

MOORELAND, OK ONE STEP UPGRADE

This application seeks a one-step upgrade of the Mooreland 283A CP (BMPH-20120217ABR) which has been constructed and a form 302 license to cover application filed.

Allocation discussion:

All exhibits utilize the V-Soft provided USGS three (3) second terrain database.

- E1 Channel study
- E1A Interference plot to 283A at Memphis, TX
- E1B Interference plot to KZBS
- E2 70 dBu contour plot
- E3 ASR
- E4 Reference pint channel study
- E5 Reference point 70 dBu plot
- E6 Reference point topographic map

A channel study is included as exhibit E1 and interference plots as E1A and E1B demonstrating full compliance with §73.207 and §73.215. A plot of the proposed 70 dBu is provided as E2 showing that the proposed facility completely encompasses the community of Mooreland, OK. HAAT and service contours are tabulated below.

N. Latitude = 361606.0 W. Longitude = 992656.0
HAAT and Distance to Contour,
FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

Az.	AV EL	HAAT	dBk	70-F5	60-F5
000	668.5	375.5	17.92	50.41	73.04
045	632.4	411.6	17.92	52.37	75.64
090	627.4	416.6	17.92	52.64	76.00
135	675.6	368.4	17.92	50.00	72.53
180	703.2	340.8	17.92	48.32	70.56
225	719.9	324.1	17.92	47.26	69.34
270	705.1	338.9	17.92	48.19	70.42
315	690.1	353.9	17.92	49.13	71.50

Ave El= 677.76 M HAAT= 366.24 M AMSL= 1044 M


The reduced ERP of 62 kW at 366 meters HAAT produces a maximum class C1 60 dBu of 72.36 km. The Mooreland 283C1 facility elects §73.215 processing.

A channel study is provided as E4, a 70 dBu plot as E5 and a topographic map as E6 for the fully spaced channel 283C1 reference point at **N 36-24-09 W 99-13-22 (NAD27).**

A substitution of channel 293C2 for the used channel 285C2 allocation at Arnett, OK is requested. A channel study is included as exhibit E7.

RF Exposure Calculation:

The proposed facility will be combined with the existing KWOX 266C0 facility at an existing tower (ASR#1010654 – **N 36-16-06 W 99-26-56 (NAD27)**) using an ERI SHPX-10AC ten bay antenna mounted at 352 meters AGL. The maximum RF contribution for the proposed 283C1 facility was calculated using FMMODEL to be 1.74 $\mu\text{Watts/cm}^2$ for the NEW Mooreland 283C1 facility or 0.87% of the maximum permissible 200 $\mu\text{Watts/cm}^2$ for general population/uncontrolled exposure, and less than the 5% requiring consideration. It is concluded that the proposed facility complies with Commission RF radiation limits.


Charles M. Anderson, February 26, 2012

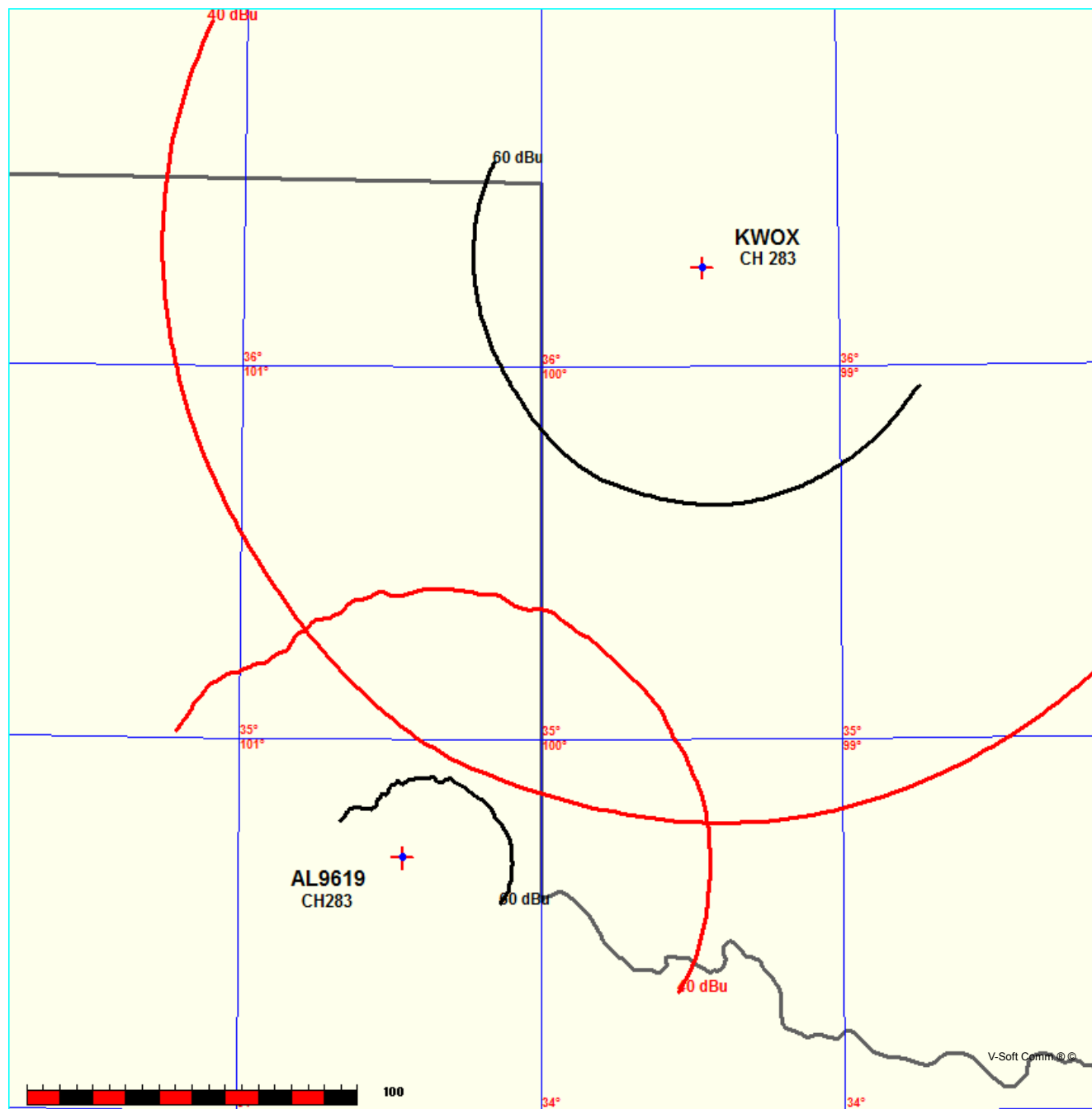
E1 MOORELAND 283C1 CHANNEL STUDY

REFERENCE		DISPLAY DATES
36 16 06.0 N.	CLASS = C1	DATA 02-25-12
99 26 56.0 W.	Current Spacings to 3rd Adj.	SEARCH 02-26-12
----- Channel 283 - 104.5 MHz -----		

Call	Channel	Location		Azi	Dist	FCC	Margin
NEW_ %	CP	283A	Mooreland	OK	51.0	27.0	199.5 -172.5
AL9619	VAC	283A	Memphis	TX	207.6	197.6	199.5 -1.9 (1)
KZBS	LIC-N	282C3	Granite	OK	178.6	143.3	143.5 -0.24(1)
1428709	APP	280C2	Wheeler	TX	218.5	111.4	78.5 32.9
AU9158952	VAC	280C2	Wheeler	TX	218.5	111.4	78.5 32.9
KFXJ	LIC-Z	283C2	Augusta	KS	48.0	258.4	223.5 34.9
KLXM	CP	286A	Weatherford	OK	144.9	109.8	74.5 35.3
1449208	RSV-A	280C3	Wheeler	TX	218.5	111.4	75.5 35.9
KQFX	LIC	282C1	Borger	TX	245.0	216.7	176.5 40.2

(1) 73.215 elected.

RSV-R = reserved and needs protection, RSV-A = allocation
 % = Station Fails minimum 73.215 spacings



E1B MOORELAND 283C1 - KZBS INTERFERENCE PLOT

FMCommander Single Allocation Study - 02-26-2012 - USGS 03 SECNEW

NEW CH 283 C1 73.215

Lat= 36 16 06.0, Lng= 99 26 56.0

62.0 kW 366.2 M HAAT, 1044 M COR

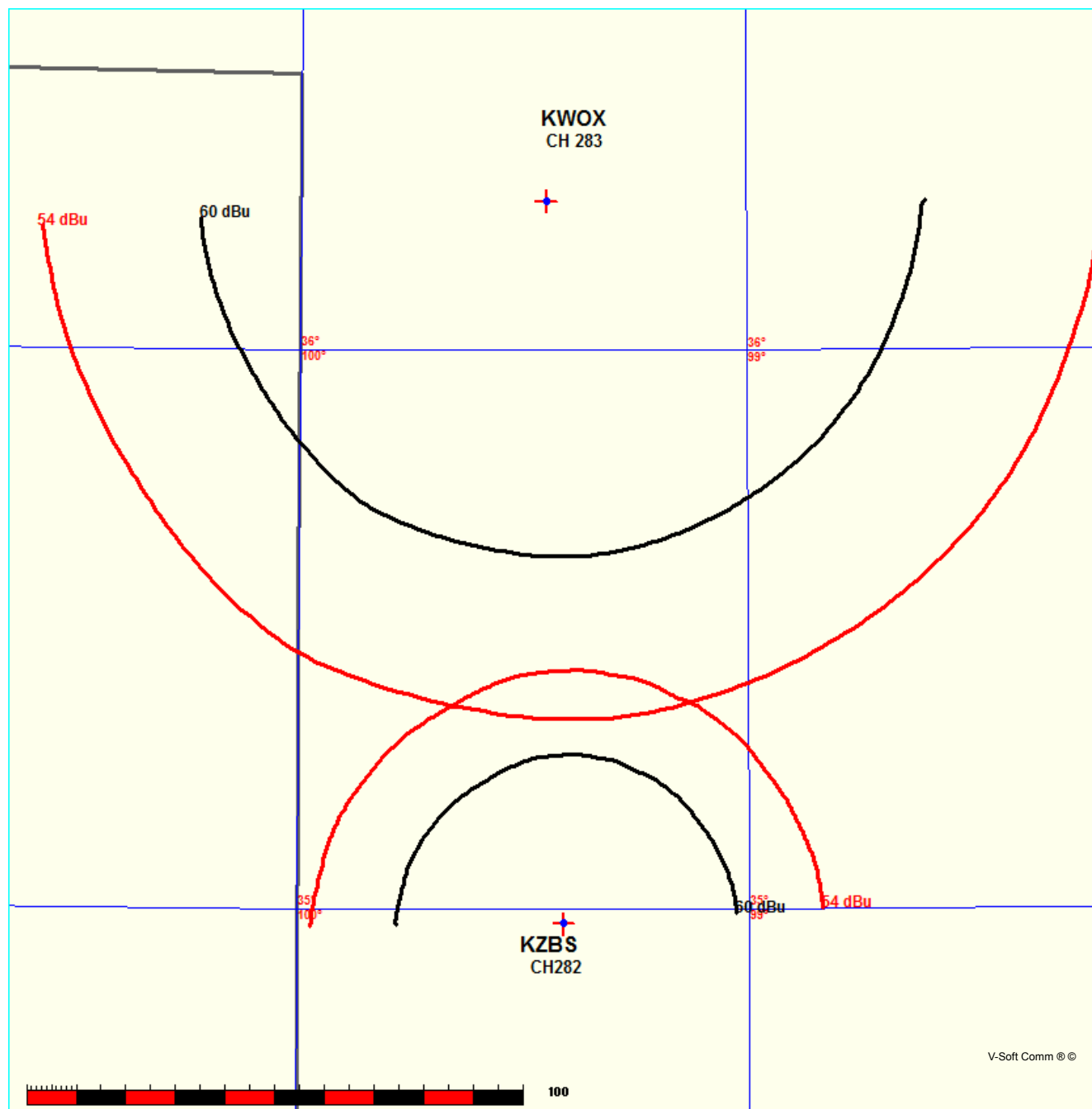
Prot.= 60 dBu, Intef.= 54 dBu

KZBS CH 282 C3 73.215 N BLH20081107ABX

Lat= 34 58 39.0, Lng= 99 24 35.0

1.7 kW 277 M HAAT, 774 M COR

Prot.= 60 dBu, Intef.= 54 dBu



NEW

BLH20071003AAM

Latitude: 36-16-06 N

Longitude: 099-26-56 W

ERP: 62.00 kW

Channel: 283

Frequency: 104.5 MHz

AMSL Height: 1044.0 m

Elevation: 692.0 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: None

PROPOSED 70 DBU

E2

Woodward

MOORELAND
BOUNDARIES

NEW

Scale 1:750,000

0 10 20 30 km

V-Soft Communications LLC ©

Registration 1010654

E3

 [Map Registration](#)

Registration Detail

Reg Number	1010654	Status	Constructed
File Number	A0012758	Constructed	01/01/1984
FAA Study	82-ASW-2595-OE	EMI	No
FAA Issue Date	01/14/1983	NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long 36-16-06.0 N 099-26-57.0 W 6.1 MI W

City, State SHARON , OK

Center of
AM Array

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
692.0	366.0
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
1058.0	366.0

Painting and Lighting Specifications

FAA Chapters 4, 6, 9

Paint and Light in Accordance with FAA Circular Number 70/7460-1F

Owner & Contact Information

FRN	0016066193	Licensee ID	L01242598
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Owner

OMNICOM TOWER LIMITED
Attention To: J DOUGLAS WILLIAMS
101 CENTRE STE 101 R
WOODWARD , OK 73801

P: (405)254-2034
E:

Contact

P:
E:

Last Action Status

Status	Constructed	Received	12/18/1996
Purpose	New	Entered	12/20/1996
Mode	Mail In (Manual)		

Related Applications

12/18/1996 A0012758 - New (NE)

Comments

Comments

12/18/1996 HIGH INTENSITY WHITE LIGHTING. Registration 1010654

E4 MOORELAND 283C1 REFERENCE POINT

REFERENCE						DISPLAY DATES
36 24 09.0 N.		CLASS = C1				DATA 02-25-12
99 13 22.0 W.		Current Spacings to 3rd Adj.				SEARCH 02-26-12
----- Channel 283 - 104.5 MHz -----						

Call	Channel	Location		Azi	Dist	FCC	Margin
NEW	CP 283A	Mooreland	OK	20.4	2.2	199.5	-197.3
KFXJ	LIC-Z 283C2	Augusta	KS	47.5	233.4	223.5	9.9
KZBS	LIC-N 282C3	Granite	OK	186.1	159.0	143.5	15.5
AL9619	VAC 283A	Memphis	TX	210.6	220.5	199.5	21.0
AL1263	VAC 285A	Ringwood	OK	87.4	95.5	74.5	21.0
KLXM	CP 286A	Weatherford	OK	157.9	113.1	74.5	38.6

NEW

BLH20071003AAM

Latitude: 36-24-09 N

Longitude: 099-26-56 W

ERP: 62.00 kW

Channel: 283

Frequency: 104.5 MHz

AMSL Height: 1044.0 m

Elevation: 692.0 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: None

283C1 70 DBU 50 KM CIRCLE
FROM REFERENCE POINT

E5

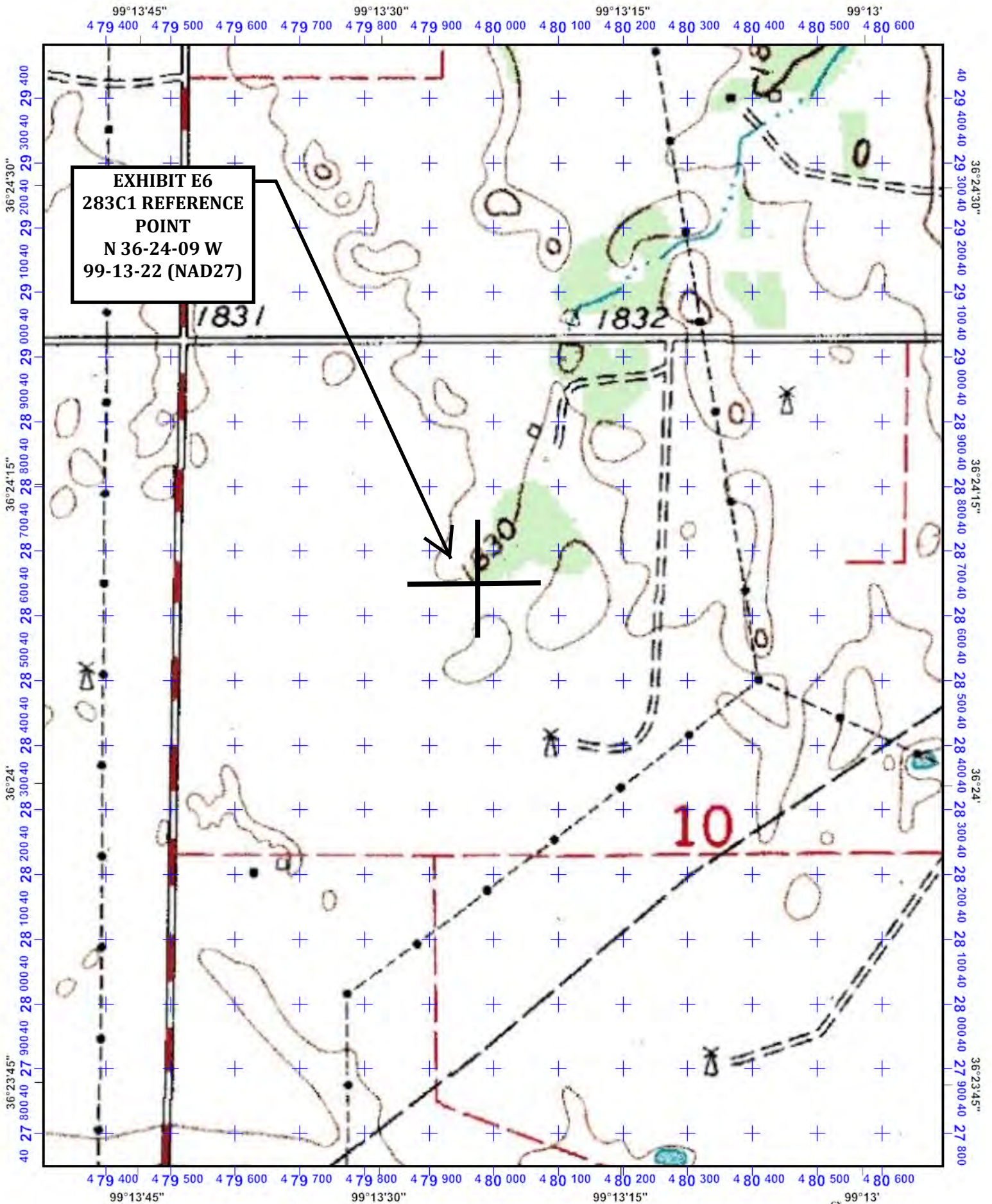
Woodward
NEW

MOORELAND
BOUNDARIES

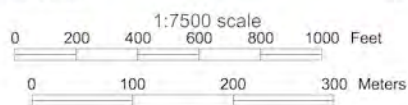
Scale 1:750,000

0 10 20 30 km

V-Soft Communications LLC ©



Universal Transverse Mercator (UTM) Projection Zone 14
North American Datum of 1983
100 meter UTM / USNG / MGRS
Grid Zone Designation: 14S
100,000-m Squares: MF



Magnetic declination of SE at center of map
on March 17, 2011

E7 ARNETT SUBSTITUTION CHANNEL STUDY

REFERENCE		DISPLAY DATES
36 02 45.0 N.	CLASS = C2	DATA 02-28-12
99 56 22.0 W.	Current Spacings to 3rd Adj.	SEARCH 03-01-12
----- Channel 293 - 106.5 MHz -----		

Call	Channel	Location		Azi	Dist	FCC	Margin
AL9578	RSV-A 295C1	Elk City	OK	158.1	94.0	79.0	15.0
KFXX-FM	LIC-N 294C1	Hugoton	KS	319.0	188.4	158.0	30.4
KQTY-FM	LIC 294A	Borger	TX	253.3	136.7	106.0	30.7
ALLO	USE 294A	Borger	TX	252.2	138.3	106.0	32.3
ALLO	USE 290C	Hobart	OK	155.7	142.9	105.0	38.0
ALLO	USE 294C1	Hugoton	KS	323.3	200.0	158.0	42.0
ALLO	USE 294C2	Okarche	OK	101.2	178.6	130.0	48.6
KTIJ	LIC-N 295C1	Elk City	OK	157.9	127.9	79.0	48.9

 RSV-R = reserved and needs protection, RSV-A = allocation