	006.7000	-0238.0	019.5	075.4	000.5300	1180.8	122.9	40.73
194.0	006.7000	-0228.5	019.5	075.3	000.5300	1180.7	122.6	40.82
195.0	006.7000	-0213.7	019.5	075.2	000.5300	1180.7	122.3	40.91
196.0	006.7000	-0198.6	019.5	075.2	000.5300	1180.6	122.0	41.00
197.0	006.7000	-0192.5	019.5	075.1	000.5300	1180.5	121.7	41.09
198.0	006.7000	-0193.3	019.5	075.0	000.5300	1180.4	121.4	41.17
199.0	006.7000	-0194.7	019.5	074.9	000.5300	1180.4	121.1	41.26
200.0	006.7000	-0188.9	019.5	074.8	000.5300	1180.3	120.8	41.35
201.0	006.7000	-0186.2	019.5	074.7	000.5300	1180.2	120.6	41.43
202.0	006.7000	-0188.6	019.5	074.6	000.5300	1180.1	120.3	41.51
203.0	006.7000	-0196.9	019.5	074.5	000.5300	1180.1	120.0	41.60
204.0	006.7000	-0197.7	019.5	074.4	000.5300	1180.0	119.8	41.68
205.0	006.7000	-0187.3	019.5	074.3	000.5300	1179.9	119.5	41.76
206.0	006.7000	-0169.5	019.5	074.2	000.5300	1179.7	119.2	41.84
207.0	006.7000	-0154.2	019.5	074.1	000.5300	1179.5	119.0	41.91
208.0	006.7000	-0145.1	019.5	074.0	000.5300	1179.2	118.7	41.99
209.0	006.7000	-0146.9	019.5	073.9	000.5300	1178.8	118.5	42.06
210.0	006.7000	-0150.7	019.5	073.8	000.5300	1178.3	118.2	42.13
211.0	006.7000	-0151.4	019.5	073.6	000.5300	1177.7	118.0	42.20
212.0	006.7000	-0149.9	019.5	073.5	000.5300	1177.1	117.8	42.26
213.0	006.7000	-0147.2	019.5	073.4	000.5300	1176.5	117.6	42.33
214.0	006.7000	-0135.8	019.5	073.3	000.5300	1176.0	117.3	42.39
215.0	006.7000	-0123.2	019.5	073.1	000.5300	1175.5	117.1	42.45
216.0	006.7000	-0111.7	019.5	073.0	000.5300	1175.2	116.9	42.51
217.0	006.7000	-0103.0	019.5	072.9	000.5300	1175.0	116.7	42.57
218.0	006.7000	-0094.4	019.5	072.7	000.5300	1174.8	116.5	42.63
219.0	006.7000	-0086.9	019.5	072.6	000.5300	1174.8	116.3	42.69
220.0	006.7000	-0088.2	019.5	072.5	000.5300	1174.8	116.1	42.75
221.0	006.7000	-0091.3	019.5	072.3	000.5300	1174.8	115.9	42.81
222.0	006.7000	-0087.9	019.5	072.2	000.5300	1174.8	115.8	42.86

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
223.0	006.7000	-0087.7	019.5	072.0	000.5300	1174.7	115.6	42.91
224.0	006.7000	-0083.3	019.5	071.9	000.5300	1174.4	115.4	42.96
225.0	006.7000	-0085.5	019.5	071.7	000.5300	1174.3	115.3	43.01
226.0	006.7000	-0081.5	019.5	071.6	000.5300	1174.3	115.1	43.05
227.0	006.7000	-0080.6	019.5	071.4	000.5300	1174.3	115.0	43.10
228.0	006.7000	-0084.7	019.5	071.3	000.5300	1174.3	114.8	43.14
229.0	006.7000	-0083.4	019.5	071.1	000.5300	1174.5	114.7	43.18
230.0	006.7000	-0076.7	019.5	071.0	000.5300	1174.7	114.5	43.23
231.0	006.7000	-0067.6	019.5	070.8	000.5300	1175.0	114.4	43.26
232.0	006.7000	-0062.1	019.5	070.6	000.5300	1175.0	114.3	43.30
233.0	006.7000	-0055.7	019.5	070.5	000.5300	1174.9	114.2	43.33
234.0	006.7000	-0055.0	019.5	070.3	000.5300	1174.7	114.1	43.36
235.0	006.7000	-0057.2	019.5	070.1	000.5300	1174.8	114.0	43.39
236.0	006.7000	-0056.4	019.5	070.0	000.5300	1174.9	113.9	43.42
237.0	006.7000	-0050.4	019.5	069.8	000.5300	1175.3	113.8	43.45
238.0	006.7000	-0044.1	019.5	069.6	000.5300	1175.9	113.8	43.47
239.0	006.7000	-0033.3	019.5	069.5	000.5300	1176.6	113.7	43.50
240.0	006.7000	-0022.5	019.5	069.3	000.5300	1177.3	113.6	43.53
241.0	006.7000	-0014.2	019.5	069.1	000.5300	1177.9	113.6	43.55
242.0	006.7000	-0009.1	019.5	069.0	000.5300	1178.3	113.5	43.57
243.0	006.7000	-0004.8	019.5	068.8	000.5300	1178.7	113.5	43.58
244.0	006.7000	0001.9	019.5	068.6	000.5300	1179.2	113.4	43.60
245.0	006.7000	0010.3	019.5	068.5	000.5300	1179.4	113.4	43.61
246.0	006.7000	0021.2	019.5	068.3	000.5300	1179.3	113.4	43.61
247.0	006.7000	0034.0	020.6	068.1	000.5300	1179.0	112.3	43.94
248.0	006.7000	0049.7	024.7	068.0	000.5300	1178.6	108.2	45.17
249.0	006.7000	0062.9	027.4	067.7	000.5300	1177.8	105.5	45.98
250.0	006.7000	0076.7	029.9	067.4	000.5300	1176.6	103.0	46.71
251.0	006.7000	0089.9	032.4	067.1	000.5300	1175.9	100.6	47.43
252.0	006.7000	0102.5	034.5	066.6	000.5300	1176.1	098.5	48.06
253.0	006.7000	0113.1	036.1	066.2	000.5300	1175.9	097.0	48.50
254.0	006.7000	0120.7	037.1	065.7	000.5300	1174.8	096.1	48.76
255.0	006.7000	0126.7	037.8	065.3	000.5300	1173.5	095.5	48.93
256.0	006.7000	0132.0	038.4	064.8	000.5300	1173.5	094.9	49.08
257.0	006.7000	0136.6	039.0	064.4	000.5300	1174.4	094.5	49.21
258.0	006.7000	0140.5	039.5	063.9	000.5300	1175.6	094.2	49.31
259.0	006.7000	0144.2	039.9	063.4	000.5300	1176.7	093.9	49.40
260.0	006.7000	0147.5	040.3	062.9	000.5300	1176.6	093.7	49.46
261.0	006.7000	0150.2	040.7	062.5	000.5300	1175.0	093.6	49.47
262.0	006.7000	0150.1	040.7	062.0	000.5300	1172.8	093.9	49.39
263.0	006.7000	0148.6	040.5	061.7	000.5300	1170.4	094.3	49.25
264.0	006.7000	0147.4	040.3	061.3	000.5300	1167.7	094.7	49.12
265.0	006.7000	0145.1	040.1	061.0	000.5300	1165.3	095.2	48.94
266.0	006.7000	0139.8	039.4	060.8	000.5300	1163.8	096.1	48.67
267.0	006.7000	0131.3	038.3	060.7	000.5300	1163.3	097.3	48.30
268.0	006.7000	0127.1	037.8	060.4	000.5300	1162.1	098.1	48.07
269.0	006.7000	0128.0	037.9	060.1	000.5300	1160.7	098.3	47.99
270.0	006.7000	0127.7	037.9	059.7	000.5300	1160.1	098.6	47.89
271.0	006.7000	0127.3	037.9	059.4	000.5300	1159.7	099.0	47.77
272.0	006.7000	0128.4	038.0	059.1	000.5300	1159.9	099.2	47.70
273.0	006.7000	0129.8	038.2	058.7	000.5300	1160.8	099.4	47.65

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
274.0	006.7000	0128.6	038.0	058.4	000.5300	1162.0	099.9	47.51
275.0	006.7000	0126.9	037.8	058.2	000.5300	1163.3	100.5	47.35
276.0	006.7000	0128.6	038.0	057.8	000.5300	1165.4	100.7	47.30
277.0	006.7000	0126.9	037.8	057.6	000.5300	1166.4	101.3	47.14
278.0	006.7000	0125.0	037.6	057.4	000.5300	1167.1	101.9	46.97
279.0	006.7000	0122.9	037.3	057.2	000.5300	1167.7	102.5	46.79
280.0	006.7000	0122.6	037.3	056.9	000.5300	1168.4	103.0	46.65
281.0	006.7000	0125.1	037.6	056.5	000.5300	1169.7	103.2	46.60
282.0	006.7000	0130.0	038.2	056.0	000.5300	1171.7	103.2	46.60
283.0	006.7000	0133.9	038.7	055.6	000.5300	1173.5	103.4	46.57
284.0	006.7000	0138.2	039.2	055.1	000.5300	1175.2	103.5	46.54
285.0	006.7000	0138.8	039.3	054.8	000.5300	1175.8	104.0	46.40
286.0	006.7000	0139.1	039.3	054.6	000.5300	1175.8	104.5	46.25
287.0	006.7000	0139.6	039.4	054.3	000.5300	1175.2	105.0	46.10
288.0	006.7000	0139.7	039.4	054.1	000.5300	1174.6	105.5	45.93
289.0	006.7000	0139.6	039.4	053.9	000.5300	1174.1	106.1	45.76
290.0	006.7000	0139.8	039.4	053.7	000.5300	1174.0	106.6	45.59
291.0	006.7000	0139.6	039.4	053.5	000.5300	1174.1	107.2	45.42
292.0	006.7000	0139.0	039.3	053.3	000.5300	1174.4	107.8	45.24
293.0	006.7000	0138.0	039.2	053.2	000.5300	1174.5	108.5	45.04
294.0	006.7000	0135.2	038.8	053.1	000.5300	1174.6	109.2	44.82
295.0	006.7000	0133.5	038.6	053.1	000.5300	1174.7	109.9	44.61
296.0	006.7000	0134.1	038.7	052.9	000.5300	1175.1	110.5	44.45
297.0	006.7000	0134.1	038.7	052.7	000.5300	1175.6	111.1	44.27
298.0	006.7000	0134.3	038.7	052.5	000.5300	1176.3	111.7	44.10
299.0	006.7000	0135.7	038.9	052.3	000.5300	1177.5	112.2	43.95
300.0	006.7000	0138.1	039.2	052.0	000.5300	1178.7	112.7	43.81
301.0	006.7000	0140.3	039.5	051.8	000.5300	1180.1	113.3	43.66
302.0	006.7000	0142.1	039.7	051.5	000.5300	1181.4	113.8	43.50
303.0	006.7000	0143.3	039.8	051.4	000.5300	1182.4	114.4	43.32
304.0	006.7000	0144.1	039.9	051.2	000.5300	1183.2	115.1	43.14
305.0	006.7000	0144.8	040.0	051.1	000.5300	1183.9	115.7	42.95
306.0	006.7000	0145.5	040.1	050.9	000.5300	1184.7	116.3	42.76
307.0	006.7000	0146.1	040.2	050.8	000.5300	1185.3	117.0	42.57
308.0	006.7000	0146.6	040.2	050.7	000.5300	1185.9	117.7	42.37
309.0	006.7000	0148.4	040.5	050.5	000.5300	1187.0	118.3	42.18