

**KVOD Allocation Exhibit**  
**January 2009**

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

**Proposed** Facility - Channel -Study

PRC DENVER-I LLC

REFERENCE  
39 43 49.0 N.  
105 15 00.0 W.

CH# 201C3 - 88.1 MHz, Pwr= 2.1 kW, HAAT= 275.0 M, COR= 2333.6 M  
Average Protected F(50-50)= 12.15 km  
Standard Directional

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

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
201C3 KVOD Lakewood		LIC _VX CO		157.2 337.3	7.1 BLED20071113AFB	39 40 18.0 105 13 05.0	1.200 321	78.6 2348	27.1 Prc Denver-I, Lic	-109.6*	-118.2*
06-2E KRMA-TV Denver		LI _HY CO		0.0 0.0	0.0 BLET19950504KE	39 43 49.0 105 15 00.0	100.000 292	81.9 2349	113.5 Rocky Mountain Public Broa	264.5R	-195.4M -*
06-2E KRMA-TV Denver		CP DCY CO		155.8 335.8	6.9 BPET19990107KE	39 40 25.0 105 13 01.0	100.000 342	75.5 2363	84.0 Rocky Mountain Public Broa	264.5R	-152.6M -*
203A KGNU-FM Boul der		LIC _CN CO		15.9 195.9	30.3 BLED1807	39 59 32.0 105 09 10.0	1.300 66	1.6 1731	10.8 Boul der Communi ty Broadcas	-19.6*	16.5 **
203A KGNU-FM Boul der		CP DCX CO		15.6 195.7	30.2 BPED20080409AAD	39 59 33.0 105 09 16.0	4.000 65	1.6 1732	14.2 Boul der Communi ty Broadcas	-19.5*	13.1 **
202A 1212074 Pi ne		APP _CX CO		190.8 10.8	35.6 BNPED20071022AZK	39 24 56.0 105 19 40.0	0.100 21	8.0 2203	5.6 The North Fork Angling Soc	4.1	-5.4 ***
202A 1205743 Idaho Spri ngs		APP DVX CO		270.5 90.2	36.6 BNPED20071019AIY	39 43 56.0 105 40 38.0	2.000 -195	24.5 3018	16.3 Clear Creek Radio, Inc	0.0	2.7
202C1 1277517 Fort Morgan		APP ZCX CO		78.5 259.3	111.5 BNPED20071019BCM	39 55 21.9 103 58 18.4	11.000 334	59.0 1815	39.3 The Helpline	3.4	0.0
201C2 KAI X Cheyenne		CP _VX WY		16.0 196.4	165.4 BPED20070327AEO	41 09 37.0 104 42 13.0	47.000 64	115.8 1890	28.8 Educational Media Foundati	0.2	10.4
202A 1213233 Strasburg		APP _CX CO		91.2 271.9	88.1 BNPED20071022AGO	39 42 31.3 104 13 23.7	0.500 -21	12.0 1607	8.5 De Mujer A Mujer Internati	26.4	5.1
202A KLHV Fort Collins		LIC _VX CO		356.2 176.1	98.7 BLED20060117AFJ	40 37 03.0 105 19 40.0	0.150 364	34.2 2552	22.5 Educational Media Foundati	14.5	5.9
202C3 1227487 Winter Park		APP DCX CO		303.7 123.3	55.7 BNPED20071018BDM	40 00 23.0 105 47 38.0	10.000 -180	26.8 2745	18.1 Fraser Valley Community Me	13.1	27.1
201C3 KMPZ Sal ida		CP _CX CO		204.9 24.4	156.9 BMPED20080408AAG	38 26 48.0 106 00 36.0	0.200 827	109.5 3567	42.4 Cheyenne Mountain Public B	25.3	45.5

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone = 2, Co to 3rd adjacent.

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.

Reference station has protected zone issue: AM tower

-\* = Applicant provides letter of authorization from KRMA-TV6

\*\* = Based on U/D overlap from KGNU-FM is reduced under the instant proposal

\*\*\* = 1212074, Pine, CO application causes overlap to existing KVOD facilities, proposal slightly reduces that.

## HOW TO READ THE FM COMPUTER PRINT-OUT

### Full Service Stations

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. 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 difference in kilometers between of the reference station's protected contour and the data file station's interference contour at the closest point between the contours. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, "IN" column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are those given in the FCC database. The column labeled "OUT " shows the greatest distance in kilometers of overlap or smallest of 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 "AZI" 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, some channel-six TV relationships and relationships with commercial channel stations providing clearance the minimum spacings values the "IN" and "OUT" columns can 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** (or lack of it) 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 under the rules will be flagged by the characters "<<" appended to the right-hand side of the call sign. The "^" character appended to the call sign 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.

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

**Existing** KVOD Facility - Contour-to-Contour Study

REFERENCE CH# 201C3 - 88.1 MHz, Pwr= 1.2 kW, HAAT= 319.8 M, COR= 2348 M DISPLAY DATES  
39 40 18.0 N. Average Protected F(50-50)= 33.76 km DATA 11-29-08  
105 13 05.0 W. Omni-directional SEARCH 12-01-08

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
201C3 KVOD Lakewood		LIC CO	_VX	0.0 0.0	0.0 BLED20071113AFB	39 40 18.0 105 13 05.0	1.200 321	106.7 2348	40.8 Prc Denver-i, Lic	-147.5*	-147.5*
06-2E KRMA-TV Denver		LI CO	_HY	337.3 157.2	7.1 BLET19950504KE	39 43 49.0 105 15 00.0	100.000 292	55.5 2349	106.2 Rocky Mountain Public Broa	264.5R	-154.7M
06-2E KRMA-TV Denver		CP CO	DCY	23.8 203.8	0.2 BPET19990107KE	39 40 25.0 105 13 01.0	100.000 342	86.8 2363	2.2 Rocky Mountain Public Broa	264.5R	-88.8M
203A KGNU-FM Boul der		LIC CO	_CN	8.9 188.9	36.0 BLED1807	39 59 32.0 105 09 10.0	1.300 66	1.6 1731	10.8 Boul der Communi ty Broadcas	-8.6*	22.9
203A KGNU-FM Boul der		CP CO	DCX	8.6 188.7	36.0 BPED20080409AAD	39 59 33.0 105 09 16.0	4.000 65	1.6 1732	14.2 Boul der Communi ty Broadcas	-8.4*	19.6
202A 1212074 Pi ne		APP CO	_CX	198.3 18.2	30.0 BNPED20071022AZK	39 24 56.0 105 19 40.0	0.100 21	8.0 2203	5.6 The North Fork Angling Soc	2.5	-7.9
202A 1205743 Idaho Spri ngs		APP CO	DVX	279.9 99.6	40.0 BNPED20071019AIY	39 43 56.0 105 40 38.0	2.000 -195	26.5 3018	17.8 Clear Creek Radi o, Inc	-0.6	2.9
202C1 1277517 Fort Morgan		APP CO	ZCX	74.9 255.7	110.3 BNPED20071019BCM	39 55 21.9 103 58 18.4	11.000 334	58.9 1815	39.2 The Hel pl ine	4.3	0.3
202A 1213233 Strasburg		APP CO	_CX	86.9 267.5	85.4 BNPED20071022AGO	39 42 31.3 104 13 23.7	0.500 -21	12.0 1607	8.5 De Mujer A Mujer Internati	25.5	4.9
202C3 1227487 Winter Park		APP CO	DCX	307.3 126.9	61.7 BNPED20071018BDM	40 00 23.0 105 47 38.0	10.000 -180	26.8 2745	18.1 Fraser Valley Communi ty Me	9.9	8.1
201C2 KAI X Cheyenne		CP WY	_VX	14.6 194.9	171.0 BPED20070327AEO	41 09 37.0 104 42 13.0	47.000 64	116.4 1890	29.5 Educational Medi a Foundati	9.2	22.0
202A KLHV Fort Coll ins		LIC CO	_VX	355.0 174.9	105.4 BLED20060117AFJ	40 37 03.0 105 19 40.0	0.150 364	35.0 2552	22.9 Educational Medi a Foundati	26.3	17.1
202A 1212100 Fraser		APP CO	_CX	301.0 120.6	61.9 BNPED20071017AHY	39 57 23.0 105 50 22.0	1.000 45	14.2 2640	10.2 Rv Mi nistries, Inc.	23.9	27.4
204C1 KCME Mani tou Spri ngs		LIC CO	_CY	163.3 343.5	107.4 BLED19990203KA	38 44 40.0 104 51 41.0	12.000 668	6.8 2918	77.3 Cheyenne Mountain Public B	65.6	27.9
203A NEW Santa Mari a		CP CO	DCX	239.8 59.5	45.5 BNPED20071017AHQ	39 27 54.0 105 40 31.0	0.500 -501	1.6 2722	8.5 Rv Mi nistries, Inc.	29.5	35.2

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone = 2, Co to 3rd adjacent.  
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.

## KGNU-FM Interference to KVOD Proposed

### KVOD

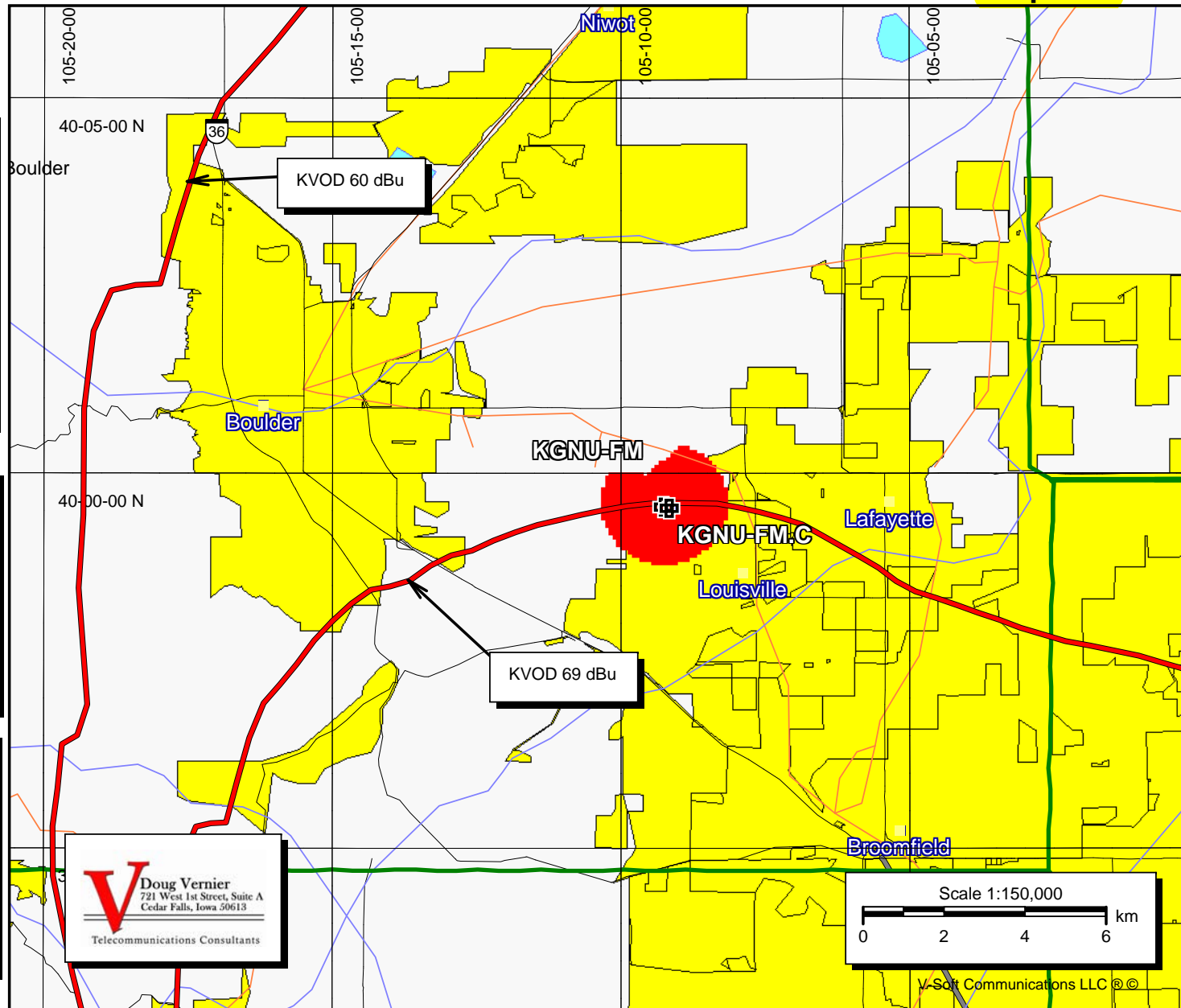
Latitude: 39-43-49 N  
Longitude: 105-15-00 W  
ERP: 2.10 kW  
Channel: 201  
Frequency: 88.1 MHz  
AMSL Height: 2333.0 m  
Horiz. Pattern: Directional  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%

### KGNU-FM.C

BPED20080409AAD  
Latitude: 39-59-33 N  
Longitude: 105-09-16 W  
ERP: 4.00 kW  
Channel: 203  
Frequency: 88.5 MHz  
AMSL Height: 1732.0 m  
Horiz. Pattern: Directional

### KGNU-FM

BLED1807  
Latitude: 39-59-32 N  
Longitude: 105-09-10 W  
ERP: 1.30 kW  
Channel: 203  
Frequency: 88.5 MHz  
AMSL Height: 1731.0 m  
Horiz. Pattern: Omni



# V-Soft Communications Population Report

KVOD (201) Lakewood, CO as **Proposed**

Lat: 39-43-49 N Lng: 105-15-00 W ERP: 2.1 kW AMSL: 2333.0 m

FM Interference Study

Protected: FCC F(50-50): 60 dBu

Interference considered within 20 km.

Signal Resolution: 0.1 km

Study Date: 1/2/2009

FM Database Date: 1/2/2009

D/U Ratios Used:

Co: 20.0 dB

First Adj: 6.0 dB

Second Adj: -40.0 dB

Third Adj: -40.0 dB

Threshold for reception: 50.0 dBu.

Primary Terrain: NED 3 Second US Terrain

Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 2,233,389.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
KGNU-FM.C (203)	1974	5267	0.236	6.71
KGNU-FM (203)	558	1544	0.069	2.49

Masking Summary:

Call Letters	Total Interference Population	%	Unique Interference Population	%
KGNU-FM.C (203)	5267	0.236	3723	0.167
KGNU-FM (203)	1544	0.069	0	0.000

Call Letters	City	State	Dist	Bear
KGNU-FM.C (203)	Boulder	CO	30.2	15.6
KGNU-FM (203)	Boulder	CO	30.2	15.9

Totals for KVOD (201)

Calculation Area Population:	2,233,389	(	3757.6 sq. km )
Not Affected by Terrain Loss:	2,233,389	(	3757.6 sq. km )
Interfered Population:	5,267	(	6.7 sq. km )
Interference Free:	2,228,122	(	3750.9 sq. km )

Percent Interference: 0.24

Terrain Blocked Population: 0 ( 0.0 sq. km)

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Interference Free Breakdown:

White:	1,575,202	( 70.7% )
Black:	113,817	( 5.1% )
Hispanic:	413,852	( 18.6% )
Native American:	12,243	( 0.5% )
Asian:	68,566	( 3.1% )
Pacific Islander:	1,829	( 0.1% )
Mixed Race:	39,682	( 1.8% )
Other:	2,931	( 0.1% )
Total:	2,228,122	

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	Housing Units	Population	% of County
Colorado			
Adams County			
County Pop	132,594	363,857	
KVOD (201)	129,879	356,522	
Ix Free	129,879	356,522	100.00
Arapahoe County			
County Pop	196,835	487,967	
KVOD (201)	194,357	481,290	
Ix Free	194,357	481,290	100.00
Boulder County			
County Pop	119,900	291,288	
KVOD (201)	85,554	208,963	
KGNU-FM.C (203)	1,974	5,267	2.52
KGNU-FM (203)	558	1,544	0.74
Ix Free	83,580	203,696	97.48
Denver County			
County Pop	251,435	554,636	
KVOD (201)	251,434	554,635	
Ix Free	251,434	554,635	100.00
Douglas County			
County Pop	63,333	175,766	
KVOD (201)	42,101	117,599	
Ix Free	42,101	117,599	100.00
Jefferson County			
County Pop	212,488	527,056	
KVOD (201)	202,042	502,572	
Ix Free	202,042	502,572	100.00
Weld County			
County Pop	66,194	180,936	

KVOD (201)	4,249	11,808	
Ix Free	4,249	11,808	100.00

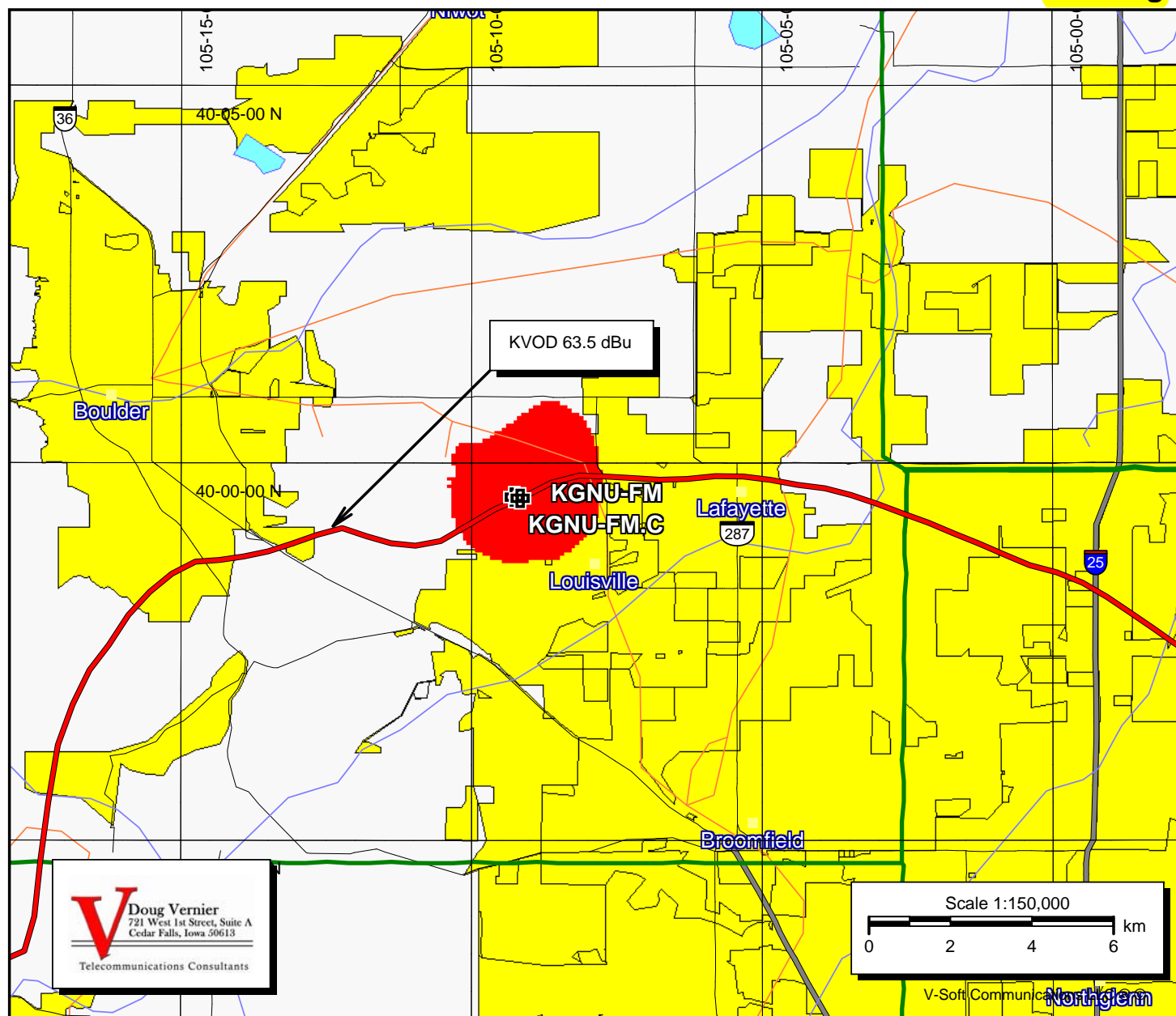


# KGNU-FM Interference to KVOD - Existing

**KVOD**  
 BLED20071113AFB  
 Latitude: 39-40-18 N  
 Longitude: 105-13-05 W  
 ERP: 1.20 kW  
 Channel: 201  
 Frequency: 88.1 MHz  
 AMSL Height: 2348.0 m  
 Horiz. Pattern: Omni  
 Prop Model: FCC Model  
 Loc. Variability: 50.0%  
 Time Variability: 50.0%

**KGNU-FM.C**  
 BPED20080409AAD  
 Latitude: 39-59-33 N  
 Longitude: 105-09-16 W  
 ERP: 4.00 kW  
 Channel: 203  
 Frequency: 88.5 MHz  
 AMSL Height: 1732.0 m  
 Horiz. Pattern: Directional

**KGNU-FM**  
 BLED1807  
 Latitude: 39-59-32 N  
 Longitude: 105-09-10 W  
 ERP: 1.30 kW  
 Channel: 203  
 Frequency: 88.5 MHz  
 AMSL Height: 1731.0 m  
 Horiz. Pattern: Omni



# V-Soft Communications Population Report

KVOD (201) Lakewood, CO - BLED20071113AFB - Existing Facility  
Lat: 39-40-18 N Lng: 105-13-05 W ERP: 1.2 kW AMSL: 2348.0 m  
FM Interference Study  
Protected: FCC F(50-50): 60 dBu  
Interference considered within 20 km.  
Signal Resolution: 0.1 km

Study Date: 1/2/2009  
FM Database Date: 1/2/2009

D/U Ratios Used:  
Co: 20.0 dB  
First Adj: 6.0 dB  
Second Adj: -40.0 dB  
Third Adj: -40.0 dB

Threshold for reception: 50.0 dBu.

Primary Terrain: NED 3 Second US Terrain  
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 2,178,356.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
KGNU-FM.C (203)	2851	7435	0.341	11.37
KGNU-FM (203)	2494	6500	0.298	8.01

Masking Summary:

Call Letters	Total Interference Population	%	Unique Interference Population	%
KGNU-FM.C (203)	7435	0.341	935	0.043
KGNU-FM (203)	6500	0.298	0	0.000

Call Letters	City	State	Dist	Bear
KGNU-FM.C (203)	Boulder	CO	36.0	8.7
KGNU-FM (203)	Boulder	CO	36.0	8.9

Totals for KVOD (201)

Calculation Area Population:	2,178,356	(	3652.5 sq. km )
Not Affected by Terrain Loss:	2,178,356	(	3652.5 sq. km )
Interfered Population:	7,435	(	11.4 sq. km )
Interference Free:	2,170,921	(	3641.2 sq. km )

Percent Interference: 0.34

Terrain Blocked Population: 0 ( 0.0 sq. km)

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Interference Free Breakdown:

White:	1,534,774	( 70.7% )
Black:	113,400	( 5.2% )
Hispanic:	399,928	( 18.4% )
Native American:	11,972	( 0.6% )
Asian:	67,270	( 3.1% )
Pacific Islander:	1,793	( 0.1% )
Mixed Race:	38,947	( 1.8% )
Other:	2,837	( 0.1% )
Total:	2,170,921	

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	Housing Units	Population	% of County
Colorado			
Adams County			
County Pop	132,594	363,857	
KVOD (201)	122,199	333,854	
Ix Free	122,199	333,854	100.00
Arapahoe County			
County Pop	196,835	487,967	
KVOD (201)	194,383	481,411	
Ix Free	194,383	481,411	100.00
Boulder County			
County Pop	119,900	291,288	
KVOD (201)	63,320	155,052	
KGNU-FM.C (203)	2,851	7,435	4.80
KGNU-FM (203)	2,494	6,500	4.19
Ix Free	60,469	147,617	95.20
Clear Creek County			
County Pop	5,128	9,322	
KVOD (201)	393	898	
Ix Free	393	898	100.00
Denver County			
County Pop	251,435	554,636	
KVOD (201)	251,434	554,635	
Ix Free	251,434	554,635	100.00
Douglas County			
County Pop	63,333	175,766	
KVOD (201)	51,973	144,816	
Ix Free	51,973	144,816	100.00
Gilpin County			
County Pop	2,929	4,757	

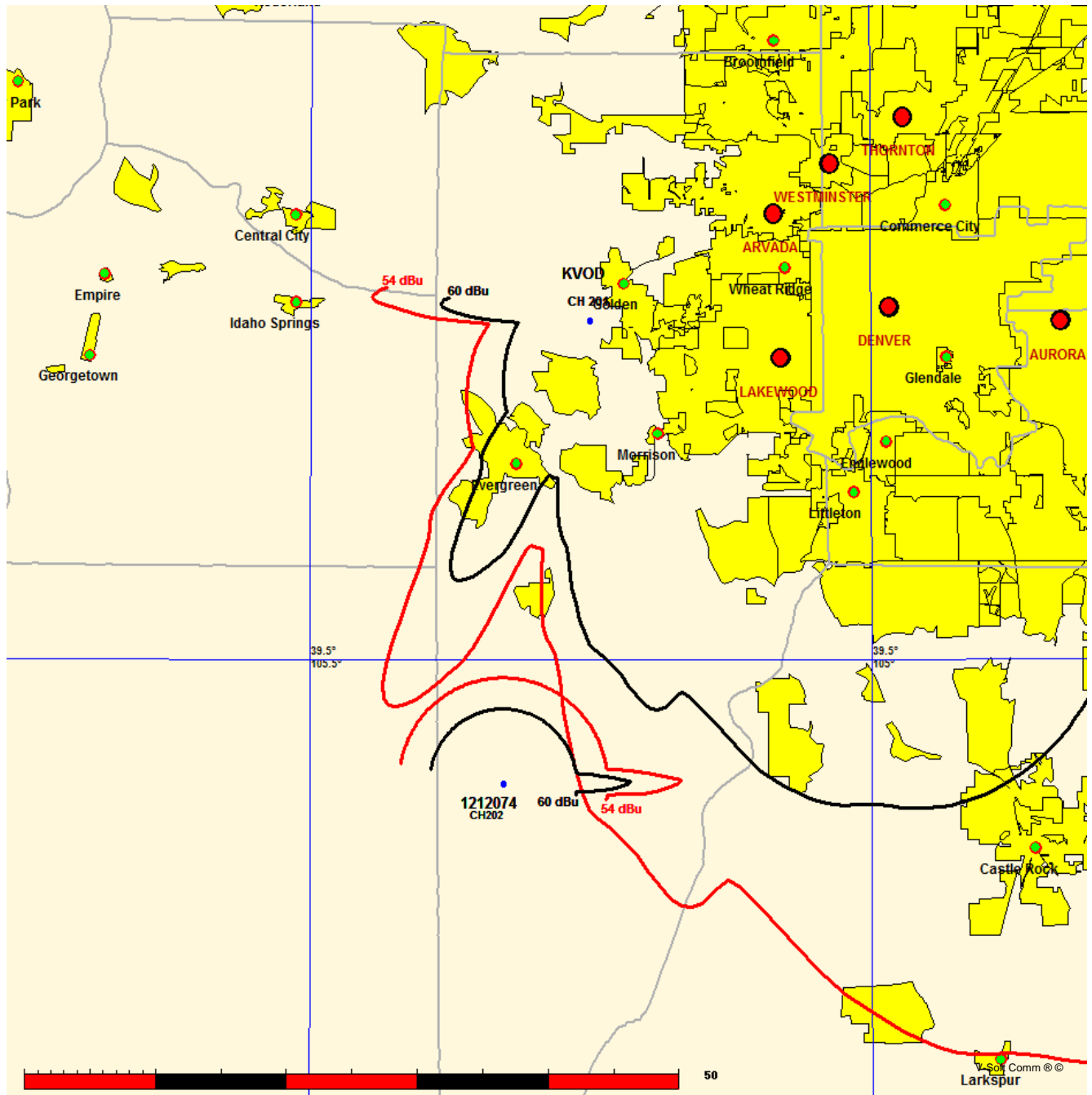
KVOD (201)	48	110	
Ix Free	48	110	100.00
Jefferson County			
County Pop	212,488	527,056	
KVOD (201)	203,106	505,292	
Ix Free	203,106	505,292	100.00
Weld County			
County Pop	66,194	180,936	
KVOD (201)	859	2,288	
Ix Free	859	2,288	100.00

**Proposed Facility**  
PRC DENVER-I LLC

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 4.13 km, Out= -5.41 km)

KVOD CH 201 C3 DA  
Lat= 39 43 49.0, Lng= 105 15 00.0  
2.1 kW 275 M HAAT, 2333.6 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

1212074 CH 202 A BNPED20071022AZK  
Lat= 39 24 56.0, Lng= 105 19 40.0  
0.1 kW 21.3 M HAAT, 2203 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

1212074 BNPED20071022AZK

Channel = 202A

Max ERP = 0.1 kW

RCAMSL = 2203 M

N. Lat. 39 24 56.0

W. Lng. 105 19 40.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
101.0	001.9881	0568.1	050.0	065.2	000.1000	-0086.3	061.2	23.57	
102.0	002.0004	0564.1	049.9	065.8	000.1000	-0084.1	060.5	23.70	
103.0	002.0127	0559.5	049.7	066.4	000.1000	-0081.8	059.9	23.83	
104.0	002.0251	0554.4	049.5	067.0	000.1000	-0078.8	059.2	23.96	
105.0	002.0375	0548.7	049.3	067.5	000.1000	-0075.2	058.5	24.11	
106.0	002.0499	0542.6	049.0	068.0	000.1000	-0071.4	057.8	24.26	
107.0	002.0624	0536.7	048.8	068.5	000.1000	-0067.6	057.1	24.41	
108.0	002.0749	0530.8	048.5	069.0	000.1000	-0064.8	056.4	24.57	
109.0	002.0874	0525.1	048.3	069.5	000.1000	-0063.8	055.6	24.73	
110.0	002.1000	0519.5	048.0	070.1	000.1000	-0063.7	054.9	24.88	
111.0	002.1000	0514.3	047.7	070.5	000.1000	-0063.8	054.1	25.04	
112.0	002.1000	0509.3	047.4	071.0	000.1000	-0063.8	053.4	25.21	
113.0	002.1000	0504.5	047.2	071.5	000.1000	-0063.9	052.7	25.37	
114.0	002.1000	0500.2	046.9	072.0	000.1000	-0064.1	051.9	25.52	
115.0	002.1000	0497.3	046.8	072.6	000.1000	-0064.0	051.3	25.66	
116.0	002.1000	0496.5	046.8	073.2	000.1000	-0062.7	050.7	25.79	
117.0	002.1000	0497.1	046.8	073.9	000.1000	-0060.9	050.2	25.91	
118.0	002.1000	0498.1	046.8	074.7	000.1000	-0057.3	049.6	26.02	
119.0	002.1000	0499.6	046.9	075.4	000.1000	-0049.8	049.1	26.13	
120.0	002.1000	0500.8	047.0	076.2	000.1000	-0037.7	048.6	26.24	
121.0	002.1000	0501.8	047.0	076.9	000.1000	-0022.1	048.1	26.35	
122.0	002.1000	0502.9	047.1	077.7	000.1000	-0007.9	047.6	26.47	
123.0	002.1000	0504.6	047.2	078.5	000.1000	0002.1	047.1	26.59	
124.0	002.1000	0506.3	047.3	079.3	000.1000	0006.0	046.6	26.71	
125.0	002.1000	0508.1	047.4	080.1	000.1000	0007.5	046.0	26.83	
126.0	002.1000	0509.5	047.5	080.9	000.1000	0010.2	045.5	26.96	
127.0	002.1000	0510.9	047.5	081.7	000.1000	0016.6	045.0	27.10	
128.0	002.1000	0512.1	047.6	082.5	000.1000	0027.9	044.4	27.24	
129.0	002.1000	0513.2	047.7	083.4	000.1000	0038.2	043.9	28.95	
130.0	002.1000	0514.3	047.7	084.2	000.1000	0045.2	043.3	30.34	
131.0	002.1000	0515.1	047.8	085.0	000.1000	0048.5	042.8	31.05	
132.0	002.1000	0515.3	047.8	085.8	000.1000	0053.2	042.2	31.97	
133.0	002.1000	0514.9	047.7	086.6	000.1000	0062.2	041.6	33.33	
134.0	002.1000	0513.5	047.7	087.3	000.1000	0070.1	040.9	34.46	
135.0	002.1000	0511.6	047.6	088.0	000.1000	0077.7	040.2	35.54	
136.0	002.1000	0509.5	047.5	088.7	000.1000	0085.2	039.6	36.58	
137.0	002.1000	0507.2	047.3	089.4	000.1000	0090.4	038.9	37.38	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
138.0	002.1000	0504.1	047.2	090.0	000.1000	0086.4	038.2	37.29
139.0	002.1000	0500.4	047.0	090.6	000.1000	0081.7	037.4	37.12
140.0	002.1000	0496.0	046.7	091.2	000.1000	0077.2	036.6	36.97
141.0	002.1000	0490.8	046.5	091.7	000.1000	0073.1	035.9	36.85
142.0	002.1000	0484.9	046.1	092.2	000.1000	0069.3	035.0	36.77
143.0	002.1000	0478.0	045.8	092.6	000.1000	0066.2	034.2	36.76
144.0	002.1000	0470.1	045.4	092.9	000.1000	0063.8	033.3	36.85
145.0	002.1000	0460.7	044.9	093.2	000.1000	0062.9	032.4	37.14
146.0	002.1000	0450.0	044.4	093.3	000.1000	0062.3	031.5	37.49
147.0	002.1000	0438.0	043.8	093.3	000.1000	0062.4	030.5	37.98
148.0	002.1000	0425.2	043.2	093.2	000.1000	0062.9	029.6	38.56
149.0	002.1000	0412.9	042.6	093.1	000.1000	0063.3	028.6	39.15
150.0	002.1000	0402.9	042.1	093.1	000.1000	0063.1	027.7	39.66
151.0	002.1000	0395.3	041.8	093.3	000.1000	0061.9	026.9	40.02
152.0	002.1000	0387.8	041.4	093.5	000.1000	0059.9	026.1	40.27
153.0	002.1000	0378.1	041.0	093.6	000.1000	0059.7	025.3	40.82
154.0	002.1000	0366.3	040.5	093.3	000.1000	0062.3	024.4	41.80
155.0	002.1000	0352.6	039.8	092.7	000.1000	0065.8	023.5	42.93
156.0	002.1000	0338.2	039.0	091.8	000.1000	0072.8	022.5	44.50
157.0	002.1000	0323.3	038.2	090.6	000.1000	0081.9	021.6	46.29
158.0	002.1000	0307.6	037.4	089.1	000.1000	0089.1	020.6	47.79
159.0	002.1000	0290.1	036.4	087.2	000.1000	0069.2	019.7	46.31
160.0	002.1000	0269.3	035.2	084.3	000.1000	0045.9	018.8	43.54
161.0	002.1000	0246.5	033.8	080.4	000.1000	0008.4	017.9	40.55
162.0	002.1000	0227.1	032.5	076.4	000.1000	-0033.4	017.2	41.16
163.0	002.1000	0211.3	031.3	072.4	000.1000	-0064.1	016.6	41.66
164.0	002.1000	0197.7	030.3	068.6	000.1000	-0067.3	016.1	42.07
165.0	002.1000	0185.8	029.4	065.2	000.1000	-0086.4	015.7	42.41
166.0	002.1000	0179.1	028.9	063.1	000.1000	-0098.8	015.3	42.76
167.0	002.1000	0181.9	029.1	063.4	000.1000	-0096.3	014.8	43.28
168.0	002.1000	0187.0	029.5	064.3	000.1000	-0090.5	014.2	43.97
169.0	002.1000	0190.6	029.7	064.9	000.1000	-0087.7	013.6	44.69
170.0	002.1000	0192.2	029.8	064.8	000.1000	-0087.9	013.1	45.41
171.0	002.1000	0190.2	029.7	063.5	000.1000	-0095.4	012.6	46.06
172.0	002.1000	0183.6	029.2	060.7	000.1000	-0124.5	012.3	46.54
173.0	002.1000	0173.0	028.4	056.4	000.1000	-0151.3	012.2	46.75
174.0	002.1000	0162.8	027.7	052.1	000.1000	-0163.6	012.1	46.82
175.0	002.1000	0150.8	026.7	047.2	000.1000	-0212.1	012.3	46.60
176.0	002.1000	0143.7	026.2	043.8	000.1000	-0221.6	012.3	46.59
177.0	002.1000	0137.6	025.7	040.7	000.1000	-0251.1	012.3	46.56
178.0	002.1000	0132.8	025.3	038.0	000.1000	-0264.6	012.3	46.58
179.0	002.1000	0128.3	024.9	035.3	000.1000	-0285.9	012.3	46.56
180.0	002.1000	0123.8	024.6	032.7	000.1000	-0294.6	012.3	46.48
181.0	002.1000	0113.2	023.7	029.0	000.1000	-0291.6	012.9	45.65
182.0	002.1000	0102.6	022.6	025.4	000.1000	-0305.7	013.7	44.58
183.0	002.1000	0092.3	021.4	022.3	000.1000	-0321.5	014.6	43.42
184.0	002.1000	0081.8	020.2	019.5	000.1000	-0331.1	015.8	42.37
185.0	002.1000	0069.1	018.5	017.0	000.1000	-0343.5	017.3	41.07
186.0	002.1000	0059.8	017.3	015.3	000.1000	-0351.5	018.5	40.09
187.0	002.1000	0056.3	016.7	014.2	000.1000	-0354.9	019.0	39.69
188.0	002.1000	0053.9	016.3	013.2	000.1000	-0356.3	019.3	39.37

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
189.0	002.1000	0050.0	015.6	012.2	000.1000	-0357.0	020.0	38.84
190.0	002.1000	0043.8	014.5	011.4	000.1000	-0355.7	021.1	37.97
191.0	002.0975	0036.6	013.2	010.7	000.1000	-0352.1	022.4	37.03
192.0	002.0950	0028.7	012.1	010.2	000.1000	-0348.8	023.5	36.22
193.0	002.0924	0023.9	012.1	009.7	000.1000	-0345.4	023.5	36.21
194.0	002.0899	0024.6	012.1	009.2	000.1000	-0342.1	023.5	36.20
195.0	002.0874	0027.4	012.1	008.6	000.1000	-0338.9	023.5	36.18
196.0	002.0849	0031.8	012.4	008.0	000.1000	-0334.3	023.3	36.37
197.0	002.0824	0036.9	013.3	007.1	000.1000	-0328.9	022.4	36.97
198.0	002.0799	0044.4	014.6	005.9	000.1000	-0320.0	021.2	37.89
199.0	002.1000	0053.3	016.2	004.1	000.1000	-0312.3	019.7	39.08
200.0	002.1000	0064.3	017.9	001.8	000.1000	-0325.2	018.2	40.32
201.0	002.0150	0073.5	018.9	359.7	000.1000	-0340.3	017.3	41.03
202.0	001.9243	0080.2	019.5	357.9	000.1000	-0354.5	016.9	41.42
203.0	001.8377	0086.9	020.1	355.9	000.1000	-0377.0	016.5	41.75
204.0	001.7550	0094.6	020.8	353.7	000.1000	-0396.2	016.1	42.10
205.0	001.6760	0101.7	021.3	351.6	000.1000	-0412.0	015.8	42.33
206.0	001.6006	0108.0	021.7	349.6	000.1000	-0427.2	015.7	42.43
207.0	001.5285	0113.2	022.0	347.9	000.1000	-0437.5	015.7	42.40
208.0	001.4598	0117.4	022.1	346.6	000.1000	-0435.9	015.9	42.27
209.0	001.3941	0118.1	021.9	346.0	000.1000	-0434.3	016.3	41.93
210.0	001.3313	0114.9	021.4	346.3	000.1000	-0435.0	016.9	41.41
211.0	001.2714	0107.7	020.5	347.4	000.1000	-0437.7	017.8	40.66
212.0	001.2142	0098.1	019.4	349.2	000.1000	-0430.4	018.9	39.74
213.0	001.1595	0087.7	018.0	351.2	000.1000	-0414.8	020.1	38.75
214.0	001.1073	0077.7	016.6	353.1	000.1000	-0401.2	021.4	37.77
215.0	001.0575	0068.2	015.2	354.8	000.1000	-0386.9	022.6	36.87
216.0	001.0099	0061.2	014.3	355.8	000.1000	-0378.6	023.5	36.24
217.0	000.9644	0057.5	013.8	356.2	000.1000	-0373.9	024.0	35.83
218.0	000.9210	0055.9	013.4	356.3	000.1000	-0372.8	024.4	35.54
219.0	000.8796	0054.9	013.2	356.3	000.1000	-0372.7	024.8	35.31
220.0	000.8400	0052.1	012.7	356.7	000.1000	-0368.7	025.3	34.98
221.0	000.8022	0045.6	011.8	357.8	000.1000	-0355.4	026.1	34.43
222.0	000.7661	0035.5	010.3	359.6	000.1000	-0341.2	027.4	33.68
223.0	000.7316	0026.8	009.4	000.6	000.1000	-0334.4	028.1	33.24
224.0	000.6987	0023.1	009.3	000.5	000.1000	-0335.1	028.3	33.13
225.0	000.6672	0023.6	009.2	000.4	000.1000	-0335.6	028.5	33.03
226.0	000.6372	0025.9	009.1	000.3	000.1000	-0336.1	028.7	32.92
227.0	000.6085	0026.3	009.0	000.3	000.1000	-0336.6	028.9	32.82
228.0	000.5811	0022.6	008.9	000.2	000.1000	-0336.9	029.1	32.72
229.0	000.5550	0015.5	008.7	000.2	000.1000	-0337.3	029.2	32.63
230.0	000.5300	0005.7	008.6	000.1	000.1000	-0337.5	029.4	32.53
231.0	000.5062	-0005.6	008.5	000.1	000.1000	-0337.7	029.6	32.44
232.0	000.4834	-0017.8	008.4	000.1	000.1000	-0337.8	029.8	32.35
233.0	000.4616	-0030.2	008.3	000.1	000.1000	-0337.9	030.0	32.26
234.0	000.4408	-0041.0	008.2	000.1	000.1000	-0338.0	030.2	32.17
235.0	000.4210	-0050.4	008.1	000.1	000.1000	-0337.9	030.3	32.09
236.0	000.4020	-0059.9	008.0	000.1	000.1000	-0337.9	030.5	32.01
237.0	000.3840	-0072.5	007.9	000.1	000.1000	-0337.8	030.7	31.93
238.0	000.3667	-0089.4	007.8	000.1	000.1000	-0337.8	030.8	31.85
239.0	000.3502	-0109.2	007.7	000.1	000.1000	-0337.6	031.0	31.78



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
240.0	000.3344	-0127.6	007.6	000.1	000.1000	-0337.5	031.2	31.71
241.0	000.3194	-0140.8	007.5	000.2	000.1000	-0337.3	031.3	31.64
242.0	000.3050	-0147.0	007.5	000.2	000.1000	-0337.1	031.5	31.57
243.0	000.2913	-0145.0	007.4	000.2	000.1000	-0336.9	031.6	31.51
244.0	000.2782	-0137.9	007.3	000.2	000.1000	-0336.7	031.8	31.45
245.0	000.2656	-0129.0	007.2	000.3	000.1000	-0336.4	031.9	31.39
246.0	000.2537	-0122.6	007.1	000.3	000.1000	-0336.1	032.1	31.33
247.0	000.2423	-0118.2	007.0	000.4	000.1000	-0335.8	032.2	31.27
248.0	000.2314	-0112.5	007.0	000.4	000.1000	-0335.5	032.4	31.22
249.0	000.2209	-0104.1	006.9	000.5	000.1000	-0335.1	032.5	31.16
250.0	000.2110	-0093.4	006.8	000.5	000.1000	-0334.8	032.7	31.11
251.0	000.2015	-0079.9	006.7	000.6	000.1000	-0334.4	032.8	31.05
252.0	000.1924	-0066.0	006.6	000.6	000.1000	-0333.9	032.9	31.00
253.0	000.1838	-0053.4	006.6	000.7	000.1000	-0333.4	033.1	30.95
254.0	000.1755	-0043.1	006.5	000.8	000.1000	-0333.0	033.2	30.90
255.0	000.1676	-0036.4	006.4	000.8	000.1000	-0332.5	033.3	30.85
256.0	000.1601	-0031.1	006.3	000.9	000.1000	-0332.0	033.5	30.80
257.0	000.1529	-0024.9	006.3	001.0	000.1000	-0331.5	033.6	30.76
258.0	000.1460	-0020.6	006.2	001.1	000.1000	-0331.0	033.7	30.71
259.0	000.1394	-0015.0	006.1	001.1	000.1000	-0330.6	033.8	30.67
260.0	000.1331	-0006.9	006.1	001.2	000.1000	-0330.0	033.9	30.62
261.0	000.1271	-0001.1	006.0	001.3	000.1000	-0329.3	034.1	30.58
262.0	000.1214	-0001.7	005.9	001.4	000.1000	-0328.7	034.2	30.54
263.0	000.1160	-0005.2	005.8	001.5	000.1000	-0328.0	034.3	30.49
264.0	000.1107	-0011.9	005.8	001.5	000.1000	-0327.3	034.4	30.45
265.0	000.1057	-0009.1	005.7	001.6	000.1000	-0326.6	034.5	30.41
266.0	000.1010	-0001.1	005.7	001.7	000.1000	-0325.9	034.6	30.38
267.0	000.0964	0003.6	005.6	001.8	000.1000	-0325.2	034.7	30.34
268.0	000.0921	0018.9	005.5	001.9	000.1000	-0324.5	034.8	30.30
269.0	000.0880	0037.8	006.1	001.0	000.1000	-0331.3	034.9	30.27
270.0	000.0840	0056.7	007.4	358.8	000.1000	-0346.9	035.0	30.23
271.0	000.0840	0075.8	008.6	356.9	000.1000	-0365.5	035.2	30.16
272.0	000.0840	0092.3	009.5	355.5	000.1000	-0381.7	035.4	30.08
273.0	000.0840	0104.6	010.1	354.5	000.1000	-0389.0	035.7	29.99
274.0	000.0840	0118.8	010.7	353.6	000.1000	-0396.9	036.0	29.89
275.0	000.0840	0132.3	011.3	352.8	000.1000	-0403.7	036.3	29.78
276.0	000.0840	0137.0	011.5	352.6	000.1000	-0405.6	036.5	29.70
277.0	000.0840	0134.6	011.4	352.8	000.1000	-0403.8	036.7	29.64
278.0	000.0840	0130.7	011.2	353.1	000.1000	-0401.0	036.8	29.59
279.0	000.0840	0123.7	010.9	353.6	000.1000	-0396.7	036.9	29.55
280.0	000.0880	0117.3	010.8	353.9	000.1000	-0394.2	037.1	29.50
281.0	000.0921	0109.2	010.5	354.4	000.1000	-0390.5	037.2	29.46

## 01-02-2009 FCC NGDC 30 Sec Terrain Data

1212074 BNPED20071022AZK

Channel = 202A

Max ERP = 0.1 kW

RCAMSL = 2203 M

N. Lat. 39 24 56.0

W. Lng. 105 19 40.0

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
281.0	000.1000	-0318.8	005.6	199.8	002.1000	0062.1	036.0	48.72	
282.0	000.1000	-0325.2	005.6	199.8	002.1000	0062.4	035.9	48.79	
283.0	000.1000	-0331.4	005.6	199.8	002.1000	0062.6	035.8	48.86	
284.0	000.1000	-0335.7	005.6	199.9	002.1000	0062.8	035.7	48.92	
285.0	000.1000	-0340.4	005.6	199.9	002.1000	0062.9	035.6	48.98	
286.0	000.1000	-0339.5	005.6	199.9	002.1000	0063.1	035.5	49.04	
287.0	000.1000	-0336.7	005.6	199.9	002.1000	0063.2	035.4	49.09	
288.0	000.1000	-0332.0	005.6	199.9	002.1000	0063.2	035.3	49.14	
289.0	000.1000	-0327.7	005.6	199.9	002.1000	0063.3	035.3	49.19	
290.0	000.1000	-0325.2	005.6	199.9	002.1000	0063.3	035.2	49.23	
291.0	000.1000	-0325.1	005.6	199.9	002.1000	0063.3	035.1	49.27	
292.0	000.1000	-0326.9	005.6	199.9	002.1000	0063.2	035.0	49.31	
293.0	000.1000	-0330.6	005.6	199.9	002.1000	0063.2	034.9	49.34	
294.0	000.1000	-0335.0	005.6	199.9	002.1000	0063.0	034.8	49.37	
295.0	000.1000	-0340.2	005.6	199.9	002.1000	0062.9	034.7	49.39	
296.0	000.1000	-0345.6	005.6	199.9	002.1000	0062.7	034.6	49.41	
297.0	000.1000	-0351.9	005.6	199.8	002.1000	0062.5	034.5	49.43	
298.0	000.1000	-0358.9	005.6	199.8	002.1000	0062.3	034.4	49.44	
299.0	000.1000	-0366.4	005.6	199.8	002.1000	0062.0	034.3	49.45	
300.0	000.1000	-0373.7	005.6	199.8	002.1000	0061.7	034.2	49.45	
301.0	000.1000	-0378.6	005.6	199.7	002.1000	0061.4	034.1	49.46	
302.0	000.1000	-0382.5	005.6	199.7	002.1000	0061.0	034.0	49.45	
303.0	000.1000	-0385.3	005.6	199.7	002.1000	0060.6	033.9	49.44	
304.0	000.1000	-0387.1	005.6	199.6	002.1000	0060.2	033.8	49.43	
305.0	000.1000	-0388.0	005.6	199.6	002.1000	0059.7	033.7	49.40	
306.0	000.1000	-0386.9	005.6	199.5	002.1000	0059.2	033.6	49.38	
307.0	000.1000	-0383.8	005.6	199.5	002.1000	0058.6	033.5	49.34	
308.0	000.1000	-0378.2	005.6	199.4	002.1000	0058.0	033.4	49.30	
309.0	000.1000	-0371.5	005.6	199.4	002.1000	0057.4	033.3	49.26	
310.0	000.1000	-0366.0	005.6	199.3	002.1000	0056.8	033.2	49.21	
311.0	000.1000	-0363.3	005.6	199.3	002.1000	0056.1	033.1	49.15	
312.0	000.1000	-0364.0	005.6	199.2	002.1000	0055.4	033.0	49.08	
313.0	000.1000	-0367.2	005.6	199.1	002.1000	0054.6	033.0	49.00	
314.0	000.1000	-0371.5	005.6	199.1	002.1000	0053.9	032.9	48.92	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
315.0	000.1000	-0373.9	005.6	199.0	002.0996	0053.1	032.8	48.84
316.0	000.1000	-0373.9	005.6	198.9	002.0981	0052.4	032.7	48.76
317.0	000.1000	-0374.4	005.6	198.8	002.0964	0051.6	032.6	48.66
318.0	000.1000	-0377.3	005.6	198.7	002.0948	0050.8	032.5	48.56
319.0	000.1000	-0380.5	005.6	198.7	002.0930	0049.9	032.4	48.45
320.0	000.1000	-0381.7	005.6	198.6	002.0912	0049.1	032.3	48.34
321.0	000.1000	-0379.2	005.6	198.5	002.0894	0048.3	032.3	48.23
322.0	000.1000	-0373.0	005.6	198.4	002.0875	0047.5	032.2	48.11
323.0	000.1000	-0366.8	005.6	198.3	002.0855	0046.7	032.1	47.99
324.0	000.1000	-0365.4	005.6	198.2	002.0834	0045.8	032.0	47.86
325.0	000.1000	-0367.6	005.6	198.1	002.0813	0045.0	031.9	47.73
326.0	000.1000	-0369.9	005.6	198.0	002.0800	0044.1	031.9	47.60
327.0	000.1000	-0371.1	005.6	197.9	002.0803	0043.3	031.8	47.47
328.0	000.1000	-0373.2	005.6	197.7	002.0805	0042.4	031.7	47.32
329.0	000.1000	-0376.5	005.6	197.6	002.0808	0041.5	031.6	47.18
330.0	000.1000	-0379.2	005.6	197.5	002.0811	0040.6	031.6	47.03
331.0	000.1000	-0382.0	005.6	197.4	002.0814	0039.6	031.5	46.86
332.0	000.1000	-0388.9	005.6	197.3	002.0817	0038.8	031.4	46.72
333.0	000.1000	-0401.3	005.6	197.1	002.0821	0037.9	031.3	46.56
334.0	000.1000	-0416.4	005.6	197.0	002.0824	0036.9	031.3	46.39
335.0	000.1000	-0430.6	005.6	196.9	002.0827	0036.2	031.2	46.27
336.0	000.1000	-0442.0	005.6	196.7	002.0831	0035.4	031.1	46.12
337.0	000.1000	-0450.4	005.6	196.6	002.0834	0034.6	031.1	45.98
338.0	000.1000	-0455.6	005.6	196.5	002.0838	0033.9	031.0	45.85
339.0	000.1000	-0459.5	005.6	196.3	002.0841	0033.2	031.0	45.72
340.0	000.1000	-0461.6	005.6	196.2	002.0845	0032.5	030.9	45.59
341.0	000.1000	-0459.3	005.6	196.0	002.0849	0031.9	030.8	45.47
342.0	000.1000	-0450.7	005.6	195.9	002.0853	0031.2	030.8	45.34
343.0	000.1000	-0440.2	005.6	195.7	002.0856	0030.5	030.7	45.20
344.0	000.1000	-0434.5	005.6	195.6	002.0860	0029.8	030.7	45.12
345.0	000.1000	-0432.3	005.6	195.4	002.0864	0029.1	030.6	45.14
346.0	000.1000	-0434.3	005.6	195.2	002.0868	0028.4	030.6	45.17
347.0	000.1000	-0437.0	005.6	195.1	002.0872	0027.7	030.5	45.19
348.0	000.1000	-0437.4	005.6	194.9	002.0876	0027.1	030.5	45.21
349.0	000.1000	-0431.6	005.6	194.7	002.0881	0026.5	030.4	45.23
350.0	000.1000	-0424.3	005.6	194.6	002.0885	0026.0	030.4	45.25
351.0	000.1000	-0416.0	005.6	194.4	002.0889	0025.5	030.4	45.27
352.0	000.1000	-0409.4	005.6	194.2	002.0893	0025.1	030.3	45.29
353.0	000.1000	-0402.1	005.6	194.1	002.0898	0024.7	030.3	45.31
354.0	000.1000	-0393.7	005.6	193.9	002.0902	0024.4	030.3	45.33
355.0	000.1000	-0385.4	005.6	193.7	002.0906	0024.0	030.2	45.34
356.0	000.1000	-0376.2	005.6	193.5	002.0911	0023.8	030.2	45.36
357.0	000.1000	-0364.5	005.6	193.4	002.0915	0023.7	030.2	45.37
358.0	000.1000	-0353.4	005.6	193.2	002.0920	0023.7	030.1	45.39
359.0	000.1000	-0345.6	005.6	193.0	002.0925	0023.9	030.1	45.40
000.0	000.1000	-0338.5	005.6	192.8	002.0929	0024.4	030.1	45.41
001.0	000.1000	-0331.3	005.6	192.6	002.0934	0025.2	030.1	45.42
002.0	000.1000	-0323.8	005.6	192.4	002.0938	0026.0	030.1	45.43
003.0	000.1000	-0316.5	005.6	192.3	002.0943	0027.0	030.0	45.44
004.0	000.1000	-0312.2	005.6	192.1	002.0948	0028.2	030.0	45.45
005.0	000.1000	-0315.4	005.6	191.9	002.0952	0029.5	030.0	45.46

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
006.0	000.1000	-0320.6	005.6	191.7	002.0957	0030.9	030.0	45.66
007.0	000.1000	-0328.1	005.6	191.5	002.0962	0032.3	030.0	46.00
008.0	000.1000	-0334.1	005.6	191.3	002.0966	0033.8	030.0	46.35
009.0	000.1000	-0341.2	005.6	191.1	002.0971	0035.4	030.0	46.70
010.0	000.1000	-0347.7	005.6	191.0	002.0976	0037.0	030.0	47.05
011.0	000.1000	-0354.0	005.6	190.8	002.0981	0038.5	030.0	47.38
012.0	000.1000	-0356.9	005.6	190.6	002.0985	0040.0	030.0	47.69
013.0	000.1000	-0356.5	005.6	190.4	002.0990	0041.3	030.0	47.97
014.0	000.1000	-0355.1	005.6	190.2	002.0995	0042.5	030.0	48.21
015.0	000.1000	-0352.6	005.6	190.0	002.1000	0043.6	030.0	48.43
016.0	000.1000	-0348.5	005.6	189.8	002.1000	0044.8	030.0	48.65
017.0	000.1000	-0343.6	005.6	189.6	002.1000	0046.0	030.0	48.88
018.0	000.1000	-0338.6	005.6	189.5	002.1000	0047.2	030.0	49.09
019.0	000.1000	-0333.4	005.6	189.3	002.1000	0048.4	030.0	49.30
020.0	000.1000	-0329.4	005.6	189.1	002.1000	0049.5	030.1	49.50
021.0	000.1000	-0326.8	005.6	188.9	002.1000	0050.5	030.1	49.67
022.0	000.1000	-0323.0	005.6	188.7	002.1000	0051.5	030.1	49.82
023.0	000.1000	-0317.4	005.6	188.5	002.1000	0052.3	030.1	49.94
024.0	000.1000	-0312.3	005.6	188.4	002.1000	0052.9	030.2	50.03
025.0	000.1000	-0307.6	005.6	188.2	002.1000	0053.4	030.2	50.10
026.0	000.1000	-0303.3	005.6	188.0	002.1000	0053.9	030.2	50.15
027.0	000.1000	-0299.0	005.6	187.8	002.1000	0054.2	030.2	50.20
028.0	000.1000	-0294.7	005.6	187.7	002.1000	0054.6	030.3	50.24
029.0	000.1000	-0291.6	005.6	187.5	002.1000	0055.1	030.3	50.30
030.0	000.1000	-0291.5	005.6	187.3	002.1000	0055.5	030.3	50.35
031.0	000.1000	-0293.5	005.6	187.1	002.1000	0056.0	030.4	50.39
032.0	000.1000	-0294.8	005.6	187.0	002.1000	0056.4	030.4	50.43
033.0	000.1000	-0294.4	005.6	186.8	002.1000	0056.8	030.5	50.47
034.0	000.1000	-0292.4	005.6	186.6	002.1000	0057.2	030.5	50.51
035.0	000.1000	-0288.0	005.6	186.5	002.1000	0057.7	030.6	50.55
036.0	000.1000	-0280.5	005.6	186.3	002.1000	0058.3	030.6	50.61
037.0	000.1000	-0271.5	005.6	186.2	002.1000	0059.0	030.7	50.69
038.0	000.1000	-0264.4	005.6	186.0	002.1000	0059.8	030.7	50.78
039.0	000.1000	-0259.6	005.6	185.8	002.1000	0060.8	030.8	50.88
040.0	000.1000	-0255.3	005.6	185.7	002.1000	0062.0	030.8	51.00
041.0	000.1000	-0249.1	005.6	185.5	002.1000	0063.3	030.9	51.13
042.0	000.1000	-0240.1	005.6	185.4	002.1000	0064.8	030.9	51.29
043.0	000.1000	-0229.5	005.6	185.2	002.1000	0066.3	031.0	51.45
044.0	000.1000	-0220.1	005.6	185.1	002.1000	0067.9	031.1	51.61
045.0	000.1000	-0215.1	005.6	185.0	002.1000	0069.5	031.1	51.78
046.0	000.1000	-0213.9	005.6	184.8	002.1000	0071.1	031.2	51.94
047.0	000.1000	-0212.8	005.6	184.7	002.1000	0072.8	031.2	52.11
048.0	000.1000	-0207.9	005.6	184.6	002.1000	0074.5	031.3	52.27
049.0	000.1000	-0197.6	005.6	184.4	002.1000	0076.1	031.4	52.43
050.0	000.1000	-0184.2	005.6	184.3	002.1000	0077.8	031.5	52.59
051.0	000.1000	-0171.8	005.6	184.2	002.1000	0079.4	031.5	52.74
052.0	000.1000	-0164.1	005.6	184.1	002.1000	0081.0	031.6	52.88
053.0	000.1000	-0160.6	005.6	183.9	002.1000	0082.5	031.7	53.01
054.0	000.1000	-0159.9	005.6	183.8	002.1000	0084.0	031.7	53.13
055.0	000.1000	-0158.0	005.6	183.7	002.1000	0085.3	031.8	53.23
056.0	000.1000	-0153.9	005.6	183.6	002.1000	0086.5	031.9	53.33

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	
057.0	000.1000	-0147.6	005.6	183.5	002.1000	0087.6	032.0	53.40	
058.0	000.1000	-0142.1	005.6	183.4	002.1000	0088.7	032.1	53.47	
059.0	000.1000	-0137.5	005.6	183.3	002.1000	0089.6	032.1	53.53	
060.0	000.1000	-0131.0	005.6	183.2	002.1000	0090.5	032.2	53.59	
061.0	000.1000	-0121.4	005.6	183.1	002.1000	0091.3	032.3	53.63	
062.0	000.1000	-0109.7	005.6	183.0	002.1000	0092.1	032.4	53.67	
063.0	000.1000	-0099.5	005.6	182.9	002.1000	0093.0	032.5	53.71	
064.0	000.1000	-0092.3	005.6	182.8	002.1000	0093.8	032.6	53.75	
065.0	000.1000	-0087.2	005.6	182.8	002.1000	0094.6	032.6	53.79	
066.0	000.1000	-0083.5	005.6	182.7	002.1000	0095.4	032.7	53.82	
067.0	000.1000	-0078.6	005.6	182.6	002.1000	0096.2	032.8	53.86	
068.0	000.1000	-0071.6	005.6	182.5	002.1000	0097.0	032.9	53.89	
069.0	000.1000	-0065.0	005.6	182.5	002.1000	0097.7	033.0	53.91	
070.0	000.1000	-0063.7	005.6	182.4	002.1000	0098.4	033.1	53.94	
071.0	000.1000	-0063.8	005.6	182.3	002.1000	0099.1	033.2	53.95	
072.0	000.1000	-0064.1	005.6	182.3	002.1000	0099.7	033.3	53.97	
073.0	000.1000	-0063.3	005.6	182.2	002.1000	0100.3	033.4	53.98	
074.0	000.1000	-0060.8	005.6	182.2	002.1000	0100.9	033.5	53.99	
075.0	000.1000	-0054.6	005.6	182.1	002.1000	0101.4	033.6	53.99	
076.0	000.1000	-0041.2	005.6	182.1	002.1000	0101.9	033.6	53.99	
077.0	000.1000	-0020.7	005.6	182.0	002.1000	0102.4	033.7	53.98	
078.0	000.1000	-0003.4	005.6	182.0	002.1000	0102.8	033.8	53.98	
079.0	000.1000	0005.3	005.6	181.9	002.1000	0103.2	033.9	53.97	
080.0	000.1000	0007.2	005.6	181.9	002.1000	0103.6	034.0	53.96	
081.0	000.1000	0010.6	005.6	181.9	002.1000	0104.0	034.1	53.94	
082.0	000.1000	0020.0	005.6	181.8	002.1000	0104.3	034.2	53.92	
083.0	000.1000	0034.3	006.0	181.2	002.1000	0110.6	034.3	54.41**	0.87
084.0	000.1000	0044.1	006.8	179.9	002.1000	0124.2	034.3	55.35**	2.84
085.0	000.1000	0048.5	007.1	179.3	002.1000	0126.9	034.4	55.47**	3.10
086.0	000.1000	0055.5	007.7	178.4	002.1000	0131.1	034.5	55.68**	3.53
087.0	000.1000	0067.0	008.4	177.1	002.1000	0136.9	034.6	55.98**	4.15
088.0	000.1000	0077.9	009.1	176.0	002.1000	0143.7	034.8	56.31**	4.81
089.0	000.1000	0088.3	009.7	175.0	002.1000	0150.5	035.0	56.60**	5.41
090.0	000.1000	0086.6	009.6	175.2	002.1000	0148.8	035.1	56.43**	5.06
091.0	000.1000	0078.7	009.2	176.0	002.1000	0143.9	035.2	56.08**	4.35
092.0	000.1000	0070.9	008.7	176.7	002.1000	0139.5	035.4	55.76**	3.71
093.0	000.1000	0063.5	008.2	177.5	002.1000	0134.9	035.5	55.44**	3.04
094.0	000.1000	0053.9	007.5	178.6	002.1000	0129.9	035.5	55.10**	2.33
095.0	000.1000	0040.6	006.5	180.3	002.1000	0120.1	035.6	54.48**	1.02
096.0	000.1000	0027.6	005.6	181.7	002.1000	0105.4	035.6	53.38	
097.0	000.1000	0021.5	005.6	181.7	002.1000	0105.3	035.7	53.32	
098.0	000.1000	0020.6	005.6	181.8	002.1000	0105.1	035.8	53.26	
099.0	000.1000	0022.8	005.6	181.8	002.1000	0104.9	035.9	53.20	
100.0	000.1000	0027.8	005.6	181.8	002.1000	0104.7	036.0	53.14	
101.0	000.1000	0035.5	006.1	181.1	002.1000	0111.9	036.2	53.62	

**Existing KVOF Facility - Contour-to-Contour Study**  
Prc Denver-i, Llc

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOF's Overlaps (In= 2.55 km, Out= -7.9 km)

KVOF CH 201 C3

Lat= 39 40 18.0, Lng= 105 13 05.0

1.2 kW 319.8 M HAAT, 2348 M COR

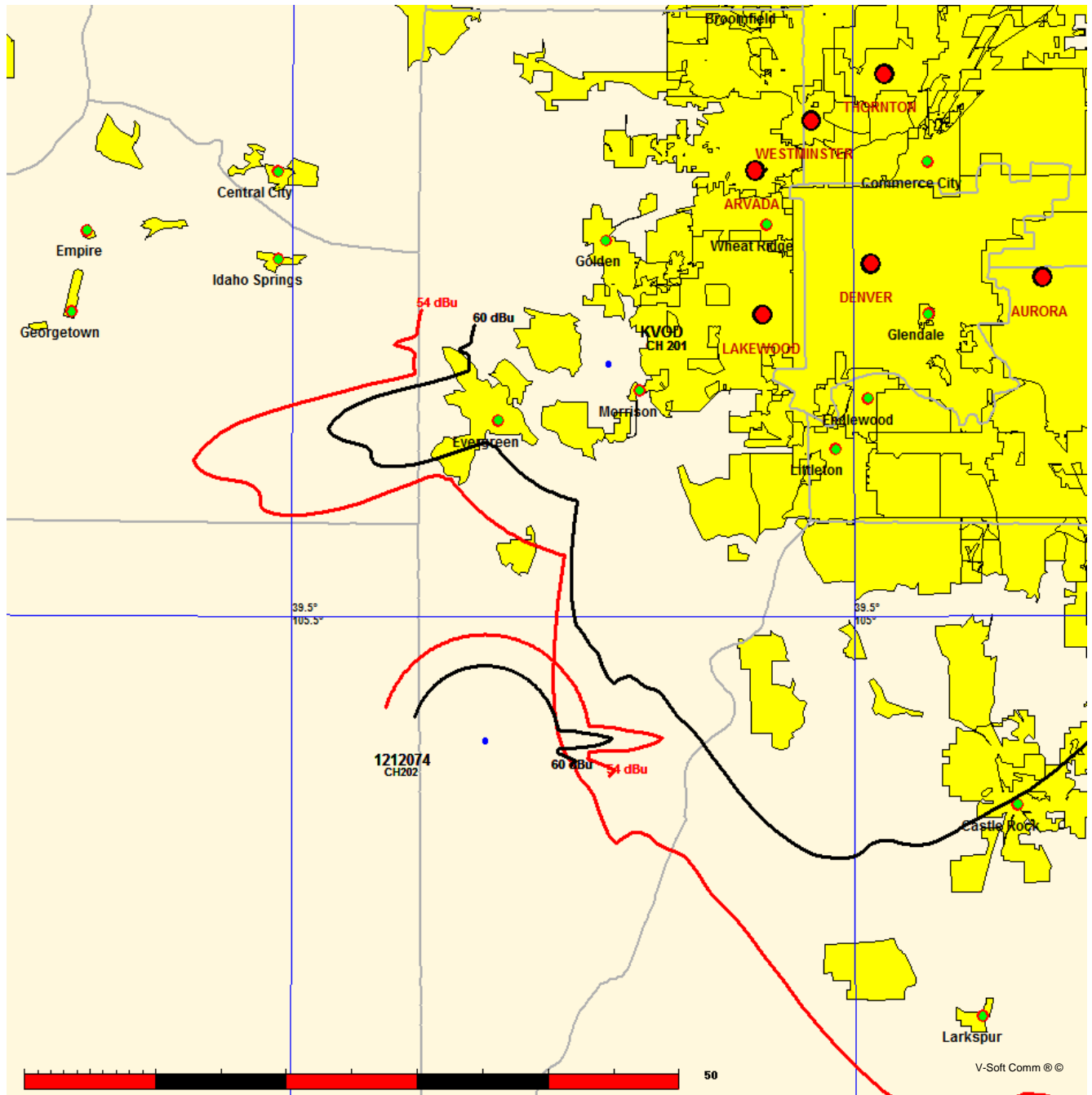
Prot.= 60 dBu, Intef.= 54 dBu

1212074 CH 202 A BNPED20071022AZK

Lat= 39 24 56.0, Lng= 105 19 40.0

0.1 kW 21.3 M HAAT, 2203 M COR

Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 1.2 kW

RCAMSL = 2348 M

N. Lat. 39 40 18.0

W. Lng. 105 13 05.0

Protected

60 dBu

1212074 BNPED20071022AZK

Channel = 202A

Max ERP = 0.1 kW

RCAMSL = 2203 M

N. Lat. 39 24 56.0

W. Lng. 105 19 40.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
108.0	001.2000	0645.6	048.0	075.9	000.1000	-0043.1	056.7	24.50	
109.0	001.2000	0645.1	048.0	076.6	000.1000	-0029.2	056.2	24.61	
110.0	001.2000	0644.6	048.0	077.3	000.1000	-0014.6	055.7	24.71	
111.0	001.2000	0644.1	048.0	078.0	000.1000	-0003.0	055.2	24.81	
112.0	001.2000	0643.3	047.9	078.7	000.1000	0004.1	054.8	24.91	
113.0	001.2000	0642.3	047.9	079.5	000.1000	0006.1	054.3	25.02	
114.0	001.2000	0641.0	047.8	080.2	000.1000	0007.7	053.8	25.12	
115.0	001.2000	0639.5	047.8	080.9	000.1000	0010.1	053.3	25.23	
116.0	001.2000	0637.7	047.7	081.6	000.1000	0015.4	052.7	25.35	
117.0	001.2000	0635.5	047.6	082.3	000.1000	0024.4	052.2	25.46	
118.0	001.2000	0633.2	047.6	083.0	000.1000	0034.4	051.7	26.31	
119.0	001.2000	0631.1	047.5	083.7	000.1000	0042.0	051.1	27.61	
120.0	001.2000	0628.9	047.4	084.4	000.1000	0046.5	050.6	28.42	
121.0	001.2000	0626.5	047.3	085.1	000.1000	0048.9	050.0	28.91	
122.0	001.2000	0623.8	047.2	085.9	000.1000	0053.8	049.5	29.72	
123.0	001.2000	0620.8	047.1	086.6	000.1000	0062.1	048.9	30.82	
124.0	001.2000	0617.9	047.0	087.3	000.1000	0069.9	048.3	31.78	
125.0	001.2000	0614.7	046.9	088.0	000.1000	0077.5	047.7	32.72	
126.0	001.2000	0611.1	046.7	088.7	000.1000	0084.9	047.2	33.62	
127.0	001.2000	0607.2	046.6	089.3	000.1000	0090.3	046.5	34.32	
128.0	001.2000	0603.3	046.5	090.0	000.1000	0086.3	045.9	34.19	
129.0	001.2000	0599.6	046.3	090.7	000.1000	0080.8	045.3	33.89	
130.0	001.2000	0596.3	046.2	091.4	000.1000	0075.2	044.7	33.56	
131.0	001.2000	0593.0	046.1	092.2	000.1000	0069.6	044.1	33.21	
132.0	001.2000	0589.6	045.9	092.9	000.1000	0064.1	043.5	32.83	
133.0	001.2000	0586.0	045.8	093.6	000.1000	0059.3	042.9	32.51	
134.0	001.2000	0582.3	045.7	094.3	000.1000	0050.1	042.3	31.46	
135.0	001.2000	0578.2	045.5	095.0	000.1000	0040.8	041.7	30.10	
136.0	001.2000	0573.6	045.3	095.7	000.1000	0031.5	041.0	28.51	
137.0	001.2000	0568.8	045.1	096.3	000.1000	0024.6	040.4	28.42	
138.0	001.2000	0563.8	044.9	097.0	000.1000	0021.5	039.7	28.63	
139.0	001.2000	0559.4	044.7	097.7	000.1000	0020.4	039.0	28.84	
140.0	001.2000	0555.3	044.5	098.4	000.1000	0021.1	038.4	29.05	
141.0	001.2000	0551.8	044.4	099.1	000.1000	0023.1	037.8	29.26	
142.0	001.2000	0548.9	044.2	099.8	000.1000	0026.6	037.2	29.47	
143.0	001.2000	0546.7	044.1	100.6	000.1000	0032.6	036.6	30.23	
144.0	001.2000	0544.5	044.0	101.4	000.1000	0038.9	036.0	31.75	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
145.0	001.2000	0542.0	043.9	102.2	000.1000	0044.7	035.4	33.10
146.0	001.2000	0537.9	043.7	102.9	000.1000	0047.9	034.7	33.94
147.0	001.2000	0530.1	043.3	103.4	000.1000	0048.1	033.9	34.31
148.0	001.2000	0517.8	042.7	103.6	000.1000	0047.7	032.9	34.62
149.0	001.2000	0503.4	042.0	103.7	000.1000	0047.5	031.9	35.01
150.0	001.2000	0493.3	041.6	104.0	000.1000	0046.6	031.1	35.24
151.0	001.2000	0491.7	041.5	104.8	000.1000	0045.4	030.5	35.29
152.0	001.2000	0494.3	041.6	105.9	000.1000	0045.1	030.1	35.44
153.0	001.2000	0495.4	041.7	107.0	000.1000	0048.0	029.6	36.26
154.0	001.2000	0491.9	041.5	107.7	000.1000	0051.5	029.0	37.22
155.0	001.2000	0485.4	041.2	108.3	000.1000	0053.3	028.2	37.95
156.0	001.2000	0476.4	040.8	108.7	000.1000	0054.1	027.4	38.57
157.0	001.2000	0464.1	040.2	108.8	000.1000	0054.3	026.5	39.18
158.0	001.2000	0448.0	039.5	108.7	000.1000	0054.0	025.5	39.81
159.0	001.2000	0427.0	038.6	108.1	000.1000	0052.6	024.4	40.36
160.0	001.2000	0401.2	037.5	107.0	000.1000	0048.0	023.2	40.41
161.0	001.2000	0373.3	036.4	105.6	000.1000	0045.1	022.1	40.73
162.0	001.2000	0345.7	035.1	103.6	000.1000	0047.7	020.8	42.23
163.0	001.2000	0319.0	033.7	101.0	000.1000	0035.2	019.6	40.46
164.0	001.2000	0291.2	032.1	097.6	000.1000	0020.4	018.4	40.12
165.0	001.2000	0265.0	030.7	093.9	000.1000	0055.5	017.4	46.51
166.0	001.2000	0241.5	029.3	090.1	000.1000	0086.0	016.5	50.90
167.0	001.2000	0224.4	028.3	086.8	000.1000	0065.3	015.8	49.18
168.0	001.2000	0212.8	027.6	084.4	000.1000	0046.4	015.2	46.73
169.0	001.2000	0202.2	026.9	082.0	000.1000	0019.9	014.7	43.37
170.0	001.2000	0186.6	025.9	078.2	000.1000	-0001.1	014.2	43.94
171.0	001.2000	0173.3	025.1	074.8	000.1000	-0056.7	013.8	44.42
172.0	001.2000	0168.3	024.8	073.2	000.1000	-0062.9	013.4	44.93
173.0	001.2000	0165.4	024.6	072.0	000.1000	-0064.1	013.0	45.47
174.0	001.2000	0161.0	024.3	070.3	000.1000	-0063.7	012.7	45.97
175.0	001.2000	0155.0	023.9	068.0	000.1000	-0071.4	012.4	46.40
176.0	001.2000	0151.8	023.7	066.4	000.1000	-0081.7	012.1	46.88
177.0	001.2000	0151.8	023.7	065.7	000.1000	-0084.5	011.7	47.48
178.0	001.2000	0154.4	023.9	065.8	000.1000	-0084.1	011.2	48.20
179.0	001.2000	0157.9	024.1	066.2	000.1000	-0082.8	010.8	48.98
180.0	001.2000	0152.6	023.7	063.4	000.1000	-0096.4	010.5	49.36
181.0	001.2000	0140.2	022.8	058.1	000.1000	-0141.6	010.6	49.21
182.0	001.2000	0128.0	021.9	052.9	000.1000	-0160.7	010.8	48.84
183.0	001.2000	0122.4	021.5	049.9	000.1000	-0184.9	010.8	48.85
184.0	001.2000	0118.2	021.2	047.3	000.1000	-0211.6	010.8	48.91
185.0	001.2000	0111.6	020.6	043.9	000.1000	-0220.5	011.0	48.60
186.0	001.2000	0107.6	020.2	041.3	000.1000	-0246.6	011.1	48.47
187.0	001.2000	0103.2	019.8	038.6	000.1000	-0261.2	011.2	48.19
188.0	001.2000	0096.3	019.1	035.3	000.1000	-0285.8	011.7	47.46
189.0	001.2000	0084.8	017.8	031.4	000.1000	-0294.2	012.7	45.91
190.0	001.2000	0072.7	016.3	028.0	000.1000	-0294.6	014.0	44.18
191.0	001.2000	0058.1	014.6	025.1	000.1000	-0306.9	015.6	42.49
192.0	001.2000	0043.4	012.6	022.8	000.1000	-0318.4	017.5	40.89
193.0	001.2000	0029.9	010.6	021.2	000.1000	-0326.3	019.4	39.31
194.0	001.2000	0017.4	010.6	020.6	000.1000	-0327.7	019.4	39.33
195.0	001.2000	0007.4	010.6	020.1	000.1000	-0329.1	019.4	39.35



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
196.0	001.2000	0002.0	010.6	019.6	000.1000	-0330.9	019.4	39.36
197.0	001.2000	-0000.6	010.6	019.0	000.1000	-0333.4	019.4	39.36
198.0	001.2000	-0001.9	010.6	018.5	000.1000	-0336.2	019.4	39.37
199.0	001.2000	-0001.3	010.6	017.9	000.1000	-0339.0	019.4	39.37
200.0	001.2000	0000.5	010.6	017.4	000.1000	-0341.7	019.4	39.36
201.0	001.2000	0002.5	010.6	016.8	000.1000	-0344.5	019.4	39.35
202.0	001.2000	0003.5	010.6	016.3	000.1000	-0347.2	019.4	39.34
203.0	001.2000	0000.8	010.6	015.7	000.1000	-0349.6	019.4	39.32
204.0	001.2000	-0006.3	010.6	015.2	000.1000	-0351.8	019.4	39.30
205.0	001.2000	-0016.6	010.6	014.7	000.1000	-0353.8	019.5	39.28
206.0	001.2000	-0026.0	010.6	014.1	000.1000	-0354.9	019.5	39.25
207.0	001.2000	-0031.6	010.6	013.6	000.1000	-0355.7	019.5	39.21
208.0	001.2000	-0033.2	010.6	013.1	000.1000	-0356.4	019.6	39.18
209.0	001.2000	-0032.0	010.6	012.6	000.1000	-0356.9	019.6	39.14
210.0	001.2000	-0028.3	010.6	012.0	000.1000	-0356.9	019.7	39.09
211.0	001.2000	-0023.4	010.6	011.5	000.1000	-0356.2	019.8	39.05
212.0	001.2000	-0019.6	010.6	011.0	000.1000	-0354.2	019.8	39.00
213.0	001.2000	-0017.3	010.6	010.5	000.1000	-0351.2	019.9	38.94
214.0	001.2000	-0015.8	010.6	010.0	000.1000	-0348.0	020.0	38.88
215.0	001.2000	-0014.4	010.6	009.6	000.1000	-0344.7	020.0	38.82
216.0	001.2000	-0014.4	010.6	009.1	000.1000	-0341.7	020.1	38.76
217.0	001.2000	-0015.9	010.6	008.6	000.1000	-0338.8	020.2	38.69
218.0	001.2000	-0018.6	010.6	008.2	000.1000	-0335.3	020.3	38.62
219.0	001.2000	-0021.6	010.6	007.7	000.1000	-0332.2	020.4	38.54
220.0	001.2000	-0024.0	010.6	007.3	000.1000	-0329.6	020.5	38.46
221.0	001.2000	-0025.5	010.6	006.9	000.1000	-0327.3	020.6	38.38
222.0	001.2000	-0025.5	010.6	006.4	000.1000	-0324.1	020.7	38.30
223.0	001.2000	-0023.2	010.6	006.0	000.1000	-0320.8	020.8	38.22
224.0	001.2000	-0019.3	010.6	005.6	000.1000	-0318.5	020.9	38.13
225.0	001.2000	-0015.0	010.6	005.2	000.1000	-0316.4	021.0	38.04
226.0	001.2000	-0011.9	010.6	004.8	000.1000	-0314.7	021.2	37.94
227.0	001.2000	-0009.9	010.6	004.5	000.1000	-0313.3	021.3	37.85
228.0	001.2000	-0007.2	010.6	004.1	000.1000	-0312.4	021.4	37.75
229.0	001.2000	-0001.2	010.6	003.8	000.1000	-0312.4	021.5	37.65
230.0	001.2000	0008.4	010.6	003.4	000.1000	-0313.8	021.7	37.55
231.0	001.2000	0018.0	010.6	003.1	000.1000	-0315.9	021.8	37.45
232.0	001.2000	0024.9	010.6	002.8	000.1000	-0318.1	022.0	37.34
233.0	001.2000	0027.9	010.6	002.5	000.1000	-0320.4	022.1	37.23
234.0	001.2000	0029.7	010.6	002.2	000.1000	-0322.7	022.2	37.13
235.0	001.2000	0031.2	010.8	001.5	000.1000	-0327.6	022.3	37.09
236.0	001.2000	0031.6	010.9	001.1	000.1000	-0330.8	022.4	37.01
237.0	001.2000	0032.6	011.0	000.5	000.1000	-0334.8	022.5	36.95
238.0	001.2000	0034.7	011.3	359.6	000.1000	-0341.5	022.5	36.95
239.0	001.2000	0039.6	012.0	357.7	000.1000	-0355.8	022.3	37.09
240.0	001.2000	0047.4	013.2	354.8	000.1000	-0386.6	022.0	37.33
241.0	001.2000	0057.5	014.5	351.4	000.1000	-0413.3	021.7	37.55
242.0	001.2000	0067.6	015.7	348.2	000.1000	-0436.6	021.5	37.64
243.0	001.2000	0076.1	016.8	345.3	000.1000	-0432.5	021.6	37.63
244.0	001.2000	0083.7	017.7	342.8	000.1000	-0442.5	021.7	37.54
245.0	001.2000	0089.8	018.4	340.8	000.1000	-0460.2	021.9	37.37
246.0	001.2000	0095.2	019.0	339.2	000.1000	-0460.2	022.2	37.16

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
247.0	001.2000	0098.7	019.4	338.2	000.1000	-0456.7	022.5	36.92
248.0	001.2000	0099.9	019.5	337.9	000.1000	-0455.2	022.8	36.67
249.0	001.2000	0098.9	019.4	338.2	000.1000	-0456.4	023.2	36.43
250.0	001.2000	0097.9	019.3	338.5	000.1000	-0457.5	023.5	36.19
251.0	001.2000	0099.4	019.4	338.1	000.1000	-0456.2	023.9	35.94
252.0	001.2000	0102.9	019.8	337.3	000.1000	-0452.3	024.2	35.69
253.0	001.2000	0109.8	020.5	335.9	000.1000	-0440.5	024.6	35.40
254.0	001.2000	0116.7	021.1	334.6	000.1000	-0425.3	025.1	35.10
255.0	001.2000	0122.5	021.5	333.7	000.1000	-0412.6	025.5	34.81
256.0	001.2000	0126.9	021.8	333.2	000.1000	-0404.3	026.0	34.52
257.0	001.2000	0127.8	021.9	333.3	000.1000	-0405.0	026.4	34.28
258.0	001.2000	0123.4	021.6	334.1	000.1000	-0418.7	026.7	34.10
259.0	001.2000	0116.7	021.1	335.4	000.1000	-0435.8	026.9	33.95
260.0	001.2000	0109.2	020.4	337.0	000.1000	-0450.1	027.1	33.83
261.0	001.2000	0099.4	019.4	339.1	000.1000	-0459.8	027.2	33.75
262.0	001.2000	0085.1	017.8	342.5	000.1000	-0445.3	027.3	33.74
263.0	001.2000	0068.0	015.7	346.9	000.1000	-0436.7	027.3	33.73
264.0	001.2000	0052.4	013.9	350.9	000.1000	-0417.0	027.4	33.67
265.0	001.2000	0042.8	012.5	353.7	000.1000	-0396.3	027.5	33.56
266.0	001.2000	0034.9	011.4	356.1	000.1000	-0375.0	027.7	33.45
267.0	001.2000	0027.8	010.6	357.6	000.1000	-0357.1	027.9	33.34
268.0	001.2000	0019.1	010.6	357.6	000.1000	-0357.1	028.1	33.23
269.0	001.2000	0016.9	010.6	357.6	000.1000	-0357.0	028.3	33.13
270.0	001.2000	0015.3	010.6	357.6	000.1000	-0356.9	028.5	33.03
271.0	001.2000	0013.8	010.6	357.6	000.1000	-0356.7	028.7	32.92
272.0	001.2000	0017.3	010.6	357.7	000.1000	-0356.4	028.9	32.83
273.0	001.2000	0025.0	010.6	357.7	000.1000	-0356.2	029.1	32.73
274.0	001.2000	0031.1	010.8	357.4	000.1000	-0359.4	029.3	32.62
275.0	001.2000	0035.7	011.5	356.1	000.1000	-0374.7	029.5	32.48
276.0	001.2000	0034.4	011.3	356.6	000.1000	-0369.7	029.7	32.39
277.0	001.2000	0032.4	011.0	357.2	000.1000	-0361.8	029.8	32.32
278.0	001.2000	0030.5	010.7	357.8	000.1000	-0355.1	030.0	32.26
279.0	001.2000	0026.8	010.6	358.0	000.1000	-0353.5	030.2	32.17
280.0	001.2000	0025.9	010.6	358.1	000.1000	-0352.8	030.3	32.09
281.0	001.2000	0025.8	010.6	358.1	000.1000	-0352.1	030.5	32.00
282.0	001.2000	0025.7	010.6	358.2	000.1000	-0351.4	030.7	31.92
283.0	001.2000	0024.5	010.6	358.3	000.1000	-0350.7	030.9	31.84
284.0	001.2000	0021.9	010.6	358.4	000.1000	-0350.0	031.1	31.76
285.0	001.2000	0020.4	010.6	358.5	000.1000	-0349.4	031.2	31.68
286.0	001.2000	0022.0	010.6	358.6	000.1000	-0348.7	031.4	31.60
287.0	001.2000	0026.4	010.6	358.7	000.1000	-0347.9	031.6	31.53
288.0	001.2000	0031.1	010.8	358.5	000.1000	-0349.0	031.8	31.44

01-02-2009 FCC NGDC 30 Sec Terrain Data

1212074 BNPED20071022AZK

Channel = 202A

Max ERP = 0.1 kW

RCAMSL = 2203 M

N. Lat. 39 24 56.0

W. Lng. 105 19 40.0

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 1.2 kW

RCAMSL = 2348 M

N. Lat. 39 40 18.0

W. Lng. 105 13 05.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
288.0	000.1000	-0332.0	005.6	208.9	001.2000	-0032.2	030.5	42.79	
289.0	000.1000	-0327.7	005.6	209.0	001.2000	-0032.1	030.4	42.83	
290.0	000.1000	-0325.2	005.6	209.0	001.2000	-0032.0	030.3	42.88	
291.0	000.1000	-0325.1	005.6	209.0	001.2000	-0031.9	030.2	42.93	
292.0	000.1000	-0326.9	005.6	209.1	001.2000	-0031.8	030.1	42.97	
293.0	000.1000	-0330.6	005.6	209.1	001.2000	-0031.8	030.0	43.02	
294.0	000.1000	-0335.0	005.6	209.1	001.2000	-0031.7	029.9	43.07	
295.0	000.1000	-0340.2	005.6	209.1	001.2000	-0031.7	029.8	43.11	
296.0	000.1000	-0345.6	005.6	209.1	001.2000	-0031.6	029.7	43.16	
297.0	000.1000	-0351.9	005.6	209.1	001.2000	-0031.6	029.7	43.21	
298.0	000.1000	-0358.9	005.6	209.1	001.2000	-0031.6	029.6	43.26	
299.0	000.1000	-0366.4	005.6	209.1	001.2000	-0031.6	029.5	43.31	
300.0	000.1000	-0373.7	005.6	209.1	001.2000	-0031.6	029.4	43.36	
301.0	000.1000	-0378.6	005.6	209.1	001.2000	-0031.6	029.3	43.41	
302.0	000.1000	-0382.5	005.6	209.1	001.2000	-0031.6	029.2	43.46	
303.0	000.1000	-0385.3	005.6	209.1	001.2000	-0031.6	029.1	43.52	
304.0	000.1000	-0387.1	005.6	209.1	001.2000	-0031.7	029.0	43.57	
305.0	000.1000	-0388.0	005.6	209.1	001.2000	-0031.8	028.9	43.62	
306.0	000.1000	-0386.9	005.6	209.1	001.2000	-0031.8	028.8	43.67	
307.0	000.1000	-0383.8	005.6	209.0	001.2000	-0031.9	028.7	43.72	
308.0	000.1000	-0378.2	005.6	209.0	001.2000	-0032.0	028.6	43.78	
309.0	000.1000	-0371.5	005.6	209.0	001.2000	-0032.1	028.5	43.83	
310.0	000.1000	-0366.0	005.6	208.9	001.2000	-0032.2	028.4	43.88	
311.0	000.1000	-0363.3	005.6	208.9	001.2000	-0032.3	028.3	43.94	
312.0	000.1000	-0364.0	005.6	208.9	001.2000	-0032.4	028.2	43.99	
313.0	000.1000	-0367.2	005.6	208.8	001.2000	-0032.5	028.1	44.04	
314.0	000.1000	-0371.5	005.6	208.8	001.2000	-0032.6	028.0	44.10	
315.0	000.1000	-0373.9	005.6	208.7	001.2000	-0032.6	027.9	44.15	
316.0	000.1000	-0373.9	005.6	208.6	001.2000	-0032.7	027.8	44.21	
317.0	000.1000	-0374.4	005.6	208.6	001.2000	-0032.8	027.7	44.26	
318.0	000.1000	-0377.3	005.6	208.5	001.2000	-0032.9	027.6	44.31	
319.0	000.1000	-0380.5	005.6	208.4	001.2000	-0033.0	027.5	44.37	
320.0	000.1000	-0381.7	005.6	208.4	001.2000	-0033.1	027.4	44.42	
321.0	000.1000	-0379.2	005.6	208.3	001.2000	-0033.1	027.3	44.48	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
322.0	000.1000	-0373.0	005.6	208.2	001.2000	-0033.2	027.3	44.53
323.0	000.1000	-0366.8	005.6	208.1	001.2000	-0033.2	027.2	44.58
324.0	000.1000	-0365.4	005.6	208.0	001.2000	-0033.2	027.1	44.64
325.0	000.1000	-0367.6	005.6	207.9	001.2000	-0033.2	027.0	44.69
326.0	000.1000	-0369.9	005.6	207.8	001.2000	-0033.1	026.9	44.74
327.0	000.1000	-0371.1	005.6	207.7	001.2000	-0033.0	026.8	44.79
328.0	000.1000	-0373.2	005.6	207.6	001.2000	-0032.9	026.7	44.85
329.0	000.1000	-0376.5	005.6	207.5	001.2000	-0032.8	026.6	44.90
330.0	000.1000	-0379.2	005.6	207.4	001.2000	-0032.7	026.6	44.95
331.0	000.1000	-0382.0	005.6	207.3	001.2000	-0032.5	026.5	45.00
332.0	000.1000	-0388.9	005.6	207.2	001.2000	-0032.2	026.4	45.05
333.0	000.1000	-0401.3	005.6	207.1	001.2000	-0031.8	026.3	45.10
334.0	000.1000	-0416.4	005.6	206.9	001.2000	-0031.4	026.2	45.15
335.0	000.1000	-0430.6	005.6	206.8	001.2000	-0030.9	026.2	45.20
336.0	000.1000	-0442.0	005.6	206.7	001.2000	-0030.3	026.1	45.25
337.0	000.1000	-0450.4	005.6	206.5	001.2000	-0029.5	026.0	45.30
338.0	000.1000	-0455.6	005.6	206.4	001.2000	-0028.8	025.9	45.34
339.0	000.1000	-0459.5	005.6	206.2	001.2000	-0027.8	025.9	45.39
340.0	000.1000	-0461.6	005.6	206.1	001.2000	-0026.7	025.8	45.44
341.0	000.1000	-0459.3	005.6	205.9	001.2000	-0025.5	025.7	45.48
342.0	000.1000	-0450.7	005.6	205.8	001.2000	-0024.3	025.7	45.53
343.0	000.1000	-0440.2	005.6	205.6	001.2000	-0022.8	025.6	45.57
344.0	000.1000	-0434.5	005.6	205.5	001.2000	-0021.3	025.5	45.61
345.0	000.1000	-0432.3	005.6	205.3	001.2000	-0019.7	025.5	45.66
346.0	000.1000	-0434.3	005.6	205.1	001.2000	-0017.9	025.4	45.70
347.0	000.1000	-0437.0	005.6	204.9	001.2000	-0016.1	025.3	45.74
348.0	000.1000	-0437.4	005.6	204.8	001.2000	-0014.2	025.3	45.78
349.0	000.1000	-0431.6	005.6	204.6	001.2000	-0012.3	025.2	45.81
350.0	000.1000	-0424.3	005.6	204.4	001.2000	-0010.3	025.2	45.85
351.0	000.1000	-0416.0	005.6	204.2	001.2000	-0008.4	025.1	45.89
352.0	000.1000	-0409.4	005.6	204.0	001.2000	-0006.6	025.0	45.92
353.0	000.1000	-0402.1	005.6	203.8	001.2000	-0004.9	025.0	45.96
354.0	000.1000	-0393.7	005.6	203.6	001.2000	-0003.3	024.9	45.99
355.0	000.1000	-0385.4	005.6	203.4	001.2000	-0001.8	024.9	46.02
356.0	000.1000	-0376.2	005.6	203.2	001.2000	-0000.6	024.9	46.05
357.0	000.1000	-0364.5	005.6	203.0	001.2000	0000.6	024.8	46.08
358.0	000.1000	-0353.4	005.6	202.8	001.2000	0001.5	024.8	46.11
359.0	000.1000	-0345.6	005.6	202.6	001.2000	0002.3	024.7	46.14
000.0	000.1000	-0338.5	005.6	202.4	001.2000	0002.9	024.7	46.17
001.0	000.1000	-0331.3	005.6	202.2	001.2000	0003.2	024.7	46.19
002.0	000.1000	-0323.8	005.6	202.0	001.2000	0003.5	024.6	46.21
003.0	000.1000	-0316.5	005.6	201.8	001.2000	0003.5	024.6	46.24
004.0	000.1000	-0312.2	005.6	201.6	001.2000	0003.3	024.6	46.26
005.0	000.1000	-0315.4	005.6	201.3	001.2000	0003.1	024.5	46.28
006.0	000.1000	-0320.6	005.6	201.1	001.2000	0002.7	024.5	46.29
007.0	000.1000	-0328.1	005.6	200.9	001.2000	0002.3	024.5	46.31
008.0	000.1000	-0334.1	005.6	200.7	001.2000	0001.9	024.5	46.33
009.0	000.1000	-0341.2	005.6	200.4	001.2000	0001.4	024.4	46.34
010.0	000.1000	-0347.7	005.6	200.2	001.2000	0000.9	024.4	46.35
011.0	000.1000	-0354.0	005.6	200.0	001.2000	0000.5	024.4	46.36
012.0	000.1000	-0356.9	005.6	199.8	001.2000	0000.1	024.4	46.37

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
013.0	000.1000	-0356.5	005.6	199.5	001.2000	-0000.4	024.4	46.38
014.0	000.1000	-0355.1	005.6	199.3	001.2000	-0000.8	024.4	46.39
015.0	000.1000	-0352.6	005.6	199.1	001.2000	-0001.2	024.4	46.39
016.0	000.1000	-0348.5	005.6	198.8	001.2000	-0001.5	024.4	46.40
017.0	000.1000	-0343.6	005.6	198.6	001.2000	-0001.8	024.3	46.40
018.0	000.1000	-0338.6	005.6	198.4	001.2000	-0002.0	024.3	46.40
019.0	000.1000	-0333.4	005.6	198.2	001.2000	-0002.0	024.3	46.40
020.0	000.1000	-0329.4	005.6	197.9	001.2000	-0001.9	024.3	46.40
021.0	000.1000	-0326.8	005.6	197.7	001.2000	-0001.7	024.4	46.40
022.0	000.1000	-0323.0	005.6	197.5	001.2000	-0001.5	024.4	46.39
023.0	000.1000	-0317.4	005.6	197.2	001.2000	-0001.1	024.4	46.39
024.0	000.1000	-0312.3	005.6	197.0	001.2000	-0000.6	024.4	46.38
025.0	000.1000	-0307.6	005.6	196.8	001.2000	-0000.1	024.4	46.37
026.0	000.1000	-0303.3	005.6	196.5	001.2000	0000.5	024.4	46.36
027.0	000.1000	-0299.0	005.6	196.3	001.2000	0001.1	024.4	46.35
028.0	000.1000	-0294.7	005.6	196.1	001.2000	0001.7	024.4	46.33
029.0	000.1000	-0291.6	005.6	195.9	001.2000	0002.4	024.5	46.32
030.0	000.1000	-0291.5	005.6	195.6	001.2000	0003.4	024.5	46.30
031.0	000.1000	-0293.5	005.6	195.4	001.2000	0004.5	024.5	46.28
032.0	000.1000	-0294.8	005.6	195.2	001.2000	0005.9	024.5	46.27
033.0	000.1000	-0294.4	005.6	195.0	001.2000	0007.6	024.6	46.25
034.0	000.1000	-0292.4	005.6	194.8	001.2000	0009.6	024.6	46.22
035.0	000.1000	-0288.0	005.6	194.5	001.2000	0011.6	024.6	46.20
036.0	000.1000	-0280.5	005.6	194.3	001.2000	0013.8	024.7	46.18
037.0	000.1000	-0271.5	005.6	194.1	001.2000	0016.0	024.7	46.15
038.0	000.1000	-0264.4	005.6	193.9	001.2000	0018.4	024.8	46.12
039.0	000.1000	-0259.6	005.6	193.7	001.2000	0020.8	024.8	46.10
040.0	000.1000	-0255.3	005.6	193.5	001.2000	0023.3	024.8	46.07
041.0	000.1000	-0249.1	005.6	193.3	001.2000	0025.8	024.9	46.04
042.0	000.1000	-0240.1	005.6	193.1	001.2000	0028.4	024.9	46.01
043.0	000.1000	-0229.5	005.6	192.9	001.2000	0031.1	025.0	46.25
044.0	000.1000	-0220.1	005.6	192.7	001.2000	0033.7	025.0	46.84
045.0	000.1000	-0215.1	005.6	192.5	001.2000	0036.3	025.1	47.40
046.0	000.1000	-0213.9	005.6	192.3	001.2000	0038.9	025.1	47.93
047.0	000.1000	-0212.8	005.6	192.2	001.2000	0041.4	025.2	48.44
048.0	000.1000	-0207.9	005.6	192.0	001.2000	0043.8	025.2	48.92
049.0	000.1000	-0197.6	005.6	191.8	001.2000	0046.4	025.3	49.39
050.0	000.1000	-0184.2	005.6	191.6	001.2000	0048.9	025.4	49.83
051.0	000.1000	-0171.8	005.6	191.4	001.2000	0051.4	025.4	50.24
052.0	000.1000	-0164.1	005.6	191.3	001.2000	0053.9	025.5	50.62
053.0	000.1000	-0160.6	005.6	191.1	001.2000	0056.4	025.6	50.97
054.0	000.1000	-0159.9	005.6	190.9	001.2000	0058.9	025.6	51.28
055.0	000.1000	-0158.0	005.6	190.8	001.2000	0061.3	025.7	51.56
056.0	000.1000	-0153.9	005.6	190.6	001.2000	0063.7	025.8	51.81
057.0	000.1000	-0147.6	005.6	190.5	001.2000	0065.8	025.8	52.04
058.0	000.1000	-0142.1	005.6	190.3	001.2000	0068.0	025.9	52.26
059.0	000.1000	-0137.5	005.6	190.2	001.2000	0070.1	026.0	52.46
060.0	000.1000	-0131.0	005.6	190.0	001.2000	0072.0	026.1	52.65
061.0	000.1000	-0121.4	005.6	189.9	001.2000	0073.9	026.1	52.82
062.0	000.1000	-0109.7	005.6	189.8	001.2000	0075.7	026.2	52.98
063.0	000.1000	-0099.5	005.6	189.6	001.2000	0077.3	026.3	53.11

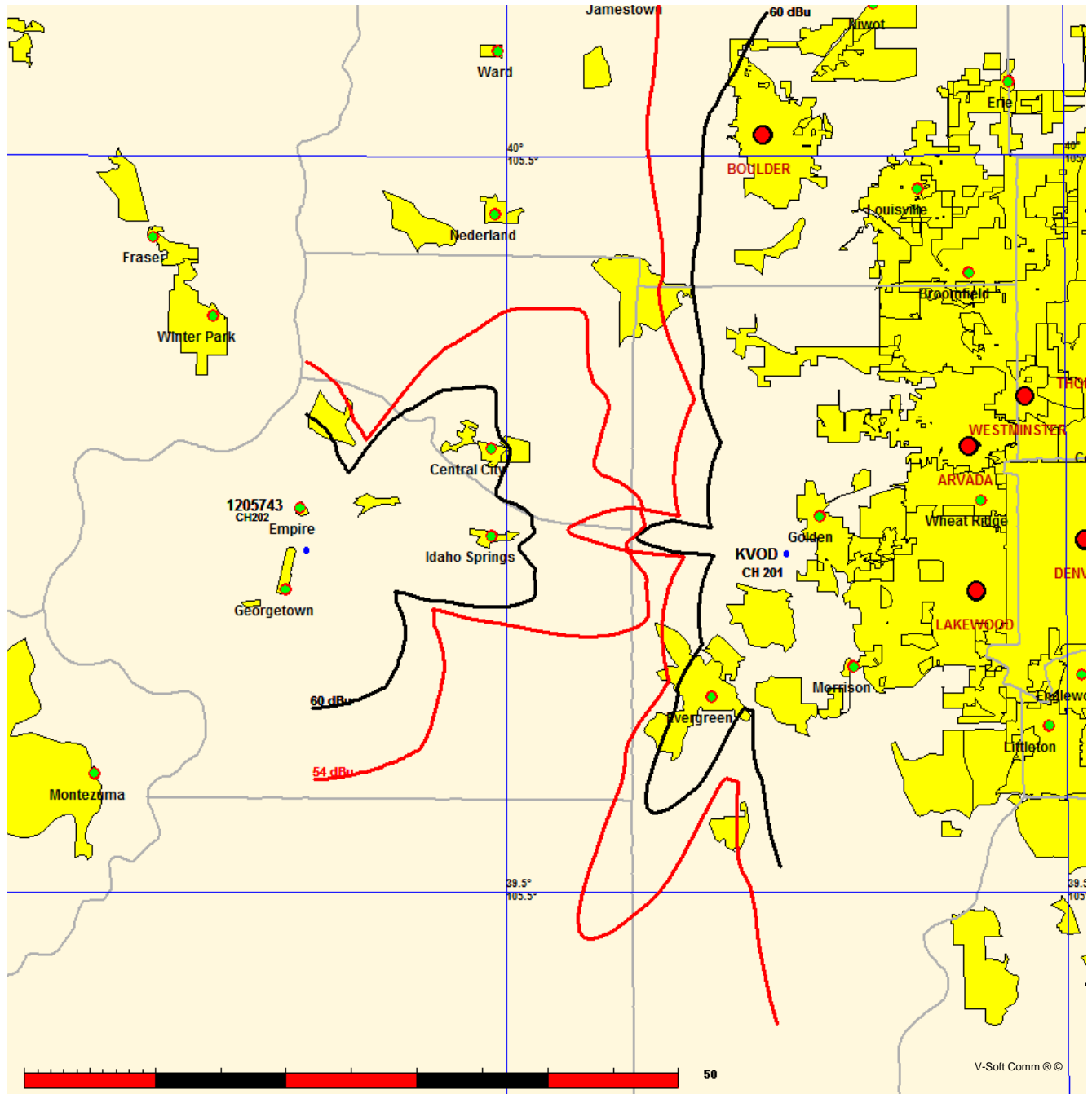
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
064.0	000.1000	-0092.3	005.6	189.5	001.2000	0078.8	026.4	53.24
065.0	000.1000	-0087.2	005.6	189.4	001.2000	0080.2	026.4	53.35
066.0	000.1000	-0083.5	005.6	189.3	001.2000	0081.6	026.5	53.45
067.0	000.1000	-0078.6	005.6	189.2	001.2000	0082.9	026.6	53.54
068.0	000.1000	-0071.6	005.6	189.1	001.2000	0084.2	026.7	53.63
069.0	000.1000	-0065.0	005.6	188.9	001.2000	0085.4	026.8	53.71
070.0	000.1000	-0063.7	005.6	188.8	001.2000	0086.6	026.9	53.78
071.0	000.1000	-0063.8	005.6	188.7	001.2000	0087.8	026.9	53.85
072.0	000.1000	-0064.1	005.6	188.6	001.2000	0088.9	027.0	53.91
073.0	000.1000	-0063.3	005.6	188.6	001.2000	0090.0	027.1	53.97
074.0	000.1000	-0060.8	005.6	188.5	001.2000	0091.0	027.2	54.02** 0.03
075.0	000.1000	-0054.6	005.6	188.4	001.2000	0092.0	027.3	54.06** 0.09
076.0	000.1000	-0041.2	005.6	188.3	001.2000	0092.9	027.4	54.09** 0.15
077.0	000.1000	-0020.7	005.6	188.2	001.2000	0093.8	027.5	54.12** 0.19
078.0	000.1000	-0003.4	005.6	188.2	001.2000	0094.6	027.6	54.14** 0.23
079.0	000.1000	0005.3	005.6	188.1	001.2000	0095.3	027.7	54.16** 0.25
080.0	000.1000	0007.2	005.6	188.0	001.2000	0096.0	027.8	54.17** 0.27
081.0	000.1000	0010.6	005.6	188.0	001.2000	0096.6	027.9	54.17** 0.27
082.0	000.1000	0020.0	005.6	187.9	001.2000	0097.2	028.0	54.17** 0.27
083.0	000.1000	0034.3	006.0	187.2	001.2000	0102.4	028.0	54.65** 1.07
084.0	000.1000	0044.1	006.8	185.5	001.2000	0109.4	027.9	55.29** 2.17
085.0	000.1000	0048.5	007.1	184.8	001.2000	0113.1	027.9	55.55** 2.64
086.0	000.1000	0055.5	007.7	183.6	001.2000	0119.7	028.0	56.01** 3.50
087.0	000.1000	0067.0	008.4	182.0	001.2000	0127.5	028.0	56.49** 4.44
088.0	000.1000	0077.9	009.1	180.6	001.2000	0144.6	028.2	57.53** 6.46
089.0	000.1000	0088.3	009.7	179.4	001.2000	0158.6	028.3	58.30** 7.90
090.0	000.1000	0086.6	009.6	179.6	001.2000	0157.2	028.5	58.11** 7.58
091.0	000.1000	0078.7	009.2	180.5	001.2000	0146.1	028.6	57.33** 6.15
092.0	000.1000	0070.9	008.7	181.5	001.2000	0134.3	028.8	56.48** 4.57
093.0	000.1000	0063.5	008.2	182.4	001.2000	0124.5	028.9	55.75** 3.17
094.0	000.1000	0053.9	007.5	183.8	001.2000	0119.2	029.1	55.32** 2.37
095.0	000.1000	0040.6	006.5	185.8	001.2000	0108.3	029.2	54.42** 0.72
096.0	000.1000	0027.6	005.6	187.5	001.2000	0100.7	029.3	53.68
097.0	000.1000	0021.5	005.6	187.5	001.2000	0100.8	029.4	53.63
098.0	000.1000	0020.6	005.6	187.5	001.2000	0100.8	029.5	53.57
099.0	000.1000	0022.8	005.6	187.5	001.2000	0100.7	029.6	53.51
100.0	000.1000	0027.8	005.6	187.5	001.2000	0100.7	029.7	53.45
101.0	000.1000	0035.5	006.1	186.7	001.2000	0104.8	029.8	53.74
102.0	000.1000	0043.4	006.7	185.4	001.2000	0109.7	030.0	54.05** 0.10
103.0	000.1000	0048.1	007.1	184.8	001.2000	0113.1	030.2	54.23** 0.42
104.0	000.1000	0046.6	007.0	185.0	001.2000	0111.4	030.3	54.04** 0.08
105.0	000.1000	0045.4	006.9	185.3	001.2000	0110.4	030.4	53.91
106.0	000.1000	0045.1	006.9	185.3	001.2000	0110.1	030.5	53.82
107.0	000.1000	0048.1	007.1	184.9	001.2000	0112.0	030.7	53.88
108.0	000.1000	0052.4	007.4	184.4	001.2000	0116.0	030.9	54.07** 0.13

## Contour-to-contour Map

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 0.0 km, Out= 2.69 km)

KVOD CH 201 C3 DA  
Lat= 39 43 49.0, Lng= 105 15 00.0  
2.1 kW 275 M HAAT, 2333.6 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

1205743 CH 202 A DA BNPED20071019AIY  
Lat= 39 43 56.0, Lng= 105 40 38.0  
2.0 kW -195 M HAAT, 3018 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

1205743 BNPED20071019AIY

Channel = 202A

Max ERP = 2 kW

RCAMSL = 3018 M

N. Lat. 39 43 56.0

W. Lng. 105 40 38.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
210.0	001.3313	0114.9	021.4	125.9	000.6562	0027.6	032.0	39.54	
211.0	001.2714	0107.7	020.5	124.4	000.5759	0025.5	031.6	39.15	
212.0	001.2142	0098.1	019.4	122.2	000.4729	-0001.8	031.2	38.46	
213.0	001.1595	0087.7	018.0	119.7	000.3734	-0015.2	030.9	37.56	
214.0	001.1073	0077.7	016.6	117.0	000.3357	-0006.7	030.7	37.18	
215.0	001.0575	0068.2	015.2	114.5	000.3017	0028.1	030.6	36.76	
216.0	001.0099	0061.2	014.3	112.7	000.2788	0053.6	030.5	41.17	
217.0	000.9644	0057.5	013.8	111.5	000.2649	0063.8	030.4	42.42	
218.0	000.9210	0055.9	013.4	110.8	000.2560	0071.7	030.3	43.32	
219.0	000.8796	0054.9	013.2	110.2	000.2488	0079.7	030.2	44.21	
220.0	000.8400	0052.1	012.7	109.2	000.2392	0098.2	030.1	46.00	
221.0	000.8022	0045.6	011.8	107.4	000.2224	0136.9	030.3	48.46	
222.0	000.7661	0035.5	010.3	104.7	000.1991	0181.1	030.7	50.23	
223.0	000.7316	0026.8	009.4	103.1	000.1860	0203.8	031.0	50.78	
224.0	000.6987	0023.1	009.3	102.8	000.1833	0208.4	030.9	50.96	
225.0	000.6672	0023.6	009.2	102.5	000.1807	0212.5	030.8	51.11	
226.0	000.6372	0025.9	009.1	102.1	000.1780	0216.2	030.7	51.24	
227.0	000.6085	0026.3	009.0	101.8	000.1753	0219.6	030.7	51.35	
228.0	000.5811	0022.6	008.9	101.5	000.1727	0222.6	030.6	51.44	
229.0	000.5550	0015.5	008.7	101.1	000.1701	0225.1	030.5	51.51	
230.0	000.5300	0005.7	008.6	100.8	000.1675	0227.2	030.5	51.55	
231.0	000.5062	-0005.6	008.5	100.5	000.1649	0229.0	030.4	51.58	
232.0	000.4834	-0017.8	008.4	100.1	000.1624	0230.4	030.4	51.59	
233.0	000.4616	-0030.2	008.3	099.8	000.1601	0231.7	030.4	51.60	
234.0	000.4408	-0041.0	008.2	099.5	000.1581	0232.9	030.3	51.60	
235.0	000.4210	-0050.4	008.1	099.1	000.1560	0233.6	030.3	51.59	
236.0	000.4020	-0059.9	008.0	098.8	000.1540	0234.2	030.3	51.57	
237.0	000.3840	-0072.5	007.9	098.5	000.1521	0234.9	030.3	51.55	
238.0	000.3667	-0089.4	007.8	098.2	000.1502	0235.7	030.2	51.54	
239.0	000.3502	-0109.2	007.7	097.9	000.1483	0236.7	030.2	51.52	
240.0	000.3344	-0127.6	007.6	097.6	000.1465	0237.6	030.2	51.51	
241.0	000.3194	-0140.8	007.5	097.3	000.1446	0238.4	030.2	51.48	
242.0	000.3050	-0147.0	007.5	097.0	000.1429	0239.5	030.2	51.47	
243.0	000.2913	-0145.0	007.4	096.7	000.1412	0240.6	030.2	51.46	
244.0	000.2782	-0137.9	007.3	096.4	000.1395	0241.2	030.2	51.42	
245.0	000.2656	-0129.0	007.2	096.1	000.1378	0241.6	030.2	51.38	
246.0	000.2537	-0122.6	007.1	095.8	000.1362	0243.1	030.2	51.38	



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
247.0	000.2423	-0118.2	007.0	095.5	000.1346	0244.8	030.2	51.38
248.0	000.2314	-0112.5	007.0	095.2	000.1330	0246.7	030.2	51.38
249.0	000.2209	-0104.1	006.9	095.0	000.1314	0248.6	030.3	51.38
250.0	000.2110	-0093.4	006.8	094.7	000.1299	0250.2	030.3	51.38
251.0	000.2015	-0079.9	006.7	094.4	000.1285	0251.1	030.3	51.34
252.0	000.1924	-0066.0	006.6	094.2	000.1270	0251.0	030.3	51.27
253.0	000.1838	-0053.4	006.6	093.9	000.1256	0250.0	030.3	51.17
254.0	000.1755	-0043.1	006.5	093.7	000.1242	0248.7	030.4	51.07
255.0	000.1676	-0036.4	006.4	093.4	000.1229	0247.4	030.4	50.96
256.0	000.1601	-0031.1	006.3	093.2	000.1215	0245.8	030.4	50.84
257.0	000.1529	-0024.9	006.3	092.9	000.1203	0244.5	030.5	50.73
258.0	000.1460	-0020.6	006.2	092.7	000.1190	0244.4	030.5	50.66
259.0	000.1394	-0015.0	006.1	092.5	000.1178	0244.3	030.6	50.59
260.0	000.1331	-0006.9	006.1	092.3	000.1166	0244.2	030.6	50.51
261.0	000.1271	-0001.1	006.0	092.0	000.1154	0244.1	030.7	50.44
262.0	000.1214	-0001.7	005.9	091.8	000.1143	0244.0	030.7	50.37
263.0	000.1160	-0005.2	005.8	091.6	000.1132	0243.9	030.8	50.30
264.0	000.1107	-0011.9	005.8	091.4	000.1121	0243.8	030.8	50.23
265.0	000.1057	-0009.1	005.7	091.2	000.1111	0243.8	030.9	50.15
266.0	000.1010	-0001.1	005.7	091.0	000.1101	0243.7	030.9	50.08
267.0	000.0964	0003.6	005.6	090.8	000.1091	0243.6	031.0	50.01
268.0	000.0921	0018.9	005.5	090.6	000.1081	0243.5	031.0	49.94
269.0	000.0880	0037.8	006.1	090.5	000.1074	0243.5	030.5	50.21
270.0	000.0840	0056.7	007.4	090.3	000.1065	0243.4	029.1	50.95
271.0	000.0840	0075.8	008.6	090.0	000.1050	0243.3	028.0	51.62
272.0	000.0840	0092.3	009.5	089.7	000.1042	0243.1	027.1	52.18
273.0	000.0840	0104.6	010.1	089.2	000.1035	0242.9	026.5	52.53
274.0	000.0840	0118.8	010.7	088.7	000.1026	0246.6	025.9	53.03
275.0	000.0840	0132.3	011.3	088.2	000.1016	0253.7	025.3	53.59
276.0	000.0840	0137.0	011.5	087.7	000.1006	0261.3	025.2	53.92
277.0	000.0840	0134.6	011.4	087.2	000.0999	0267.7	025.3	53.99
278.0	000.0840	0130.7	011.2	086.9	000.0992	0273.3	025.5	54.00**
279.0	000.0840	0123.7	010.9	086.6	000.0987	0277.7	025.8	53.88
280.0	000.0880	0117.3	010.8	086.2	000.0981	0282.9	026.0	53.89
281.0	000.0921	0109.2	010.5	086.0	000.0976	0286.0	026.3	53.78
282.0	000.0964	0101.8	010.3	085.7	000.0972	0287.5	026.5	53.62
283.0	000.1010	0093.9	010.0	085.5	000.0969	0288.0	026.9	53.40
284.0	000.1057	0085.7	009.7	085.4	000.0966	0288.0	027.2	53.15
285.0	000.1107	0078.9	009.4	085.3	000.0964	0287.9	027.5	52.93
286.0	000.1160	0068.7	008.9	085.3	000.0965	0288.0	028.1	52.59
287.0	000.1214	0055.1	008.0	085.6	000.0971	0287.7	028.9	52.08
288.0	000.1271	0038.6	006.7	086.3	000.0983	0281.3	030.2	51.19
289.0	000.1331	0021.5	006.1	086.6	000.0988	0277.2	030.9	50.71
290.0	000.1394	0006.5	006.1	086.4	000.0984	0280.7	030.8	50.82
291.0	000.1460	-0004.7	006.2	086.2	000.0979	0284.2	030.8	50.92
292.0	000.1529	-0011.4	006.3	085.9	000.0975	0286.5	030.8	50.98
293.0	000.1601	-0015.1	006.3	085.7	000.0971	0287.7	030.8	51.00
294.0	000.1676	-0017.4	006.4	085.4	000.0967	0288.0	030.8	51.00
295.0	000.1755	-0020.2	006.5	085.2	000.0962	0287.7	030.8	50.98
296.0	000.1838	-0025.8	006.6	084.9	000.0958	0287.0	030.8	50.94
297.0	000.1924	-0035.8	006.6	084.7	000.0953	0286.6	030.7	50.91

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
298.0	000.2015	-0050.5	006.7	084.4	000.0949	0286.7	030.7	50.89
299.0	000.2110	-0069.2	006.8	084.1	000.0944	0287.0	030.7	50.88
300.0	000.2209	-0087.6	006.9	083.9	000.0939	0287.6	030.8	50.87
301.0	000.2314	-0101.6	007.0	083.6	000.0935	0288.5	030.8	50.88
302.0	000.2423	-0107.5	007.0	083.3	000.0930	0289.8	030.8	50.89
303.0	000.2537	-0107.4	007.1	083.0	000.0925	0291.4	030.8	50.90
304.0	000.2656	-0100.9	007.2	082.8	000.0921	0292.8	030.8	50.91
305.0	000.2782	-0089.5	007.3	082.5	000.0916	0293.7	030.8	50.91
306.0	000.2913	-0074.4	007.4	082.2	000.0911	0293.8	030.9	50.87
307.0	000.3050	-0059.8	007.5	081.9	000.0906	0293.6	030.9	50.83
308.0	000.3194	-0051.8	007.5	081.6	000.0901	0293.1	030.9	50.77
309.0	000.3344	-0052.8	007.6	081.3	000.0896	0292.4	030.9	50.71
310.0	000.3502	-0062.4	007.7	081.1	000.0891	0291.6	031.0	50.64
311.0	000.3667	-0076.5	007.8	080.8	000.0886	0290.9	031.0	50.57
312.0	000.3840	-0091.3	007.9	080.5	000.0881	0289.9	031.1	50.49
313.0	000.4020	-0105.4	008.0	080.2	000.0876	0288.4	031.1	50.40
314.0	000.4210	-0119.2	008.1	079.9	000.0874	0286.2	031.2	50.29
315.0	000.4408	-0132.2	008.2	079.6	000.0874	0283.5	031.2	50.18
316.0	000.4616	-0142.0	008.3	079.2	000.0874	0280.6	031.3	50.06
317.0	000.4834	-0143.5	008.4	078.9	000.0875	0277.6	031.4	49.93
318.0	000.5062	-0135.8	008.5	078.6	000.0875	0274.5	031.4	49.80
319.0	000.5300	-0122.3	008.6	078.3	000.0875	0271.3	031.5	49.66
320.0	000.5550	-0107.6	008.7	078.0	000.0875	0268.0	031.6	49.51
321.0	000.5811	-0093.3	008.9	077.7	000.0876	0264.4	031.7	49.36
322.0	000.6085	-0080.2	009.0	077.4	000.0876	0260.6	031.8	49.19
323.0	000.6372	-0067.8	009.1	077.1	000.0876	0256.5	031.9	49.01
324.0	000.6672	-0055.3	009.2	076.8	000.0876	0252.3	032.0	48.82
325.0	000.6987	-0041.5	009.3	076.5	000.0877	0248.0	032.1	48.63
326.0	000.7316	-0025.4	009.4	076.3	000.0877	0243.9	032.2	48.44
327.0	000.7661	-0007.5	009.5	076.0	000.0877	0240.2	032.3	48.25
328.0	000.8022	0009.0	009.6	075.7	000.0877	0237.4	032.4	48.09
329.0	000.8400	0024.0	009.7	075.4	000.0877	0235.1	032.5	47.95
330.0	000.8796	0036.8	010.8	073.5	000.0879	0230.7	032.4	47.85

01-02-2009 FCC NGDC 30 Sec Terrain Data

1205743 BNPED20071019AIY

Channel = 202A

Max ERP = 2 kW

RCAMSL = 3018 M

N. Lat. 39 43 56.0

W. Lng. 105 40 38.0

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
030.0	000.1800	0038.6	007.3	281.5	000.0941	0105.6	033.5	40.88	
031.0	000.1731	0052.7	008.7	283.5	000.1035	0089.2	033.0	40.03	
032.0	000.1663	0070.8	009.9	285.5	000.1136	0073.9	032.4	39.00	
033.0	000.1597	0090.9	011.0	287.4	000.1236	0049.1	032.0	36.21	
034.0	000.1532	0108.9	011.9	288.8	000.1319	0025.0	031.5	32.76	
035.0	000.1469	0122.7	012.5	289.7	000.1372	0011.3	031.2	33.08	
036.0	000.1407	0134.2	012.9	290.3	000.1413	0002.6	030.9	33.35	
037.0	000.1346	0146.2	013.3	291.0	000.1459	-0004.7	030.5	33.65	
038.0	000.1286	0162.0	013.9	292.0	000.1528	-0011.3	030.1	34.04	
039.0	000.1228	0184.8	014.7	293.3	000.1625	-0015.9	029.6	34.53	
040.0	000.1171	0206.3	015.4	294.4	000.1704	-0018.2	029.2	34.95	
041.0	000.1171	0220.5	015.9	295.2	000.1775	-0021.1	028.8	35.35	
042.0	000.1171	0229.2	016.3	295.7	000.1816	-0023.9	028.5	35.64	
043.0	000.1171	0236.7	016.5	296.1	000.1849	-0026.8	028.1	35.92	
044.0	000.1171	0245.7	016.9	296.6	000.1889	-0031.4	027.7	36.23	
045.0	000.1171	0255.4	017.2	297.1	000.1934	-0037.2	027.3	36.56	
046.0	000.1171	0266.3	017.6	297.7	000.1987	-0045.5	026.9	36.92	
047.0	000.1171	0277.5	018.0	298.3	000.2039	-0055.0	026.5	37.29	
048.0	000.1171	0288.2	018.4	298.8	000.2088	-0064.8	026.1	37.65	
049.0	000.1171	0296.8	018.6	299.1	000.2121	-0071.3	025.7	37.97	
050.0	000.1171	0301.2	018.8	299.2	000.2125	-0072.1	025.3	38.21	
051.0	000.1126	0302.3	018.6	298.6	000.2068	-0060.6	025.1	38.26	
052.0	000.1082	0300.7	018.4	297.8	000.1993	-0046.6	024.9	38.23	
053.0	000.1039	0298.9	018.2	296.9	000.1918	-0035.0	024.7	38.19	
054.0	000.0996	0297.2	017.9	296.1	000.1845	-0026.4	024.5	38.14	
055.0	000.0955	0295.8	017.7	295.2	000.1774	-0021.1	024.4	38.07	
056.0	000.0914	0295.8	017.5	294.5	000.1712	-0018.5	024.2	38.03	
057.0	000.0874	0297.0	017.3	293.8	000.1657	-0016.9	024.1	38.01	
058.0	000.0836	0299.8	017.2	293.1	000.1609	-0015.3	023.9	38.01	
059.0	000.0798	0304.0	017.1	292.5	000.1566	-0013.7	023.7	38.03	
060.0	000.0760	0307.5	017.0	291.9	000.1520	-0010.7	023.5	38.01	
061.0	000.0772	0309.2	017.1	291.6	000.1503	-0009.3	023.2	38.19	
062.0	000.0784	0310.1	017.2	291.3	000.1483	-0007.2	022.9	38.34	
063.0	000.0796	0309.5	017.3	290.9	000.1455	-0004.1	022.7	38.44	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
064.0	000.0808	0306.7	017.2	290.4	000.1419	0001.6	022.4	38.49
065.0	000.0820	0300.8	017.1	289.6	000.1371	0011.6	022.3	38.44
066.0	000.0832	0292.6	016.9	288.7	000.1316	0025.8	022.2	38.31
067.0	000.0845	0282.0	016.7	287.7	000.1255	0043.6	022.3	41.26
068.0	000.0857	0270.4	016.3	286.6	000.1192	0060.9	022.3	43.97
069.0	000.0869	0260.6	016.1	285.6	000.1138	0073.4	022.4	45.26
070.0	000.0882	0251.7	015.8	284.6	000.1090	0081.5	022.4	45.97
071.0	000.0881	0244.2	015.6	283.7	000.1043	0087.9	022.5	46.43
072.0	000.0880	0238.4	015.4	282.9	000.1003	0095.2	022.5	46.98
073.0	000.0879	0233.2	015.2	282.0	000.0966	0101.5	022.5	47.40
074.0	000.0879	0229.6	015.1	281.3	000.0934	0106.8	022.5	47.73
075.0	000.0878	0232.4	015.2	280.8	000.0912	0111.0	022.3	48.13
076.0	000.0877	0240.6	015.4	280.5	000.0898	0113.7	021.9	48.54
077.0	000.0876	0254.7	015.9	280.3	000.0892	0115.0	021.4	49.02
078.0	000.0875	0267.7	016.3	280.1	000.0882	0116.9	020.9	49.52
079.0	000.0874	0278.2	016.7	279.7	000.0866	0119.7	020.5	49.98
080.0	000.0874	0287.3	017.0	279.2	000.0846	0122.6	020.1	50.37
081.0	000.0890	0291.5	017.2	278.5	000.0840	0126.9	019.8	50.87
082.0	000.0907	0293.7	017.4	277.8	000.0840	0131.7	019.5	51.37
083.0	000.0925	0291.6	017.4	277.0	000.0840	0134.7	019.5	51.65
084.0	000.0942	0287.2	017.3	276.1	000.0840	0136.9	019.4	51.81
085.0	000.0959	0287.2	017.4	275.2	000.0840	0134.6	019.3	51.77
086.0	000.0977	0285.8	017.5	274.4	000.0840	0123.8	019.2	51.11
087.0	000.0995	0271.4	017.0	273.3	000.0840	0109.4	019.6	49.77
088.0	000.1013	0256.2	016.6	272.4	000.0840	0095.5	020.0	48.19
089.0	000.1031	0244.1	016.2	271.5	000.0840	0084.2	020.3	46.75
090.0	000.1049	0243.2	016.3	270.7	000.0840	0069.8	020.3	45.16
091.0	000.1100	0243.7	016.5	269.9	000.0845	0054.2	020.1	43.30
092.0	000.1152	0244.1	016.7	269.0	000.0879	0037.9	019.8	40.35
093.0	000.1205	0244.7	017.0	268.1	000.0916	0021.0	019.6	38.76
094.0	000.1260	0250.3	017.4	267.1	000.0960	0004.6	019.3	39.26
095.0	000.1316	0248.4	017.5	266.1	000.1003	-0000.5	019.2	39.52
096.0	000.1373	0242.0	017.5	265.3	000.1044	-0006.5	019.3	39.62
097.0	000.1431	0239.3	017.6	264.3	000.1091	-0013.4	019.2	39.83
098.0	000.1491	0236.3	017.6	263.4	000.1139	-0007.3	019.2	40.02
099.0	000.1551	0233.9	017.7	262.4	000.1191	-0002.9	019.2	40.21
100.0	000.1613	0230.9	017.8	261.5	000.1243	-0000.8	019.3	40.38
101.0	000.1690	0226.0	017.8	260.6	000.1295	-0002.8	019.4	40.48
102.0	000.1769	0217.7	017.7	259.9	000.1338	-0007.8	019.6	40.44
103.0	000.1850	0205.6	017.4	259.4	000.1367	-0011.7	020.0	40.21
104.0	000.1932	0191.3	016.9	259.1	000.1385	-0013.9	020.5	39.86
105.0	000.2016	0176.6	016.5	259.0	000.1395	-0015.1	021.1	39.46
106.0	000.2102	0161.3	015.8	259.1	000.1389	-0014.3	021.8	38.90
107.0	000.2190	0144.1	015.0	259.5	000.1363	-0011.2	022.7	38.16
108.0	000.2279	0125.3	014.0	260.0	000.1330	-0006.8	023.6	37.37
109.0	000.2371	0103.3	012.9	260.8	000.1284	-0001.8	024.7	36.45
110.0	000.2464	0082.9	011.7	261.6	000.1235	-0001.0	025.8	35.53
111.0	000.2583	0069.4	010.9	262.1	000.1209	-0001.9	026.6	34.95
112.0	000.2706	0059.7	010.4	262.4	000.1195	-0002.6	027.2	34.53
113.0	000.2831	0050.0	009.6	262.9	000.1167	-0004.6	028.0	33.99
114.0	000.2958	0036.0	008.1	264.1	000.1102	-0012.5	029.3	33.00

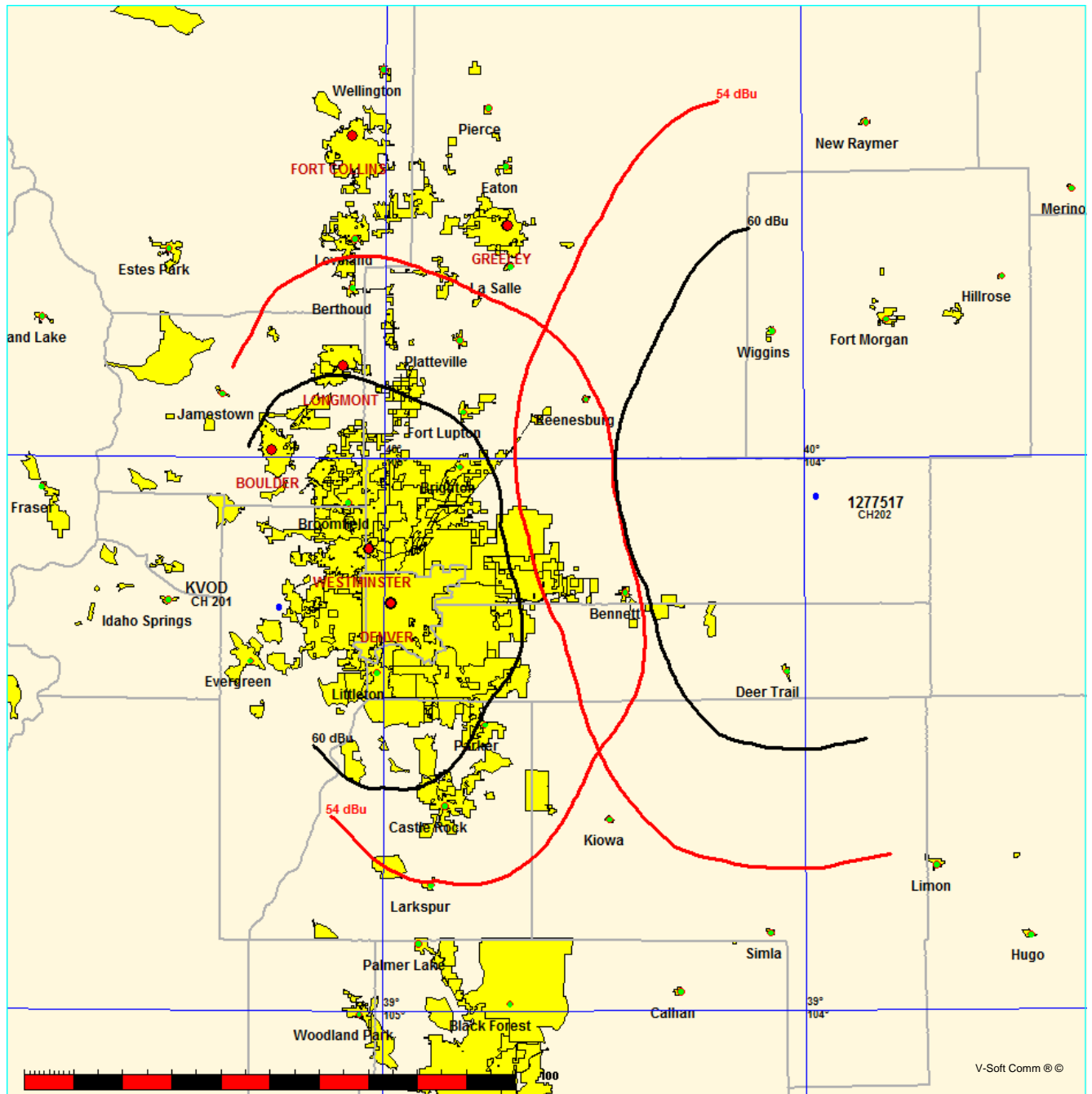
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
115.0	000.3089	0018.6	007.5	264.5	000.1084	-0013.3	029.9	32.64
116.0	000.3222	0003.3	007.6	264.2	000.1099	-0012.9	029.9	32.70
117.0	000.3359	-0006.8	007.6	263.9	000.1114	-0010.9	029.9	32.76
118.0	000.3498	-0013.0	007.7	263.6	000.1130	-0008.5	029.9	32.81
119.0	000.3640	-0014.7	007.8	263.3	000.1146	-0006.5	029.9	32.87
120.0	000.3785	-0014.9	007.9	263.0	000.1162	-0005.0	030.0	32.92
121.0	000.4201	-0012.5	008.1	262.5	000.1188	-0003.1	029.9	33.06
122.0	000.4639	-0004.2	008.3	262.0	000.1214	-0001.7	029.8	33.20
123.0	000.5098	0009.0	008.5	261.5	000.1242	-0000.8	029.7	33.33
124.0	000.5580	0021.7	008.8	261.0	000.1270	-0001.0	029.7	33.45
125.0	000.6083	0029.5	009.0	260.5	000.1299	-0003.2	029.6	33.56
126.0	000.6608	0027.0	009.2	260.1	000.1328	-0006.5	029.6	33.67
127.0	000.7154	0018.6	009.3	259.6	000.1358	-0010.5	029.6	33.78
128.0	000.7723	0009.1	009.5	259.1	000.1388	-0014.3	029.6	33.87
129.0	000.8313	0001.8	009.7	258.6	000.1419	-0017.4	029.6	33.96
130.0	000.8924	-0004.5	009.9	258.1	000.1450	-0019.9	029.6	34.04
131.0	000.9354	-0013.1	010.0	257.8	000.1475	-0021.5	029.7	34.08
132.0	000.9794	-0025.0	010.1	257.4	000.1501	-0023.0	029.8	34.12
133.0	001.0245	-0038.9	010.2	257.0	000.1527	-0024.8	029.9	34.15
134.0	001.0705	-0054.0	010.3	256.7	000.1553	-0026.9	030.0	34.18
135.0	001.1175	-0066.6	010.4	256.3	000.1579	-0029.3	030.1	34.21
136.0	001.1656	-0075.7	010.5	255.9	000.1605	-0031.5	030.2	34.23
137.0	001.2146	-0082.7	010.7	255.6	000.1631	-0033.4	030.3	34.25
138.0	001.2647	-0090.5	010.8	255.3	000.1657	-0035.2	030.4	34.26
139.0	001.3158	-0099.4	010.9	254.9	000.1682	-0036.8	030.5	34.27
140.0	001.3679	-0108.8	011.0	254.6	000.1708	-0038.6	030.6	34.27
141.0	001.4257	-0120.0	011.1	254.3	000.1734	-0040.9	030.8	34.28
142.0	001.4847	-0134.8	011.2	253.9	000.1760	-0043.6	030.9	34.28
143.0	001.5449	-0151.9	011.3	253.6	000.1786	-0046.6	031.1	34.28
144.0	001.6063	-0170.6	011.4	253.3	000.1811	-0049.8	031.2	34.28
145.0	001.6690	-0189.8	011.5	253.0	000.1836	-0053.1	031.4	34.27
146.0	001.7328	-0207.2	011.6	252.7	000.1861	-0056.6	031.5	34.26
147.0	001.7978	-0222.9	011.7	252.5	000.1885	-0060.0	031.7	34.24
148.0	001.8640	-0236.7	011.8	252.2	000.1909	-0063.6	031.9	34.23
149.0	001.9314	-0248.2	011.9	251.9	000.1931	-0067.0	032.0	34.21
150.0	002.0000	-0259.5	012.0	251.7	000.1954	-0070.5	032.2	34.19

## Contour-to-contour Map

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 3.35 km, Out= 0.02 km)

KVOD CH 201 C3 DA  
Lat= 39 43 49.0, Lng= 105 15 00.0  
2.1 kW 275 M HAAT, 2333.6 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

1277517 CH 202 C1 73.215 Z BNPED20071019BCM  
Lat= 39 55 21.9, Lng= 103 58 18.4  
11.0 kW 333.8 M HAAT, 1815 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

1277517 BNPED20071019BCM

Channel = 202C1

Max ERP = 11 kW

RCAMSL = 1815 M

N. Lat. 39 55 21.9

W. Lng. 103 58 18.4

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
018.0	002.1000	0531.7	048.7	285.3	002.8298	0346.4	097.1	42.46	
019.0	002.1000	0532.7	048.7	285.3	002.8299	0346.4	096.2	42.73	
020.0	002.1000	0533.0	048.8	285.2	002.8293	0346.4	095.4	42.98	
021.0	002.1000	0533.3	048.8	285.2	002.8285	0346.4	094.5	43.24	
022.0	002.1000	0533.7	048.8	285.1	002.8276	0346.3	093.7	43.50	
023.0	002.1000	0534.0	048.8	285.1	002.8264	0346.3	092.8	43.75	
024.0	002.1000	0534.5	048.8	285.0	002.8252	0346.3	092.0	44.01	
025.0	002.1000	0535.9	048.9	284.9	002.8244	0346.2	091.1	44.28	
026.0	002.1000	0538.0	049.0	284.9	002.8238	0346.2	090.3	44.55	
027.0	002.1000	0540.5	049.2	284.9	002.8232	0346.2	089.4	44.82	
028.0	002.1000	0543.0	049.3	284.8	002.8224	0346.2	088.6	45.10	
029.0	002.1000	0545.3	049.4	284.8	002.8213	0346.1	087.7	45.37	
030.0	002.1000	0547.0	049.5	284.7	002.8195	0346.1	086.9	45.64	
031.0	002.1000	0548.4	049.6	284.6	002.8174	0346.0	086.0	45.91	
032.0	002.1000	0550.1	049.7	284.4	002.8153	0345.9	085.2	46.19	
033.0	002.1000	0552.5	049.8	284.3	002.8133	0345.8	084.3	46.46	
034.0	002.1000	0556.4	050.0	284.2	002.8118	0345.7	083.4	46.75	
035.0	002.1000	0561.1	050.2	284.2	002.8105	0345.7	082.5	47.04	
036.0	002.1000	0566.5	050.4	284.1	002.8092	0345.6	081.6	47.34	
037.0	002.1000	0572.3	050.7	284.0	002.8078	0345.6	080.7	47.64	
038.0	002.1000	0578.2	051.0	283.9	002.8061	0345.5	079.8	47.94	
039.0	002.1000	0584.3	051.2	283.8	002.8041	0345.4	078.9	48.24	
040.0	002.1000	0590.3	051.4	283.7	002.8017	0345.3	078.0	48.54	
041.0	002.1000	0595.8	051.7	283.5	002.7988	0345.2	077.1	48.84	
042.0	002.1000	0600.4	051.8	283.3	002.7950	0345.1	076.2	49.13	
043.0	002.1000	0604.2	052.0	283.1	002.7906	0345.0	075.4	49.42	
044.0	002.1000	0607.2	052.1	282.8	002.7855	0344.8	074.5	49.70	
045.0	002.1000	0610.1	052.2	282.5	002.7801	0344.7	073.7	49.98	
046.0	002.1000	0612.8	052.3	282.1	002.7742	0344.5	072.9	50.25	
047.0	002.1000	0614.8	052.4	281.8	002.7642	0344.4	072.1	50.51	
048.0	002.1000	0615.9	052.4	281.3	002.7511	0344.2	071.4	50.75	
049.0	002.1000	0615.9	052.4	280.9	002.7366	0344.0	070.7	50.97	
050.0	002.1000	0616.0	052.4	280.4	002.7217	0343.7	069.9	51.19	
051.0	002.0720	0616.0	052.3	279.8	002.7034	0343.4	069.3	51.37	
052.0	002.0441	0615.9	052.1	279.2	002.6846	0343.1	068.8	51.54	
053.0	002.0164	0615.7	052.0	278.6	002.6653	0342.8	068.2	51.69	
054.0	001.9889	0615.8	051.9	278.0	002.6457	0342.6	067.7	51.84	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
055.0	001.9617	0616.3	051.8	277.4	002.6259	0342.3	067.2	51.99
056.0	001.9346	0616.8	051.6	276.7	002.6056	0342.1	066.7	52.13
057.0	001.9076	0617.4	051.5	276.1	002.5851	0342.0	066.2	52.27
058.0	001.8809	0618.0	051.4	275.4	002.5641	0342.0	065.7	52.39
059.0	001.8544	0619.0	051.3	274.7	002.5429	0342.0	065.3	52.52
060.0	001.8280	0620.4	051.2	274.0	002.5216	0342.0	064.9	52.63
061.0	001.7759	0621.9	051.0	273.2	002.4980	0341.9	064.6	52.69
062.0	001.7245	0623.1	050.7	272.4	002.4741	0341.8	064.3	52.74
063.0	001.6739	0624.1	050.5	271.6	002.4507	0341.7	064.1	52.76
064.0	001.6240	0624.8	050.2	270.8	002.4280	0341.5	064.0	52.77
065.0	001.5749	0625.2	049.9	270.0	002.4052	0341.2	063.9	52.76
066.0	001.5265	0624.9	049.6	269.2	002.3822	0340.9	063.8	52.73
067.0	001.4789	0624.0	049.3	268.3	002.3591	0340.6	063.8	52.68
068.0	001.4321	0622.1	048.9	267.5	002.3360	0340.4	063.9	52.60
069.0	001.3860	0619.6	048.5	266.7	002.3131	0340.0	064.0	52.50
070.0	001.3406	0616.8	048.0	265.8	002.2905	0339.5	064.2	52.37
071.0	001.3403	0614.4	047.9	265.1	002.2703	0339.0	064.1	52.36
072.0	001.3400	0612.4	047.9	264.3	002.2502	0338.5	064.0	52.34
073.0	001.3396	0611.3	047.8	263.6	002.2303	0338.1	063.9	52.33
074.0	001.3393	0610.6	047.8	262.8	002.2104	0337.7	063.8	52.31
075.0	001.3390	0609.8	047.8	262.1	002.1906	0337.4	063.7	52.29
076.0	001.3386	0608.7	047.7	261.3	002.1881	0337.3	063.6	52.29
077.0	001.3383	0607.4	047.7	260.6	002.1881	0337.1	063.6	52.29
078.0	001.3380	0606.3	047.6	259.8	002.1881	0336.9	063.7	52.27
079.0	001.3376	0605.3	047.6	259.1	002.1881	0336.6	063.7	52.25
080.0	001.3373	0604.7	047.6	258.3	002.1881	0336.4	063.7	52.23
081.0	001.3636	0604.2	047.7	257.6	002.1881	0336.3	063.6	52.27
082.0	001.3901	0604.0	047.9	256.8	002.1881	0336.1	063.5	52.30
083.0	001.4169	0603.6	048.1	256.1	002.1881	0335.9	063.4	52.32
084.0	001.4439	0603.1	048.2	255.3	002.1881	0335.8	063.4	52.33
085.0	001.4712	0602.8	048.4	254.5	002.1881	0335.7	063.4	52.34
086.0	001.4987	0602.7	048.6	253.7	002.1881	0335.6	063.4	52.33
087.0	001.5265	0602.3	048.8	252.9	002.1881	0335.4	063.4	52.31
088.0	001.5546	0600.9	048.9	252.2	002.1881	0335.1	063.5	52.26
089.0	001.5829	0599.4	049.0	251.4	002.1881	0334.9	063.7	52.21
090.0	001.6115	0598.2	049.1	250.6	002.1881	0334.8	063.8	52.14
091.0	001.6463	0596.9	049.3	249.9	002.1881	0334.6	064.0	52.08
092.0	001.6814	0595.6	049.5	249.1	002.1881	0334.4	064.2	52.01
093.0	001.7169	0593.6	049.6	248.3	002.1881	0334.1	064.4	51.91
094.0	001.7528	0591.1	049.7	247.6	002.1881	0333.8	064.7	51.79
095.0	001.7891	0588.5	049.8	246.9	002.1881	0333.4	065.0	51.66
096.0	001.8257	0585.5	049.9	246.2	002.1881	0333.0	065.4	51.52
097.0	001.8627	0582.3	049.9	245.5	002.1881	0332.6	065.8	51.36
098.0	001.9000	0578.9	050.0	244.9	002.1881	0332.1	066.2	51.19
099.0	001.9378	0575.5	050.0	244.2	002.1881	0331.6	066.7	51.01
100.0	001.9759	0571.9	050.1	243.6	002.1881	0330.9	067.1	50.81
101.0	001.9881	0568.1	050.0	243.0	002.1881	0330.4	067.8	50.57
102.0	002.0004	0564.1	049.9	242.5	002.1881	0329.8	068.4	50.32
103.0	002.0127	0559.5	049.7	242.1	002.1881	0329.2	069.1	50.05
104.0	002.0251	0554.4	049.5	241.6	002.2174	0328.7	069.8	49.83
105.0	002.0375	0548.7	049.3	241.3	002.2494	0328.2	070.6	49.61



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
106.0	002.0499	0542.6	049.0	240.9	002.2784	0327.8	071.3	49.37
107.0	002.0624	0536.7	048.8	240.6	002.3055	0327.4	072.1	49.13
108.0	002.0749	0530.8	048.5	240.3	002.3306	0327.1	073.0	48.87
109.0	002.0874	0525.1	048.3	240.0	002.3544	0326.7	073.8	48.62
110.0	002.1000	0519.5	048.0	239.8	002.3772	0326.4	074.6	48.37
111.0	002.1000	0514.3	047.7	239.5	002.3968	0326.1	075.4	48.11
112.0	002.1000	0509.3	047.4	239.3	002.4154	0325.9	076.2	47.85
113.0	002.1000	0504.5	047.2	239.1	002.4335	0325.7	077.1	47.59
114.0	002.1000	0500.2	046.9	238.9	002.4515	0325.5	077.9	47.34
115.0	002.1000	0497.3	046.8	238.7	002.4724	0325.2	078.6	47.11
116.0	002.1000	0496.5	046.8	238.4	002.4981	0324.9	079.4	46.90
117.0	002.1000	0497.1	046.8	238.0	002.5266	0324.7	080.0	46.72
118.0	002.1000	0498.1	046.8	237.7	002.5555	0324.4	080.7	46.53
119.0	002.1000	0499.6	046.9	237.4	002.5844	0324.2	081.4	46.35
120.0	002.1000	0500.8	047.0	237.1	002.6117	0324.0	082.1	46.16
121.0	002.1000	0501.8	047.0	236.8	002.6371	0323.8	082.8	45.96
122.0	002.1000	0502.9	047.1	236.5	002.6620	0323.7	083.5	45.76
123.0	002.1000	0504.6	047.2	236.3	002.6873	0323.6	084.3	45.56
124.0	002.1000	0506.3	047.3	236.0	002.7120	0323.5	085.0	45.36
125.0	002.1000	0508.1	047.4	235.7	002.7356	0323.4	085.7	45.16
126.0	002.1000	0509.5	047.5	235.5	002.7571	0323.3	086.5	44.95
127.0	002.1000	0510.9	047.5	235.3	002.7774	0323.3	087.3	44.73
128.0	002.1000	0512.1	047.6	235.1	002.7961	0323.2	088.0	44.51
129.0	002.1000	0513.2	047.7	234.9	002.8133	0323.2	088.8	44.29
130.0	002.1000	0514.3	047.7	234.7	002.8295	0323.1	089.6	44.06
131.0	002.1000	0515.1	047.8	234.6	002.8439	0323.0	090.4	43.83
132.0	002.1000	0515.3	047.8	234.4	002.8552	0323.0	091.2	43.59
133.0	002.1000	0514.9	047.7	234.4	002.8635	0322.9	092.1	43.34
134.0	002.1000	0513.5	047.7	234.3	002.8677	0322.9	092.9	43.09
135.0	002.1000	0511.6	047.6	234.3	002.8695	0322.9	093.7	42.83
136.0	002.1000	0509.5	047.5	234.3	002.8697	0322.9	094.6	42.57
137.0	002.1000	0507.2	047.3	234.3	002.8685	0322.9	095.4	42.30
138.0	002.1000	0504.1	047.2	234.3	002.8643	0322.9	096.2	42.04

## 01-02-2009 FCC NGDC 30 Sec Terrain Data

1277517 BNPED20071019BCM

Channel = 202C1

Max ERP = 11 kW

RCAMSL = 1815 M

N. Lat. 39 55 21.9

W. Lng. 103 58 18.4

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
199.0	011.0000	0313.1	051.8	106.3	002.0536	0540.8	096.7	46.76	
200.0	011.0000	0312.6	051.8	106.2	002.0530	0541.1	095.8	47.00	
201.0	011.0000	0312.0	051.8	106.2	002.0522	0541.5	094.9	47.26	
202.0	011.0000	0311.6	051.7	106.1	002.0515	0541.8	094.0	47.53	
203.0	010.6530	0311.5	051.4	105.9	002.0485	0543.3	093.1	47.80	
204.0	010.3115	0311.5	051.1	105.6	002.0453	0544.8	092.3	48.08	
205.0	009.9756	0311.4	050.8	105.4	002.0419	0546.5	091.5	48.36	
206.0	009.6453	0311.3	050.5	105.1	002.0383	0548.3	090.6	48.64	
207.0	009.3205	0311.2	050.2	104.8	002.0345	0550.1	089.8	48.92	
208.0	009.0013	0311.4	049.9	104.4	002.0306	0552.0	089.0	49.19	
209.0	008.6877	0311.9	049.6	104.1	002.0267	0553.7	088.3	49.47	
210.0	008.3796	0312.5	049.3	103.8	002.0225	0555.5	087.5	49.73	
211.0	008.0771	0313.0	049.0	103.4	002.0182	0557.3	086.8	50.00	
212.0	007.7801	0313.5	048.7	103.1	002.0136	0559.1	086.1	50.26	
213.0	007.4633	0314.0	048.3	102.7	002.0086	0561.1	085.4	50.51	
214.0	007.1531	0314.6	048.0	102.2	002.0034	0563.1	084.7	50.76	
215.0	006.8495	0315.3	047.6	101.8	001.9981	0564.9	084.1	50.99	
216.0	006.5524	0316.2	047.3	101.4	001.9927	0566.7	083.4	51.22	
217.0	006.2620	0317.0	046.9	100.9	001.9870	0568.4	082.8	51.44	
218.0	005.9781	0317.6	046.5	100.4	001.9811	0570.3	082.3	51.65	
219.0	005.7008	0318.1	046.1	099.9	001.9728	0572.2	081.7	51.85	
220.0	005.4301	0318.5	045.7	099.4	001.9529	0574.1	081.2	52.01	
221.0	005.1660	0318.9	045.3	098.9	001.9325	0575.9	080.8	52.15	
222.0	004.9085	0319.3	044.9	098.3	001.9118	0577.8	080.3	52.29	
223.0	004.7078	0319.8	044.6	097.8	001.8928	0579.6	079.8	52.43	
224.0	004.5112	0320.3	044.3	097.3	001.8734	0581.4	079.4	52.56	
225.0	004.3189	0320.5	043.9	096.7	001.8534	0583.2	079.0	52.68	
226.0	004.1308	0320.6	043.5	096.2	001.8328	0584.9	078.6	52.79	
227.0	003.9468	0320.6	043.2	095.6	001.8120	0586.7	078.3	52.88	
228.0	003.7670	0320.9	042.8	095.1	001.7911	0588.3	078.0	52.96	
229.0	003.5915	0321.2	042.4	094.5	001.7702	0589.9	077.7	53.03	
230.0	003.4201	0321.5	042.0	093.9	001.7491	0591.4	077.4	53.09	
231.0	003.2529	0321.8	041.6	093.3	001.7278	0592.8	077.2	53.13	
232.0	003.0899	0322.1	041.2	092.7	001.7065	0594.3	077.0	53.17	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
233.0	002.9927	0322.4	041.0	092.2	001.6879	0595.3	076.7	53.23
234.0	002.8971	0322.8	040.8	091.7	001.6693	0596.0	076.5	53.28
235.0	002.8031	0323.2	040.5	091.1	001.6505	0596.8	076.2	53.32
236.0	002.7105	0323.5	040.3	090.6	001.6316	0597.5	076.0	53.35
237.0	002.6196	0323.9	040.0	090.0	001.6128	0598.2	075.8	53.37
238.0	002.5302	0324.6	039.8	089.5	001.5971	0598.8	075.7	53.40
239.0	002.4423	0325.6	039.5	089.0	001.5817	0599.5	075.5	53.42
240.0	002.3560	0326.7	039.3	088.4	001.5664	0600.2	075.3	53.44
241.0	002.2713	0327.9	039.1	087.9	001.5512	0601.1	075.2	53.45
242.0	002.1881	0329.1	038.9	087.3	001.5359	0601.9	075.1	53.46
243.0	002.1881	0330.3	038.9	086.9	001.5234	0602.4	074.8	53.54
244.0	002.1881	0331.4	039.0	086.4	001.5105	0602.6	074.4	53.61
245.0	002.1881	0332.2	039.0	086.0	001.4974	0602.8	074.1	53.68
246.0	002.1881	0332.9	039.1	085.5	001.4840	0602.8	073.9	53.73
247.0	002.1881	0333.5	039.1	085.0	001.4705	0602.8	073.6	53.77
248.0	002.1881	0334.0	039.1	084.5	001.4568	0602.9	073.4	53.81
249.0	002.1881	0334.4	039.2	084.0	001.4429	0603.1	073.2	53.84
250.0	002.1881	0334.7	039.2	083.4	001.4289	0603.4	073.0	53.86
251.0	002.1881	0334.8	039.2	082.9	001.4148	0603.6	072.8	53.87
252.0	002.1881	0335.1	039.2	082.4	001.4007	0603.8	072.6	53.88
253.0	002.1881	0335.4	039.2	081.9	001.3866	0604.0	072.5	53.89
254.0	002.1881	0335.6	039.2	081.3	001.3724	0604.1	072.4	53.88
255.0	002.1881	0335.8	039.2	080.8	001.3582	0604.3	072.3	53.87
256.0	002.1881	0335.9	039.2	080.3	001.3440	0604.6	072.2	53.85
257.0	002.1881	0336.1	039.3	079.7	001.3374	0604.8	072.2	53.85
258.0	002.1881	0336.4	039.3	079.2	001.3376	0605.2	072.1	53.87
259.0	002.1881	0336.6	039.3	078.6	001.3377	0605.6	072.1	53.89
260.0	002.1881	0336.9	039.3	078.1	001.3379	0606.2	072.1	53.90
261.0	002.1881	0337.2	039.3	077.5	001.3381	0606.8	072.1	53.91
262.0	002.1881	0337.4	039.3	077.0	001.3383	0607.5	072.1	53.91
263.0	002.2146	0337.7	039.4	076.4	001.3385	0608.2	072.1	53.94
264.0	002.2414	0338.3	039.6	075.9	001.3387	0608.9	072.0	53.96
265.0	002.2683	0339.0	039.7	075.3	001.3389	0609.5	072.0	53.98
266.0	002.2953	0339.6	039.8	074.8	001.3390	0610.1	072.0	53.99
267.0	002.3225	0340.2	039.9	074.2	001.3392	0610.5	072.0	53.99
268.0	002.3499	0340.5	040.1	073.6	001.3394	0610.9	072.1	53.98
269.0	002.3775	0340.9	040.2	073.1	001.3396	0611.3	072.1	53.97
270.0	002.4051	0341.2	040.3	072.5	001.3398	0611.8	072.2	53.95
271.0	002.4330	0341.6	040.4	071.9	001.3400	0612.5	072.3	53.92
272.0	002.4610	0341.8	040.5	071.4	001.3402	0613.5	072.5	53.90
273.0	002.4913	0341.9	040.6	070.8	001.3404	0614.7	072.6	53.87
274.0	002.5217	0342.0	040.7	070.3	001.3405	0616.1	072.8	53.83
275.0	002.5524	0342.0	040.8	069.7	001.3521	0617.5	073.0	53.82
276.0	002.5832	0342.0	040.9	069.2	001.3765	0619.0	073.2	53.85
277.0	002.6142	0342.2	041.0	068.7	001.4010	0620.5	073.4	53.88
278.0	002.6454	0342.6	041.1	068.1	001.4257	0621.8	073.7	53.90
279.0	002.6768	0343.0	041.2	067.6	001.4504	0622.9	073.9	53.91
280.0	002.7084	0343.5	041.4	067.1	001.4750	0623.8	074.2	53.91
281.0	002.7401	0344.0	041.5	066.6	001.4996	0624.5	074.5	53.90
282.0	002.7720	0344.5	041.6	066.1	001.5241	0624.9	074.8	53.88
283.0	002.7897	0344.9	041.7	065.6	001.5473	0625.1	075.2	53.83

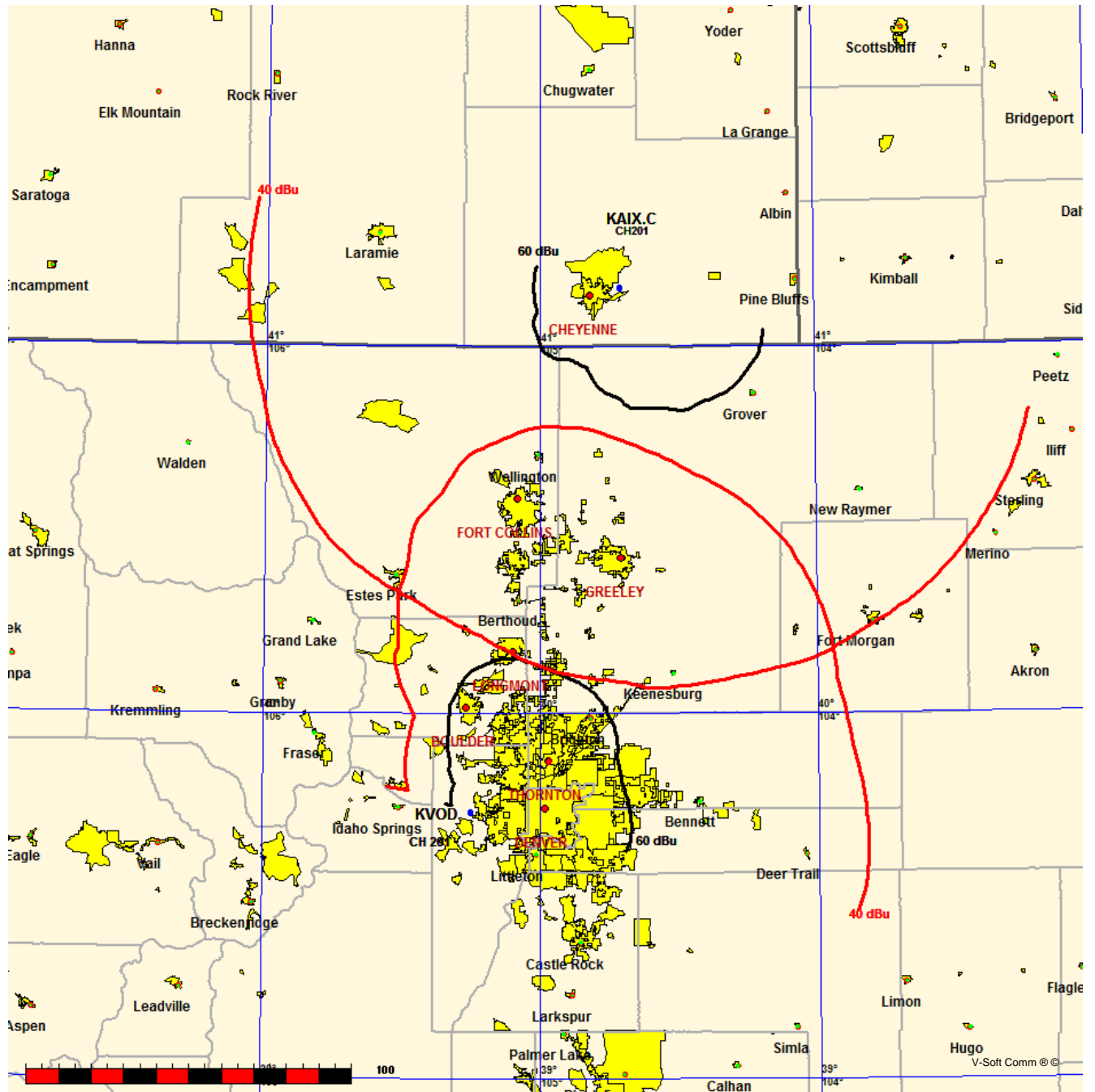
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
284.0	002.8075	0345.6	041.8	065.1	001.5706	0625.2	075.5	53.77
285.0	002.8253	0346.3	041.8	064.6	001.5936	0625.1	075.9	53.71
286.0	002.8432	0347.0	041.9	064.2	001.6164	0624.9	076.3	53.64
287.0	002.8611	0347.7	042.0	063.7	001.6390	0624.6	076.8	53.57
288.0	002.8791	0348.4	042.1	063.3	001.6610	0624.3	077.2	53.48
289.0	002.8971	0349.0	042.2	062.8	001.6826	0623.9	077.7	53.38
290.0	002.9152	0349.5	042.3	062.4	001.7037	0623.5	078.1	53.28
291.0	002.9334	0350.1	042.4	062.0	001.7245	0623.1	078.6	53.17
292.0	002.9516	0350.7	042.4	061.6	001.7450	0622.6	079.1	53.06
293.0	002.9607	0351.6	042.5	061.2	001.7646	0622.2	079.7	52.93
294.0	002.9698	0352.5	042.6	060.8	001.7837	0621.7	080.2	52.80
295.0	002.9790	0353.2	042.6	060.5	001.8022	0621.1	080.8	52.66
296.0	002.9881	0353.6	042.7	060.2	001.8197	0620.6	081.3	52.51
297.0	002.9973	0353.9	042.7	059.8	001.8322	0620.1	081.9	52.34
298.0	003.0065	0354.0	042.8	059.5	001.8401	0619.7	082.5	52.16
299.0	003.0157	0354.3	042.8	059.2	001.8478	0619.3	083.1	51.97
300.0	003.0249	0354.5	042.8	059.0	001.8553	0618.9	083.8	51.79
301.0	003.0342	0354.7	042.9	058.7	001.8625	0618.6	084.4	51.60
302.0	003.0434	0354.9	042.9	058.4	001.8692	0618.4	085.1	51.40
303.0	003.1039	0354.9	043.1	058.1	001.8778	0618.1	085.6	51.23
304.0	003.1650	0354.9	043.2	057.8	001.8861	0617.9	086.3	51.05
305.0	003.2266	0354.8	043.4	057.5	001.8941	0617.7	086.9	50.86
306.0	003.2889	0354.8	043.6	057.2	001.9018	0617.6	087.5	50.68
307.0	003.3517	0354.8	043.7	056.9	001.9093	0617.4	088.2	50.49
308.0	003.4152	0354.8	043.9	056.7	001.9164	0617.3	088.8	50.29
309.0	003.4792	0354.8	044.0	056.4	001.9233	0617.1	089.5	50.09
310.0	003.5439	0355.0	044.2	056.2	001.9300	0616.9	090.2	49.89
311.0	003.6091	0355.5	044.4	055.9	001.9367	0616.7	090.9	49.69
312.0	003.6749	0356.0	044.6	055.7	001.9431	0616.5	091.6	49.48
313.0	003.7903	0356.6	044.9	055.4	001.9511	0616.4	092.3	49.29
314.0	003.9074	0357.2	045.2	055.1	001.9588	0616.3	093.0	49.09
315.0	004.0263	0358.0	045.5	054.8	001.9664	0616.2	093.7	48.89
316.0	004.1470	0359.0	045.8	054.6	001.9738	0616.1	094.4	48.69
317.0	004.2694	0360.0	046.1	054.3	001.9809	0615.9	095.2	48.48
318.0	004.3937	0360.7	046.4	054.1	001.9874	0615.9	095.9	48.27
319.0	004.5197	0360.8	046.6	053.8	001.9931	0615.8	096.7	48.05

## Contour-to-contour Map

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 0.16 km, Out= 10.35 km)

KVOD CH 201 C3 DA  
Lat= 39 43 49.0, Lng= 105 15 00.0  
2.1 kW 275 M HAAT, 2333.6 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

KAIX-C CH 201 C2 BPED20070327AEO  
Lat= 41 09 37.0, Lng= 104 42 13.0  
47.0 kW 64 M HAAT, 1890 M COR  
Prot.= 60 dBu, Intef.= 40 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

KAIX-C BPED20070327AEO

Channel = 201C2

Max ERP = 47 kW

RCAMSL = 1890 M

N. Lat. 41 09 37.0

W. Lng. 104 42 13.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
316.0	000.4616	-0142.0	008.3	199.0	047.0000	0034.2	161.6	31.32	
317.0	000.4834	-0143.5	008.4	199.0	047.0000	0034.2	161.4	31.36	
318.0	000.5062	-0135.8	008.5	199.0	047.0000	0034.1	161.2	31.39	
319.0	000.5300	-0122.3	008.6	199.0	047.0000	0034.1	161.0	31.42	
320.0	000.5550	-0107.6	008.7	199.0	047.0000	0034.1	160.9	31.46	
321.0	000.5811	-0093.3	008.9	199.0	047.0000	0034.1	160.7	31.49	
322.0	000.6085	-0080.2	009.0	199.0	047.0000	0034.1	160.5	31.53	
323.0	000.6372	-0067.8	009.1	199.0	047.0000	0034.1	160.3	31.56	
324.0	000.6672	-0055.3	009.2	199.0	047.0000	0034.1	160.1	31.60	
325.0	000.6987	-0041.5	009.3	199.0	047.0000	0034.1	159.9	31.64	
326.0	000.7316	-0025.4	009.4	199.0	047.0000	0034.1	159.7	31.67	
327.0	000.7661	-0007.5	009.5	199.0	047.0000	0034.1	159.5	31.71	
328.0	000.8022	0009.0	009.6	199.0	047.0000	0034.2	159.3	31.75	
329.0	000.8400	0024.0	009.7	199.0	047.0000	0034.2	159.1	31.78	
330.0	000.8796	0036.8	010.8	199.2	047.0000	0033.8	158.3	31.92	
331.0	000.9210	0046.7	012.3	199.6	047.0000	0033.4	157.1	32.10	
332.0	000.9644	0054.3	013.4	199.8	047.0000	0033.1	156.2	32.24	
333.0	001.0099	0060.6	014.3	200.0	047.0000	0032.9	155.5	32.37	
334.0	001.0575	0064.2	014.8	200.1	047.0000	0032.8	154.9	32.46	
335.0	001.1073	0065.0	015.1	200.1	047.0000	0032.8	154.5	32.53	
336.0	001.1595	0066.3	015.4	200.1	047.0000	0032.7	154.1	32.60	
337.0	001.2142	0070.2	016.1	200.2	047.0000	0032.6	153.4	32.72	
338.0	001.2714	0077.4	017.2	200.4	047.0000	0032.4	152.4	32.88	
339.0	001.3313	0088.1	018.7	200.7	047.0000	0032.0	151.1	33.10	
340.0	001.3941	0101.5	020.4	201.0	047.0000	0031.6	149.6	33.34	
341.0	001.4598	0115.3	021.9	201.3	047.0000	0031.2	148.1	33.57	
342.0	001.5285	0125.7	023.0	201.4	047.0000	0031.0	147.1	33.75	
343.0	001.6006	0133.0	023.8	201.5	047.0000	0030.9	146.2	33.91	
344.0	001.6760	0139.2	024.5	201.6	047.0000	0030.8	145.3	34.05	
345.0	001.7550	0149.5	025.6	201.7	047.0000	0030.7	144.2	34.25	
346.0	001.8377	0164.0	026.9	201.8	047.0000	0030.4	142.9	34.48	
347.0	001.9243	0185.4	028.8	202.1	047.0000	0030.0	141.1	34.78	
348.0	002.0150	0209.9	030.9	202.4	047.0000	0029.5	139.0	35.16	
349.0	002.1000	0229.0	032.7	202.6	047.0000	0029.2	137.3	35.49	
350.0	002.1000	0244.6	033.7	202.7	047.0000	0029.2	136.1	35.71	
351.0	002.0962	0254.6	034.3	202.6	047.0000	0029.3	135.2	35.87	
352.0	002.0966	0269.7	035.2	202.6	047.0000	0029.3	134.1	36.08	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
353.0	002.0971	0281.8	035.9	202.5	047.0000	0029.4	133.2	36.25
354.0	002.0975	0294.8	036.7	202.4	047.0000	0029.6	132.3	36.43
355.0	002.0979	0315.0	037.8	202.3	047.0000	0029.6	131.0	36.67
356.0	002.0983	0335.4	038.9	202.3	047.0000	0029.7	129.7	36.91
357.0	002.0987	0356.9	040.0	202.2	047.0000	0029.8	128.4	37.16
358.0	002.0992	0374.6	040.9	202.1	047.0000	0030.0	127.3	37.37
359.0	002.0996	0391.3	041.6	201.9	047.0000	0030.3	126.3	37.57
000.0	002.1000	0408.1	042.4	201.8	047.0000	0030.5	125.3	37.77
001.0	002.1000	0416.5	042.8	201.5	047.0000	0030.9	124.7	37.91
002.0	002.1000	0425.0	043.2	201.2	047.0000	0031.3	124.1	38.06
003.0	002.1000	0433.7	043.6	201.0	047.0000	0031.6	123.4	38.20
004.0	002.1000	0441.6	044.0	200.7	047.0000	0032.0	122.9	38.34
005.0	002.1000	0451.8	044.5	200.4	047.0000	0032.4	122.2	38.49
006.0	002.1000	0462.2	045.0	200.1	047.0000	0032.8	121.5	38.64
007.0	002.1000	0472.4	045.5	199.8	047.0000	0033.1	120.8	38.80
008.0	002.1000	0481.9	046.0	199.5	047.0000	0033.5	120.1	38.94
009.0	002.1000	0489.6	046.4	199.1	047.0000	0034.0	119.6	39.07
010.0	002.1000	0496.4	046.7	198.7	047.0000	0034.5	119.1	39.19
011.0	002.1000	0503.1	047.1	198.4	047.0000	0035.0	118.7	39.31
012.0	002.1000	0508.6	047.4	198.0	047.0000	0035.5	118.3	39.41
013.0	002.1000	0512.9	047.6	197.6	047.0000	0036.1	118.0	39.50
014.0	002.1000	0516.0	047.8	197.2	047.0000	0036.7	117.7	39.58
015.0	002.1000	0519.9	048.0	196.8	047.0000	0037.3	117.5	39.66
016.0	002.1000	0524.3	048.3	196.4	047.0000	0037.9	117.2	39.74
017.0	002.1000	0528.8	048.5	196.0	047.0000	0038.5	117.0	39.82
018.0	002.1000	0531.7	048.7	195.5	047.0000	0039.1	116.8	39.87
019.0	002.1000	0532.7	048.7	195.1	047.0000	0039.6	116.8	39.90
020.0	002.1000	0533.0	048.8	194.7	047.0000	0040.1	116.9	39.92
021.0	002.1000	0533.3	048.8	194.3	047.0000	0040.5	117.0	39.93
022.0	002.1000	0533.7	048.8	193.9	047.0000	0041.0	117.0	39.94
023.0	002.1000	0534.0	048.8	193.5	047.0000	0041.5	117.2	39.94
024.0	002.1000	0534.5	048.8	193.0	047.0000	0041.9	117.3	39.94
025.0	002.1000	0535.9	048.9	192.6	047.0000	0042.4	117.4	39.94
026.0	002.1000	0538.0	049.0	192.2	047.0000	0042.9	117.5	39.96
027.0	002.1000	0540.5	049.2	191.8	047.0000	0043.4	117.6	39.97
028.0	002.1000	0543.0	049.3	191.4	047.0000	0043.9	117.7	39.97
029.0	002.1000	0545.3	049.4	190.9	047.0000	0044.3	117.8	39.96
030.0	002.1000	0547.0	049.5	190.5	047.0000	0044.7	118.0	39.95
031.0	002.1000	0548.4	049.6	190.1	047.0000	0045.1	118.2	39.92
032.0	002.1000	0550.1	049.7	189.7	047.0000	0045.4	118.5	39.89
033.0	002.1000	0552.5	049.8	189.3	047.0000	0045.7	118.7	39.87
034.0	002.1000	0556.4	050.0	188.9	047.0000	0046.0	118.9	39.85
035.0	002.1000	0561.1	050.2	188.5	047.0000	0046.3	119.1	39.83
036.0	002.1000	0566.5	050.4	188.0	047.0000	0046.5	119.3	39.81
037.0	002.1000	0572.3	050.7	187.6	047.0000	0046.8	119.5	39.78
038.0	002.1000	0578.2	051.0	187.2	047.0000	0047.1	119.7	39.75
039.0	002.1000	0584.3	051.2	186.7	047.0000	0047.4	120.0	39.72
040.0	002.1000	0590.3	051.4	186.3	047.0000	0047.7	120.2	39.68
041.0	002.1000	0595.8	051.7	185.9	047.0000	0047.9	120.6	39.63
042.0	002.1000	0600.4	051.8	185.5	047.0000	0048.2	121.0	39.57
043.0	002.1000	0604.2	052.0	185.1	047.0000	0048.4	121.4	39.51

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
044.0	002.1000	0607.2	052.1	184.8	047.0000	0048.6	121.9	39.43
045.0	002.1000	0610.1	052.2	184.4	047.0000	0048.8	122.4	39.35
046.0	002.1000	0612.8	052.3	184.0	047.0000	0048.9	122.9	39.26
047.0	002.1000	0614.8	052.4	183.7	047.0000	0049.1	123.5	39.16
048.0	002.1000	0615.9	052.4	183.4	047.0000	0049.2	124.1	39.05
049.0	002.1000	0615.9	052.4	183.1	047.0000	0049.3	124.7	38.94
050.0	002.1000	0616.0	052.4	182.8	047.0000	0049.4	125.4	38.83
051.0	002.0720	0616.0	052.3	182.6	047.0000	0049.6	126.2	38.69
052.0	002.0441	0615.9	052.1	182.3	047.0000	0049.7	126.9	38.55
053.0	002.0164	0615.7	052.0	182.1	047.0000	0049.8	127.7	38.41
054.0	001.9889	0615.8	051.9	181.9	047.0000	0049.9	128.5	38.27
055.0	001.9617	0616.3	051.8	181.7	047.0000	0050.0	129.3	38.13
056.0	001.9346	0616.8	051.6	181.5	047.0000	0050.1	130.1	37.99
057.0	001.9076	0617.4	051.5	181.3	047.0000	0050.3	130.9	37.85
058.0	001.8809	0618.0	051.4	181.2	047.0000	0050.4	131.7	37.70
059.0	001.8544	0619.0	051.3	181.0	047.0000	0050.6	132.5	37.56
060.0	001.8280	0620.4	051.2	180.8	047.0000	0050.7	133.4	37.42
061.0	001.7759	0621.9	051.0	180.7	047.0000	0050.8	134.2	37.26
062.0	001.7245	0623.1	050.7	180.6	047.0000	0050.9	135.1	37.09
063.0	001.6739	0624.1	050.5	180.5	047.0000	0051.0	136.0	36.93
064.0	001.6240	0624.8	050.2	180.5	047.0000	0051.0	136.9	36.76
065.0	001.5749	0625.2	049.9	180.4	047.0000	0051.1	137.9	36.60
066.0	001.5265	0624.9	049.6	180.4	047.0000	0051.1	138.8	36.43
067.0	001.4789	0624.0	049.3	180.4	047.0000	0051.1	139.7	36.25
068.0	001.4321	0622.1	048.9	180.4	047.0000	0051.1	140.7	36.08
069.0	001.3860	0619.6	048.5	180.4	047.0000	0051.1	141.6	35.90
070.0	001.3406	0616.8	048.0	180.5	047.0000	0051.1	142.5	35.73
071.0	001.3403	0614.4	047.9	180.4	047.0000	0051.1	143.4	35.58
072.0	001.3400	0612.4	047.9	180.3	047.0000	0051.2	144.2	35.43
073.0	001.3396	0611.3	047.8	180.2	047.0000	0051.3	145.0	35.29
074.0	001.3393	0610.6	047.8	180.1	047.0000	0051.3	145.8	35.14
075.0	001.3390	0609.8	047.8	180.1	047.0000	0051.4	146.6	35.00
076.0	001.3386	0608.7	047.7	180.0	047.0000	0051.5	147.4	34.85



01-02-2009 FCC NGDC 30 Sec Terrain Data

KAIX-C BPED20070327AEO

Channel = 201C2

Max ERP = 47 kW

RCAMSL = 1890 M

N. Lat. 41 09 37.0

W. Lng. 104 42 13.0

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
136.0	047.0000	0104.8	045.1	031.2	002.1000	0548.7	148.4	33.40	
137.0	047.0000	0103.0	044.7	031.0	002.1000	0548.4	147.7	33.57	
138.0	047.0000	0101.2	044.4	030.8	002.1000	0548.1	147.1	33.74	
139.0	047.0000	0099.8	044.2	030.6	002.1000	0547.9	146.4	33.90	
140.0	047.0000	0098.4	043.9	030.5	002.1000	0547.6	145.8	34.06	
141.0	047.0000	0096.6	043.6	030.2	002.1000	0547.3	145.1	34.21	
142.0	047.0000	0094.6	043.3	030.0	002.1000	0547.0	144.6	34.36	
143.0	047.0000	0092.9	043.0	029.8	002.1000	0546.6	144.0	34.50	
144.0	047.0000	0091.8	042.8	029.6	002.1000	0546.4	143.4	34.65	
145.0	047.0000	0091.2	042.6	029.4	002.1000	0546.1	142.8	34.81	
146.0	047.0000	0090.8	042.6	029.3	002.1000	0545.9	142.1	34.98	
147.0	047.0000	0090.6	042.5	029.1	002.1000	0545.6	141.5	35.14	
148.0	047.0000	0090.4	042.5	029.0	002.1000	0545.3	140.9	35.30	
149.0	047.0000	0090.1	042.4	028.8	002.1000	0545.0	140.2	35.46	
150.0	047.0000	0089.7	042.4	028.6	002.1000	0544.6	139.6	35.60	
151.0	047.0000	0088.9	042.2	028.4	002.1000	0544.1	139.1	35.74	
152.0	047.0000	0087.7	042.0	028.2	002.1000	0543.5	138.6	35.86	
153.0	047.0000	0086.2	041.7	027.9	002.1000	0542.9	138.2	35.96	
154.0	047.0000	0084.3	041.3	027.6	002.1000	0542.1	137.8	36.04	
155.0	047.0000	0081.9	040.8	027.3	002.1000	0541.3	137.5	36.10	
156.0	047.0000	0079.5	040.3	026.9	002.1000	0540.4	137.2	36.15	
157.0	047.0000	0077.3	039.9	026.6	002.1000	0539.6	137.0	36.20	
158.0	047.0000	0075.4	039.5	026.3	002.1000	0538.8	136.7	36.25	
159.0	047.0000	0074.1	039.2	026.0	002.1000	0538.1	136.4	36.32	
160.0	047.0000	0073.0	039.0	025.8	002.1000	0537.5	136.1	36.39	
161.0	047.0000	0071.7	038.7	025.5	002.1000	0536.9	135.8	36.45	
162.0	047.0000	0070.2	038.3	025.2	002.1000	0536.3	135.6	36.50	
163.0	047.0000	0068.9	038.1	024.9	002.1000	0535.8	135.3	36.55	
164.0	047.0000	0068.1	037.9	024.6	002.1000	0535.3	135.0	36.62	
165.0	047.0000	0067.4	037.7	024.4	002.1000	0535.0	134.7	36.69	
166.0	047.0000	0066.7	037.6	024.1	002.1000	0534.7	134.4	36.76	
167.0	047.0000	0066.0	037.4	023.9	002.1000	0534.4	134.2	36.83	
168.0	047.0000	0065.4	037.3	023.6	002.1000	0534.2	133.9	36.90	
169.0	047.0000	0064.9	037.2	023.4	002.1000	0534.1	133.6	36.97	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
170.0	047.0000	0064.4	037.0	023.1	002.1000	0534.0	133.3	37.04
171.0	047.0000	0063.7	036.9	022.8	002.1000	0534.0	133.1	37.09
172.0	047.0000	0063.2	036.8	022.6	002.1000	0533.9	132.9	37.15
173.0	047.0000	0062.9	036.7	022.3	002.1000	0533.8	132.6	37.22
174.0	047.0000	0062.5	036.6	022.1	002.1000	0533.7	132.4	37.27
175.0	047.0000	0061.6	036.4	021.8	002.1000	0533.6	132.3	37.30
176.0	047.0000	0060.0	036.0	021.5	002.1000	0533.5	132.4	37.28
177.0	047.0000	0057.5	035.4	021.1	002.1000	0533.3	132.7	37.19
178.0	047.0000	0054.8	034.6	020.7	002.1000	0533.2	133.2	37.07
179.0	047.0000	0052.3	033.8	020.4	002.1000	0533.1	133.6	36.94
180.0	047.0000	0051.5	033.5	020.1	002.1000	0533.0	133.7	36.92
181.0	047.0000	0050.6	033.3	019.8	002.1000	0533.0	133.8	36.90
182.0	047.0000	0049.9	033.0	019.6	002.1000	0532.9	133.8	36.89
183.0	047.0000	0049.4	032.8	019.3	002.1000	0532.8	133.8	36.89
184.0	047.0000	0048.9	032.7	019.1	002.1000	0532.7	133.8	36.89
185.0	047.0000	0048.5	032.5	018.8	002.1000	0532.6	133.8	36.89
186.0	047.0000	0047.8	032.3	018.6	002.1000	0532.5	133.9	36.86
187.0	047.0000	0047.2	032.1	018.3	002.1000	0532.2	134.0	36.83
188.0	047.0000	0046.6	031.9	018.0	002.1000	0531.8	134.1	36.79
189.0	047.0000	0045.9	031.6	017.8	002.1000	0531.2	134.2	36.74
190.0	047.0000	0045.2	031.4	017.6	002.1000	0530.6	134.4	36.68
191.0	047.0000	0044.3	031.1	017.3	002.1000	0529.9	134.7	36.60
192.0	047.0000	0043.2	030.7	017.1	002.1000	0529.0	135.0	36.50
193.0	047.0000	0042.0	030.3	016.8	002.1000	0528.1	135.4	36.38
194.0	047.0000	0040.9	029.9	016.6	002.1000	0527.2	135.7	36.27
195.0	047.0000	0039.8	029.5	016.4	002.1000	0526.1	136.1	36.14
196.0	047.0000	0038.5	029.0	016.2	002.1000	0525.1	136.5	36.01
197.0	047.0000	0037.0	028.5	016.0	002.1000	0524.0	137.1	35.85
198.0	047.0000	0035.5	028.0	015.8	002.1000	0523.1	137.6	35.69
199.0	047.0000	0034.1	027.5	015.6	002.1000	0522.2	138.1	35.54
200.0	047.0000	0032.9	027.1	015.4	002.1000	0521.4	138.5	35.40
201.0	047.0000	0031.6	026.7	015.2	002.1000	0520.7	139.0	35.27
202.0	047.0000	0030.2	026.2	015.0	002.1000	0520.0	139.5	35.11
203.0	047.0000	0028.7	026.1	014.9	002.1000	0519.3	139.6	35.06
204.0	047.0000	0027.7	026.1	014.7	002.1000	0518.5	139.7	35.03
205.0	047.0000	0027.4	026.1	014.5	002.1000	0517.8	139.8	34.99
206.0	047.0000	0027.4	026.1	014.3	002.1000	0517.1	139.9	34.95
207.0	047.0000	0027.5	026.1	014.1	002.1000	0516.5	140.0	34.91
208.0	047.0000	0027.7	026.1	013.9	002.1000	0515.8	140.1	34.87
209.0	047.0000	0028.2	026.1	013.8	002.1000	0515.3	140.2	34.83
210.0	047.0000	0028.7	026.1	013.6	002.1000	0514.7	140.3	34.78
211.0	047.0000	0029.3	026.1	013.4	002.1000	0514.2	140.4	34.74
212.0	047.0000	0029.9	026.1	013.2	002.1000	0513.7	140.6	34.69
213.0	047.0000	0030.3	026.2	013.0	002.1000	0513.0	140.6	34.66
214.0	047.0000	0030.8	026.4	012.9	002.1000	0512.3	140.7	34.63
215.0	047.0000	0031.4	026.6	012.6	002.1000	0511.5	140.6	34.62
216.0	047.0000	0032.4	026.9	012.4	002.1000	0510.6	140.5	34.63
217.0	047.0000	0033.5	027.3	012.2	002.1000	0509.5	140.4	34.64
218.0	047.0000	0034.6	027.7	011.9	002.1000	0508.3	140.2	34.65
219.0	047.0000	0035.5	028.0	011.7	002.1000	0507.1	140.2	34.64
220.0	047.0000	0036.3	028.3	011.5	002.1000	0505.9	140.2	34.61

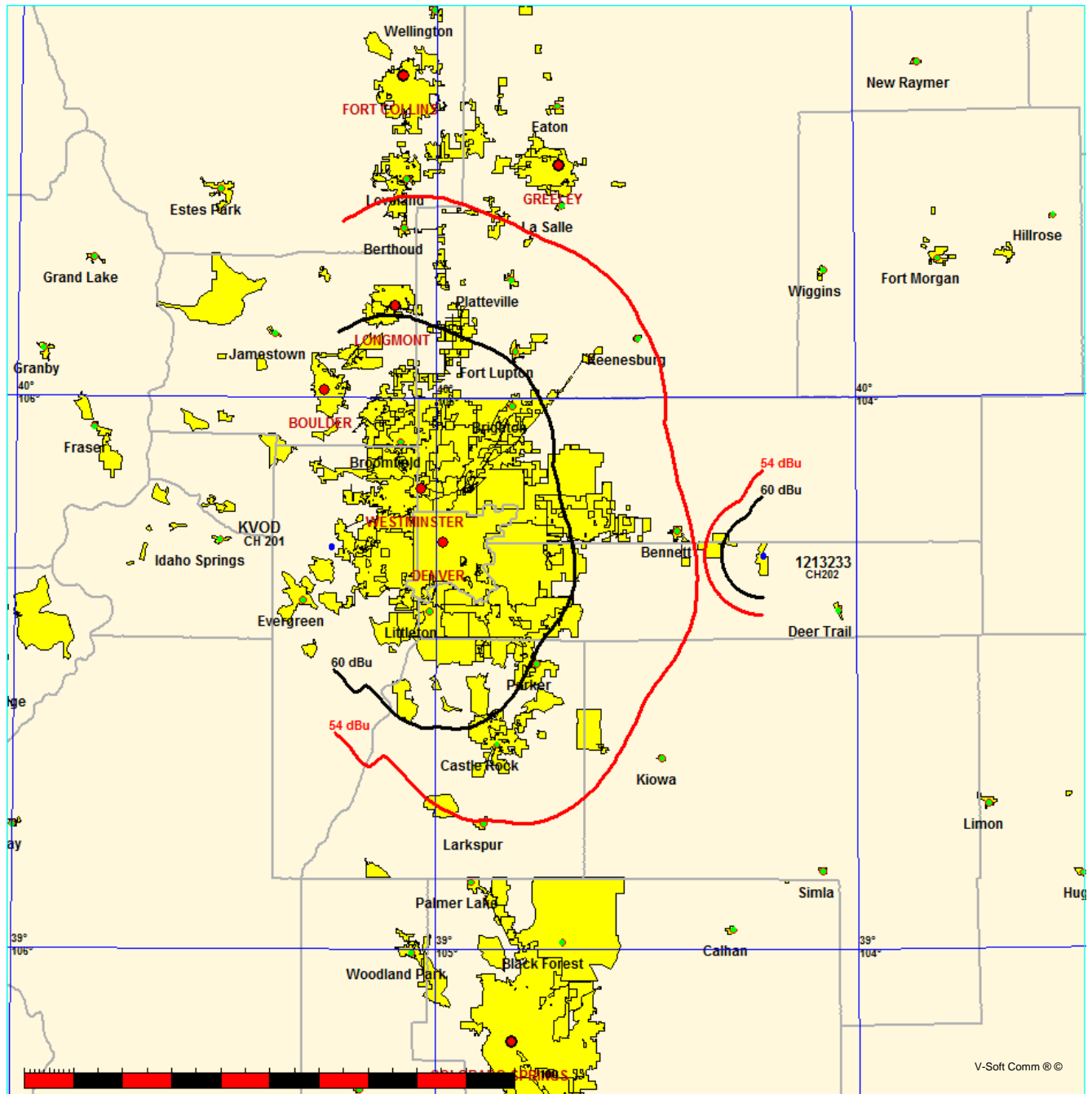
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
221.0	047.0000	0037.0	028.5	011.3	002.1000	0504.6	140.2	34.57
222.0	047.0000	0037.7	028.8	011.0	002.1000	0503.3	140.2	34.53
223.0	047.0000	0038.4	029.0	010.8	002.1000	0501.9	140.3	34.47
224.0	047.0000	0038.9	029.2	010.6	002.1000	0500.5	140.4	34.41
225.0	047.0000	0039.5	029.4	010.4	002.1000	0499.1	140.5	34.34
226.0	047.0000	0040.1	029.6	010.2	002.1000	0497.6	140.7	34.27
227.0	047.0000	0040.6	029.8	010.0	002.1000	0496.1	140.8	34.19
228.0	047.0000	0041.1	029.9	009.7	002.1000	0494.7	141.0	34.11
229.0	047.0000	0041.5	030.1	009.5	002.1000	0493.3	141.2	34.02
230.0	047.0000	0041.8	030.2	009.4	002.1000	0492.0	141.5	33.92
231.0	047.0000	0041.7	030.2	009.2	002.1000	0491.0	141.8	33.80
232.0	047.0000	0041.5	030.1	009.1	002.1000	0490.1	142.3	33.67
233.0	047.0000	0041.1	030.0	009.0	002.1000	0489.3	142.7	33.54
234.0	047.0000	0040.7	029.8	008.9	002.1000	0488.5	143.2	33.41
235.0	047.0000	0040.2	029.6	008.8	002.1000	0487.9	143.7	33.27
236.0	047.0000	0039.6	029.4	008.7	002.1000	0487.3	144.2	33.14
237.0	047.0000	0039.1	029.3	008.6	002.1000	0486.6	144.7	33.00
238.0	047.0000	0038.8	029.1	008.5	002.1000	0485.9	145.1	32.88
239.0	047.0000	0038.4	029.0	008.4	002.1000	0485.2	145.6	32.75
240.0	047.0000	0038.2	029.0	008.3	002.1000	0484.3	146.0	32.63
241.0	047.0000	0038.1	028.9	008.2	002.1000	0483.5	146.5	32.51
242.0	047.0000	0038.0	028.9	008.1	002.1000	0482.5	146.9	32.39
243.0	047.0000	0038.0	028.9	008.0	002.1000	0481.6	147.3	32.27
244.0	047.0000	0037.9	028.8	007.9	002.1000	0480.7	147.8	32.15
245.0	047.0000	0037.6	028.7	007.8	002.1000	0480.0	148.2	32.03
246.0	047.0000	0037.3	028.6	007.7	002.1000	0479.4	148.7	31.91
247.0	047.0000	0036.9	028.5	007.7	002.1000	0478.9	149.2	31.78
248.0	047.0000	0036.3	028.3	007.6	002.1000	0478.6	149.7	31.66
249.0	047.0000	0035.7	028.1	007.6	002.1000	0478.4	150.3	31.53
250.0	047.0000	0034.7	027.8	007.6	002.1000	0478.6	150.8	31.40
251.0	047.0000	0033.6	027.4	007.7	002.1000	0479.0	151.4	31.28
252.0	047.0000	0032.4	027.0	007.7	002.1000	0479.6	152.1	31.15
253.0	047.0000	0031.2	026.5	007.8	002.1000	0480.2	152.7	31.03
254.0	047.0000	0030.1	026.2	007.9	002.1000	0480.6	153.2	30.91
255.0	047.0000	0029.1	026.1	007.8	002.1000	0480.1	153.7	30.80
256.0	047.0000	0028.3	026.1	007.7	002.1000	0479.5	154.1	30.69

## Contour-to-Contour Map

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 26.4 km, Out= 5.09 km)

KVOD CH 201 C3 DA  
Lat= 39 43 49.0, Lng= 105 15 00.0  
2.1 kW 275 M HAAT, 2333.6 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

1213233 CH 202 A BNPED20071022AGO  
Lat= 39 42 31.3, Lng= 104 13 23.7  
0.5 kW -20.5 M HAAT, 1607 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

1213233 BNPED20071022AGO

Channel = 202A

Max ERP = 0.5 kW

RCAMSL = 1607 M

N. Lat. 39 42 31.3

W. Lng. 104 13 23.7

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
031.0	002.1000	0548.4	049.6	306.1	000.5000	-0011.3	076.7	27.68	
032.0	002.1000	0550.1	049.7	306.3	000.5000	-0011.1	075.8	27.85	
033.0	002.1000	0552.5	049.8	306.4	000.5000	-0010.9	074.9	28.01	
034.0	002.1000	0556.4	050.0	306.6	000.5000	-0010.7	074.1	28.17	
035.0	002.1000	0561.1	050.2	306.7	000.5000	-0010.5	073.2	28.32	
036.0	002.1000	0566.5	050.4	306.9	000.5000	-0010.2	072.4	28.48	
037.0	002.1000	0572.3	050.7	307.1	000.5000	-0010.0	071.5	28.64	
038.0	002.1000	0578.2	051.0	307.3	000.5000	-0009.8	070.6	28.80	
039.0	002.1000	0584.3	051.2	307.5	000.5000	-0009.5	069.7	28.96	
040.0	002.1000	0590.3	051.4	307.7	000.5000	-0009.3	068.8	29.12	
041.0	002.1000	0595.8	051.7	307.8	000.5000	-0009.2	067.9	29.28	
042.0	002.1000	0600.4	051.8	307.9	000.5000	-0009.1	067.0	29.45	
043.0	002.1000	0604.2	052.0	308.0	000.5000	-0009.0	066.1	29.62	
044.0	002.1000	0607.2	052.1	308.0	000.5000	-0009.0	065.2	29.79	
045.0	002.1000	0610.1	052.2	308.0	000.5000	-0009.0	064.2	29.96	
046.0	002.1000	0612.8	052.3	307.9	000.5000	-0009.0	063.3	30.13	
047.0	002.1000	0614.8	052.4	307.9	000.5000	-0009.1	062.4	30.31	
048.0	002.1000	0615.9	052.4	307.8	000.5000	-0009.2	061.5	30.49	
049.0	002.1000	0615.9	052.4	307.6	000.5000	-0009.4	060.6	30.67	
050.0	002.1000	0616.0	052.4	307.4	000.5000	-0009.7	059.7	30.85	
051.0	002.0720	0616.0	052.3	307.1	000.5000	-0010.1	058.9	31.03	
052.0	002.0441	0615.9	052.1	306.7	000.5000	-0010.5	058.0	31.20	
053.0	002.0164	0615.7	052.0	306.3	000.5000	-0011.0	057.2	31.38	
054.0	001.9889	0615.8	051.9	305.9	000.5000	-0011.5	056.4	31.55	
055.0	001.9617	0616.3	051.8	305.5	000.5000	-0012.1	055.6	31.73	
056.0	001.9346	0616.8	051.6	305.0	000.5000	-0012.6	054.8	31.90	
057.0	001.9076	0617.4	051.5	304.6	000.5000	-0013.2	054.0	32.07	
058.0	001.8809	0618.0	051.4	304.1	000.5000	-0013.9	053.2	32.23	
059.0	001.8544	0619.0	051.3	303.6	000.5000	-0014.5	052.4	32.40	
060.0	001.8280	0620.4	051.2	303.0	000.5000	-0015.2	051.7	32.56	
061.0	001.7759	0621.9	051.0	302.3	000.5000	-0016.2	051.0	32.71	
062.0	001.7245	0623.1	050.7	301.6	000.5000	-0017.1	050.4	32.85	
063.0	001.6739	0624.1	050.5	300.8	000.5000	-0018.3	049.7	32.99	
064.0	001.6240	0624.8	050.2	300.0	000.5000	-0019.5	049.2	33.11	
065.0	001.5749	0625.2	049.9	299.1	000.5000	-0020.8	048.6	33.23	
066.0	001.5265	0624.9	049.6	298.2	000.5000	-0022.2	048.1	33.34	
067.0	001.4789	0624.0	049.3	297.2	000.5000	-0023.6	047.7	33.44	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
068.0	001.4321	0622.1	048.9	296.2	000.5000	-0024.9	047.3	33.53
069.0	001.3860	0619.6	048.5	295.1	000.5000	-0026.2	046.9	33.60
070.0	001.3406	0616.8	048.0	294.0	000.5000	-0027.8	046.7	33.67
071.0	001.3403	0614.4	047.9	293.1	000.5000	-0029.1	046.2	33.79
072.0	001.3400	0612.4	047.9	292.3	000.5000	-0030.6	045.7	33.91
073.0	001.3396	0611.3	047.8	291.4	000.5000	-0032.0	045.2	34.03
074.0	001.3393	0610.6	047.8	290.6	000.5000	-0033.6	044.7	34.16
075.0	001.3390	0609.8	047.8	289.7	000.5000	-0035.2	044.3	34.28
076.0	001.3386	0608.7	047.7	288.7	000.5000	-0036.9	043.8	34.39
077.0	001.3383	0607.4	047.7	287.8	000.5000	-0038.3	043.5	34.50
078.0	001.3380	0606.3	047.6	286.8	000.5000	-0039.3	043.1	34.60
079.0	001.3376	0605.3	047.6	285.8	000.5000	-0040.1	042.7	34.70
080.0	001.3373	0604.7	047.6	284.7	000.5000	-0041.2	042.4	34.79
081.0	001.3636	0604.2	047.7	283.8	000.5000	-0042.2	041.9	34.93
082.0	001.3901	0604.0	047.9	282.8	000.5000	-0043.2	041.5	35.07
083.0	001.4169	0603.6	048.1	281.8	000.5000	-0044.1	041.0	35.21
084.0	001.4439	0603.1	048.2	280.7	000.5000	-0044.6	040.6	35.33
085.0	001.4712	0602.8	048.4	279.6	000.5000	-0045.2	040.2	35.45
086.0	001.4987	0602.7	048.6	278.5	000.5000	-0046.2	039.8	35.57
087.0	001.5265	0602.3	048.8	277.3	000.5000	-0047.6	039.5	35.67
088.0	001.5546	0600.9	048.9	276.2	000.5000	-0049.2	039.3	35.75
089.0	001.5829	0599.4	049.0	274.9	000.5000	-0050.9	039.1	35.82
090.0	001.6115	0598.2	049.1	273.7	000.5000	-0052.4	038.9	35.89
091.0	001.6463	0596.9	049.3	272.4	000.5000	-0054.2	038.7	35.95
092.0	001.6814	0595.6	049.5	271.1	000.5000	-0056.1	038.5	36.00
093.0	001.7169	0593.6	049.6	269.8	000.5000	-0058.0	038.4	36.03
094.0	001.7528	0591.1	049.7	268.5	000.5000	-0059.7	038.4	36.04
095.0	001.7891	0588.5	049.8	267.2	000.5000	-0061.3	038.4	36.04
096.0	001.8257	0585.5	049.9	265.9	000.5000	-0063.0	038.5	36.02
097.0	001.8627	0582.3	049.9	264.6	000.5000	-0064.0	038.6	35.98
098.0	001.9000	0578.9	050.0	263.4	000.5000	-0064.6	038.7	35.93
099.0	001.9378	0575.5	050.0	262.1	000.5000	-0065.2	038.9	35.86
100.0	001.9759	0571.9	050.1	260.9	000.5000	-0066.0	039.2	35.79
101.0	001.9881	0568.1	050.0	259.7	000.5000	-0066.9	039.6	35.65
102.0	002.0004	0564.1	049.9	258.6	000.5000	-0067.7	040.0	35.51
103.0	002.0127	0559.5	049.7	257.6	000.5000	-0068.6	040.5	35.36
104.0	002.0251	0554.4	049.5	256.6	000.5000	-0069.7	041.1	35.19
105.0	002.0375	0548.7	049.3	255.7	000.5000	-0070.8	041.7	35.00
106.0	002.0499	0542.6	049.0	254.9	000.5000	-0071.7	042.3	34.81
107.0	002.0624	0536.7	048.8	254.1	000.5000	-0072.4	043.0	34.62
108.0	002.0749	0530.8	048.5	253.4	000.5000	-0072.8	043.7	34.42
109.0	002.0874	0525.1	048.3	252.7	000.5000	-0073.2	044.4	34.23
110.0	002.1000	0519.5	048.0	252.0	000.5000	-0073.5	045.1	34.04
111.0	002.1000	0514.3	047.7	251.5	000.5000	-0073.8	045.9	33.85
112.0	002.1000	0509.3	047.4	250.9	000.5000	-0074.1	046.7	33.67
113.0	002.1000	0504.5	047.2	250.4	000.5000	-0074.4	047.4	33.50
114.0	002.1000	0500.2	046.9	249.8	000.5000	-0074.7	048.1	33.33
115.0	002.1000	0497.3	046.8	249.3	000.5000	-0074.9	048.8	33.18
116.0	002.1000	0496.5	046.8	248.7	000.5000	-0075.2	049.5	33.05
117.0	002.1000	0497.1	046.8	248.0	000.5000	-0075.6	050.0	32.92
118.0	002.1000	0498.1	046.8	247.4	000.5000	-0075.9	050.6	32.79

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
119.0	002.1000	0499.6	046.9	246.7	000.5000	-0076.4	051.2	32.66
120.0	002.1000	0500.8	047.0	246.1	000.5000	-0076.8	051.9	32.53
121.0	002.1000	0501.8	047.0	245.6	000.5000	-0077.0	052.5	32.39
122.0	002.1000	0502.9	047.1	245.0	000.5000	-0077.1	053.2	32.25
123.0	002.1000	0504.6	047.2	244.5	000.5000	-0077.1	053.8	32.11
124.0	002.1000	0506.3	047.3	244.0	000.5000	-0077.0	054.5	31.96
125.0	002.1000	0508.1	047.4	243.4	000.5000	-0076.9	055.2	31.82
126.0	002.1000	0509.5	047.5	243.0	000.5000	-0076.7	055.9	31.67
127.0	002.1000	0510.9	047.5	242.5	000.5000	-0076.6	056.6	31.51
128.0	002.1000	0512.1	047.6	242.1	000.5000	-0076.4	057.3	31.36
129.0	002.1000	0513.2	047.7	241.8	000.5000	-0076.3	058.0	31.20
130.0	002.1000	0514.3	047.7	241.4	000.5000	-0076.2	058.8	31.05
131.0	002.1000	0515.1	047.8	241.1	000.5000	-0076.1	059.6	30.89
132.0	002.1000	0515.3	047.8	240.8	000.5000	-0076.1	060.3	30.73
133.0	002.1000	0514.9	047.7	240.6	000.5000	-0076.0	061.1	30.56
134.0	002.1000	0513.5	047.7	240.4	000.5000	-0076.0	062.0	30.40
135.0	002.1000	0511.6	047.6	240.3	000.5000	-0076.0	062.8	30.24
136.0	002.1000	0509.5	047.5	240.2	000.5000	-0076.0	063.6	30.08
137.0	002.1000	0507.2	047.3	240.2	000.5000	-0076.0	064.5	29.92
138.0	002.1000	0504.1	047.2	240.2	000.5000	-0076.0	065.3	29.76
139.0	002.1000	0500.4	047.0	240.2	000.5000	-0076.0	066.2	29.60
140.0	002.1000	0496.0	046.7	240.3	000.5000	-0076.0	067.0	29.45
141.0	002.1000	0490.8	046.5	240.4	000.5000	-0076.0	067.8	29.29
142.0	002.1000	0484.9	046.1	240.5	000.5000	-0076.0	068.7	29.14
143.0	002.1000	0478.0	045.8	240.7	000.5000	-0076.0	069.5	28.99
144.0	002.1000	0470.1	045.4	241.0	000.5000	-0076.1	070.4	28.84
145.0	002.1000	0460.7	044.9	241.3	000.5000	-0076.2	071.2	28.69
146.0	002.1000	0450.0	044.4	241.7	000.5000	-0076.3	072.0	28.54
147.0	002.1000	0438.0	043.8	242.1	000.5000	-0076.4	072.8	28.39
148.0	002.1000	0425.2	043.2	242.5	000.5000	-0076.6	073.7	28.25
149.0	002.1000	0412.9	042.6	242.9	000.5000	-0076.7	074.4	28.10
150.0	002.1000	0402.9	042.1	243.2	000.5000	-0076.8	075.2	27.96
151.0	002.1000	0395.3	041.8	243.5	000.5000	-0076.9	075.9	27.83

01-02-2009 FCC NGDC 30 Sec Terrain Data

1213233 BNPED20071022AGO

Channel = 202A

Max ERP = 0.5 kW

RCAMSL = 1607 M

N. Lat. 39 42 31.3

W. Lng. 104 13 23.7

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
212.0	000.5000	-0076.0	008.5	096.3	001.8357	0584.7	083.9	51.08	
213.0	000.5000	-0076.1	008.5	096.2	001.8341	0584.8	083.8	51.12	
214.0	000.5000	-0076.3	008.5	096.2	001.8324	0585.0	083.6	51.17	
215.0	000.5000	-0076.5	008.5	096.1	001.8306	0585.1	083.5	51.21	
216.0	000.5000	-0076.7	008.5	096.1	001.8288	0585.3	083.4	51.25	
217.0	000.5000	-0076.8	008.5	096.0	001.8270	0585.4	083.3	51.29	
218.0	000.5000	-0077.1	008.5	096.0	001.8250	0585.6	083.1	51.33	
219.0	000.5000	-0077.7	008.5	095.9	001.8230	0585.8	083.0	51.37	
220.0	000.5000	-0078.5	008.5	095.9	001.8210	0585.9	082.9	51.40	
221.0	000.5000	-0079.2	008.5	095.8	001.8189	0586.1	082.8	51.44	
222.0	000.5000	-0079.6	008.5	095.8	001.8167	0586.3	082.6	51.48	
223.0	000.5000	-0079.9	008.5	095.7	001.8145	0586.5	082.5	51.52	
224.0	000.5000	-0080.2	008.5	095.6	001.8122	0586.7	082.4	51.55	
225.0	000.5000	-0080.5	008.5	095.6	001.8098	0586.9	082.3	51.59	
226.0	000.5000	-0080.6	008.5	095.5	001.8074	0587.1	082.2	51.62	
227.0	000.5000	-0080.7	008.5	095.4	001.8049	0587.3	082.0	51.66	
228.0	000.5000	-0080.9	008.5	095.4	001.8024	0587.5	081.9	51.69	
229.0	000.5000	-0081.3	008.5	095.3	001.7999	0587.7	081.8	51.72	
230.0	000.5000	-0081.7	008.5	095.2	001.7972	0587.9	081.7	51.76	
231.0	000.5000	-0081.7	008.5	095.2	001.7945	0588.1	081.6	51.79	
232.0	000.5000	-0081.3	008.5	095.1	001.7918	0588.3	081.5	51.82	
233.0	000.5000	-0080.7	008.5	095.0	001.7890	0588.5	081.4	51.85	
234.0	000.5000	-0079.9	008.5	094.9	001.7862	0588.7	081.3	51.88	
235.0	000.5000	-0079.1	008.5	094.8	001.7833	0588.9	081.2	51.91	
236.0	000.5000	-0078.4	008.5	094.8	001.7804	0589.1	081.1	51.93	
237.0	000.5000	-0077.8	008.5	094.7	001.7774	0589.4	081.0	51.96	
238.0	000.5000	-0077.0	008.5	094.6	001.7744	0589.6	080.9	51.99	
239.0	000.5000	-0076.4	008.5	094.5	001.7713	0589.8	080.8	52.01	
240.0	000.5000	-0076.0	008.5	094.4	001.7682	0590.0	080.8	52.04	
241.0	000.5000	-0076.1	008.5	094.3	001.7651	0590.3	080.7	52.06	
242.0	000.5000	-0076.4	008.5	094.3	001.7619	0590.5	080.6	52.08	
243.0	000.5000	-0076.8	008.5	094.2	001.7587	0590.7	080.5	52.10	
244.0	000.5000	-0077.0	008.5	094.1	001.7554	0590.9	080.4	52.13	
245.0	000.5000	-0077.1	008.5	094.0	001.7521	0591.2	080.4	52.15	



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
246.0	000.5000	-0076.9	008.5	093.9	001.7488	0591.4	080.3	52.16
247.0	000.5000	-0076.2	008.5	093.8	001.7454	0591.6	080.2	52.18
248.0	000.5000	-0075.6	008.5	093.7	001.7420	0591.8	080.2	52.20
249.0	000.5000	-0075.0	008.5	093.6	001.7385	0592.1	080.1	52.22
250.0	000.5000	-0074.6	008.5	093.5	001.7351	0592.3	080.0	52.23
251.0	000.5000	-0074.1	008.5	093.4	001.7316	0592.6	080.0	52.25
252.0	000.5000	-0073.5	008.5	093.3	001.7280	0592.8	079.9	52.26
253.0	000.5000	-0073.0	008.5	093.2	001.7245	0593.1	079.9	52.27
254.0	000.5000	-0072.4	008.5	093.1	001.7209	0593.3	079.8	52.29
255.0	000.5000	-0071.6	008.5	093.0	001.7173	0593.6	079.8	52.30
256.0	000.5000	-0070.4	008.5	092.9	001.7137	0593.8	079.7	52.31
257.0	000.5000	-0069.3	008.5	092.8	001.7100	0594.0	079.7	52.32
258.0	000.5000	-0068.2	008.5	092.7	001.7064	0594.3	079.6	52.32
259.0	000.5000	-0067.4	008.5	092.6	001.7027	0594.5	079.6	52.33
260.0	000.5000	-0066.6	008.5	092.5	001.6990	0594.8	079.6	52.34
261.0	000.5000	-0065.9	008.5	092.4	001.6953	0595.0	079.5	52.34
262.0	000.5000	-0065.3	008.5	092.3	001.6916	0595.2	079.5	52.34
263.0	000.5000	-0064.8	008.5	092.2	001.6878	0595.3	079.5	52.35
264.0	000.5000	-0064.3	008.5	092.1	001.6841	0595.5	079.4	52.35
265.0	000.5000	-0063.8	008.5	092.0	001.6804	0595.6	079.4	52.35
266.0	000.5000	-0062.9	008.5	091.9	001.6766	0595.8	079.4	52.35
267.0	000.5000	-0061.6	008.5	091.8	001.6728	0595.9	079.4	52.34
268.0	000.5000	-0060.4	008.5	091.7	001.6691	0596.0	079.4	52.34
269.0	000.5000	-0059.1	008.5	091.5	001.6653	0596.2	079.4	52.34
270.0	000.5000	-0057.8	008.5	091.4	001.6615	0596.3	079.4	52.33
271.0	000.5000	-0056.3	008.5	091.3	001.6578	0596.5	079.4	52.32
272.0	000.5000	-0054.8	008.5	091.2	001.6540	0596.6	079.4	52.32
273.0	000.5000	-0053.3	008.5	091.1	001.6503	0596.8	079.4	52.31
274.0	000.5000	-0052.1	008.5	091.0	001.6465	0596.9	079.4	52.30
275.0	000.5000	-0050.8	008.5	090.9	001.6428	0597.0	079.4	52.29
276.0	000.5000	-0049.4	008.5	090.8	001.6390	0597.2	079.4	52.28
277.0	000.5000	-0048.1	008.5	090.7	001.6353	0597.3	079.4	52.27
278.0	000.5000	-0046.8	008.5	090.6	001.6316	0597.5	079.4	52.26
279.0	000.5000	-0045.7	008.5	090.5	001.6279	0597.6	079.4	52.24
280.0	000.5000	-0045.0	008.5	090.4	001.6242	0597.7	079.5	52.23
281.0	000.5000	-0044.5	008.5	090.3	001.6206	0597.9	079.5	52.21
282.0	000.5000	-0043.9	008.5	090.2	001.6169	0598.0	079.5	52.20
283.0	000.5000	-0043.0	008.5	090.1	001.6133	0598.1	079.5	52.18
284.0	000.5000	-0042.0	008.5	089.9	001.6100	0598.3	079.6	52.16
285.0	000.5000	-0040.8	008.5	089.8	001.6070	0598.4	079.6	52.14
286.0	000.5000	-0039.9	008.5	089.7	001.6041	0598.5	079.6	52.13
287.0	000.5000	-0039.1	008.5	089.6	001.6011	0598.7	079.7	52.11
288.0	000.5000	-0038.0	008.5	089.5	001.5982	0598.8	079.7	52.09
289.0	000.5000	-0036.4	008.5	089.4	001.5953	0598.9	079.8	52.07
290.0	000.5000	-0034.6	008.5	089.3	001.5924	0599.0	079.8	52.05
291.0	000.5000	-0032.8	008.5	089.2	001.5896	0599.2	079.9	52.02
292.0	000.5000	-0031.1	008.5	089.1	001.5868	0599.3	079.9	52.00
293.0	000.5000	-0029.4	008.5	089.0	001.5840	0599.4	080.0	51.98
294.0	000.5000	-0027.7	008.5	088.9	001.5812	0599.5	080.0	51.95
295.0	000.5000	-0026.3	008.5	088.8	001.5785	0599.6	080.1	51.93
296.0	000.5000	-0025.1	008.5	088.7	001.5758	0599.8	080.2	51.90

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
297.0	000.5000	-0023.8	008.5	088.7	001.5731	0599.9	080.2	51.87
298.0	000.5000	-0022.5	008.5	088.6	001.5704	0600.0	080.3	51.85
299.0	000.5000	-0021.0	008.5	088.5	001.5678	0600.1	080.4	51.82
300.0	000.5000	-0019.5	008.5	088.4	001.5652	0600.3	080.5	51.79
301.0	000.5000	-0018.0	008.5	088.3	001.5627	0600.4	080.5	51.76
302.0	000.5000	-0016.6	008.5	088.2	001.5602	0600.6	080.6	51.73
303.0	000.5000	-0015.3	008.5	088.1	001.5577	0600.7	080.7	51.70
304.0	000.5000	-0014.0	008.5	088.0	001.5553	0600.9	080.8	51.67
305.0	000.5000	-0012.7	008.5	087.9	001.5529	0601.0	080.9	51.64
306.0	000.5000	-0011.4	008.5	087.9	001.5505	0601.1	081.0	51.60
307.0	000.5000	-0010.2	008.5	087.8	001.5482	0601.3	081.0	51.57
308.0	000.5000	-0008.9	008.5	087.7	001.5459	0601.4	081.1	51.54
309.0	000.5000	-0007.7	008.5	087.6	001.5436	0601.5	081.2	51.50
310.0	000.5000	-0006.3	008.5	087.5	001.5414	0601.6	081.3	51.47
311.0	000.5000	-0004.9	008.5	087.5	001.5393	0601.7	081.4	51.43
312.0	000.5000	-0003.6	008.5	087.4	001.5371	0601.8	081.5	51.39
313.0	000.5000	-0002.3	008.5	087.3	001.5350	0601.9	081.6	51.36
314.0	000.5000	-0001.0	008.5	087.2	001.5330	0602.0	081.7	51.32
315.0	000.5000	0000.5	008.5	087.2	001.5310	0602.1	081.9	51.28
316.0	000.5000	0001.9	008.5	087.1	001.5290	0602.2	082.0	51.24
317.0	000.5000	0003.3	008.5	087.0	001.5271	0602.2	082.1	51.20
318.0	000.5000	0004.6	008.5	087.0	001.5253	0602.3	082.2	51.16
319.0	000.5000	0005.7	008.5	086.9	001.5234	0602.4	082.3	51.12
320.0	000.5000	0006.7	008.5	086.8	001.5217	0602.4	082.4	51.08
321.0	000.5000	0007.8	008.5	086.8	001.5199	0602.5	082.5	51.04
322.0	000.5000	0009.3	008.5	086.7	001.5183	0602.5	082.7	50.99
323.0	000.5000	0011.2	008.5	086.6	001.5166	0602.5	082.8	50.95
324.0	000.5000	0013.5	008.5	086.6	001.5150	0602.6	082.9	50.91
325.0	000.5000	0016.0	008.5	086.5	001.5135	0602.6	083.0	50.86
326.0	000.5000	0018.6	008.5	086.5	001.5120	0602.6	083.2	50.82
327.0	000.5000	0020.9	008.5	086.4	001.5106	0602.6	083.3	50.77
328.0	000.5000	0022.9	008.5	086.4	001.5092	0602.7	083.4	50.73
329.0	000.5000	0024.6	008.5	086.3	001.5078	0602.7	083.5	50.68
330.0	000.5000	0025.9	008.5	086.3	001.5065	0602.7	083.7	50.64
331.0	000.5000	0026.7	008.5	086.2	001.5052	0602.7	083.8	50.59
332.0	000.5000	0027.3	008.5	086.2	001.5040	0602.7	083.9	50.55

## Contour-to-contour Map

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 14.46 km, Out= 5.91 km)

KVOD CH 201 C3 DA

Lat= 39 43 49.0, Lng= 105 15 00.0

2.1 kW 275 M HAAT, 2333.6 M COR

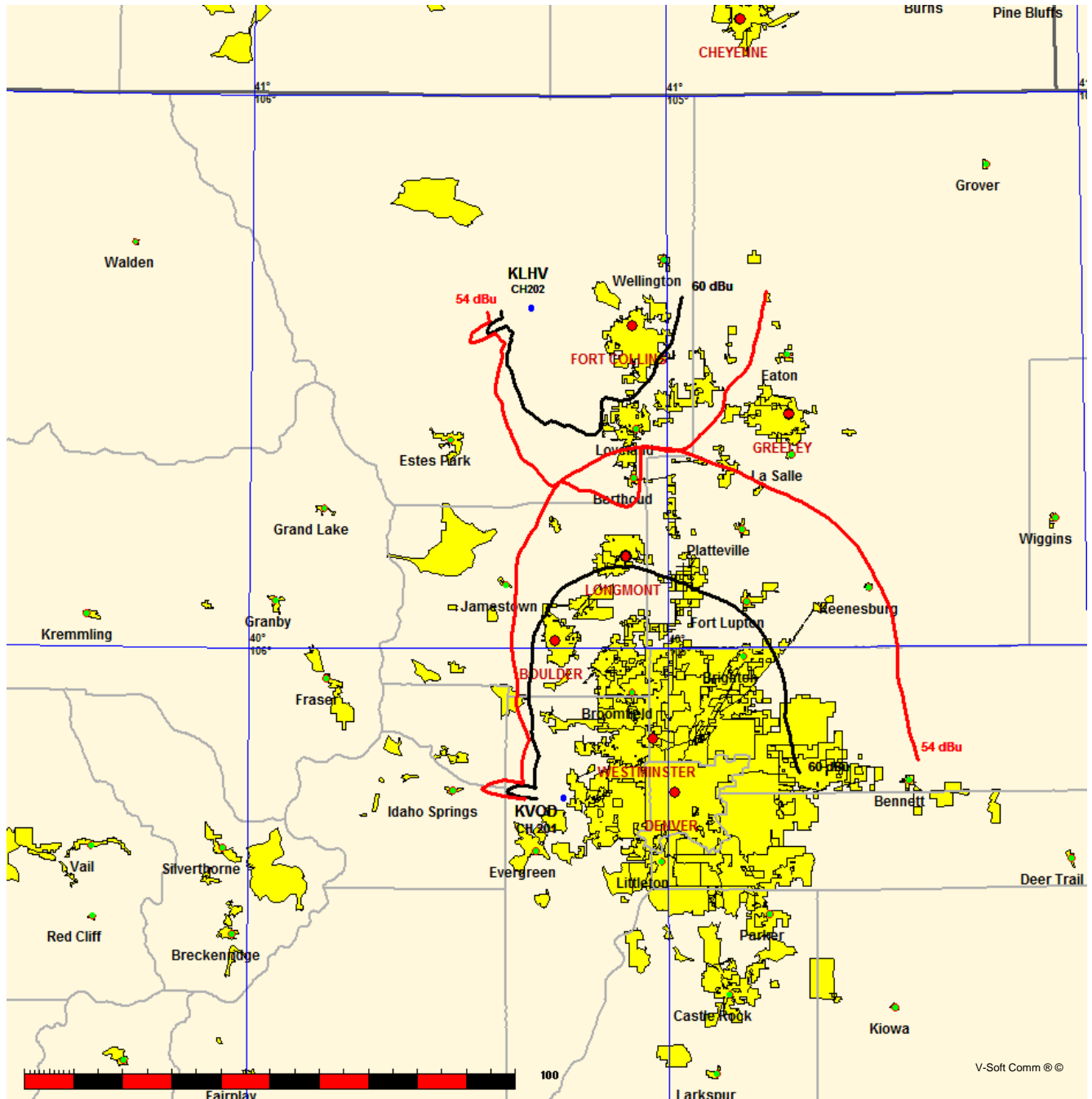
Prot.= 60 dBu, Intef.= 54 dBu

KLHV CH 202 A BLED20060117AFJ

Lat= 40 37 03.0, Lng= 105 19 40.0

0.15 kW 364 M HAAT, 2552 M COR

Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

KLHV BLED20060117AFJ

Channel = 202A

Max ERP = 0.15 kW

RCAMSL = 2552 M

N. Lat. 40 37 03.0

W. Lng. 105 19 40.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
296.0	000.1838	-0025.8	006.6	179.6	000.1500	0346.7	095.8	30.12	
297.0	000.1924	-0035.8	006.6	179.6	000.1500	0346.6	095.6	30.16	
298.0	000.2015	-0050.5	006.7	179.6	000.1500	0346.6	095.5	30.20	
299.0	000.2110	-0069.2	006.8	179.6	000.1500	0346.5	095.3	30.24	
300.0	000.2209	-0087.6	006.9	179.6	000.1500	0346.5	095.2	30.28	
301.0	000.2314	-0101.6	007.0	179.6	000.1500	0346.5	095.1	30.33	
302.0	000.2423	-0107.5	007.0	179.6	000.1500	0346.4	094.9	30.37	
303.0	000.2537	-0107.4	007.1	179.6	000.1500	0346.4	094.8	30.41	
304.0	000.2656	-0100.9	007.2	179.6	000.1500	0346.4	094.6	30.46	
305.0	000.2782	-0089.5	007.3	179.6	000.1500	0346.5	094.5	30.51	
306.0	000.2913	-0074.4	007.4	179.6	000.1500	0346.5	094.3	30.56	
307.0	000.3050	-0059.8	007.5	179.6	000.1500	0346.5	094.2	30.60	
308.0	000.3194	-0051.8	007.5	179.6	000.1500	0346.6	094.0	30.65	
309.0	000.3344	-0052.8	007.6	179.6	000.1500	0346.6	093.8	30.71	
310.0	000.3502	-0062.4	007.7	179.6	000.1500	0346.7	093.7	30.76	
311.0	000.3667	-0076.5	007.8	179.6	000.1500	0346.8	093.5	30.81	
312.0	000.3840	-0091.3	007.9	179.5	000.1500	0346.9	093.3	30.86	
313.0	000.4020	-0105.4	008.0	179.5	000.1500	0347.0	093.2	30.92	
314.0	000.4210	-0119.2	008.1	179.5	000.1500	0347.1	093.0	30.98	
315.0	000.4408	-0132.2	008.2	179.5	000.1500	0347.2	092.8	31.03	
316.0	000.4616	-0142.0	008.3	179.5	000.1500	0347.4	092.7	31.09	
317.0	000.4834	-0143.5	008.4	179.5	000.1500	0347.5	092.5	31.15	
318.0	000.5062	-0135.8	008.5	179.4	000.1500	0347.7	092.3	31.21	
319.0	000.5300	-0122.3	008.6	179.4	000.1500	0347.9	092.1	31.28	
320.0	000.5550	-0107.6	008.7	179.4	000.1500	0348.2	091.9	31.34	
321.0	000.5811	-0093.3	008.9	179.3	000.1500	0348.4	091.8	31.40	
322.0	000.6085	-0080.2	009.0	179.3	000.1500	0348.7	091.6	31.47	
323.0	000.6372	-0067.8	009.1	179.3	000.1500	0349.0	091.4	31.53	
324.0	000.6672	-0055.3	009.2	179.2	000.1500	0349.3	091.2	31.60	
325.0	000.6987	-0041.5	009.3	179.2	000.1500	0349.6	091.0	31.67	
326.0	000.7316	-0025.4	009.4	179.1	000.1500	0350.0	090.9	31.74	
327.0	000.7661	-0007.5	009.5	179.1	000.1500	0350.4	090.7	31.81	
328.0	000.8022	0009.0	009.6	179.0	000.1500	0350.8	090.5	31.88	
329.0	000.8400	0024.0	009.7	179.0	000.1500	0351.2	090.3	31.95	
330.0	000.8796	0036.8	010.8	179.2	000.1500	0349.4	089.3	32.22	
331.0	000.9210	0046.7	012.3	179.6	000.1500	0346.7	087.9	32.59	
332.0	000.9644	0054.3	013.4	179.8	000.1500	0345.1	086.8	32.89	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
333.0	001.0099	0060.6	014.3	179.9	000.1500	0344.2	085.9	33.15
334.0	001.0575	0064.2	014.8	179.9	000.1500	0344.1	085.3	33.34
335.0	001.1073	0065.0	015.1	179.8	000.1500	0344.7	085.0	33.48
336.0	001.1595	0066.3	015.4	179.8	000.1500	0345.3	084.6	33.63
337.0	001.2142	0070.2	016.1	179.8	000.1500	0345.2	083.8	33.87
338.0	001.2714	0077.4	017.2	179.9	000.1500	0344.4	082.7	34.22
339.0	001.3313	0088.1	018.7	180.1	000.1500	0343.0	081.2	34.68
340.0	001.3941	0101.5	020.4	180.3	000.1500	0341.5	079.5	35.20
341.0	001.4598	0115.3	021.9	180.4	000.1500	0340.5	077.9	35.71
342.0	001.5285	0125.7	023.0	180.4	000.1500	0340.6	076.7	36.11
343.0	001.6006	0133.0	023.8	180.3	000.1500	0341.4	075.8	36.45
344.0	001.6760	0139.2	024.5	180.1	000.1500	0342.6	075.0	36.77
345.0	001.7550	0149.5	025.6	180.0	000.1500	0343.4	073.9	37.19
346.0	001.8377	0164.0	026.9	179.9	000.1500	0344.0	072.5	37.72
347.0	001.9243	0185.4	028.8	179.9	000.1500	0344.3	070.6	38.40
348.0	002.0150	0209.9	030.9	179.8	000.1500	0344.6	068.4	39.20
349.0	002.1000	0229.0	032.7	179.7	000.1500	0345.9	066.5	39.90
350.0	002.1000	0244.6	033.7	179.3	000.1500	0348.4	065.4	40.40
351.0	002.0962	0254.6	034.3	178.9	000.1500	0351.9	064.7	40.76
352.0	002.0966	0269.7	035.2	178.5	000.1500	0357.0	063.7	41.28
353.0	002.0971	0281.8	035.9	178.0	000.1500	0363.4	063.0	41.76
354.0	002.0975	0294.8	036.7	177.4	000.1500	0370.4	062.2	42.26
355.0	002.0979	0315.0	037.8	176.9	000.1500	0377.7	061.1	42.87
356.0	002.0983	0335.4	038.9	176.3	000.1500	0386.2	059.9	43.51
357.0	002.0987	0356.9	040.0	175.6	000.1500	0395.4	058.8	44.16
358.0	002.0992	0374.6	040.9	174.9	000.1500	0404.4	058.0	44.70
359.0	002.0996	0391.3	041.6	174.1	000.1500	0415.2	057.3	45.23
000.0	002.1000	0408.1	042.4	173.3	000.1500	0423.2	056.6	45.69
001.0	002.1000	0416.5	042.8	172.5	000.1500	0422.7	056.3	45.79
002.0	002.1000	0425.0	043.2	171.7	000.1500	0419.4	056.0	45.81
003.0	002.1000	0433.7	043.6	170.8	000.1500	0413.4	055.8	45.76
004.0	002.1000	0441.6	044.0	170.0	000.1500	0410.5	055.6	45.76
005.0	002.1000	0451.8	044.5	169.1	000.1500	0415.1	055.3	45.99
006.0	002.1000	0462.2	045.0	168.1	000.1500	0423.6	055.0	46.30
007.0	002.1000	0472.4	045.5	167.2	000.1500	0436.1	054.8	46.69
008.0	002.1000	0481.9	046.0	166.2	000.1500	0447.5	054.6	47.04
009.0	002.1000	0489.6	046.4	165.3	000.1500	0460.0	054.5	47.37
010.0	002.1000	0496.4	046.7	164.3	000.1500	0468.4	054.6	47.57
011.0	002.1000	0503.1	047.1	163.4	000.1500	0472.5	054.6	47.66
012.0	002.1000	0508.6	047.4	162.5	000.1500	0473.9	054.7	47.65
013.0	002.1000	0512.9	047.6	161.6	000.1500	0479.4	055.0	47.70
014.0	002.1000	0516.0	047.8	160.8	000.1500	0488.7	055.3	47.83
015.0	002.1000	0519.9	048.0	159.9	000.1500	0501.9	055.5	48.06
016.0	002.1000	0524.3	048.3	159.1	000.1500	0516.6	055.8	48.32
017.0	002.1000	0528.8	048.5	158.2	000.1500	0531.7	056.1	48.57
018.0	002.1000	0531.7	048.7	157.5	000.1500	0546.8	056.6	48.76
019.0	002.1000	0532.7	048.7	156.8	000.1500	0560.8	057.1	48.82
020.0	002.1000	0533.0	048.8	156.2	000.1500	0573.3	057.6	48.81
021.0	002.1000	0533.3	048.8	155.5	000.1500	0584.2	058.2	48.75
022.0	002.1000	0533.7	048.8	155.0	000.1500	0593.1	058.8	48.65
023.0	002.1000	0534.0	048.8	154.4	000.1500	0599.8	059.4	48.51

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
024.0	002.1000	0534.5	048.8	153.8	000.1500	0604.4	060.1	48.35
025.0	002.1000	0535.9	048.9	153.3	000.1500	0607.2	060.7	48.17
026.0	002.1000	0538.0	049.0	152.7	000.1500	0607.6	061.3	47.97
027.0	002.1000	0540.5	049.2	152.1	000.1500	0606.3	061.9	47.75
028.0	002.1000	0543.0	049.3	151.6	000.1500	0603.3	062.5	47.49
029.0	002.1000	0545.3	049.4	151.0	000.1500	0598.4	063.2	47.21
030.0	002.1000	0547.0	049.5	150.6	000.1500	0592.2	063.9	46.91
031.0	002.1000	0548.4	049.6	150.1	000.1500	0584.9	064.6	46.58
032.0	002.1000	0550.1	049.7	149.7	000.1500	0576.7	065.3	46.24
033.0	002.1000	0552.5	049.8	149.2	000.1500	0567.6	066.0	45.87
034.0	002.1000	0556.4	050.0	148.8	000.1500	0557.4	066.7	45.46
035.0	002.1000	0561.1	050.2	148.3	000.1500	0547.1	067.4	45.02
036.0	002.1000	0566.5	050.4	147.8	000.1500	0537.2	068.2	44.55
037.0	002.1000	0572.3	050.7	147.4	000.1500	0528.2	068.9	44.08
038.0	002.1000	0578.2	051.0	146.9	000.1500	0519.9	069.6	43.62
039.0	002.1000	0584.3	051.2	146.5	000.1500	0512.1	070.4	43.16
040.0	002.1000	0590.3	051.4	146.1	000.1500	0504.7	071.2	42.71
041.0	002.1000	0595.8	051.7	145.7	000.1500	0497.7	072.0	42.27
042.0	002.1000	0600.4	051.8	145.4	000.1500	0491.6	072.8	41.84
043.0	002.1000	0604.2	052.0	145.1	000.1500	0486.1	073.7	41.43
044.0	002.1000	0607.2	052.1	144.9	000.1500	0481.5	074.5	41.02
045.0	002.1000	0610.1	052.2	144.7	000.1500	0477.0	075.4	40.62
046.0	002.1000	0612.8	052.3	144.5	000.1500	0472.9	076.3	40.23
047.0	002.1000	0614.8	052.4	144.4	000.1500	0469.5	077.2	39.85
048.0	002.1000	0615.9	052.4	144.3	000.1500	0467.0	078.1	39.49
049.0	002.1000	0615.9	052.4	144.2	000.1500	0465.4	079.0	39.15
050.0	002.1000	0616.0	052.4	144.1	000.1500	0464.1	079.9	38.82
051.0	002.0720	0616.0	052.3	144.2	000.1500	0465.2	080.8	38.55
052.0	002.0441	0615.9	052.1	144.2	000.1500	0466.6	081.8	38.30
053.0	002.0164	0615.7	052.0	144.3	000.1500	0468.3	082.7	38.04
054.0	001.9889	0615.8	051.9	144.4	000.1500	0470.0	083.6	37.80
055.0	001.9617	0616.3	051.8	144.5	000.1500	0471.8	084.5	37.55
056.0	001.9346	0616.8	051.6	144.6	000.1500	0473.8	085.4	37.31

01-02-2009 FCC NGDC 30 Sec Terrain Data

KLHV BLED20060117AFJ

Channel = 202A

Max ERP = 0.15 kW

RCAMSL = 2552 M

N. Lat. 40 37 03.0

W. Lng. 105 19 40.0

Protected

60 dBu

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
116.0	000.1500	0584.4	028.0	012.0	002.1000	0508.8	088.3	48.64	
117.0	000.1500	0589.4	028.1	012.0	002.1000	0508.7	087.8	48.80	
118.0	000.1500	0591.6	028.2	012.0	002.1000	0508.4	087.3	48.95	
119.0	000.1500	0591.3	028.2	011.9	002.1000	0508.0	086.8	49.08	
120.0	000.1500	0588.8	028.1	011.7	002.1000	0507.3	086.4	49.21	
121.0	000.1500	0585.6	028.0	011.6	002.1000	0506.5	086.0	49.34	
122.0	000.1500	0582.7	028.0	011.4	002.1000	0505.6	085.5	49.46	
123.0	000.1500	0580.1	027.9	011.3	002.1000	0504.7	085.1	49.58	
124.0	000.1500	0576.7	027.8	011.1	002.1000	0503.7	084.7	49.69	
125.0	000.1500	0572.5	027.7	010.9	002.1000	0502.5	084.3	49.80	
126.0	000.1500	0568.8	027.6	010.7	002.1000	0501.3	083.9	49.90	
127.0	000.1500	0566.8	027.6	010.5	002.1000	0500.1	083.5	50.01	
128.0	000.1500	0565.9	027.5	010.4	002.1000	0499.0	083.0	50.12	
129.0	000.1500	0565.0	027.5	010.2	002.1000	0497.8	082.6	50.23	
130.0	000.1500	0563.1	027.5	010.0	002.1000	0496.5	082.2	50.33	
131.0	000.1500	0559.3	027.4	009.8	002.1000	0494.9	081.9	50.41	
132.0	000.1500	0552.0	027.2	009.5	002.1000	0492.9	081.6	50.46	
133.0	000.1500	0542.4	026.9	009.2	002.1000	0490.6	081.3	50.49	
134.0	000.1500	0532.1	026.6	008.8	002.1000	0488.2	081.1	50.50	
135.0	000.1500	0521.2	026.3	008.4	002.1000	0485.4	080.9	50.50	
136.0	000.1500	0506.2	025.8	008.0	002.1000	0481.7	080.8	50.44	
137.0	000.1500	0486.6	025.2	007.4	002.1000	0476.8	080.9	50.31	
138.0	000.1500	0464.9	024.6	006.9	002.1000	0471.4	081.0	50.14	
139.0	000.1500	0443.8	024.0	006.4	002.1000	0466.3	081.0	49.98	
140.0	000.1500	0427.5	023.6	006.0	002.1000	0461.9	081.0	49.87	
141.0	000.1500	0420.0	023.4	005.7	002.1000	0458.8	080.9	49.84	
142.0	000.1500	0424.0	023.5	005.5	002.1000	0457.2	080.5	49.91	
143.0	000.1500	0439.5	023.9	005.5	002.1000	0457.0	079.9	50.09	
144.0	000.1500	0461.3	024.5	005.6	002.1000	0457.6	079.2	50.34	
145.0	000.1500	0483.2	025.1	005.6	002.1000	0458.4	078.4	50.62	
146.0	000.1500	0503.2	025.7	005.7	002.1000	0458.9	077.7	50.88	
147.0	000.1500	0521.7	026.3	005.7	002.1000	0458.9	076.9	51.11	
148.0	000.1500	0541.0	026.9	005.7	002.1000	0458.8	076.2	51.35	
149.0	000.1500	0562.2	027.4	005.7	002.1000	0458.6	075.5	51.59	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
150.0	000.1500	0582.6	028.0	005.6	002.1000	0458.0	074.7	51.80
151.0	000.1500	0598.0	028.3	005.5	002.1000	0456.5	074.2	51.95
152.0	000.1500	0605.8	028.5	005.2	002.1000	0454.0	073.7	52.03
153.0	000.1500	0607.6	028.6	004.9	002.1000	0450.8	073.4	52.04
154.0	000.1500	0603.2	028.5	004.5	002.1000	0446.9	073.3	51.99
155.0	000.1500	0592.5	028.2	004.1	002.1000	0442.6	073.2	51.88
156.0	000.1500	0576.2	027.8	003.6	002.1000	0438.7	073.4	51.73
157.0	000.1500	0556.6	027.3	003.1	002.1000	0434.7	073.6	51.54
158.0	000.1500	0536.5	026.7	002.6	002.1000	0430.1	073.9	51.31
159.0	000.1500	0518.2	026.2	002.1	002.1000	0425.9	074.2	51.09
160.0	000.1500	0500.9	025.7	001.6	002.1000	0421.9	074.5	50.87
161.0	000.1500	0485.9	025.2	001.2	002.1000	0418.1	074.8	50.67
162.0	000.1500	0476.2	024.9	000.8	002.1000	0414.8	074.9	50.53
163.0	000.1500	0473.3	024.8	000.5	002.1000	0412.0	074.9	50.47
164.0	000.1500	0470.2	024.7	000.1	002.1000	0409.2	074.9	50.40
165.0	000.1500	0463.1	024.5	359.8	002.0999	0404.4	074.9	50.23
166.0	000.1500	0450.2	024.2	359.4	002.0997	0398.0	075.2	49.95
167.0	000.1500	0438.3	023.8	359.0	002.0996	0392.0	075.4	49.70
168.0	000.1500	0425.2	023.5	358.7	002.0994	0386.1	075.7	49.43
169.0	000.1500	0415.5	023.2	358.4	002.0993	0380.5	075.8	49.19
170.0	000.1500	0410.5	023.1	358.0	002.0992	0375.2	075.9	49.00
171.0	000.1500	0414.9	023.2	357.7	002.0991	0370.3	075.7	48.90
172.0	000.1500	0420.9	023.4	357.5	002.0989	0365.4	075.5	48.81
173.0	000.1500	0423.7	023.5	357.2	002.0988	0360.0	075.4	48.67
174.0	000.1500	0416.5	023.3	356.8	002.0987	0353.3	075.6	48.39
175.0	000.1500	0402.7	022.9	356.5	002.0985	0345.9	075.9	48.02
176.0	000.1500	0390.1	022.6	356.2	002.0984	0339.7	076.3	47.70
177.0	000.1500	0376.2	022.2	355.9	002.0983	0334.2	076.6	47.38
178.0	000.1500	0362.9	021.8	355.7	002.0982	0328.8	077.0	47.07
179.0	000.1500	0351.0	021.5	355.4	002.0981	0323.4	077.4	46.76
180.0	000.1500	0343.4	021.3	355.1	002.0980	0317.9	077.6	46.50
181.0	000.1500	0335.9	021.1	354.9	002.0979	0312.5	077.9	46.23
182.0	000.1500	0329.3	020.9	354.6	002.0977	0307.4	078.1	45.99
183.0	000.1500	0322.7	020.7	354.4	002.0976	0302.4	078.4	45.74
184.0	000.1500	0310.2	020.3	354.2	002.0976	0298.3	078.8	45.46
185.0	000.1500	0293.3	019.7	354.0	002.0975	0295.0	079.4	45.15
186.0	000.1500	0274.0	019.1	353.9	002.0974	0292.6	080.1	44.84
187.0	000.1500	0255.6	018.4	353.7	002.0974	0290.5	080.8	44.54
188.0	000.1500	0239.3	017.8	353.6	002.0973	0288.8	081.5	44.27
189.0	000.1500	0225.6	017.2	353.5	002.0973	0287.3	082.1	44.03
190.0	000.1500	0213.8	016.8	353.4	002.0972	0285.9	082.7	43.81
191.0	000.1500	0202.7	016.3	353.3	002.0972	0284.9	083.2	43.61
192.0	000.1500	0191.3	015.8	353.3	002.0972	0284.2	083.7	43.41
193.0	000.1500	0181.1	015.4	353.2	002.0971	0283.4	084.2	43.23
194.0	000.1500	0171.9	015.0	353.1	002.0971	0282.8	084.7	43.06
195.0	000.1500	0162.5	014.5	353.1	002.0971	0282.3	085.2	42.88
196.0	000.1500	0151.9	014.0	353.0	002.0971	0282.2	085.8	42.68
197.0	000.1500	0141.3	013.4	353.0	002.0971	0282.2	086.4	42.49
198.0	000.1500	0135.0	013.1	353.0	002.0971	0281.7	086.8	42.36
199.0	000.1500	0132.0	013.0	352.9	002.0970	0280.9	087.0	42.25
200.0	000.1500	0130.2	012.9	352.8	002.0970	0279.8	087.2	42.16



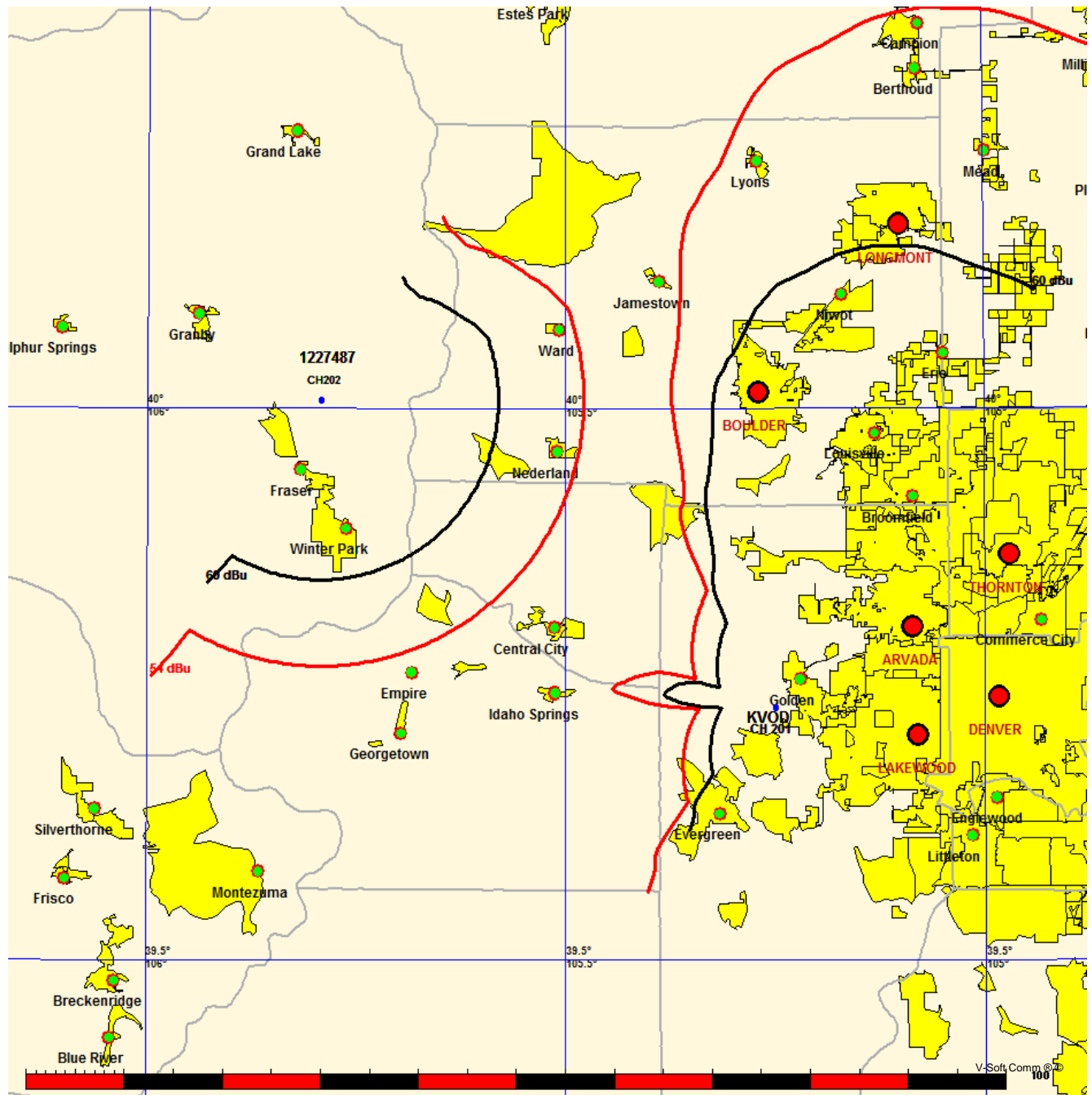
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
201.0	000.1500	0128.8	012.8	352.7	002.0969	0278.6	087.4	42.08
202.0	000.1500	0126.4	012.7	352.6	002.0969	0277.5	087.6	41.98
203.0	000.1500	0121.9	012.5	352.5	002.0969	0276.9	087.9	41.86
204.0	000.1500	0115.4	012.2	352.5	002.0969	0276.7	088.3	41.74
205.0	000.1500	0108.2	011.8	352.5	002.0969	0276.9	088.7	41.61
206.0	000.1500	0099.1	011.3	352.6	002.0969	0277.6	089.2	41.47
207.0	000.1500	0088.2	010.7	352.7	002.0969	0278.9	089.8	41.32
208.0	000.1500	0077.5	010.1	352.8	002.0970	0280.4	090.4	41.17
209.0	000.1500	0067.9	009.5	353.0	002.0971	0281.7	091.0	41.02
210.0	000.1500	0058.6	008.8	353.1	002.0971	0283.1	091.7	40.87
211.0	000.1500	0051.1	008.2	353.3	002.0972	0284.7	092.3	40.73
212.0	000.1500	0045.9	007.7	353.4	002.0972	0286.0	092.7	40.62
213.0	000.1500	0044.2	007.5	353.4	002.0972	0286.0	092.9	40.56
214.0	000.1500	0044.4	007.5	353.4	002.0972	0285.3	093.0	40.51
215.0	000.1500	0042.9	007.4	353.4	002.0972	0285.2	093.2	40.45
216.0	000.1500	0038.6	007.0	353.5	002.0973	0286.4	093.6	40.37
217.0	000.1500	0031.3	006.4	353.7	002.0973	0289.5	094.1	40.29
218.0	000.1500	0023.3	006.2	353.7	002.0973	0289.5	094.3	40.24
219.0	000.1500	0014.4	006.2	353.6	002.0973	0288.8	094.4	40.20
220.0	000.1500	0005.3	006.2	353.6	002.0973	0288.1	094.5	40.15
221.0	000.1500	-0002.4	006.2	353.5	002.0973	0287.5	094.5	40.11
222.0	000.1500	-0008.1	006.2	353.5	002.0973	0286.9	094.6	40.06
223.0	000.1500	-0011.3	006.2	353.5	002.0973	0286.4	094.7	40.02
224.0	000.1500	-0013.2	006.2	353.4	002.0972	0285.9	094.8	39.98
225.0	000.1500	-0016.3	006.2	353.4	002.0972	0285.4	094.9	39.94
226.0	000.1500	-0021.6	006.2	353.3	002.0972	0285.0	095.0	39.90
227.0	000.1500	-0025.7	006.2	353.3	002.0972	0284.6	095.0	39.86
228.0	000.1500	-0026.7	006.2	353.3	002.0972	0284.2	095.1	39.82
229.0	000.1500	-0024.1	006.2	353.2	002.0972	0283.9	095.2	39.78
230.0	000.1500	-0018.1	006.2	353.2	002.0971	0283.5	095.3	39.74
231.0	000.1500	-0009.1	006.2	353.2	002.0971	0283.2	095.4	39.70
232.0	000.1500	-0000.1	006.2	353.1	002.0971	0282.9	095.5	39.67
233.0	000.1500	0007.7	006.2	353.1	002.0971	0282.6	095.6	39.63
234.0	000.1500	0015.8	006.2	353.1	002.0971	0282.3	095.7	39.59
235.0	000.1500	0025.6	006.2	353.0	002.0971	0282.1	095.8	39.55
236.0	000.1500	0037.7	006.9	352.6	002.0969	0278.0	095.6	39.49

## Contour-to-contour Map

FMCommander Single Allocation Study - 01-02-2009 - FCC NGDC 30 Sec  
KVOD's Overlaps (In= 13.1 km, Out= 27.14 km)

KVOD CH 201 C3 DA  
Lat= 39 43 49.0, Lng= 105 15 00.0  
2.1 kW 275 M HAAT, 2333.6 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

1227487 CH 202 C3 DA BNPED20071018BDM  
Lat= 40 00 23.0, Lng= 105 47 38.0  
10.0 kW -180 M HAAT, 2745 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



01-02-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KVOD

Channel = 201C3

Max ERP = 2.1 kW

RCAMSL = 2333.58 M

N. Lat. 39 43 49.0

W. Lng. 105 15 00.0

Protected

60 dBu

1227487 BNPED20071018BDM

Channel = 202C3

Max ERP = 10 kW

RCAMSL = 2745 M

N. Lat. 40 00 23.0

W. Lng. 105 47 38.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
244.0	000.2782	-0137.9	007.3	130.2	010.0000	-0465.5	052.3	45.43	
245.0	000.2656	-0129.0	007.2	130.1	010.0000	-0466.8	052.3	45.45	
246.0	000.2537	-0122.6	007.1	129.9	010.0000	-0468.1	052.2	45.47	
247.0	000.2423	-0118.2	007.0	129.8	010.0000	-0469.4	052.1	45.48	
248.0	000.2314	-0112.5	007.0	129.6	010.0000	-0470.4	052.0	45.50	
249.0	000.2209	-0104.1	006.9	129.5	010.0000	-0471.3	052.0	45.51	
250.0	000.2110	-0093.4	006.8	129.4	010.0000	-0472.1	051.9	45.53	
251.0	000.2015	-0079.9	006.7	129.2	010.0000	-0472.7	051.8	45.54	
252.0	000.1924	-0066.0	006.6	129.1	010.0000	-0473.3	051.8	45.55	
253.0	000.1838	-0053.4	006.6	128.9	010.0000	-0473.9	051.7	45.56	
254.0	000.1755	-0043.1	006.5	128.8	010.0000	-0474.1	051.7	45.58	
255.0	000.1676	-0036.4	006.4	128.7	010.0000	-0474.3	051.6	45.59	
256.0	000.1601	-0031.1	006.3	128.5	010.0000	-0474.2	051.6	45.60	
257.0	000.1529	-0024.9	006.3	128.4	010.0000	-0473.8	051.5	45.61	
258.0	000.1460	-0020.6	006.2	128.2	010.0000	-0473.3	051.5	45.61	
259.0	000.1394	-0015.0	006.1	128.1	010.0000	-0472.7	051.5	45.62	
260.0	000.1331	-0006.9	006.1	128.0	010.0000	-0472.0	051.4	45.63	
261.0	000.1271	-0001.1	006.0	127.8	010.0000	-0471.2	051.4	45.64	
262.0	000.1214	-0001.7	005.9	127.7	010.0000	-0470.4	051.4	45.64	
263.0	000.1160	-0005.2	005.8	127.6	010.0000	-0469.5	051.4	45.65	
264.0	000.1107	-0011.9	005.8	127.4	010.0000	-0468.6	051.3	45.65	
265.0	000.1057	-0009.1	005.7	127.3	010.0000	-0467.7	051.3	45.66	
266.0	000.1010	-0001.1	005.7	127.2	010.0000	-0466.7	051.3	45.66	
267.0	000.0964	0003.6	005.6	127.0	010.0000	-0465.8	051.3	45.66	
268.0	000.0921	0018.9	005.5	126.9	010.0000	-0464.8	051.3	45.67	
269.0	000.0880	0037.8	006.1	127.2	010.0000	-0467.0	050.8	45.77	
270.0	000.0840	0056.7	007.4	128.0	010.0000	-0472.4	049.7	46.02	
271.0	000.0840	0075.8	008.6	128.8	010.0000	-0474.2	048.6	46.24	
272.0	000.0840	0092.3	009.5	129.3	010.0000	-0472.4	047.8	46.42	
273.0	000.0840	0104.6	010.1	129.6	010.0000	-0470.9	047.2	46.55	
274.0	000.0840	0118.8	010.7	129.8	010.0000	-0468.9	046.6	46.69	
275.0	000.0840	0132.3	011.3	130.0	010.0000	-0467.1	046.1	46.82	
276.0	000.0840	0137.0	011.5	130.0	010.0000	-0467.7	045.8	46.89	
277.0	000.0840	0134.6	011.4	129.7	010.0000	-0470.0	045.8	46.90	
278.0	000.0840	0130.7	011.2	129.4	010.0000	-0472.0	045.8	46.89	
279.0	000.0840	0123.7	010.9	129.0	010.0000	-0473.7	045.9	46.85	
280.0	000.0880	0117.3	010.8	128.7	010.0000	-0474.3	046.0	46.85	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
281.0	000.0921	0109.2	010.5	128.3	010.0000	-0473.7	046.1	46.82
282.0	000.0964	0101.8	010.3	128.0	010.0000	-0472.3	046.2	46.79
283.0	000.1010	0093.9	010.0	127.7	010.0000	-0470.2	046.4	46.74
284.0	000.1057	0085.7	009.7	127.3	010.0000	-0467.7	046.6	46.69
285.0	000.1107	0078.9	009.4	127.0	010.0000	-0465.5	046.8	46.64
286.0	000.1160	0068.7	008.9	126.6	010.0000	-0462.9	047.2	46.55
287.0	000.1214	0055.1	008.0	126.1	010.0000	-0461.1	048.0	46.38
288.0	000.1271	0038.6	006.7	125.4	010.0000	-0461.4	049.2	46.11
289.0	000.1331	0021.5	006.1	125.1	010.0000	-0462.9	049.8	45.98
290.0	000.1394	0006.5	006.1	125.0	010.0000	-0463.5	049.7	46.00
291.0	000.1460	-0004.7	006.2	124.9	010.0000	-0464.1	049.6	46.02
292.0	000.1529	-0011.4	006.3	124.8	010.0000	-0464.8	049.5	46.04
293.0	000.1601	-0015.1	006.3	124.7	010.0000	-0465.6	049.4	46.06
294.0	000.1676	-0017.4	006.4	124.5	010.0000	-0466.6	049.3	46.09
295.0	000.1755	-0020.2	006.5	124.4	010.0000	-0467.6	049.2	46.10
296.0	000.1838	-0025.8	006.6	124.3	010.0000	-0468.7	049.1	46.13
297.0	000.1924	-0035.8	006.6	124.2	010.0000	-0469.9	049.1	46.15
298.0	000.2015	-0050.5	006.7	124.1	010.0000	-0471.2	049.0	46.17
299.0	000.2110	-0069.2	006.8	123.9	010.0000	-0472.5	048.9	46.18
300.0	000.2209	-0087.6	006.9	123.8	010.0000	-0474.0	048.8	46.20
301.0	000.2314	-0101.6	007.0	123.7	010.0000	-0475.7	048.7	46.22
302.0	000.2423	-0107.5	007.0	123.5	010.0000	-0477.3	048.6	46.24
303.0	000.2537	-0107.4	007.1	123.4	010.0000	-0478.9	048.5	46.26
304.0	000.2656	-0100.9	007.2	123.2	010.0000	-0480.5	048.4	46.28
305.0	000.2782	-0089.5	007.3	123.1	010.0000	-0482.0	048.4	46.30
306.0	000.2913	-0074.4	007.4	122.9	010.0000	-0483.4	048.3	46.31
307.0	000.3050	-0059.8	007.5	122.8	010.0000	-0484.8	048.2	46.33
308.0	000.3194	-0051.8	007.5	122.6	010.0000	-0486.0	048.1	46.35
309.0	000.3344	-0052.8	007.6	122.4	010.0000	-0487.2	048.1	46.36
310.0	000.3502	-0062.4	007.7	122.3	010.0000	-0488.3	048.0	46.38
311.0	000.3667	-0076.5	007.8	122.1	010.0000	-0489.4	047.9	46.40
312.0	000.3840	-0091.3	007.9	121.9	010.0000	-0490.3	047.8	46.41
313.0	000.4020	-0105.4	008.0	121.7	010.0000	-0491.0	047.8	46.43
314.0	000.4210	-0119.2	008.1	121.5	010.0000	-0491.5	047.7	46.44
315.0	000.4408	-0132.2	008.2	121.3	010.0000	-0491.9	047.6	46.46
316.0	000.4616	-0142.0	008.3	121.1	010.0000	-0492.0	047.6	46.47
317.0	000.4834	-0143.5	008.4	120.9	010.0000	-0492.1	047.5	46.49
318.0	000.5062	-0135.8	008.5	120.7	010.0000	-0492.2	047.4	46.50
319.0	000.5300	-0122.3	008.6	120.5	010.0000	-0491.8	047.4	46.52
320.0	000.5550	-0107.6	008.7	120.3	010.0000	-0491.5	047.3	46.53
321.0	000.5811	-0093.3	008.9	120.1	010.0000	-0490.9	047.3	46.54
322.0	000.6085	-0080.2	009.0	119.9	010.0000	-0490.2	047.2	46.55
323.0	000.6372	-0067.8	009.1	119.6	010.0000	-0489.3	047.2	46.56
324.0	000.6672	-0055.3	009.2	119.4	010.0000	-0488.1	047.1	46.57
325.0	000.6987	-0041.5	009.3	119.2	010.0000	-0486.9	047.1	46.57
326.0	000.7316	-0025.4	009.4	118.9	010.0000	-0485.3	047.1	46.58
327.0	000.7661	-0007.5	009.5	118.7	010.0000	-0483.4	047.1	46.58
328.0	000.8022	0009.0	009.6	118.5	010.0000	-0481.9	047.1	46.59
329.0	000.8400	0024.0	009.7	118.2	010.0000	-0479.6	047.0	46.59
330.0	000.8796	0036.8	010.8	117.3	010.0000	-0470.1	046.2	46.79
331.0	000.9210	0046.7	012.3	116.1	010.0000	-0454.1	045.1	47.07

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
332.0	000.9644	0054.3	013.4	115.0	010.0000	-0444.2	044.3	47.27
333.0	001.0099	0060.6	014.3	114.1	010.0000	-0441.2	043.8	47.42
334.0	001.0575	0064.2	014.8	113.4	010.0000	-0441.3	043.5	47.49
335.0	001.1073	0065.0	015.1	112.9	010.0000	-0441.7	043.5	47.50
336.0	001.1595	0066.3	015.4	112.3	010.0000	-0442.3	043.4	47.51
337.0	001.2142	0070.2	016.1	111.5	010.0000	-0441.5	043.1	47.60
338.0	001.2714	0077.4	017.2	110.1	010.0000	-0440.3	042.6	47.75
339.0	001.3313	0088.1	018.7	108.3	010.0000	-0455.2	041.8	47.97
340.0	001.3941	0101.5	020.4	106.1	010.0000	-0494.7	041.0	48.21
341.0	001.4598	0115.3	021.9	104.1	010.0000	-0526.2	040.5	48.39
342.0	001.5285	0125.7	023.0	102.5	010.0000	-0534.6	040.2	48.46
343.0	001.6006	0133.0	023.8	101.2	010.0000	-0537.7	040.2	48.47
344.0	001.6760	0139.2	024.5	100.0	010.0000	-0535.4	040.2	48.46
345.0	001.7550	0149.5	025.6	098.4	010.0000	-0548.3	040.2	48.48
346.0	001.8377	0164.0	026.9	096.3	010.0000	-0571.8	040.1	48.50
347.0	001.9243	0185.4	028.8	093.6	010.0000	-0603.1	040.0	48.54
348.0	002.0150	0209.9	030.9	090.5	010.0000	-0644.7	039.9	48.56
349.0	002.1000	0229.0	032.7	087.9	010.0000	-0692.3	040.1	48.49
350.0	002.1000	0244.6	033.7	086.2	010.0000	-0731.1	040.6	48.36
351.0	002.0962	0254.6	034.3	085.3	010.0000	-0747.8	041.1	48.20
352.0	002.0966	0269.7	035.2	084.0	010.0000	-0738.2	041.6	48.03
353.0	002.0971	0281.8	035.9	083.0	010.0000	-0716.0	042.2	47.85
354.0	002.0975	0294.8	036.7	082.0	010.0000	-0692.0	042.9	47.67
355.0	002.0979	0315.0	037.8	080.6	010.0000	-0668.4	043.6	47.47
356.0	002.0983	0335.4	038.9	079.3	010.0000	-0644.2	044.3	47.26
357.0	002.0987	0356.9	040.0	077.9	010.0000	-0638.6	045.2	47.05
358.0	002.0992	0374.6	040.9	077.0	010.0000	-0644.5	046.0	46.84
359.0	002.0996	0391.3	041.6	076.3	010.0000	-0647.0	046.9	46.63
000.0	002.1000	0408.1	042.4	075.6	010.0000	-0648.0	047.7	46.43
001.0	002.1000	0416.5	042.8	075.4	010.0000	-0647.0	048.6	46.25
002.0	002.1000	0425.0	043.2	075.2	010.0000	-0645.4	049.4	46.07
003.0	002.1000	0433.7	043.6	075.0	010.0000	-0643.4	050.2	45.89
004.0	002.1000	0441.6	044.0	074.8	010.0000	-0641.8	051.1	45.71

01-02-2009 FCC NGDC 30 Sec Terrain Data

1227487 BNPED20071018BDM  
 Channel = 202C3  
 Max ERP = 10 kW  
 RCAMSL = 2745 M  
 N. Lat. 40 00 23.0  
 W. Lng. 105 47 38.0  
 Protected  
 60 dBu

KVOD  
 Channel = 201C3  
 Max ERP = 2.1 kW  
 RCAMSL = 2333.58 M  
 N. Lat. 39 43 49.0  
 W. Lng. 105 15 00.0  
 Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
063.0	008.2992	-0613.1	017.2	321.2	000.5874	-0090.1	049.5	33.74	
064.0	008.6490	-0606.0	017.4	321.4	000.5914	-0088.3	049.2	33.84	
065.0	008.8674	-0594.7	017.5	321.4	000.5928	-0087.6	048.8	33.92	
066.0	009.0884	-0585.1	017.7	321.5	000.5939	-0087.1	048.5	34.00	
067.0	009.3123	-0584.1	017.8	321.5	000.5948	-0086.7	048.2	34.08	
068.0	009.5388	-0590.1	017.9	321.5	000.5955	-0086.4	047.9	34.15	
069.0	009.7680	-0598.8	018.0	321.5	000.5959	-0086.2	047.5	34.23	
070.0	010.0000	-0606.4	018.1	321.6	000.5962	-0086.1	047.2	34.31	
071.0	010.0000	-0609.8	018.1	321.4	000.5926	-0087.7	046.9	34.35	
072.0	010.0000	-0613.4	018.1	321.3	000.5889	-0089.4	046.6	34.40	
073.0	010.0000	-0621.0	018.1	321.1	000.5850	-0091.3	046.3	34.44	
074.0	010.0000	-0632.1	018.1	321.0	000.5809	-0093.4	046.0	34.48	
075.0	010.0000	-0643.9	018.1	320.8	000.5766	-0095.6	045.7	34.52	
076.0	010.0000	-0647.8	018.1	320.7	000.5722	-0098.0	045.4	34.56	
077.0	010.0000	-0644.7	018.1	320.5	000.5676	-0100.4	045.2	34.59	
078.0	010.0000	-0638.3	018.1	320.3	000.5627	-0103.0	044.9	34.63	
079.0	010.0000	-0640.6	018.1	320.1	000.5577	-0106.0	044.6	34.66	
080.0	010.0000	-0657.8	018.1	319.9	000.5525	-0109.0	044.3	34.69	
081.0	010.0000	-0673.5	018.1	319.7	000.5472	-0112.1	044.0	34.72	
082.0	010.0000	-0691.5	018.1	319.5	000.5416	-0115.3	043.8	34.75	
083.0	010.0000	-0715.8	018.1	319.2	000.5359	-0118.7	043.5	34.78	
084.0	010.0000	-0738.2	018.1	319.0	000.5301	-0122.3	043.3	34.80	
085.0	010.0000	-0748.1	018.1	318.8	000.5241	-0125.9	043.0	34.83	
086.0	010.0000	-0736.8	018.1	318.5	000.5180	-0129.3	042.7	34.85	
087.0	010.0000	-0713.3	018.1	318.2	000.5117	-0132.8	042.5	34.87	
088.0	010.0000	-0688.5	018.1	318.0	000.5053	-0136.2	042.3	34.88	
089.0	010.0000	-0666.8	018.1	317.7	000.4988	-0139.3	042.0	34.90	
090.0	010.0000	-0652.0	018.1	317.4	000.4922	-0141.7	041.8	34.91	
091.0	010.0000	-0637.1	018.1	317.1	000.4854	-0143.1	041.6	34.91	
092.0	010.0000	-0622.1	018.1	316.8	000.4785	-0144.1	041.3	34.92	
093.0	010.0000	-0606.7	018.1	316.5	000.4716	-0144.2	041.1	34.92	
094.0	010.0000	-0600.8	018.1	316.1	000.4646	-0142.8	040.9	34.92	
095.0	010.0000	-0589.9	018.1	315.8	000.4575	-0140.7	040.7	34.92	
096.0	010.0000	-0577.5	018.1	315.5	000.4503	-0137.7	040.5	34.91	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
097.0	010.0000	-0562.4	018.1	315.1	000.4431	-0133.6	040.3	34.91
098.0	010.0000	-0552.3	018.1	314.7	000.4358	-0129.0	040.1	34.89
099.0	010.0000	-0541.2	018.1	314.4	000.4285	-0124.5	039.9	34.88
100.0	010.0000	-0535.4	018.1	314.0	000.4211	-0119.3	039.7	34.86
101.0	010.0000	-0537.7	018.1	313.6	000.4138	-0114.0	039.6	34.84
102.0	010.0000	-0536.3	018.1	313.2	000.4064	-0108.7	039.4	34.81
103.0	010.0000	-0532.7	018.1	312.8	000.3990	-0103.1	039.2	34.79
104.0	010.0000	-0526.7	018.1	312.4	000.3916	-0097.4	039.1	34.75
105.0	010.0000	-0514.2	018.1	312.0	000.3842	-0091.5	038.9	34.72
106.0	010.0000	-0497.4	018.1	311.6	000.3769	-0085.4	038.8	34.68
107.0	010.0000	-0478.0	018.1	311.2	000.3696	-0079.0	038.7	34.64
108.0	010.0000	-0459.3	018.1	310.7	000.3623	-0072.6	038.5	34.60
109.0	010.0000	-0447.0	018.1	310.3	000.3551	-0066.4	038.4	34.55
110.0	010.0000	-0440.4	018.1	309.9	000.3479	-0060.7	038.3	34.49
111.0	010.0000	-0440.6	018.1	309.4	000.3408	-0055.9	038.2	34.44
112.0	010.0000	-0442.2	018.1	309.0	000.3338	-0052.6	038.1	34.38
113.0	010.0000	-0441.6	018.1	308.5	000.3268	-0051.0	038.0	34.32
114.0	010.0000	-0441.2	018.1	308.0	000.3199	-0051.7	037.9	34.25
115.0	010.0000	-0444.0	018.1	307.6	000.3132	-0054.2	037.9	34.18
116.0	010.0000	-0452.9	018.1	307.1	000.3064	-0058.6	037.8	34.11
117.0	010.0000	-0465.9	018.1	306.6	000.2999	-0064.6	037.7	34.04
118.0	010.0000	-0477.6	018.1	306.2	000.2934	-0072.1	037.7	33.96
119.0	010.0000	-0485.7	018.1	305.7	000.2870	-0079.4	037.7	33.88
120.0	010.0000	-0490.6	018.1	305.2	000.2807	-0086.5	037.6	33.79
121.0	010.0000	-0492.1	018.1	304.7	000.2746	-0093.3	037.6	33.70
122.0	010.0000	-0489.9	018.1	304.2	000.2686	-0098.7	037.6	33.61
123.0	010.0000	-0482.8	018.1	303.8	000.2627	-0102.9	037.6	33.52
124.0	010.0000	-0471.9	018.1	303.3	000.2569	-0106.1	037.6	33.42
125.0	010.0000	-0463.2	018.1	302.8	000.2513	-0107.9	037.6	33.32
126.0	010.0000	-0461.0	018.1	302.3	000.2458	-0108.2	037.6	33.22
127.0	010.0000	-0465.6	018.1	301.8	000.2404	-0106.9	037.6	33.12
128.0	010.0000	-0472.2	018.1	301.4	000.2352	-0104.4	037.7	33.01
129.0	010.0000	-0473.6	018.1	300.9	000.2300	-0100.3	037.7	32.90
130.0	010.0000	-0467.4	018.1	300.4	000.2251	-0094.2	037.8	32.79
131.0	010.0000	-0456.8	018.1	299.9	000.2202	-0086.4	037.8	32.67
132.0	010.0000	-0446.3	018.1	299.5	000.2156	-0078.0	037.9	32.56
133.0	010.0000	-0435.8	018.1	299.0	000.2110	-0069.1	038.0	32.44
134.0	010.0000	-0425.5	018.1	298.5	000.2066	-0060.2	038.0	32.32
135.0	010.0000	-0416.9	018.1	298.1	000.2023	-0051.9	038.1	32.20
136.0	010.0000	-0411.0	018.1	297.6	000.1981	-0044.5	038.2	32.08
137.0	010.0000	-0405.0	018.1	297.2	000.1941	-0038.2	038.3	31.95
138.0	010.0000	-0394.0	018.1	296.7	000.1902	-0032.9	038.4	31.83
139.0	010.0000	-0376.7	018.1	296.3	000.1864	-0028.4	038.6	31.70
140.0	010.0000	-0356.8	018.1	295.9	000.1827	-0024.8	038.7	31.57
141.0	010.0000	-0339.8	018.1	295.5	000.1792	-0022.2	038.8	31.45
142.0	010.0000	-0329.3	018.1	295.0	000.1758	-0020.3	039.0	31.32
143.0	010.0000	-0322.6	018.1	294.6	000.1725	-0018.9	039.1	31.19
144.0	010.0000	-0314.7	018.1	294.2	000.1694	-0017.9	039.3	31.06
145.0	010.0000	-0305.1	018.1	293.8	000.1663	-0017.1	039.4	30.93
146.0	010.0000	-0298.0	018.1	293.4	000.1634	-0016.2	039.6	30.79
147.0	010.0000	-0294.8	018.1	293.1	000.1605	-0015.2	039.8	30.66

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
148.0	010.0000	-0291.7	018.1	292.7	000.1578	-0014.2	039.9	30.53
149.0	010.0000	-0286.7	018.1	292.3	000.1552	-0012.9	040.1	30.40
150.0	010.0000	-0277.5	018.1	292.0	000.1526	-0011.2	040.3	30.27
151.0	010.0000	-0262.8	018.1	291.6	000.1502	-0009.2	040.5	30.14
152.0	010.0000	-0243.2	018.1	291.3	000.1479	-0006.9	040.7	30.01
153.0	010.0000	-0222.0	018.1	290.9	000.1456	-0004.3	040.9	29.87
154.0	010.0000	-0201.3	018.1	290.6	000.1435	-0001.2	041.1	29.75
155.0	010.0000	-0180.7	018.1	290.3	000.1414	0002.4	041.4	29.62
156.0	010.0000	-0163.1	018.1	290.0	000.1394	0006.4	041.6	29.49
157.0	010.0000	-0147.4	018.1	289.7	000.1376	0010.5	041.8	29.36
158.0	010.0000	-0132.8	018.1	289.4	000.1358	0014.7	042.1	29.23
159.0	010.0000	-0120.4	018.1	289.1	000.1340	0019.1	042.3	29.11
160.0	010.0000	-0110.5	018.1	288.9	000.1324	0023.6	042.5	28.98
161.0	010.0000	-0100.8	018.1	288.6	000.1308	0028.1	042.8	28.86
162.0	010.0000	-0088.2	018.1	288.4	000.1293	0032.4	043.0	29.22
163.0	010.0000	-0076.2	018.1	288.1	000.1278	0036.6	043.3	29.89
164.0	010.0000	-0062.3	018.1	287.9	000.1265	0040.7	043.6	30.51
165.0	010.0000	-0049.4	018.1	287.7	000.1252	0044.5	043.8	31.04
166.0	010.0000	-0038.9	018.1	287.4	000.1239	0048.1	044.1	31.50
167.0	010.0000	-0034.2	018.1	287.2	000.1227	0051.5	044.4	31.87
168.0	010.0000	-0030.5	018.1	287.0	000.1216	0054.6	044.6	32.17
169.0	010.0000	-0025.5	018.1	286.8	000.1206	0057.4	044.9	32.41
170.0	010.0000	-0022.8	018.1	286.7	000.1196	0060.1	045.2	32.59
171.0	010.0000	-0024.9	018.1	286.5	000.1186	0062.5	045.5	32.72
172.0	010.0000	-0034.6	018.1	286.3	000.1177	0064.7	045.8	32.83
173.0	010.0000	-0047.2	018.1	286.2	000.1169	0066.7	046.0	32.91
174.0	010.0000	-0058.4	018.1	286.0	000.1161	0068.5	046.3	32.96
175.0	010.0000	-0064.0	018.1	285.9	000.1153	0070.2	046.6	33.00
176.0	010.0000	-0070.2	018.1	285.7	000.1146	0071.7	046.9	33.02
177.0	010.0000	-0068.1	018.1	285.6	000.1140	0073.1	047.2	33.03
178.0	010.0000	-0060.5	018.1	285.5	000.1134	0074.3	047.5	33.03
179.0	010.0000	-0051.8	018.1	285.4	000.1128	0075.4	047.8	33.01
180.0	010.0000	-0050.8	018.1	285.3	000.1123	0076.3	048.1	32.98
181.0	010.0000	-0053.8	018.1	285.2	000.1118	0077.1	048.4	32.93
182.0	010.0000	-0055.8	018.1	285.1	000.1114	0077.9	048.7	32.88
183.0	010.0000	-0055.3	018.1	285.0	000.1109	0078.6	049.1	32.82