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**Engineering Statement
Minor Change Application for KXLY-DT
Post-Transition Channel 13 at Spokane, Washington
June 2008**

This Engineering Statement has been prepared on behalf of Spokane Television, Inc., licensee of television station KXLY-TV at Spokane, Washington. KXLY-TV presently operates on analog Channel 4, with paired digital Channel 13. KXLY-TV will be continuing post-transition digital operation on its present digital channel. This material has been prepared in connection with a minor change application for the KXLY-DT post-transition facilities on digital Channel 13.

The following table lists the KXLY-DT post-transition facilities approved in Appendix B of the DTV Seventh Report and Order MO&O¹, as well as the requested post-transition facilities as proposed herein:

	DTV Table Appendix B	Proposed Form 301
Channel	13	13
ERP	23.3 kW	35 kW
HAAT	936 meters	675 meters
Antenna	omnidirectional	Dielectric THV-6A13 C150 directional at 320 deg True
Coordinates	47-55-18 117-06-48	47-39-34 116-57-48
DTV Population (thousand)	655	647 (98.9%)

¹ See *Advanced Television Systems and their Impact Upon the Existing Television Broadcast Service*, MB Docket No. 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Further Notice of Proposed Rulemaking, FCC 08-72, Released March 6, 2008.

The proposed ERP is greater than the 25.2 kW ERP which would normally be allowed under §73.622 for a Channel 13 digital station operating at 675 meters HAAT in Zone II. However, KXLY-DT is already licensed for operation with 23.3 kW ERP at 936 meters HAAT, which also exceeds the §73.622 limit, producing a reference 36 dBu F(50,90) contour at 129.6 km. The proposed facilities will produce a reference 36 dBu F(50,90) contour at 128.7 km, and therefore §73.622 is not believed to be an impediment to grant of the instant application.

Since KXLY-DT was initially authorized with an ERP in excess of the §73.622 limit in order to ensure replication of the station's low-band VHF analog service area, waiver of §73.622 is not believed to be required in this instance. Waiver of §73.622 is nevertheless requested, if required and to the extent required, to permit operation of KXLY-DT at the ERP and HAAT proposed herein.

I. Domestic Allocation Study

Study has been made of all domestic cochannel and adjacent-channel facilities in the vicinity of the proposed operation, including a detailed Longley-Rice interference study to demonstrate that the proposed operation will not cause impermissible interference (i.e. more than 0.5 percent new interference) to any stations beyond that level listed in the post-transition DTV Table Appendix B. This study was performed using the SunDTV program from V-Soft Communications and a 2 km grid spacing. The SunDTV program identically duplicates the FCC's OET-69 processing program.

The FCC software currently in use has not been modified to work properly using the Appendix B table as a set of allotments. Rather, it basically treats the Appendix B records as regular stations in the study. Therefore if it finds any stations with the same channel and city as the reference station they are removed from the study. It has been indicated that eventually there will be a new version of the FCC's software that will treat the Appendix B records as allotments. However in the meantime the workaround used by V-Soft is to run two studies: one with the proposed station configuration, and a second with the same proposed record but with the "City Name" slightly modified so that the program does not remove the allotment and includes it in both the before and after cases. Then the user can compare the "before" case of the second study to the "after" case of the first study to determine impact of the change with respect to the Appendix B record.

One anomaly, however, is that the allotment might cause interference in some locations where the "proposed" facility does not (and vice versa). Since the allotment is included in both the before and after cases for the "_PT2" study the difference reported by this study only indicates the new interference caused by your reference station where there wasn't any from the allotment. It is possible that by changing antenna pattern or transmitter location that the "proposed" facility will cause less total interference (compared to the allotment), but if the locations where it causes the interference are different than where the allotment causes interference then just looking at the second report could show an increase in interference.

The instant application proposes a change in transmitter site for KXLY-DT of 31 kilometers, creating precisely this problem in the interference study output. Therefore, we have not relied solely upon the output of the SunDTV software, but have compared the interference population figures generated by that software (from a study which excludes the KXLY-DT Appendix B allotment) directly to the Appendix B figures.²

The SunDTV interference study output is attached as Exhibit A. Following is a summary of those results compared with the Appendix B baseline interference figures.

Facility Studied	Appendix B Int-Free Population	Proposed Int-Free Population	Change in Population	Change Percentage
KUID-DT Ch12 Moscow	238,034	237,681	-353	-0.2%
KECI-DT Ch13 Missoula	168,912	168,973	+61	0.0%
KTVR-DT Ch13 La Grande	78,200	77,987	-213	-0.3%

Based on this allocation and interference study, it is believed that the proposed facility can operate without risk of interference to other domestic stations.

² Notations in the study output which state that the proposed facility has "failed the de minimis interference criteria" should therefore be ignored.

Furthermore, it has been verified that the proposed facility will not reduce the population served by the KXLY-DT digital facility by more than 5%, compared to the DTV population listed in Appendix B.

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KXLY-TV	SPOKANE WA	USERRECORD-06

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	KUID-TV	MOSCOW ID	108.7	LIC	BDTV -0503
13	KECITV	MISSOULA MT	233.4	LIC	BDTV -0938
13	KTVR	LA GRANDE OR	267.8	LIC	BDTV -1278

Total scenarios = 1

Result key: 4
 Scenario 1 Affected station 4
 Before Analysis

Results for: 13A WA SPOKANE USERRECORD06 APP
 HAAT 677.0 m, ATV ERP 35.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	722388	46338.1
not affected by terrain losses	665628	38869.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	18113	595.7
lost to ATV IX only	18113	595.7
lost to all IX	18113	595.7

Potential Interfering Stations Included in above Scenario 1

12A ID MOSCOW	BDTV	0503	LIC
13A MT MISSOULA	BDTV	0938	LIC
13A OR LA GRANDE	BDTV	1278	LIC

II. International Allocation Study

The KXLY-DT transmitter site is located 149 kilometers from the US-Canada border and is therefore within the Canadian coordination zone.

Step 1: Spacing Study

Under the terms of the Letter of Understanding³ (“LOU”) the proposed KXLY-DT facility is classified as equivalent to a “Class VL” facility for the purpose of evaluation using the spacing tables included in Section 4.2 of the LOU. We find that the proposed KXLY-DT facility has the following short-spacings to Canadian analog and digital stations and allotments:

Callsign	City	Channel	Class	Required	Actual
BC-DT-116	Cranbrook, BC	13 digital	VU	321 km	223 km

Step 2: Contour Overlap Study

This short-spacing was next evaluated under the contour overlap provisions of the LOU.

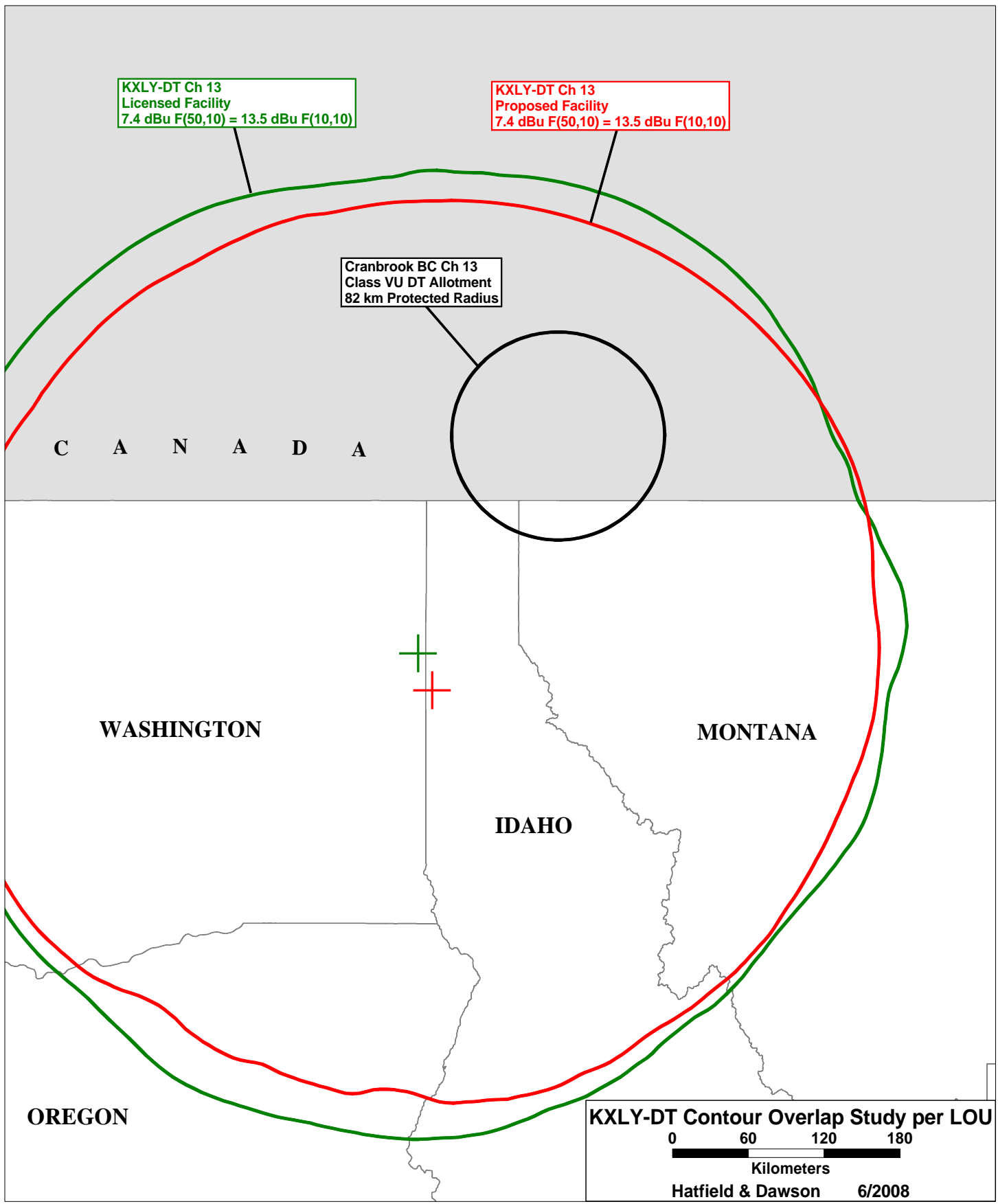
As a Class VU digital allotment, the Cranbrook allotment is protected out to a distance of 82 km.

The LOU provides for protection to a high-band VHF station’s 33 dBu F(90,90) contour. The specified cochannel D/U ratio is +19.5 dB, and the corresponding cochannel interfering contour from KXLY-DT is the 13.5 dBu F(10,10) contour. As described in Section 3 of the LOU, for F(10,10) calculations in the VHF band we subtract 6.1 dB from the F(50,10) value. In other words, we use the 7.4 dBu F(50,10) contour to indicate the position of the 13.5 dBu F(10,10) contour.

The attached map exhibit depicts the licensed and proposed KXLY-DT 13.5 dBu F(10,10) contours with respect to the protected circle for the Cranbrook allotment. Both the licensed and proposed KXLY-DT interfering contours completely overlap the protected Canadian allotments. However, it is clear from this map that the KXLY-DT transmitter site is moving farther from the Cranbrook allotment, and that the proposed interfering contour is pulled back from the licensed interfering

³ “Letter of Understanding Between the Federal Communications Commission of the United States of America and Industry Canada Related to the Use of the 54-72 MHz, 76-88 MHz, 174-216 MHz, and 470-806 MHz Bands for the Digital Television Broadcasting Service Along the Common Border”, September 2000.

contour in the direction of Cranbrook. Equivalent protection is therefore provided to Cranbrook, and it is believed that the proposed operation of KXLY-DT satisfies the requirements for protection of Canadian stations and allotments under the terms of the LOU.



III. NIER Study

The power density calculations shown below were made using the techniques and formulas outlined in the OET Bulletin 65. "Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. The equation shown below was used to calculate the ground level power density figures from each antenna.

$$S(\text{mW} / \text{cm}^2) = \frac{33.40981 \times \text{AdjERP}(\text{Watts})}{D^2}$$

Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

Power density levels produced by the proposed KXLY-DT facility were calculated for an elevation of 2 meters above ground (156 meters below the antenna radiation center). The worst case power density levels occur at depression angles between 45 and 90 degrees below the horizontal. The calculations in this report assume a worst-case relative field value of 0.161 at these angles, based on the manufacturer's vertical plane pattern for the horizontally-polarized Dielectric THV-6A13-R C150 antenna proposed in this application. This relative field value yields a worst-case adjusted effective radiated power of 907.2 Watts at depression angles between 45 and 90 degrees below the horizontal. Assuming this power and the shortest distance between the antenna radiation center and 2 meters above ground level (i.e. straight down), the highest calculated power density from the proposed antenna alone occurs at the base of the antenna support structure. At this point the power density is calculated to be 1.2 $\mu\text{W}/\text{cm}^2$, which is 0.6% of 200 $\mu\text{W}/\text{cm}^2$ (the FCC maximum at the Channel 13 frequency for uncontrolled environments).

The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.

June 17, 2008

Erik C. Swanson

Hatfield & Dawson Consulting Engineers

SHORT TO: KUID-TV 12 MOSCOW ID BDTV 0503
 46 -40-54 116 -58-13
 Req. separation => 23.0 <= 110.0 Actual separation 108.7 Short 1.3(85.7) km

SHORT TO: KECITV 13 MISSOULA MT BDTV 0938
 47 -01-04 114 -00-47
 Req. separation 273.6 Actual separation 234.1 Short 39.5 km

SHORT TO: KTVR 13 LA GRANDE OR BDTV 1278
 45 -18-33 117 -43-54
 Req. separation 273.6 Actual separation 267.8 Short 5.8 km

SHORT TO: KXLY-TV 13 SPOKANE WA BDTV 1716
 47 -55-18 117 -06-48
 Req. separation 273.6 Actual separation 31.2 Short 242.4 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance
 Distance to border = 149.0km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

 Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
13	KXLY-TV	SPOKANE WA	USERRECORD06

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	108.7	LIC	BDTV	-0503
13	KECITV	MISSOULA MT	233.4	LIC	BDTV	-0938
13	KTVR	LA GRANDE OR	267.8	LIC	BDTV	-1278

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KUID-TV	MOSCOW ID	BDTV	-0503

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KUFM-TV	MISSOULA MT	228.7	LIC	BDTV	-0937
11	KFFX-TV	PENDLETON OR	132.3	LIC	BDTV	-1285
12	KTVH	HELENA MT	400.9	LIC	BDTV	-0931
13	KECITV	MISSOULA MT	227.9	LIC	BDTV	-0938

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13	KTVR	LA GRANDE OR	163.5	LIC	BDTV	-1278
13	KXLY-TV	SPOKANE WA	108.7	APP	USERRECORD-06	

Total scenarios = 1

Result key: 1
 Scenario 1 Affected station 1
 Before Analysis

Results for: 12A ID MOSCOW BDTV 0503 LIC
 HAAT 340.0 m, ATV ERP 78.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	397127	39784.0
not affected by terrain losses	272806	35725.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	19	20.0
lost to ATV IX only	19	20.0
lost to all IX	19	20.0

Potential Interfering Stations Included in above Scenario 1

11A OR PENDLETON	BDTV	1285	LIC
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After Analysis

Results for: 12A ID MOSCOW BDTV 0503 LIC
 HAAT 340.0 m, ATV ERP 78.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	397127	39784.0
not affected by terrain losses	272806	35725.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	35125	647.2
lost to ATV IX only	35125	647.2
lost to all IX	35125	647.2

Potential Interfering Stations Included in above Scenario 1

11A OR PENDLETON	BDTV	1285	LIC
13A WA SPOKANE	USERRECORD06		APP

The following station failed the de minimis interference criteria.

13D WA SPOKANE USERRECORD06
 ERP 35.00 kW HAAT 677.0 m RCAMSL 1487.0 m
 Antenna usr USRPAT06

Due to interference to the following station and scenario: 1

12D ID MOSCOW BDTV 0503
 ERP 78.00 kW HAAT 340.0 m RCAMSL 1186.0 m
 Antenna CDB 9999999999999999

Percent Service lost without proposal:	0.0	to BDTV	0503
Percent Service lost with proposal:	12.9	to BDTV	0503

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	KECITV	MISSOULA MT	BDTV	-0938

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Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	227.9	LIC	BDTV	-0503
12	KTVH	HELENA MT	176.2	LIC	BDTV	-0931
13	KTRV	NAMPA ID	397.5	LIC	BDTV	-0504
13	KBZK	BOZEMAN MT	283.9	LIC	BDTV	-0919
13	KBAO	LEWISTOWN MT	339.3	LIC	BDTV	-0934
13	KTVR	LA GRANDE OR	343.5	LIC	BDTV	-1278
13	KXLY-TV	SPOKANE WA	233.4	APP	USERRECORD-06	

Total scenarios = 1

Result key: 2
Scenario 1 Affected station 2
Before Analysis

Results for: 13A MT MISSOULA BDTV 0938 LIC
HAAT 610.0 m, ATV ERP 26.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	183489	43489.9
not affected by terrain losses	169109	36218.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	85	52.2
lost to ATV IX only	85	52.2
lost to all IX	85	52.2

Potential Interfering Stations Included in above Scenario 1

13A MT BOZEMAN BDTV 0919 LIC

After Analysis

Results for: 13A MT MISSOULA BDTV 0938 LIC
HAAT 610.0 m, ATV ERP 26.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	183489	43489.9
not affected by terrain losses	169109	36218.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	136	261.0
lost to ATV IX only	136	261.0
lost to all IX	136	261.0

Potential Interfering Stations Included in above Scenario 1

13A MT BOZEMAN BDTV 0919 LIC
13A WA SPOKANE USERRECORD06 APP
*Percent Service lost without proposal: 0.0 to BDTV 0938
*Percent Service lost with proposal: 0.0 to BDTV 0938

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Analysis of Interference to Affected Station 3

Analysis of current record
Channel Call City/State Application Ref. No.
13 KTVR LA GRANDE OR BDTV -1278

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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12	KUID-TV	MOSCOW ID	163.5	LIC	BDTV	-0503
13	KTRV	NAMPA ID	215.9	LIC	BDTV	-0504
13	KECITY	MISSOULA MT	343.5	LIC	BDTV	-0938
13	KXLY-TV	SPOKANE WA	267.8	APP	USERRECORD-06	

Total scenarios = 1

Result key: 3
 Scenario 1 Affected station 3
 Before Analysis

Results for: 13A OR LA GRANDE BDTV 1278 LIC
 HAAT 775.0 m, ATV ERP 31.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	165627	40239.5
not affected by terrain losses	80679	30184.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	101	1156.0
lost to ATV IX only	101	1156.0
lost to all IX	101	1156.0

Potential Interfering Stations Included in above Scenario 1

13A ID NAMPA	BDTV	0504	LIC
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After Analysis

Results for: 13A OR LA GRANDE BDTV 1278 LIC
 HAAT 775.0 m, ATV ERP 31.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	165627	40239.5
not affected by terrain losses	80679	30184.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2692	1810.3
lost to ATV IX only	2692	1810.3
lost to all IX	2692	1810.3

Potential Interfering Stations Included in above Scenario 1

13A ID NAMPA	BDTV	0504	LIC
13A WA SPOKANE	USERRECORD06		APP

The following station failed the de minimis interference criteria.

13D WA SPOKANE USERRECORD06
 ERP 35.00 kW HAAT 677.0 m RCAMSL 1487.0 m
 Antenna usr USRPAT06

Due to interference to the following station and scenario: 1
 13D OR LA GRANDE BDTV 1278
 ERP 31.78 kW HAAT 775.0 m RCAMSL 2193.0 m
 Antenna CDB 00000000074341

Percent Service lost without proposal:	0.0	to BDTV	1278
Percent Service lost with proposal:	3.2	to BDTV	1278

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Analysis of Interference to Affected Station 4

Analysis of current record
 Channel Call City/State Application Ref. No.

Hatfield & Dawson Consulting Engineers

13 KXLY-TV SPOKANE WA USERRECORD-06

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	108.7	LIC	BDTV	-0503
13	KECITV	MISSOULA MT	233.4	LIC	BDTV	-0938
13	KTVR	LA GRANDE OR	267.8	LIC	BDTV	-1278

Total scenarios = 1

Result key: 4
Scenario 1 Affected station 4
Before Analysis

Results for: 13A WA SPOKANE USERRECORD06 APP
HAAT 677.0 m, ATV ERP 35.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	722388	46338.1
not affected by terrain losses	665628	38869.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	18113	595.7
lost to ATV IX only	18113	595.7
lost to all IX	18113	595.7

Potential Interfering Stations Included in above Scenario 1

12A ID MOSCOW	BDTV	0503	LIC
13A MT MISSOULA	BDTV	0938	LIC
13A OR LA GRANDE	BDTV	1278	LIC

#####

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED



Exhibit No.

Date	13 Jun 2008	Channel	13
Call Letters	KXLY-DT		
Location	Blossom Mtn		
Customer			
Antenna Type	THV-6A13 C150		

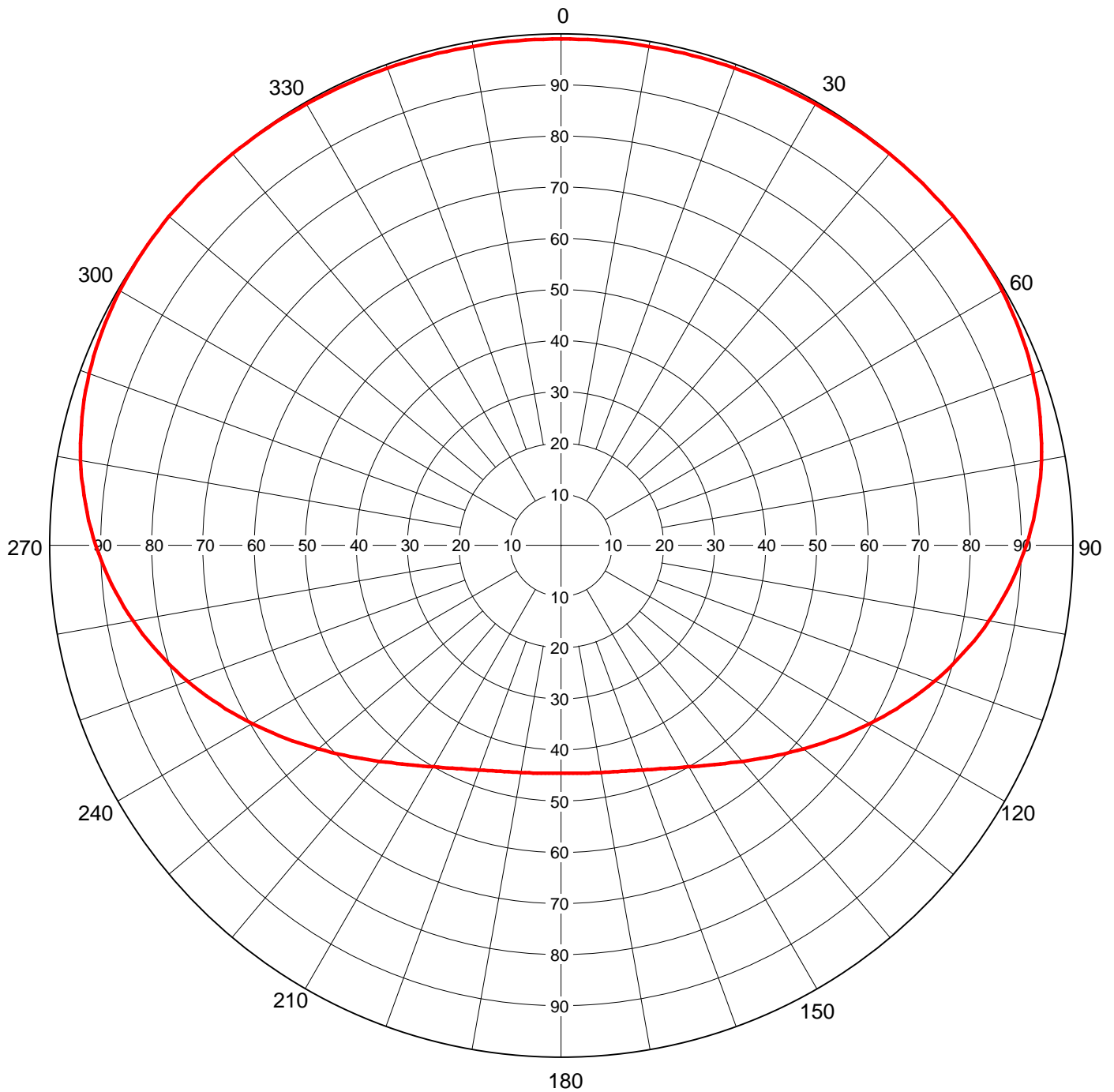
AZIMUTH PATTERN

Gain
Calculated / Measured

1.50 (1.76 dB)
Calculated

Frequency
Drawing #

213 MHz
THV-C150



Remarks:



Exhibit No.

Date

13 Jun 2008

Call Letters

KXLY-DT

Channel

13

Location

Blossom Mtn

Customer

Antenna Type

THV-6A13 C150

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #

THV-C150

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.990	45	1.000	90	0.909	135	0.583	180	0.446	225	0.583	270	0.909	315	1.000
1	0.990	46	1.000	91	0.904	136	0.577	181	0.446	226	0.590	271	0.914	316	1.000
2	0.990	47	1.000	92	0.899	137	0.570	182	0.446	227	0.597	272	0.920	317	0.999
3	0.990	48	1.000	93	0.893	138	0.564	183	0.446	228	0.604	273	0.924	318	0.999
4	0.990	49	1.000	94	0.887	139	0.557	184	0.447	229	0.612	274	0.929	319	0.999
5	0.990	50	1.000	95	0.881	140	0.551	185	0.447	230	0.619	275	0.933	320	0.999
6	0.990	51	1.000	96	0.875	141	0.545	186	0.448	231	0.627	276	0.938	321	0.998
7	0.990	52	1.000	97	0.869	142	0.539	187	0.448	232	0.634	277	0.942	322	0.998
8	0.990	53	0.999	98	0.863	143	0.534	188	0.449	233	0.642	278	0.946	323	0.998
9	0.990	54	0.999	99	0.856	144	0.528	189	0.450	234	0.649	279	0.950	324	0.998
10	0.990	55	0.999	100	0.849	145	0.523	190	0.451	235	0.657	280	0.953	325	0.997
11	0.990	56	0.998	101	0.843	146	0.518	191	0.452	236	0.665	281	0.957	326	0.997
12	0.991	57	0.998	102	0.836	147	0.513	192	0.453	237	0.673	282	0.960	327	0.997
13	0.991	58	0.997	103	0.829	148	0.509	193	0.454	238	0.681	283	0.963	328	0.996
14	0.991	59	0.996	104	0.822	149	0.504	194	0.456	239	0.689	284	0.966	329	0.996
15	0.991	60	0.995	105	0.814	150	0.500	195	0.457	240	0.697	285	0.969	330	0.995
16	0.991	61	0.995	106	0.807	151	0.496	196	0.459	241	0.705	286	0.972	331	0.995
17	0.992	62	0.994	107	0.799	152	0.492	197	0.461	242	0.713	287	0.974	332	0.995
18	0.992	63	0.992	108	0.792	153	0.488	198	0.463	243	0.721	288	0.977	333	0.994
19	0.992	64	0.991	109	0.784	154	0.485	199	0.465	244	0.729	289	0.979	334	0.994
20	0.992	65	0.990	110	0.777	155	0.481	200	0.467	245	0.737	290	0.981	335	0.994
21	0.993	66	0.988	111	0.769	156	0.478	201	0.470	246	0.745	291	0.983	336	0.993
22	0.993	67	0.987	112	0.761	157	0.475	202	0.472	247	0.753	292	0.985	337	0.993
23	0.993	68	0.985	113	0.753	158	0.472	203	0.475	248	0.761	293	0.987	338	0.993
24	0.993	69	0.983	114	0.745	159	0.470	204	0.478	249	0.769	294	0.988	339	0.993
25	0.994	70	0.981	115	0.737	160	0.467	205	0.481	250	0.777	295	0.990	340	0.992
26	0.994	71	0.979	116	0.729	161	0.465	206	0.485	251	0.784	296	0.991	341	0.992
27	0.994	72	0.977	117	0.721	162	0.463	207	0.488	252	0.792	297	0.992	342	0.992
28	0.995	73	0.974	118	0.713	163	0.461	208	0.492	253	0.799	298	0.994	343	0.992
29	0.995	74	0.972	119	0.705	164	0.459	209	0.496	254	0.807	299	0.995	344	0.991
30	0.995	75	0.969	120	0.697	165	0.457	210	0.500	255	0.814	300	0.995	345	0.991
31	0.996	76	0.966	121	0.689	166	0.456	211	0.504	256	0.822	301	0.996	346	0.991
32	0.996	77	0.963	122	0.681	167	0.454	212	0.509	257	0.829	302	0.997	347	0.991
33	0.997	78	0.960	123	0.673	168	0.453	213	0.513	258	0.836	303	0.998	348	0.991
34	0.997	79	0.957	124	0.665	169	0.452	214	0.518	259	0.843	304	0.998	349	0.990
35	0.997	80	0.953	125	0.657	170	0.451	215	0.523	260	0.849	305	0.999	350	0.990
36	0.998	81	0.950	126	0.649	171	0.450	216	0.528	261	0.856	306	0.999	351	0.990
37	0.998	82	0.946	127	0.642	172	0.449	217	0.534	262	0.863	307	0.999	352	0.990
38	0.998	83	0.942	128	0.634	173	0.448	218	0.539	263	0.869	308	1.000	353	0.990
39	0.998	84	0.938	129	0.627	174	0.448	219	0.545	264	0.875	309	1.000	354	0.990
40	0.999	85	0.933	130	0.619	175	0.447	220	0.551	265	0.881	310	1.000	355	0.990
41	0.999	86	0.929	131	0.612	176	0.447	221	0.557	266	0.887	311	1.000	356	0.990
42	0.999	87	0.924	132	0.604	177	0.446	222	0.564	267	0.893	312	1.000	357	0.990
43	0.999	88	0.920	133	0.597	178	0.446	223	0.570	268	0.899	313	1.000	358	0.990
44	1.000	89	0.914	134	0.590	179	0.446	224	0.577	269	0.904	314	1.000	359	0.990

Remarks:



Exhibit No.

Date **13 Jun 2008**
Call Letters **KXLY-DT** Channel **13**
Location **Blossom Mtn**
Customer
Antenna Type **THV-6A13 C150**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **THV-C150**

Angle	Field	ERP (kW)	ERP (dBk)
0	0.990	34.3	15.35
10	0.990	34.3	15.35
20	0.992	34.4	15.37
30	0.995	34.7	15.40
40	0.999	34.9	15.43
50	1.000	35.0	15.44
60	0.995	34.7	15.40
70	0.981	33.7	15.27
80	0.953	31.8	15.02
90	0.909	28.9	14.61
100	0.849	25.2	14.02
110	0.777	21.1	13.25
120	0.697	17.0	12.31
130	0.619	13.4	11.27
140	0.551	10.6	10.26
150	0.500	8.8	9.42
160	0.467	7.6	8.83
170	0.451	7.1	8.52
180	0.446	7.0	8.43
190	0.451	7.1	8.52
200	0.467	7.6	8.83
210	0.500	8.8	9.42
220	0.551	10.6	10.26
230	0.619	13.4	11.27
240	0.697	17.0	12.31
250	0.777	21.1	13.25
260	0.849	25.2	14.02
270	0.909	28.9	14.61
280	0.953	31.8	15.02
290	0.981	33.7	15.27
300	0.995	34.7	15.40
310	1.000	35.0	15.44
320	0.999	34.9	15.43
330	0.995	34.7	15.40
340	0.992	34.4	15.37
350	0.990	34.3	15.35

Maxima

Angle	Field	ERP (kW)	ERP (dBk)
48	1.000	35.0	15.44
312	1.000	35.0	15.44

Minima

Angle	Field	ERP (kW)	ERP (dBk)
180	0.446	7.0	8.43

Remarks:

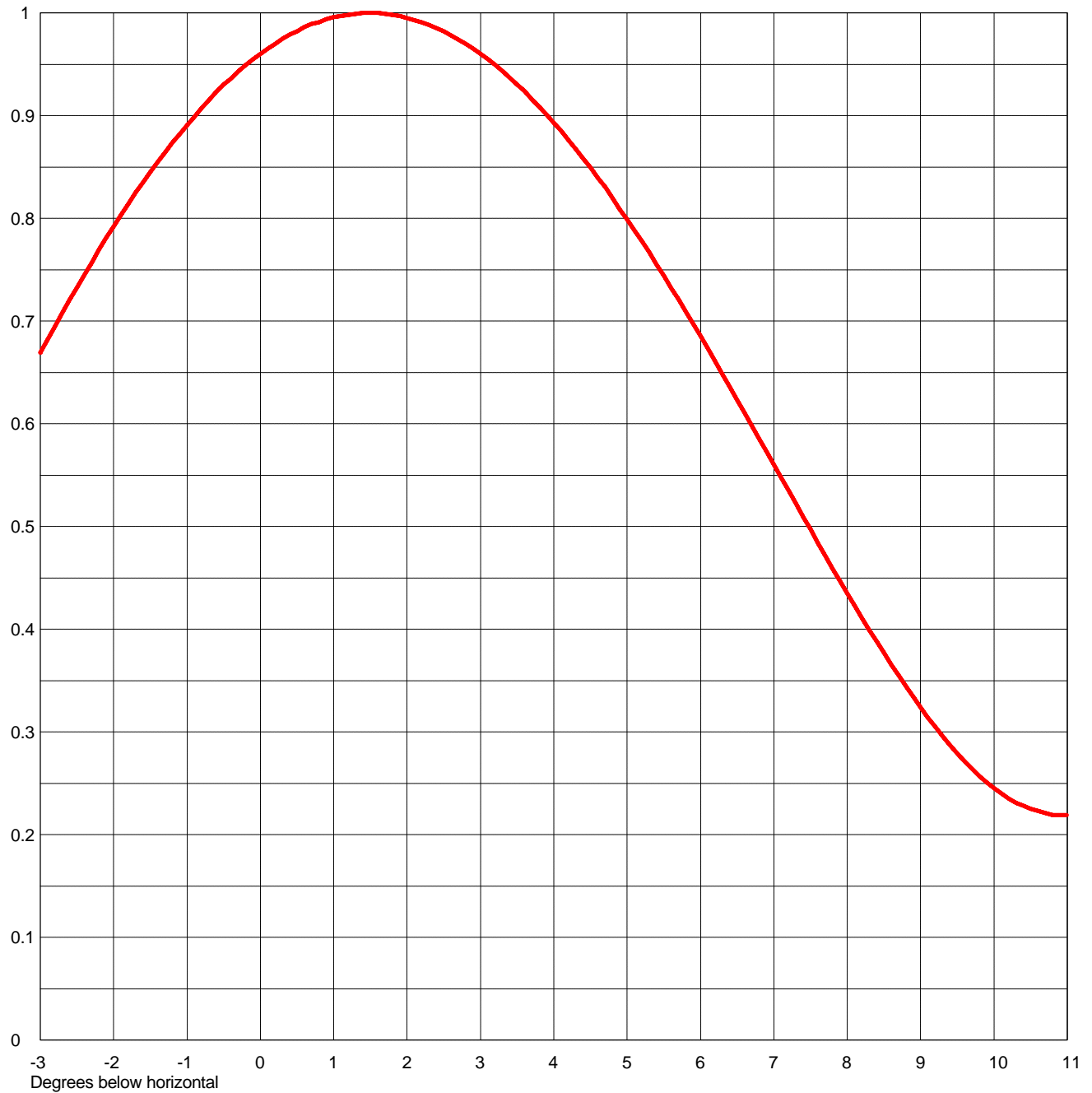


Exhibit No.

Date	13 Jun 2008	Channel	13
Call Letters	KXLY-DT		
Location	Blossom Mtn		
Customer			
Antenna Type	THV-6A13 C150		

ELEVATION PATTERN

RMS Gain at Main Lobe	6.0 (7.78 dB)	Beam Tilt	1.50 Degrees
RMS Gain at Horizontal	5.5 (7.40 dB)	Frequency	213.00 MHz
Calculated / Measured	Calculated	Drawing #	06V060150



Remarks:

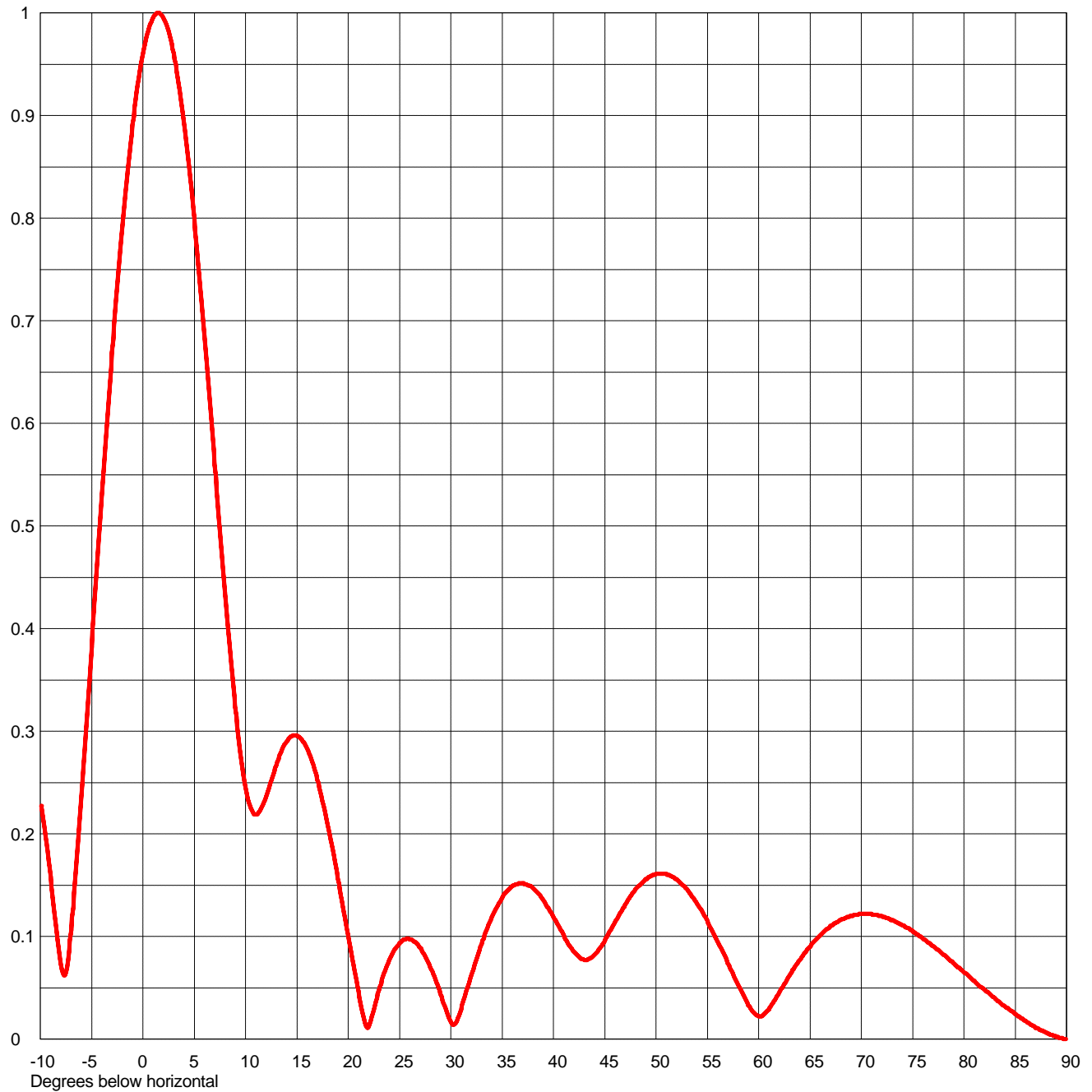


Exhibit No.

Date	13 Jun 2008	
Call Letters	KXLY-DT	Channel 13
Location	Blossom Mtn	
Customer		
Antenna Type	THV-6A13 C150	

ELEVATION PATTERN

RMS Gain at Main Lobe	6.0 (7.78 dB)	Beam Tilt	1.50 Degrees
RMS Gain at Horizontal	5.5 (7.40 dB)	Frequency	213.00 MHz
Calculated / Measured	Calculated	Drawing #	06V060150-90



Remarks:



Exhibit No.

Date

13 Jun 2008

Call Letters

KXLY-DT

Channel

13

Location

Blossom Mtn

Customer

Antenna Type

THV-6A13 C150

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #

06V060150-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.233	2.4	0.985	10.6	0.223	30.5	0.016	51.0	0.161	71.5	0.121
-9.5	0.198	2.6	0.978	10.8	0.219	31.0	0.029	51.5	0.159	72.0	0.120
-9.0	0.158	2.8	0.970	11.0	0.219	31.5	0.046	52.0	0.156	72.5	0.118
-8.5	0.114	3.0	0.960	11.5	0.224	32.0	0.062	52.5	0.151	73.0	0.116
-8.0	0.073	3.2	0.949	12.0	0.236	32.5	0.078	53.0	0.146	73.5	0.114
-7.5	0.065	3.4	0.937	12.5	0.252	33.0	0.093	53.5	0.139	74.0	0.111
-7.0	0.106	3.6	0.924	13.0	0.267	33.5	0.106	54.0	0.132	74.5	0.108
-6.5	0.167	3.8	0.909	13.5	0.280	34.0	0.119	54.5	0.124	75.0	0.105
-6.0	0.236	4.0	0.893	14.0	0.290	34.5	0.129	55.0	0.115	75.5	0.102
-5.5	0.308	4.2	0.876	14.5	0.295	35.0	0.138	55.5	0.105	76.0	0.098
-5.0	0.382	4.4	0.858	15.0	0.296	35.5	0.144	56.0	0.095	76.5	0.094
-4.5	0.456	4.6	0.839	15.5	0.292	36.0	0.149	56.5	0.085	77.0	0.091
-4.0	0.530	4.8	0.820	16.0	0.283	36.5	0.151	57.0	0.074	77.5	0.087
-3.5	0.601	5.0	0.799	16.5	0.270	37.0	0.152	57.5	0.064	78.0	0.082
-3.0	0.669	5.2	0.778	17.0	0.253	37.5	0.150	58.0	0.053	78.5	0.078
-2.8	0.695	5.4	0.755	17.5	0.232	38.0	0.147	58.5	0.043	79.0	0.074
-2.6	0.721	5.6	0.732	18.0	0.209	38.5	0.142	59.0	0.033	79.5	0.070
-2.4	0.745	5.8	0.709	18.5	0.184	39.0	0.136	59.5	0.026	80.0	0.065
-2.2	0.769	6.0	0.685	19.0	0.157	39.5	0.128	60.0	0.022	80.5	0.061
-2.0	0.792	6.2	0.661	19.5	0.129	40.0	0.119	60.5	0.024	81.0	0.057
-1.8	0.814	6.4	0.636	20.0	0.101	40.5	0.110	61.0	0.029	81.5	0.052
-1.6	0.835	6.6	0.611	20.5	0.073	41.0	0.101	61.5	0.037	82.0	0.048
-1.4	0.855	6.8	0.585	21.0	0.046	41.5	0.092	62.0	0.045	82.5	0.044
-1.2	0.874	7.0	0.560	21.5	0.022	42.0	0.085	62.5	0.054	83.0	0.040
-1.0	0.891	7.2	0.535	22.0	0.012	42.5	0.080	63.0	0.062	83.5	0.036
-0.8	0.907	7.4	0.509	22.5	0.029	43.0	0.077	63.5	0.070	84.0	0.032
-0.6	0.923	7.6	0.484	23.0	0.048	43.5	0.078	64.0	0.077	84.5	0.028
-0.4	0.936	7.8	0.459	23.5	0.064	44.0	0.082	64.5	0.084	85.0	0.024
-0.2	0.949	8.0	0.435	24.0	0.077	44.5	0.088	65.0	0.090	85.5	0.021
0.0	0.960	8.2	0.411	24.5	0.087	45.0	0.096	65.5	0.096	86.0	0.018
0.2	0.970	8.4	0.388	25.0	0.094	45.5	0.105	66.0	0.101	86.5	0.014
0.4	0.979	8.6	0.365	25.5	0.097	46.0	0.114	66.5	0.106	87.0	0.011
0.6	0.986	8.8	0.344	26.0	0.097	46.5	0.123	67.0	0.110	87.5	0.009
0.8	0.991	9.0	0.324	26.5	0.095	47.0	0.131	67.5	0.113	88.0	0.006
1.0	0.996	9.2	0.305	27.0	0.089	47.5	0.139	68.0	0.116	88.5	0.004
1.2	0.998	9.4	0.287	27.5	0.081	48.0	0.146	68.5	0.118	89.0	0.002
1.4	1.000	9.6	0.271	28.0	0.070	48.5	0.151	69.0	0.120	89.5	0.001
1.6	1.000	9.8	0.257	28.5	0.058	49.0	0.156	69.5	0.121	90.0	0.000
1.8	0.998	10.0	0.245	29.0	0.044	49.5	0.159	70.0	0.122		
2.0	0.995	10.2	0.235	29.5	0.030	50.0	0.161	70.5	0.122		
2.2	0.991	10.4	0.228	30.0	0.017	50.5	0.161	71.0	0.122		

Remarks:

