



**Dickey Rural Networks**

**Summer 2013**

**Warm Weather Test**

**Proof of Performance**

**Report**

**August 13-15, 2013**





## Dickey Rural Networks CATV System FCC Proof of Performance Testing

Summer 2013

### **System Description:**

The Dickey Rural Networks CATV network is a fiber to the home (FTTH) system with an RF overlay. There are no architectural components that would be frequency altering after the headend.

### **Bandwidth:**

The total system bandwidth is 750 MHz. This bandwidth is populated with both analog and digital traffic. Per FCC rules, plant testing will be performed on the analog bandwidth using 12 test channels.

### **Set Tops:**

Digital tier customers are supplied with set tops by the operator. The RF performance of these units is a matter of the manufacturer's specifications. All are well known units in common usage throughout the industry.

### **Test Equipment:**

These system performance measurements were made by using the following test instruments: Tektronix 2715 spectrum analyzer, Tektronix TSG-120 test signal generator, RGB Networks SEP processor test signal generation, JDSU SDA-4040D, CLI-1750, & CLI-1450 signal level meters, 100 Ft. length of RG-6 coaxial cable standard to the system.

### **Headend Equipment:**

The headend hardware was all left in the normal operating condition, supplying the normal programming content. An FCC multiburst video test pattern was substituted for normal video in order to perform the in channel frequency response tests.

### **System Test Points:**

The quantity of test points selected reflect FCC rules. Time intervals between signal level tests were performed in accordance with FCC rules.

**ENGINEERING FOR TELECOMMUNICATIONS**

Worksheet File:  
HEADEND.wrk

Site:  
DRN Headend

Channel Table:  
DRNHE.cht

Video Standard:  
NTSC

Aural Offset:  
4.5

Date:  
8/14/2013

Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	19.6	55.249947	-15.9	4.499988	45.0				
4	67.2500	CBS	20.0	67.249936	-15.0	4.499998	46.5				
5	77.2500	CSPN	19.7	77.249951	-14.4	4.500000	43.7				
6	83.2500	ABC	23.5	83.249921	-14.8	4.499990	43.7				
95 A5	91.2500	BEKcen	19.4	91.250044	-15.1	4.500002	48.9				
99 A1+	115.2750	TRNADO	23.2	115.274889	-16.0	4.499975	46.9				
14 A+	121.2375	HSN	19.2	121.237200	-15.4	4.499987	52.0				
15 B++	127.2625	WEATHR	20.1	127.262184	-15.5	4.499989	45.8				
16 C+	133.2375	DRNCOM	20.3	133.236939	-15.2	4.499980	48.9				
17 D	139.2500	QVC	19.6	139.249408	-15.5	4.499983	45.1				
7	175.2500	BEK	18.2	175.250061	-15.1	4.499997	44.9				
8	181.2500	CW	18.0	181.249535	-15.2	4.499990	46.5				
9	187.2500	DRNWE	17.8	187.249512	-13.6	4.499989	46.9				
10	193.2500	FOX	18.2	193.249778	-16.2	4.500038	50.1				
11	199.2500	NBC	18.8	199.249771	-15.6	4.499998	51.2				
12	205.2500	CSPAN2	18.6	205.249861	-15.7	4.499995	45.4				
13	211.2500	PBS	18.0	211.249081	-15.4	4.499983	48.9				
23 J	217.2500	WGN	18.3	217.236239	-14.7	4.499975	48.2				
24 K+	223.2500	ESPN	17.6	223.249044	-14.6	4.499982	45.1				
25 L++	229.2625	ESPN2	18.3	229.261199	-14.3	4.499975	47.3				
26 M+	235.2375	ESPNcl	17.9	235.236173	-15.0	4.499955	44.3				
27 N+	241.2375	ESPNNew	17.6	241.236147	-15.1	4.499976	47.3				
28 O+	247.2375	TBS	18.2	247.236119	-15.8	4.499974	50.3				
29 P+	253.2375	LIFETM	17.9	253.236088	-15.9	4.499965	44.7				
30 Q+	259.2375	DISNEY	18.4	259.236062	-15.3	4.499978	47.2				
31 R+	265.2375	USA	18.3	265.236038	-15.4	4.499977	48.1				
32 S+	271.2375	ABCfam	18.1	271.236179	-15.1	4.499973	41.8				
33 T++	277.2625	MTV	18.3	277.261135	-14.4	4.499967	47.4				
34 U+	283.2375	CMT	18.1	283.236092	-14.6	4.499996	45.8				
35 V+	289.2375	VH-1	18.8	289.236044	-15.2	4.499986	47.0				
36 W+	295.2375	SPIKE	18.7	295.236001	-15.3	4.499978	43.3				
37 AA+	301.2375	TNT	18.3	301.235970	-14.0	4.499995	43.3				
38 BB+	307.2375	DISCVR	18.4	307.235939	-15.3	4.499980	47.0				
39 CC+	313.2375	NICK	18.9	313.235914	-15.4	4.499975	43.3				
40 DD+	319.2375	HEADLN	18.4	319.237176	-15.5	4.500006	44.4				
41 EE+	325.2375	FOXsn	18.5	325.237173	-15.0	4.499992	45.5				
42 FF++	331.2750	ANIMAL	17.4	331.274174	-15.0	4.499994	47.9				
43 GG+	337.2375	AMC	17.9	337.236661	-14.5	4.499992	43.0				
44 HH+	343.2375	HISTORY	18.3	343.236066	-15.2	4.499979	43.3				
45 II+	349.2375	TLC	18.3	349.236049	-15.7	4.499973	47.0				
46 JJ+	355.2375	TOON	17.8	355.235192	-15.6	4.499973	43.0				
47 KK++	361.2625	HGTV	18.2	361.261606	-15.6	4.499984	43.7				
48 LL+	367.2375	A&E	17.8	367.237881	-15.0	4.500001	46.7				
49 MM+	373.2375	CNBC	18.4	373.237894	-15.6	4.500002	44.8				
50 NN+	379.2375	OWN	18.1	379.237899	-15.2	4.500009	47.4				
51 OO+	385.2375	TCM	18.0	385.237904	-15.6	4.500007	45.9				
52 PP+	391.2375	OUTDR	17.9	391.237910	-15.6	4.500004	48.2				
53 QQ+	397.2375	TRAVEL	18.1	397.237921	-15.2	4.500003	45.1				
54 RR	403.2500	CNN	17.8	403.250428	-15.6	4.500004	47.3				
55 SS	409.2500	DIY	21.8	409.250443	-13.3	4.500012	44.3				
56 TT	415.2500	NATGEO	17.3	415.247318	-15.0	4.499968	47.3				
57 UU	421.2500	FOXnew	17.6	421.247282	-14.0	4.499967	50.3				
58 VV	427.2500	TVLAND	17.1	427.247238	-15.4	4.499970	44.7				
59 WW	433.2500	MSNBC	17.3	433.247201	-15.9	4.499963	47.2				
60 XX	439.2500	BRAVO	17.6	439.247168	-12.0	4.499968	48.1				
61 YY	445.2500	DSNYxd	17.4	445.248166	-15.4	4.499988	41.8				
62 ZZ	451.2500	GOLF	17.1	451.247091	-15.4	4.499962	47.4				
63 AAA	457.2500	COMEDY	17.3	457.248114	-15.8	4.499944	45.8				
64 BBB	463.2500	FOOD	17.0	463.247016	-12.2	4.499966	47.0				
65 CCC	469.2500	GSN	17.4	469.249427	-14.8	4.499998	43.3				
66 DDD	475.2500	BOOM	17.1	475.249419	-15.6	4.500001	43.3				
67 EEE	481.2500	FX	17.3	481.249410	-15.9	4.499993	47.0				
68 FFF	487.2500	FOXspt	17.7	487.249401	-15.0	4.499997	43.3				
69 GGG	493.2500	YouToo	17.2	493.249394	-16.1	4.499990	44.4				
70 HHH	499.2500	GAC	17.4	499.249381	-15.2	4.499987	45.5				
71 III	505.2500	truTV	22.2	505.249379	-15.7	4.499996	45.5				
72 JJJ	511.2500	HLMARK	16.8	511.249365	-14.7	4.499997	47.9				
73 KKK	517.2500	OXYGEN	16.6	517.249683	-14.3	4.500003	47.3				
74 LLL	523.2500	NBCspt	16.3	523.249678	-14.6	4.499997	50.3				
75 MMM	529.2500	ION	16.5	529.249674	-15.0	4.499999	44.7				
76 NNN	535.2500	RFD TV	17.1	535.248691	-14.8	4.499991	45.8				
77 OOO	541.2500	SyFy	16.9	541.249666	-14.8	4.500011	48.9				
78 PPP	547.2500	SPTMEN	16.9	547.249663	-14.9	4.499983	45.1				
79 QQQ	553.2500	SOAPnt	17.7	553.249641	-14.6	4.499996	47.4				

\*Note: Additional testing has been performed in some locations for completeness.

KEY:

Warning

Out of Spec

Error

Site:		Forbes, ND		Date:		8/13/2013					
Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	17.0	55.249945	-15.7	4.499995	39.7	-48.00	-64.10	0.4	
7	175.2500	BEK	16.0	175.250097	-18.0	4.499981	39.3	-45.00	-59.20	0.5	
23 J	217.2500	WGN	16.3	217.236280	-14.7	4.499967	41.7	-53.90	-62.10	0.3	
28 O+	247.2375	TBS	16.7	247.236115	-16.0	4.499976	40.4	-50.00	-61.00	0.2	0.5
32 S+	271.2375	ABCfam	16.6	271.236143	-15.5	4.499972	34.6	-49.70	-62.50	0.5	
46 JJ+	355.2375	TOON	16.5	355.235192	-15.4	4.499969	36.6	-52.10	-60.20	0.8	
55 SS	409.2500	DIY	16.8	409.250429	-13.5	4.500002	39.0	-51.00	-59.40	0.8	
58 VV	427.2500	TVLAND	16.7	427.247227	-15.6	4.499976	42.6	-51.00	-59.40	0.9	
61 YY	445.2500	DSNYxd	16.8	445.248166	-15.6	4.499981	41.2	-47.90	-59.40	0.9	
69 GGG	493.2500	YouToo	16.5	493.249376	-15.5	4.500001	41.5	-49.30	-61.50	0.9	
71 III	505.2500	truTV	17.2	505.249362	-15.6	4.499994	41.3	-49.30	-59.80	0.9	
79 QQQ	553.2500	SOAPnt	16.5	553.249647	-14.9	4.499992	41.5	-48.30	-64.40	1.0	

Site:		Jud, ND		Date:		8/14/2013					
Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	11.2	55.249942	-15.0	4.499999	40.2	-48.10	-67.20	0.6	
7	175.2500	BEK	12.0	175.250079	-18.3	4.499981	40.4	-48.40	-67.80	0.6	
23 J	217.2500	WGN	12.7	217.236272	-14.7	4.499973	41.2	-48.70	-68.10	0.3	
28 O+	247.2375	TBS	13.4	247.236104	-16.0	4.499976	41.2	-47.00	-68.10	0.4	
32 S+	271.2375	ABCfam	13.1	271.236134	-15.5	4.499978	42.6	-48.40	-67.80	0.3	
46 JJ+	355.2375	TOON	12.6	355.235189	-15.5	4.499970	40.9	-49.80	-66.90	0.6	
55 SS	409.2500	DIY	12.6	409.250428	-13.0	4.500006	41.5	-49.00	-67.00	0.6	
58 VV	427.2500	TVLAND	13.0	427.247220	-15.7	4.499968	41.5	-45.10	-67.60	0.4	
61 YY	445.2500	DSNYxd	12.8	445.248136	-15.3	4.499984	40.8	-48.70	-67.40	0.7	
69 GGG	493.2500	YouToo	13.0	493.249370	-15.5	4.499995	41.2	-48.40	-68.10	1.0	
71 III	505.2500	truTV	13.8	505.249360	-15.5	4.499996	42.6	-50.10	-69.20	0.4	
79 QQQ	553.2500	SOAPnt	12.7	553.249641	-14.6	4.499996	40.9	-49.40	-68.20	1.1	0.3

Site:		Kathryn, ND		Date:		8/14/2013					
Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	17.9	55.249943	-15.4	4.499993	40.1	-47.70	-66.10	0.9	0.7
7	175.2500	BEK	17.2	175.250091	-18.8	4.499981	39.1	-44.90	-61.90	1.0	
23 J	217.2500	WGN	17.6	217.236277	-14.9	4.499970	41.2	-48.00	-58.10	0.5	
28 O+	247.2375	TBS	18.0	247.236101	-16.0	4.499972	41.2	-52.90	-58.50	0.6	
32 S+	271.2375	ABCfam	17.9	271.236102	-15.5	4.499971	42.6	-48.70	-59.00	0.4	
46 JJ+	355.2375	TOON	17.6	355.235172	-15.2	4.499969	40.9	-47.60	-58.80	0.8	
55 SS	409.2500	DIY	17.8	409.250392	-13.5	4.500011	40.5	-49.70	-56.90	0.9	
58 VV	427.2500	TVLAND	17.7	427.247197	-15.5	4.499973	41.6	-49.40	-56.20	0.9	
61 YY	445.2500	DSNYxd	17.8	445.248116	-15.6	4.499980	42.0	-49.00	-56.20	0.6	
69 GGG	493.2500	YouToo	17.6	493.249353	-15.4	4.499998	41.3	-46.00	-53.80	0.6	
71 III	505.2500	truTV	18.7	505.249334	-15.7	4.499990	41.0	-52.20	-55.50	0.6	
79 QQQ	553.2500	SOAPnt	17.7	553.249622	-14.6	4.499991	42.4	-49.00	-59.20	1.1	

KEY:

Warning

Out of Spec

Error

Site:		Litchville, ND		Date:		8/14/2013					
Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	11.5	55.249946	-15.4	4.499991	39.5	-48.10	-66.9	0.6	
7	175.2500	BEK	12.0	175.250092	-14.8	4.500005	37.1	-44.90	-62.4	0.5	
23 J	217.2500	WGN	13.0	217.236293	-14.7	4.499972	41.1	-48.70	-64.6	0.4	
28 O+	247.2375	TBS	13.1	247.236125	-15.9	4.499973	34.1	-47.00	-64.3	0.5	
32 S+	271.2375	ABCfam	13.1	271.236147	-15.4	4.499985	42.2	-48.40	-64.5	0.5	
46 JJ+	355.2375	TOON	12.4	355.235205	-15.3	4.499971	38.1	-49.80	-63.4	0.3	
55 SS	409.2500	DIY	12.7	409.250455	-13.4	4.500003	41.2	-47.30	-59.9	0.8	0.6
58 VV	427.2500	TVLAND	12.9	427.247240	-15.5	4.499970	39.8	-49.40	-62.0	0.4	
61 YY	445.2500	DSNYxd	13.1	445.248161	-15.2	4.499983	41.5	-48.00	-62.9	0.3	
69 GGG	493.2500	YouToo	13.3	493.249382	-15.4	4.500006	41.5	-50.50	-61.5	0.9	
71 III	505.2500	truTV	14.0	505.249375	-15.5	4.499987	40.8	-55.20	-61.4	0.3	
79 QQQ	553.2500	SOAPnt	13.2	553.249645	-14.6	4.500000	41.2	-49.70	-62.4	1.1	

Site:		Lisbon, ND		Date:		8/14/2013					
Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	9.7	55.249947	-15.6	4.499993	42.7	-48.30	-68.1	0.4	
7	175.2500	BEK	8.8	175.250077	-17.7	4.499985	39.2	-46.90	-67.6	0.5	
23 J	217.2500	WGN	8.9	217.236235	-14.6	4.499975	43.8	-52.50	-67.3	0.3	
28 O+	247.2375	TBS	9.7	247.236029	-16.3	4.499973	34.7	-50.40	-67.9	0.4	
32 S+	271.2375	ABCfam	9.1	271.236059	-15.2	4.499979	34.4	-48.30	-66.3	0.4	
46 JJ+	355.2375	TOON	8.8	355.235147	-15.6	4.499971	39.8	-50.40	-64.9	0.5	0.8
55 SS	409.2500	DIY	8.6	409.250373	-13.7	4.499998	40.5	-49.00	-63.5	0.6	
58 VV	427.2500	TVLAND	8.4	427.247198	-15.9	4.499972	42.1	-45.10	-64.5	0.7	
61 YY	445.2500	DSNYxd	8.0	445.248137	-15.4	4.499988	43.9	-48.70	-64.8	0.4	
69 GGG	493.2500	YouToo	7.0	493.249366	-15.7	4.499990	41.9	-48.40	-65.5	0.8	
71 III	505.2500	truTV	7.7	505.249355	-15.7	4.499991	42.9	-50.40	-67.7	0.9	
79 QQQ	553.2500	SOAPnt	6.5	553.249645	-14.9	4.499998	40.4	-49.40	-64.5	0.8	

Site:		Rutland, ND		Date:		8/14/2013					
Channel	Standard Frequency	Program	Vis Car Lev (dBmV)	Vis Car Freq (MHz)	Aur Car Δ (dBc)	Aur Car Freq Offset (MHz)	C/N (dB)	CSO (dBc)	CTB (dBc)	ICR ± (dB)	Hum / LFD (%)
2	55.2500	GUIDE	13.4	55.249934	-15.1	4.499999	41.4	-46.80	-68.5	0.7	
7	175.2500	BEK	14.0	175.250034	-19.2	4.499985	37.4	-44.90	-68.6	0.5	
23 J	217.2500	WGN	14.5	217.236215	-14.6	4.499961	43.8	-51.80	-67.2	0.3	
28 O+	247.2375	TBS	15.0	247.236034	-15.9	4.499975	34.8	-49.00	-67.9	0.7	
32 S+	271.2375	ABCfam	14.4	271.236053	-15.1	4.499979	36.1	-45.70	-68.0	0.4	
46 JJ+	355.2375	TOON	14.6	355.235146	-15.7	4.499967	42.2	-49.70	-67.6	0.7	
55 SS	409.2500	DIY	14.2	409.250330	-13.3	4.500002	40.8	-48.00	-67.0	0.8	
58 VV	427.2500	TVLAND	14.5	427.247162	-15.3	4.499966	41.8	-46.30	-66.2	1.1	
61 YY	445.2500	DSNYxd	14.9	445.248039	-15.9	4.499985	43.6	-50.10	-67.4	1.1	
69 GGG	493.2500	YouToo	14.6	493.249313	-15.3	4.499996	42.2	-50.40	-69.1	0.7	
71 III	505.2500	truTV	15.2	505.249301	-15.5	4.499997	45.4	-48.30	-69.9	0.9	0.3
79 QQQ	553.2500	SOAPnt	14.6	553.249613	-14.6	4.499997	43.6	-51.10	-68.8	1.0	

KEY:

Warning

Out of Spec

Error



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Forbes, ND

Model: 4040D  
Operator: TECH\_PLAN\_  
Date: 08/13/13 Time: 17:14:11  
Description:

Serial #: 5443192  
File: FORBES

Cal Date: 01/11/00  
DOS File: FORBES

Location: FORBES  
Location Type: FieldTest  
Area: SJ  
Test Pnt Type:  
Test Pnt Comp:  
AC Voltage:

AmplID:  
Power Cfg:  
Feeder Maker Cfg:  
Trunk Term:  
Voltage Setting:  
DC Voltage (reg):

Reverse Pad:  
Forward Pad:  
Rev Equalizer:  
Fwd Equalizer:  
Temp:  
DC Voltage (unreg):

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/14/13	08/14/13	
Time:	17:14:11	23:13:58	05:13:58	11:13:58	
Temp:	89.6 F	78.8 F	78.8 F	78.8 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
2	17.0	17.1	17.2	16.7	0.5
4	17.3	17.2	17.8	17.2	0.6
5	17.0	17.5	17.5	17.4	0.5
6	16.9	17.2	17.3	17.0	0.4
7	15.9	16.2	16.3	16.2	0.4
8	16.3	16.5	17.0	16.3	0.7
9	16.3	16.6	16.6	16.4	0.3
10	16.9	16.8	17.2	16.7	0.5
11	16.5	16.7	16.7	16.5	0.2
12	16.5	16.6	16.6	16.5	0.1
13	16.5	16.3	16.2	16.1	0.4
14	16.5	17.0	17.2	16.9	0.7
15	16.9	17.4	17.5	17.3	0.6
16	17.6	17.9	18.0	17.4	0.6
17	16.7	17.3	17.5	17.0	0.8
23	16.4	16.3	16.7	16.1	0.6
24	16.1	15.9	16.0	15.8	0.3
25	16.7	16.5	16.6	16.6	0.2
26	16.2	16.2	16.4	16.3	0.2
27	16.0	16.2	16.2	16.0	0.2
28	16.8	16.9	17.1	16.9	0.3
29	16.3	15.8	16.3	16.1	0.5
30	16.8	16.9	17.0	16.8	0.2
31	16.8	16.7	16.9	16.9	0.2
32	16.7	17.0	17.0	16.7	0.3
33	16.9	16.9	16.9	16.8	0.1
34	16.8	16.6	16.9	16.5	0.4
35	17.3	17.3	17.4	16.9	0.5
36	17.2	16.9	17.1	17.0	0.3
37	16.8	16.8	16.9	16.8	0.1
38	17.3	16.8	16.6	16.9	0.7
39	16.9	17.1	17.0	17.1	0.2
40	16.5	16.8	16.8	16.7	0.3
41	17.0	17.0	17.1	17.1	0.1
42	16.3	16.5	16.5	16.4	0.2
43	16.8	16.7	16.8	16.7	0.1
44	17.0	16.9	17.2	17.0	0.3
45	17.3	17.7	18.0	17.5	0.7
46	16.8	16.9	17.2	16.8	0.4
47	17.3	17.4	17.7	17.0	0.7
48	17.3	17.0	17.3	17.2	0.3
49	17.3	17.5	17.8	17.5	0.5
50	17.5	17.4	17.5	17.5	0.1
51	17.3	17.5	17.6	17.4	0.3
52	17.4	17.6	17.8	17.5	0.4
53	17.7	17.5	17.7	17.5	0.2
54	17.7	17.5	17.8	17.7	0.1
55	16.9	16.8	16.8	16.4	0.5
56	17.0	17.0	17.3	16.9	0.4



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Forbes, ND

Model: 4040D  
Operator: TECH\_PLAN\_  
Date: 08/13/13 Time: 17:14:11  
Description:

Serial #: 5443192  
File: FORBES

Cal Date: 01/11/00  
DOS File: FORBES

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/14/13	08/14/13	
Time:	17:14:11	23:13:58	05:13:58	11:13:58	
Temp:	89.6 F	78.8 F	78.8 F	78.8 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
57	17.3	17.1	17.4	17.0	0.4
58	17.0	17.3	17.4	17.0	0.4
59	16.9	16.5	16.9	16.6	0.4
60	17.5	17.4	17.6	17.5	0.2
61	17.1	17.2	17.5	17.1	0.4
62	16.9	17.0	17.0	16.8	0.2
63	16.9	17.1	17.2	16.9	0.3
64	16.3	16.6	16.6	16.4	0.3
65	16.9	17.2	17.4	16.8	0.6
66	17.0	17.1	17.2	16.9	0.3
67	17.5	17.8	17.9	17.3	0.6
68	18.0	18.0	18.2	17.8	0.4
69	17.0	17.2	17.5	16.8	0.7
70	17.2	17.3	17.3	17.4	0.2
71	17.0	17.1	17.1	16.9	0.2
72	16.3	16.5	16.4	16.3	0.2
73	16.6	16.7	17.0	16.5	0.5
74	17.0	16.9	17.1	16.7	0.4
75	17.3	17.4	17.6	16.9	0.7
76	17.7	17.9	17.9	17.5	0.4
77	17.1	17.2	17.5	16.9	0.6
78	17.0	17.0	17.1	16.8	0.3
79	16.2	16.4	16.4	16.2	0.2
95	16.8	16.9	17.1	16.7	0.4
99	16.8	17.3	17.4	17.0	0.6

LIMIT CHECK	Limit	1	2	3	4	
Min Video Carrier Level	3.0 dBmV					Pass
Max Delta Video Level	15.0 dB					Pass
Min Delta V/A	10.0 dB					Pass
Max Delta V/A	17.0 dB					Pass
Max Delta Adjacent Chan	3.0 dB					Pass
Max 24 Hour Deviation	8.0 dB					Pass
Min Digital Level	..					Pass
Max Digital Level	..					Pass
Conclusion:						<b>P A S S</b>

Reviewed: \_\_\_\_\_

Date: \_\_\_\_\_

# 24 Hour Test Report



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Jud, ND

Model: 1450  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 07:09:49  
Description:

Serial #: 7183480  
File: JUD\_\_\_\_\_

Cal Date: 4/09/01  
DOS File: JUD\_\_\_\_\_

Location: JUD  
Location Type: FieldTest  
Area: \_  
Test Pnt Type:  
Test Pnt Comp:  
AC Voltage:

AmplID:  
Power Cfg:  
Feeder Maker Cfg:  
Trunk Term:  
Voltage Setting:  
DC Voltage (reg):

Reverse Pad:  
Forward Pad:  
Rev Equalizer:  
Fwd Equalizer:  
Temp:  
DC Voltage (unreg):

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/13/13	08/14/13	
Time:	07:09:49	13:09:42	19:09:42	01:09:42	
Temp:	70.0 F	66.7 F	67.8 F	65.8 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
2	19.0	19.0	19.1	18.7	0.4
4	19.1	19.0	19.4	19.0	0.4
5	19.0	18.9	19.3	18.9	0.4
6	18.8	18.8	18.9	18.5	0.4
7	18.2	18.2	18.3	18.2	0.1
8	18.6	18.5	18.5	18.2	0.4
9	18.5	18.5	18.6	18.4	0.2
10	18.8	18.8	19.1	18.7	0.4
11	18.7	18.6	18.7	18.6	0.1
12	18.6	18.6	18.8	18.6	0.2
13	18.6	18.6	18.3	18.1	0.5
14	19.0	18.9	19.0	18.7	0.3
15	18.6	18.5	19.0	18.5	0.5
16	19.9	19.8	19.9	19.6	0.3
17	19.0	19.0	19.3	18.8	0.5
23	18.7	18.7	18.8	18.5	0.3
24	18.0	18.1	18.0	18.0	0.1
25	18.1	18.1	18.2	18.1	0.1
26	18.5	18.4	18.6	18.5	0.2
27	18.4	18.3	18.4	18.4	0.1
28	19.1	19.1	19.3	19.1	0.2
29	18.5	18.2	18.4	18.4	0.3
30	19.0	19.0	19.1	19.1	0.1
31	19.0	18.9	19.1	19.0	0.2
32	19.1	19.0	19.1	19.0	0.1
33	18.3	18.2	18.3	18.2	0.1
34	18.9	18.7	18.9	18.7	0.2
35	19.3	19.2	19.3	19.1	0.2
36	19.2	19.1	19.2	19.2	0.1
37	19.0	18.9	19.0	18.9	0.1
38	18.9	18.8	19.0	18.9	0.2
39	19.1	19.1	19.2	19.2	0.1
40	19.0	18.9	19.1	18.9	0.2
41	19.3	19.2	19.3	19.3	0.1
42	18.5	18.4	18.5	18.4	0.1
43	19.2	19.1	19.3	19.1	0.2
44	19.4	19.3	19.5	19.4	0.2
45	20.0	19.9	20.0	19.9	0.1
46	19.2	19.1	19.2	19.1	0.1
47	18.8	18.7	18.8	18.7	0.1
48	19.2	19.2	19.2	19.2	0.0
49	19.5	19.4	19.6	19.6	0.2
50	19.6	19.5	19.7	19.5	0.2
51	19.5	19.6	19.7	19.6	0.2
52	19.7	19.8	19.9	19.7	0.2
53	19.9	19.9	19.9	19.7	0.2
54	19.9	19.9	20.1	19.8	0.3
55	19.2	19.2	19.1	19.0	0.2
56	19.4	19.4	19.5	19.2	0.3





Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Jud, ND

Model: 1450  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 07:09:49  
Description:

Serial #: 7183480  
File: JUD\_\_\_\_\_

Cal Date: 4/09/01  
DOS File: JUD\_\_\_\_\_

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/13/13	08/14/13	
Time:	07:09:49	13:09:42	19:09:42	01:09:42	
Temp:	70.0 F	66.7 F	67.8 F	65.8 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
57	19.8	19.7	19.8	19.5	0.3
58	19.7	19.6	19.8	19.5	0.3
59	19.3	19.2	19.4	19.0	0.4
60	19.7	19.6	20.1	19.5	0.6
61	19.4	19.4	19.5	19.2	0.3
62	19.2	19.2	19.3	19.0	0.3
63	19.2	19.2	19.4	19.0	0.4
64	18.8	18.8	18.9	18.5	0.4
65	19.4	19.5	19.5	19.0	0.5
66	19.1	19.2	19.2	18.7	0.5
67	19.5	19.5	19.6	19.1	0.5
68	19.7	20.0	20.1	19.6	0.5
69	19.3	19.3	19.3	18.9	0.4
70	19.8	19.9	19.9	19.5	0.4
71	20.0	20.0	20.1	19.7	0.4
72	19.3	19.3	19.3	18.9	0.4
73	19.4	19.4	19.6	19.1	0.5
74	19.5	19.5	19.5	19.1	0.4
75	19.7	19.7	19.8	19.3	0.5
76	20.2	20.2	20.3	19.9	0.4
77	19.8	19.8	19.9	19.4	0.5
78	19.7	19.9	19.9	19.5	0.4
79	19.2	19.3	19.3	19.0	0.3
95	18.9	18.8	19.0	18.5	0.5
99	19.0	18.8	18.9	18.5	0.5

LIMIT CHECK	Limit	1	2	3	4	
Min Video Carrier Level	3.0 dBmV					Pass
Max Delta Video Level	15.0 dB					Pass
Min Delta V/A	10.0 dB					Pass
Max Delta V/A	17.0 dB					Pass
Max Delta Adjacent Chan	3.0 dB					Pass
Max 24 Hour Deviation	8.0 dB					Pass
Min Digital Level	..					Pass
Max Digital Level	..					Pass
Conclusion:						<b>P A S S</b>

Reviewed: \_\_\_\_\_

Date: \_\_\_\_\_



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Kathryn, ND

Model: 1750  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 08:45:13  
Description:

Serial #: 0614953  
File: KATHRYN

Cal Date: 12/15/04  
DOS File: KATHRYN

Location: KATHRYN  
Location Type: FieldTest  
Area: \_0\_\_\_\_  
Test Pnt Type:  
Test Pnt Comp:  
AC Voltage:

AmpID:  
Power Cfg:  
Feeder Maker Cfg:  
Trunk Term:  
Voltage Setting:  
DC Voltage (reg):

Reverse Pad:  
Forward Pad:  
Rev Equalizer:  
Fwd Equalizer:  
Temp:  
DC Voltage (unreg):

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/13/13	08/14/13	
Time:	08:45:13	14:45:05	20:45:05	02:45:02	
Temp:	64.9 F	76.6 F	75.7 F	80.6 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
2	12.1	12.3	12.2	11.9	0.4
4	13.4	13.6	13.7	13.6	0.3
5	13.5	13.4	13.5	13.4	0.1
6	13.2	13.4	13.3	13.2	0.2
7	13.2	13.3	13.2	13.2	0.1
8	13.6	13.7	13.6	13.7	0.1
9	13.6	13.7	13.7	13.7	0.1
10	14.0	14.1	14.0	14.1	0.1
11	14.0	14.0	14.0	14.0	0.0
12	13.9	14.1	14.1	14.1	0.2
13	13.9	14.0	14.0	14.1	0.2
14	13.6	13.7	13.6	13.5	0.2
15	13.2	13.3	13.3	13.3	0.1
16	14.6	14.8	14.7	14.5	0.3
17	13.8	13.9	13.8	13.5	0.4
23	14.0	14.2	14.1	14.1	0.2
24	13.4	13.5	13.5	13.6	0.2
25	13.3	13.5	13.4	13.4	0.2
26	13.8	13.9	13.9	14.1	0.3
27	13.7	13.9	13.8	14.0	0.3
28	14.5	14.6	14.6	14.8	0.3
29	13.9	13.8	14.0	14.0	0.2
30	14.5	14.6	14.5	14.7	0.2
31	14.5	14.6	14.5	14.7	0.2
32	14.5	14.7	14.4	14.7	0.3
33	13.6	13.8	13.7	13.8	0.2
34	14.2	14.3	14.3	14.2	0.1
35	14.5	14.7	14.6	14.6	0.2
36	14.3	14.5	14.4	14.5	0.2
37	14.1	14.2	14.2	14.2	0.1
38	14.4	14.5	14.1	14.0	0.5
39	14.2	14.4	14.3	14.2	0.2
40	14.1	14.3	14.2	14.1	0.2
41	14.4	14.6	14.4	14.7	0.3
42	13.6	13.7	13.6	13.8	0.2
43	14.3	14.4	14.4	14.5	0.2
44	14.4	14.6	14.5	14.6	0.2
45	15.0	15.1	15.1	14.9	0.2
46	14.3	14.4	14.3	14.2	0.2
47	13.6	13.8	13.7	13.6	0.2
48	14.3	14.4	14.4	14.2	0.2
49	14.5	14.5	14.5	14.4	0.1
50	14.3	14.4	14.5	14.4	0.2
51	14.3	14.5	14.5	14.3	0.2
52	14.6	14.7	14.6	14.6	0.1
53	14.7	14.8	14.6	14.6	0.2
54	14.8	14.8	14.9	14.7	0.2
55	14.0	14.2	14.2	13.9	0.3
56	14.4	14.6	14.5	14.3	0.3



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Kathryn, ND

Model: 1750  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 08:45:13  
Description:

Serial #: 0614953  
File: KATHRYN

Cal Date: 12/15/04  
DOS File: KATHRYN

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/13/13	08/14/13	
Time:	08:45:13	14:45:05	20:45:05	02:45:02	
Temp:	64.9 F	76.6 F	75.7 F	80.6 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
57	14.7	14.9	14.7	14.6	0.3
58	14.6	14.7	14.7	14.2	0.5
59	14.2	14.4	14.2	13.9	0.5
60	14.5	14.7	14.5	14.3	0.4
61	14.3	14.4	14.4	14.1	0.3
62	14.1	14.3	14.1	14.0	0.3
63	14.1	14.3	14.3	14.0	0.3
64	13.9	14.1	13.9	13.8	0.3
65	14.5	14.7	14.5	14.3	0.4
66	14.3	14.4	14.3	14.0	0.4
67	14.7	14.8	14.7	14.5	0.3
68	14.9	15.4	15.2	15.0	0.5
69	14.4	14.6	14.5	14.3	0.3
70	14.9	15.0	15.1	14.8	0.3
71	15.1	15.1	15.1	15.1	0.0
72	14.4	14.5	14.5	14.4	0.1
73	14.3	14.5	14.3	14.3	0.2
74	14.1	14.3	14.5	14.1	0.4
75	14.3	14.5	14.4	14.2	0.3
76	15.0	15.2	15.2	14.9	0.3
77	14.8	15.0	14.9	14.5	0.5
78	14.8	14.9	14.9	14.3	0.6
79	14.2	14.4	14.3	13.8	0.6
95	13.3	13.4	13.4	13.1	0.3
99	13.5	13.6	13.4	13.4	0.2

LIMIT CHECK	Limit	1	2	3	4	
Min Video Carrier Level	3.0 dBmV					Pass
Max Delta Video Level	15.0 dB					Pass
Min Delta V/A	10.0 dB					Pass
Max Delta V/A	17.0 dB					Pass
Max Delta Adjacent Chan	3.0 dB					Pass
Max 24 Hour Deviation	8.0 dB					Pass
Min Digital Level	..					Pass
Max Digital Level	..					Pass
Conclusion:						<b>P A S S</b>

Reviewed: \_\_\_\_\_

Date: \_\_\_\_\_



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Lisbon, ND

Model: 1450  
Operator: OPERATOR\_NAME  
Date: 08/14/13 Time: 01:43:49  
Description:

Serial #: 8483578  
File: LISBON\_\_

Cal Date: 1/24/00  
DOS File: LISBON\_\_

Location: LISBON  
Location Type: FieldTest  
Area: \_  
Test Pnt Type:  
Test Pnt Comp:  
AC Voltage:

AmpID:  
Power Cfg:  
Feeder Maker Cfg:  
Trunk Term:  
Voltage Setting:  
DC Voltage (reg):

Reverse Pad:  
Forward Pad:  
Rev Equalizer:  
Fwd Equalizer:  
Temp:  
DC Voltage (unreg):

	#1	#2	#3	#4	
Date:	08/14/13	08/14/13	08/14/13	08/14/13	
Time:	01:43:49	07:43:43	13:43:43	19:43:43	
Temp:	72.0 F	61.2 F	63.5 F	63.7 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
2	10.0	10.0	9.9	10.1	0.2
4	10.1	9.8	10.0	10.2	0.4
5	9.7	9.5	9.5	9.7	0.2
6	9.2	9.2	9.1	9.3	0.2
7	9.0	8.9	8.9	9.0	0.1
8	9.1	9.2	9.1	9.1	0.1
9	9.0	9.0	8.9	9.1	0.2
10	9.4	9.4	9.4	9.6	0.2
11	9.1	9.3	9.2	9.4	0.3
12	9.2	9.2	9.2	9.4	0.2
13	8.8	9.2	9.1	9.3	0.5
14	9.3	9.4	9.3	9.5	0.2
15	9.3	9.1	9.1	9.3	0.2
16	10.4	10.4	10.4	10.5	0.1
17	9.6	9.5	9.4	9.6	0.2
23	9.1	9.1	9.0	9.3	0.3
24	8.3	8.5	8.5	8.5	0.2
25	8.4	8.5	8.5	8.7	0.3
26	8.8	8.7	8.7	8.9	0.2
27	8.6	8.8	8.7	8.9	0.3
28	9.1	9.4	9.4	9.6	0.5
29	8.5	8.8	8.7	8.9	0.4
30	9.4	9.4	9.4	9.5	0.1
31	9.2	9.3	9.2	9.4	0.2
32	9.2	9.3	9.3	9.4	0.2
33	8.5	8.7	8.6	8.8	0.3
34	8.8	8.9	8.8	9.0	0.2
35	9.3	9.5	9.4	9.5	0.2
36	9.4	9.5	9.4	9.6	0.2
37	8.8	8.9	8.9	9.0	0.2
38	9.1	9.2	9.1	9.3	0.2
39	9.1	9.1	9.1	9.4	0.3
40	8.9	9.0	8.9	9.1	0.2
41	9.3	9.4	9.3	9.5	0.2
42	8.0	8.1	8.0	8.2	0.2
43	8.8	8.9	8.8	9.0	0.2
44	9.0	8.9	8.8	9.1	0.3
45	9.3	9.4	9.2	9.4	0.2
46	8.8	8.8	8.8	8.9	0.1
47	8.2	8.3	8.3	8.4	0.2
48	8.7	8.9	8.7	9.0	0.3
49	9.1	9.2	9.1	9.3	0.2
50	9.0	9.1	9.0	9.2	0.2
51	8.9	8.9	8.8	9.0	0.2
52	9.2	9.3	9.0	9.3	0.3
53	8.8	9.0	8.9	9.0	0.2
54	8.7	8.8	8.7	8.9	0.2
55	8.1	8.1	8.1	8.1	0.0
56	7.9	8.0	7.9	8.0	0.1



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Lisbon, ND

Model: 1450  
Operator: OPERATOR\_NAME  
Date: 08/14/13 Time: 01:43:49  
Description:

Serial #: 8483578  
File: LISBON\_\_

Cal Date: 1/24/00  
DOS File: LISBON\_\_

	#1	#2	#3	#4	
Date:	08/14/13	08/14/13	08/14/13	08/14/13	
Time:	01:43:49	07:43:43	13:43:43	19:43:43	
Temp:	72.0 F	61.2 F	63.5 F	63.7 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
57	8.3	8.4	8.4	8.4	0.1
58	8.1	8.1	8.1	8.2	0.1
59	7.4	7.6	7.5	7.6	0.2
60	8.1	8.3	8.3	8.4	0.3
61	7.6	7.8	7.7	7.8	0.2
62	7.5	7.6	7.5	7.7	0.2
63	7.6	7.8	7.7	7.8	0.2
64	6.9	7.1	6.9	7.1	0.2
65	7.6	7.8	7.7	7.9	0.3
66	7.0	7.2	7.1	7.3	0.3
67	7.3	7.5	7.4	7.5	0.2
68	7.7	7.8	7.7	8.0	0.3
69	6.6	6.9	6.8	6.9	0.3
70	7.1	7.3	7.3	7.5	0.4
71	7.1	7.3	7.2	7.3	0.2
72	6.4	6.7	6.6	6.7	0.3
73	6.4	6.6	6.5	6.6	0.2
74	6.5	6.8	6.8	6.6	0.3
75	6.7	6.8	6.8	6.8	0.1
76	7.0	7.3	7.2	7.2	0.3
77	6.8	7.0	6.9	7.0	0.2
78	6.7	6.8	6.7	6.8	0.1
79	6.3	6.4	6.4	6.4	0.1
95	9.1	9.2	9.0	9.3	0.3
99	9.3	9.4	9.3	9.5	0.2

LIMIT CHECK	Limit	1	2	3	4	
Min Video Carrier Level	3.0 dBmV					Pass
Max Delta Video Level	15.0 dB					Pass
Min Delta V/A	10.0 dB					Pass
Max Delta V/A	17.0 dB					Pass
Max Delta Adjacent Chan	3.0 dB					Pass
Max 24 Hour Deviation	8.0 dB					Pass
Min Digital Level	..					Pass
Max Digital Level	..					Pass
Conclusion:						<b>P A S S</b>

Reviewed: \_\_\_\_\_

Date: \_\_\_\_\_

# 24 Hour Test Report



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Litchville, ND

Model: 1450  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 07:09:49  
Description:

Serial #: 7183480  
File: LITCHVILLE

Cal Date: 4/09/01  
DOS File: LITCHVILLE

Location: LITCHVILLE  
Location Type: FieldTest  
Area: \_  
Test Pnt Type:  
Test Pnt Comp:  
AC Voltage:

AmpID:  
Power Cfg:  
Feeder Maker Cfg:  
Trunk Term:  
Voltage Setting:  
DC Voltage (reg):

Reverse Pad:  
Forward Pad:  
Rev Equalizer:  
Fwd Equalizer:  
Temp:  
DC Voltage (unreg):

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/13/13	08/14/13	
Time:	07:09:49	13:09:42	19:09:42	01:09:42	
Temp:	70.0 F	66.7 F	67.8 F	65.8 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
2	19.0	19.0	19.1	18.7	0.4
4	19.1	19.0	19.4	19.0	0.4
5	19.0	18.9	19.3	18.9	0.4
6	18.8	18.8	18.9	18.5	0.4
7	18.2	18.2	18.3	18.2	0.1
8	18.6	18.5	18.5	18.2	0.4
9	18.5	18.5	18.6	18.4	0.2
10	18.8	18.8	19.1	18.7	0.4
11	18.7	18.6	18.7	18.6	0.1
12	18.6	18.6	18.8	18.6	0.2
13	18.6	18.6	18.3	18.1	0.5
14	19.0	18.9	19.0	18.7	0.3
15	18.6	18.5	19.0	18.5	0.5
16	19.9	19.8	19.9	19.6	0.3
17	19.0	19.0	19.3	18.8	0.5
23	18.7	18.7	18.8	18.5	0.3
24	18.0	18.1	18.0	18.0	0.1
25	18.1	18.1	18.2	18.1	0.1
26	18.5	18.4	18.6	18.5	0.2
27	18.4	18.3	18.4	18.4	0.1
28	19.1	19.1	19.3	19.1	0.2
29	18.5	18.2	18.4	18.4	0.3
30	19.0	19.0	19.1	19.1	0.1
31	19.0	18.9	19.1	19.0	0.2
32	19.1	19.0	19.1	19.0	0.1
33	18.3	18.2	18.3	18.2	0.1
34	18.9	18.7	18.9	18.7	0.2
35	19.3	19.2	19.3	19.1	0.2
36	19.2	19.1	19.2	19.2	0.1
37	19.0	18.9	19.0	18.9	0.1
38	18.9	18.8	19.0	18.9	0.2
39	19.1	19.1	19.2	19.2	0.1
40	19.0	18.9	19.1	18.9	0.2
41	19.3	19.2	19.3	19.3	0.1
42	18.5	18.4	18.5	18.4	0.1
43	19.2	19.1	19.3	19.1	0.2
44	19.4	19.3	19.5	19.4	0.2
45	20.0	19.9	20.0	19.9	0.1
46	19.2	19.1	19.2	19.1	0.1
47	18.8	18.7	18.8	18.7	0.1
48	19.2	19.2	19.2	19.2	0.0
49	19.5	19.4	19.6	19.6	0.2
50	19.6	19.5	19.7	19.5	0.2
51	19.5	19.6	19.7	19.6	0.2
52	19.7	19.8	19.9	19.7	0.2
53	19.9	19.9	19.9	19.7	0.2
54	19.9	19.9	20.1	19.8	0.3
55	19.2	19.2	19.1	19.0	0.2
56	19.4	19.4	19.5	19.2	0.3



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Litchville, ND

Model: 1450  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 07:09:49  
Description:

Serial #: 7183480  
File: LITCHVILLE

Cal Date: 4/09/01  
DOS File: LITCHVILLE

	#1	#2	#3	#4	
Date:	08/13/13	08/13/13	08/13/13	08/14/13	
Time:	07:09:49	13:09:42	19:09:42	01:09:42	
Temp:	70.0 F	66.7 F	67.8 F	65.8 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
57	19.8	19.7	19.8	19.5	0.3
58	19.7	19.6	19.8	19.5	0.3
59	19.3	19.2	19.4	19.0	0.4
60	19.7	19.6	20.1	19.5	0.6
61	19.4	19.4	19.5	19.2	0.3
62	19.2	19.2	19.3	19.0	0.3
63	19.2	19.2	19.4	19.0	0.4
64	18.8	18.8	18.9	18.5	0.4
65	19.4	19.5	19.5	19.0	0.5
66	19.1	19.2	19.2	18.7	0.5
67	19.5	19.5	19.6	19.1	0.5
68	19.7	20.0	20.1	19.6	0.5
69	19.3	19.3	19.3	18.9	0.4
70	19.8	19.9	19.9	19.5	0.4
71	20.0	20.0	20.1	19.7	0.4
72	19.3	19.3	19.3	18.9	0.4
73	19.4	19.4	19.6	19.1	0.5
74	19.5	19.5	19.5	19.1	0.4
75	19.7	19.7	19.8	19.3	0.5
76	20.2	20.2	20.3	19.9	0.4
77	19.8	19.8	19.9	19.4	0.5
78	19.7	19.9	19.9	19.5	0.4
79	19.2	19.3	19.3	19.0	0.3
95	18.9	18.8	19.0	18.5	0.5
99	19.0	18.8	18.9	18.5	0.5

LIMIT CHECK	Limit	1	2	3	4	
Min Video Carrier Level	3.0 dBmV					Pass
Max Delta Video Level	15.0 dB					Pass
Min Delta V/A	10.0 dB					Pass
Max Delta V/A	17.0 dB					Pass
Max Delta Adjacent Chan	3.0 dB					Pass
Max 24 Hour Deviation	8.0 dB					Pass
Min Digital Level	..					Pass
Max Digital Level	..					Pass
Conclusion:						<b>P A S S</b>

Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_



Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Rutland, ND

Model: 1750  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 22:28:35  
Description:

Serial #: 2420532  
File: RUTLAND

Cal Date: 2/11/02  
DOS File: RUTLAND

Location: RUTLAND  
Location Type: FieldTest  
Area: \_  
Test Pnt Type:  
Test Pnt Comp:  
AC Voltage:

AmplID:  
Power Cfg:  
Feeder Maker Cfg:  
Trunk Term:  
Voltage Setting:  
DC Voltage (reg):

Reverse Pad:  
Forward Pad:  
Rev Equalizer:  
Fwd Equalizer:  
Temp:  
DC Voltage (unreg):

	#1	#2	#3	#4	
Date:	08/13/13	08/14/13	08/14/13	08/14/13	
Time:	22:28:35	04:27:50	10:27:50	16:27:49	
Temp:	72.0 F	63.7 F	63.9 F	65.7 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
2	13.9	13.6	13.6	13.7	0.3
4	15.3	14.7	15.0	15.0	0.6
5	15.2	14.8	14.7	14.8	0.5
6	14.9	14.6	14.6	14.6	0.3
7	14.8	14.3	14.3	14.3	0.5
8	15.0	14.8	14.8	14.8	0.2
9	14.7	14.8	14.8	14.7	0.1
10	15.2	15.0	15.0	15.0	0.2
11	15.0	15.1	15.1	15.0	0.1
12	15.2	15.2	15.2	15.1	0.1
13	14.6	14.9	14.9	14.9	0.3
14	15.4	15.1	15.2	15.1	0.3
15	14.7	14.1	14.2	14.2	0.6
16	16.2	15.8	15.9	15.8	0.4
17	15.5	15.0	15.0	15.3	0.5
23	15.5	15.2	15.3	15.2	0.3
24	14.7	14.6	14.7	14.7	0.1
25	14.7	14.4	14.4	14.5	0.3
26	15.4	15.1	15.1	15.1	0.3
27	15.4	15.3	15.3	15.3	0.1
28	16.0	15.8	15.9	15.9	0.2
29	15.0	15.2	15.2	15.3	0.3
30	16.1	15.7	15.8	15.8	0.4
31	16.2	15.8	15.9	15.9	0.4
32	15.9	15.6	15.7	15.7	0.3
33	14.5	14.4	14.4	14.5	0.1
34	15.8	15.6	15.7	15.6	0.2
35	16.1	16.0	16.0	16.0	0.1
36	15.5	15.6	15.6	15.6	0.1
37	15.6	15.4	15.5	15.4	0.2
38	15.9	16.1	15.8	15.7	0.4
39	15.8	15.6	15.7	15.7	0.2
40	15.4	15.3	15.4	15.3	0.1
41	16.1	15.9	16.0	15.9	0.2
42	14.5	14.7	14.7	14.6	0.2
43	15.1	15.0	15.1	15.0	0.1
44	15.7	15.2	15.3	15.1	0.6
45	16.6	16.5	16.6	16.4	0.2
46	15.5	15.4	15.4	15.4	0.1
47	14.2	14.1	14.1	14.1	0.1
48	15.7	15.7	15.6	15.5	0.2
49	16.4	16.2	16.3	16.3	0.2
50	15.9	15.8	15.7	15.7	0.2
51	15.7	15.5	15.5	15.5	0.2
52	16.4	16.3	16.3	16.2	0.2
53	16.2	16.1	16.1	16.1	0.1
54	15.2	15.1	15.1	15.1	0.1
55	14.4	14.6	14.6	14.6	0.2
56	15.5	15.6	15.3	15.3	0.3





Technology Planners  
244 W Pioneer Road  
Fond du Lac, WI  
54935  
920-923-1034

Test completed for:  
Dickey Rural Networks  
Testing Location:  
Rutland, ND

Model: 1750  
Operator: OPERATOR\_NAME  
Date: 08/13/13 Time: 22:28:35  
Description:

Serial #: 2420532  
File: RUTLAND

Cal Date: 2/11/02  
DOS File: RUTLAND

	#1	#2	#3	#4	
Date:	08/13/13	08/14/13	08/14/13	08/14/13	
Time:	22:28:35	04:27:50	10:27:50	16:27:49	
Temp:	72.0 F	63.7 F	63.9 F	65.7 F	
Channel	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	Video Lvl(dBmV)	24Hr Deviation(dB)
57	15.0	15.3	15.1	15.1	0.3
58	14.4	14.8	14.5	14.6	0.4
59	14.7	14.9	14.8	14.7	0.2
60	16.1	15.7	15.7	15.6	0.5
61	15.3	14.8	14.9	14.8	0.5
62	14.8	14.7	14.6	14.6	0.2
63	15.1	15.2	15.1	15.3	0.2
64	14.8	15.1	14.9	15.0	0.3
65	14.7	14.9	14.8	14.8	0.2
66	14.5	14.7	14.7	14.7	0.2
67	15.7	15.6	15.5	15.6	0.2
68	15.7	15.4	15.3	15.3	0.4
69	14.4	14.4	14.3	14.2	0.2
70	15.3	15.3	15.2	15.1	0.2
71	16.0	15.9	15.8	15.8	0.2
72	14.7	14.9	14.9	14.8	0.2
73	14.5	14.4	14.3	14.3	0.2
74	14.8	14.9	14.8	14.5	0.4
75	15.2	15.2	15.1	15.1	0.1
76	15.4	15.4	15.5	15.4	0.1
77	15.3	15.2	15.1	15.1	0.2
78	15.9	15.7	15.7	15.7	0.2
79	15.7	15.2	15.2	15.2	0.5
95	14.9	14.6	14.5	14.5	0.4
99	14.9	14.7	14.8	14.7	0.2

LIMIT CHECK	Limit	1	2	3	4	
Min Video Carrier Level	3.0 dBmV					Pass
Max Delta Video Level	15.0 dB					Pass
Min Delta V/A	10.0 dB					Pass
Max Delta V/A	17.0 dB					Pass
Max Delta Adjacent Chan	3.0 dB					Pass
Max 24 Hour Deviation	8.0 dB					Pass
Min Digital Level	..					Pass
Max Digital Level	..					Pass
Conclusion:						<b>P A S S</b>

Reviewed: \_\_\_\_\_

Date: \_\_\_\_\_