

Percent allowed new interference: 0.500  
Percent allowed new interference to non Class A LPTV: 2.000  
TW Census data selected 2000  
Data Base Selected  
/space/software/cdbs/pt\_tvdb.sff  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-16-2014 Time: 15:10:10

#### Record Selected for Analysis

WURO USERRECORD-01 US  
Channel 33 ERP 15. kW HAAT 75. m RCAMSL 00357 m FULL SERVICE MASK  
Latitude 044-17-58 Longitude 0084-07-44  
Status APP Zone 2 Border Site number: 01  
Dir Antenna Make usr Model 18STER Beam tilt N Ref Azimuth 310.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station  
Service Class = LD  
Maximum height/power limits not checked

Site number	1			
Azimuth	ERP	HAAT	51.0 dBu F(50,90)	
(Deg)	(kW)	(m)	(km)	
0.0	0.054	51.1	10.579	
45.0	0.038	100.1	12.989	
90.0	0.024	99.9	11.747	
135.0	0.045	102.8	13.739	
180.0	0.096	97.3	16.311	
225.0	0.038	86.4	12.190	
270.0	0.122	33.0	10.311	
315.0	12.285	33.0	29.156	

Contour Overlap to Proposed Station

Contour Overlap Evaluation to Proposed Station Complete

NO LANDMOBILE SPACING VIOLATIONS FOUND

Checks to Site Number 01

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance

Distance to border = 143.6km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
33	WURO		USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	W18BT	ALPENA MI	108.7	LIC	BLTTL	-19981113JB
25	DW25CU	TRAVERSE CITY MI	132.9	LIC	BLTTL	-20010802AAI
32	WFQX-TV	CADILLAC MI	98.4	LIC	BLCDT	-20091217ACU
32	WFQX-DR	CADILLAC MI	98.4	APP	BPRM	-20080620AOP
32	WBWM-LP	MOUNT PLEASANT MI	95.6	LIC	BLTTL	-20001220ABG
32	W32EL-D	ST. IGNACE MI	180.5	CP	BNPDTL	-20100223ADT
33	WCHU-LD	CHICAGO IL	389.3	CP MOD	BMPDTL	-20110912ACN
33	WCHU-LD	CHICAGO IL	389.3	CP	BDISDTL	-20100720ABQ
33	WCHU-LD	CHICAGO IL	389.3	LIC	BLDTL	-20110928ALC
33	W33DC-D	FORT WAYNE IN	372.0	CP	BNPDTL	-20091228AAX
33	W33DQ-D	ALPENA MI	82.2	CP	BDCCDTL	-20120409AAC
33	W33BY	DETROIT MI	225.3	LIC	BLTTA	-20020301ABU
33	W33BY	DETROIT MI	226.3	CP	BDFCDTA	-20121023ACI
33	WOHO-CD	HOLLAND MI	220.9	LIC	BLDTA	-20120316ACT
33	W33DR-D	HOUGHTON LAKE MI	54.6	CP	BNPDTL	-20100223AAM
33	W33DS-D	ST. IGNACE MI	180.5	CP	BNPDTL	-20100223ADS
33	WITI	MILWAUKEE WI	331.3	LIC	BLCDT	-20091106AEL
34	W34EI-D	GAYLORD MI	74.6	CP	BNPDTL	-20100223ADI

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	W18BT	ALPENA MI	BLTTL	-19981113JB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WURO		108.7	APP	USERRECORD-01	

Proposed station is beyond the site to  
nearest cell evaluation distance

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
25	DW25CU	TRAVERSE CITY MI	BLTTL	-20010802AAI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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17	WCMV	CADILLAC MI	48.1	LIC	BLEDT	-20050914AAI
21	WCMW	MANISTEE MI	92.7	LIC	BLEDT	-20090612ABH
24	WCML	ALPENA MI	126.6	LIC	BLEDT	-20110707ABQ
25	W25DX	ESCANABA MI	157.5	LIC	BLTTL	-20110825ABZ
25	WCGV-TV	MILWAUKEE WI	256.5	LIC	BLCDDT	-20120405ACO
26	WCMU-TV	MOUNT PLEASANT MI	117.7	LIC	BLEDT	-20130710ABN
29	WGTU	TRAVERSE CITY MI	48.1	LIC	BLCDDT	-20090622AFH
32	WFQX-TV	CADILLAC MI	73.8	LIC	BLCDDT	-20091217ACU
32	WFQX-DR	CADILLAC MI	73.8	APP	BPRM	-20080620AOP
33	WURO		132.9	APP	USERRECORD-01	

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 3

##### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
32	WFQX-TV	CADILLAC MI	BLCDDT	-20091217ACU

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WFQX-DR	CADILLAC MI	0.0	APP	BPRM	-20080620AOP
32	WBUW	JANESVILLE WI	354.7	LIC	BLCDDT	-20040930BHL
33	WURO		98.4	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 4

##### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
32	WFQX-DR	CADILLAC MI	BPRM	-20080620AOP

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WFQX-TV	CADILLAC MI	0.0	LIC	BLCDDT	-20091217ACU
32	WBUW	JANESVILLE WI	354.7	LIC	BLCDDT	-20040930BHL
33	WURO		98.4	APP	USERRECORD-01	

Total scenarios = 1

Result key:

1

Scenario 1 Affected station

4

Before Analysis

Results for: 32A MI CADILLAC BPRM 20080620AOP APP

HAAT 426.0 m, ATV ERP 175.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	515645	24813.1
not affected by terrain losses	512094	24612.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	482419	23265.5
lost to ATV IX only	482419	23265.5
lost to all IX	482419	23265.5

Potential Interfering Stations Included in above Scenario 1

32A MI CADILLAC	BLCDDT	20091217ACU	LIC
32A WI JANESVILLE	BLCDDT	20040930BHL	LIC

# After Analysis

Results for: 32A MI CADILLAC                      BPRM                      20080620AOP   APP  
 HAAT 426.0 m, ATV ERP 175.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	515645	24813.1
not affected by terrain losses	512094	24612.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	482419	23265.5
lost to ATV IX only	482419	23265.5
lost to all IX	482419	23265.5

Potential Interfering Stations Included in above Scenario                      1

32A MI CADILLAC	BLCDDT	20091217ACU	LIC
32A WI JANESVILLE	BLCDDT	20040930BHL	LIC
33A	USERRECORD01		APP

Percent new IX =                      0.0000%

Worst case new IX                      0.0000% Scenario                      1

#####

## Analysis of Interference to Affected Station                      5

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
32	WBWM-LP	MOUNT PLEASANT MI	BLTTL -20001220ABG

### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
24	WTLJ	MUSKEGON MI	114.3	LIC	BLCDDT -20101007AAX
24	WTLJ	MUSKEGON MI	114.3	APP	BPCDDT -20140210AAX
28	WCMZ-TV	FLINT MI	130.3	LIC	BLEDDT -20110218AAR
29	WGTU	TRAVERSE CITY MI	132.4	LIC	BLCDDT -20090622AFH
30	WEYI-TV	SAGINAW MI	94.0	LIC	BLCDDT -20040123ASH
32	WNDY-TV	MARION IN	392.8	LIC	BLCDDT -20110706ABJ
32	WFQX-TV	CADILLAC MI	77.2	LIC	BLCDDT -20091217ACU
32	WFQX-DR	CADILLAC MI	77.2	APP	BPRM -20080620AOP
32	WBUW	JANESVILLE WI	385.5	LIC	BLCDDT -20040930BHL
34	WHTV	JACKSON MI	145.4	LIC	BLCDDT -20130927AWH
36	WLNS-TV	LANSING MI	103.8	LIC	BLCDDT -20090720ADT
40	WKAR-TV	EAST LANSING MI	101.5	LIC	BLEDDT -20110817ACE
46	WBSF	BAY CITY MI	75.7	LIC	BLCDDT -20090622AFF
47	WPBN-DR	TRAVERSE CITY MI	132.4	APP	BPRM -20090724AEF
47	WPBN-TV	TRAVERSE CITY MI	132.4	LIC	BLCDDT -20091203AHC
33	WURO		95.6	APP	USERRECORD-01

Proposal causes no interference

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## Analysis of Interference to Affected Station                      6

### Analysis of current record

Channel	Call	City/State	Application Ref. No.
32	W32EL-D	ST. IGNACE MI	BNPDTL -20100223ADT

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WFQX-TV	CADILLAC MI	196.3	LIC	BLCDDT	-20091217ACU
32	WFQX-DR	CADILLAC MI	196.3	APP	BPRM	-20080620AOP
33	W33DS-D	ST. IGNACE MI	0.0	CP	BNPDTL	-20100223ADS
33	WURO		180.5	APP	USERRECORD-01	

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 7

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	WCHU-LD	CHICAGO IL	BMPDTL	-20110912ACN

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WMEU-CD	CHICAGO IL	2.5	LIC	BLDTA	-20131212ABK
32	WLS-TV	CHICAGO IL	2.5	APP	BDRTCDT	-20090630AFT
33	W33DV-D	PEORIA IL	220.6	CP	BDCCDTT	-20120713ADV
33	W33DE-D	WOLCOTT IN	134.7	CP MOD	BMPDTL	-20140203ACA
33	WITI	MILWAUKEE WI	134.3	LIC	BLCDDT	-20091106AEL
34	WEDE-CA	ARLINGTON HEIGHTS IL	2.5	LIC	BLTTA	-20050308AAS
34	WEDE-CA	ARLINGTON HEIGHTS IL	2.5	CP	BDFCDTA	-20081014AAM
33	WURO		389.3	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 8

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	WCHU-LD	CHICAGO IL	BDISDTL	-20100720ABQ

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WMEU-CD	CHICAGO IL	2.5	LIC	BLDTA	-20131212ABK
32	WLS-TV	CHICAGO IL	2.5	APP	BDRTCDT	-20090630AFT
33	W33DV-D	PEORIA IL	220.6	CP	BDCCDTT	-20120713ADV
33	W33DE-D	WOLCOTT IN	134.7	CP MOD	BMPDTL	-20140203ACA
33	WITI	MILWAUKEE WI	134.3	LIC	BLCDDT	-20091106AEL
34	WEDE-CA	ARLINGTON HEIGHTS IL	2.5	LIC	BLTTA	-20050308AAS
34	WEDE-CA	ARLINGTON HEIGHTS IL	2.5	CP	BDFCDTA	-20081014AAM
33	WURO		389.3	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 9

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	WCHU-LD	CHICAGO IL	BLDTL	-20110928ALC

# Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WMEU-CD	CHICAGO IL	2.5	LIC	BLDTA	-20131212ABK
32	WLS-TV	CHICAGO IL	2.5	APP	BDRTCDT	-20090630AFT
33	W33DV-D	PEORIA IL	220.6	CP	BDCCDTT	-20120713ADV
33	W33DE-D	WOLCOTT IN	134.7	CP MOD	BMPDTL	-20140203ACA
33	WITI	MILWAUKEE WI	134.3	LIC	BLCDT	-20091106AEL
34	WEDE-CA	ARLINGTON HEIGHTS IL	2.5	LIC	BLTTA	-20050308AAS
34	WEDE-CA	ARLINGTON HEIGHTS IL	2.5	CP	BDFCDTA	-20081014AAM
33	WURO		389.3	APP	USERRECORD-01	

Proposal causes no interference

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# Analysis of Interference to Affected Station 10

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	W33DC-D	FORT WAYNE IN	BNPDTL	-20091228AAX

# Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WNDY-TV	MARION IN	121.9	LIC	BLCDT	-20110706ABJ
32	W32DS-D	MAPLEWOOD OH	69.7	LIC	BLDTT	-20110104ABK
33	WCHU-LD	CHICAGO IL	234.3	CP MOD	BMPDTL	-20110912ACN
33	WCHU-LD	CHICAGO IL	234.3	CP	BDISDTL	-20100720ABQ
33	WCHU-LD	CHICAGO IL	234.3	LIC	BLDTL	-20110928ALC
33	W33DE-D	WOLCOTT IN	169.4	CP MOD	BMPDTL	-20140203ACA
33	W33BW	ASHLAND OH	233.0	LIC	BLTTL	-20020211ABL
33	WSTR-TV	CINCINNATI OH	207.9	LIC	BLCDT	-20091117ACS
33	WCSN-LD	COLUMBUS OH	205.8	LIC	BLDTL	-20100728AAG
33	WITI	MILWAUKEE WI	327.7	LIC	BLCDT	-20091106AEL
34	W34EG-D	FORT WAYNE IN	0.0	CP	BNPDTL	-20090825BRX
33	WURO		372.0	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

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# Analysis of Interference to Affected Station 11

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	W33DQ-D	ALPENA MI	BDCCDTL	-20120409AAC

# Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	W33DR-D	HOUGHTON LAKE MI	127.8	CP	BNPDTL	-20100223AAM
33	WURO		82.2	APP	USERRECORD-01	

Proposal causes no interference

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# Analysis of Interference to Affected Station 12

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
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## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WGTE-TV	TOLEDO OH	81.6	LIC	BLEDT	-20031110AKO
30	WEYI-TV	SAGINAW MI	101.1	LIC	BLCDDT	-20040123ASH
33	WGRZ	BUFFALO NY	385.0	LIC	BLCDDT	-20050705AAG
33	W33BW	ASHLAND OH	197.0	LIC	BLTTTL	-20020211ABL
33	WSTR-TV	CINCINNATI OH	369.2	LIC	BLCDDT	-20091117ACS
33	WITI	MILWAUKEE WI	388.2	LIC	BLCDDT	-20091106AEL
34	WHTV	JACKSON MI	67.9	LIC	BLCDDT	-20130927AWH
36	WLNS-TV	LANSING MI	99.1	LIC	BLCDDT	-20090720ADT
40	WKAR-TV	EAST LANSING MI	102.5	LIC	BLEDT	-20110817ACE
41	WXYZ-TV	DETROIT MI	10.3	LIC	BLCDDT	-20081222AAS
41	WXYZ-TV	DETROIT MI	10.3	APP	BXMLCDDT	-20120809AAY
48	W48AV	DETROIT MI	31.4	LIC	BLTTTL	-19960523JB
48	WAQP	SAGINAW MI	114.7	APP	BPCDDT	-20140210AAV
48	WAQP	SAGINAW MI	114.8	LIC	BLCDDT	-20060824ADS
33	WURO		225.3	APP	USERRECORD	-01

Proposal causes no interference

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## Analysis of Interference to Affected Station 13

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	W33BY	DETROIT MI	BDFCDTA	-20121023ACI

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WGRZ	BUFFALO NY	372.3	LIC	BLCDDT	-20050705AAG
33	W33BW	ASHLAND OH	195.6	LIC	BLTTTL	-20020211ABL
33	WSTR-TV	CINCINNATI OH	376.3	LIC	BLCDDT	-20091117ACS
34	WHTV	JACKSON MI	80.4	LIC	BLCDDT	-20130927AWH
33	WURO		226.3	APP	USERRECORD	-01

Proposal causes no interference

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## Analysis of Interference to Affected Station 14

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	WOHO-CD	HOLLAND MI	BLDTA	-20120316ACT

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	WCHU-LD	CHICAGO IL	170.8	CP MOD	BMPDTL	-20110912ACN
33	WCHU-LD	CHICAGO IL	170.8	CP	BDISDTL	-20100720ABQ
33	WCHU-LD	CHICAGO IL	170.8	LIC	BLDTL	-20110928ALC
33	WITI	MILWAUKEE WI	160.9	LIC	BLCDDT	-20091106AEL
33	WURO		220.9	APP	USERRECORD	-01

Proposal causes no interference

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## Analysis of Interference to Affected Station 15

Analysis of current record

Channel	Call	City/State	Application Ref. No.
33	W33DR-D	HOUGHTON LAKE MI	BNPDTL -20100223AAM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	WFQX-TV	CADILLAC MI	47.2	LIC	BLCDDT -20091217ACU
32	WFQX-DR	CADILLAC MI	47.2	APP	BPRM -20080620AOP
33	W33DQ-D	ALPENA MI	127.8	CP	BDCCDDL -20120409AAC
33	WITI	MILWAUKEE WI	283.4	LIC	BLCDDT -20091106AEL
33	WURO		54.6	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 16

Analysis of current record

Channel	Call	City/State	Application Ref. No.
33	W33DS-D	ST. IGNACE MI	BNPDTL -20100223ADS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	W32EL-D	ST. IGNACE MI	0.0	CP	BNPDTL -20100223ADT
33	WURO		180.5	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 17

Analysis of current record

Channel	Call	City/State	Application Ref. No.
33	WITI	MILWAUKEE WI	BLCDDT -20091106AEL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	WBUW	JANESVILLE WI	129.2	LIC	BLCDDT -20040930BHL
34	WISN-TV	MILWAUKEE WI	3.4	LIC	BLCDDT -20101104AAA
33	WURO		331.3	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 18

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	W34EI-D	GAYLORD MI	BNPDTL -20100223ADI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
34	WHTV	JACKSON MI	277.8	LIC	BLCDDT -20130927AWH
34	WISN-TV	MILWAUKEE WI	320.8	LIC	BLCDDT -20101104AAA
35	WVIU-LD	CADILLAC MI	92.2	CP	BNPDTL -20091211AAU
35	WTOM-TV	CHEBOYGAN MI	95.5	LIC	BLCDDT -20040420AAI



33 WURO 74.6 APP USERRECORD-01  
Proposal causes no interference

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Analysis of Interference to Affected Station 19

Analysis of current record

Channel	Call	City/State	Application Ref. No.
33	WURO		USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	WFQX-TV	CADILLAC MI	98.4	LIC	BLCDT -20091217ACU
32	WFQX-DR	CADILLAC MI	98.4	APP	BPRM -20080620AOP
33	W33DQ-D	ALPENA MI	82.2	CP	BDCCDTL -20120409AAC
33	W33DR-D	HOUGHTON LAKE MI	54.6	CP	BNPDTL -20100223AAM
33	WITI	MILWAUKEE WI	331.3	LIC	BLCDT -20091106AEL

Total scenarios = 1

Result key: 2  
Scenario 1 Affected station 19  
Before Analysis

Results for: 33A USERRECORD01 APP

	POPULATION	AREA (sq km)
HAAT 75.0 m, ATV ERP 15.0 kW		
within Noise Limited Contour	14556	819.2
not affected by terrain losses	14556	819.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	544	93.3
lost to ATV IX only	544	93.3
lost to all IX	544	93.3

Potential Interfering Stations Included in above Scenario 1

33A MI HOUGHTON LAKE BNPDTL 20100223AAM CP

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED