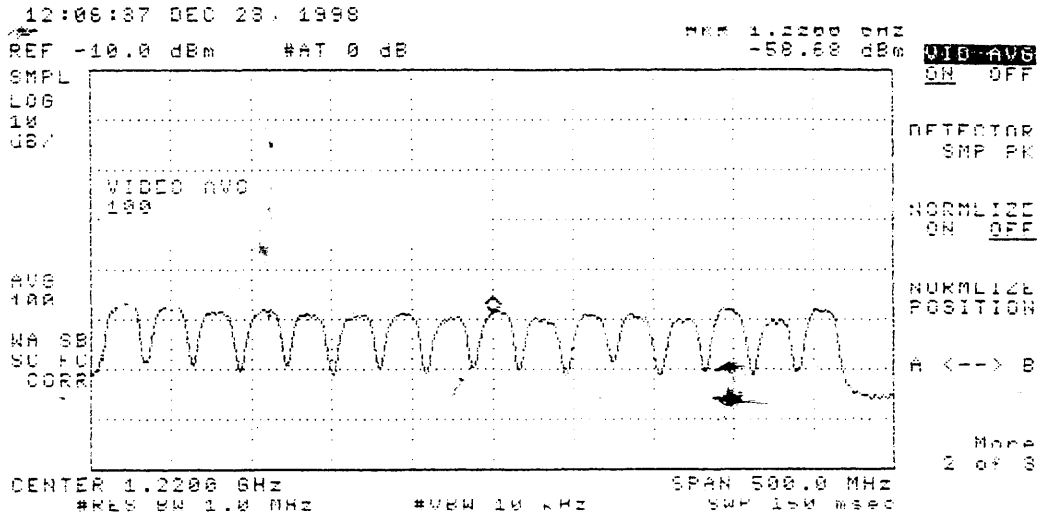




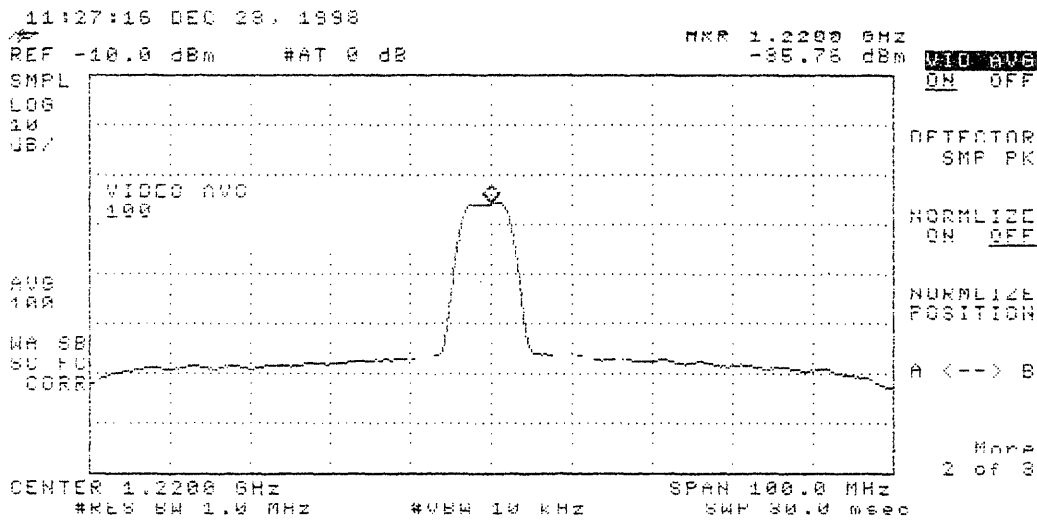
1. Site -4, Set-1, 12/23/98
2. Ester, Boom Down
3. Was point through a tree
4. H.P 8591E

Plot 4-E



1. Site-4, Set-6, 12/23/98
2. N/A of Dish, Boom Down
3. HP-8591E

Plot-4-N

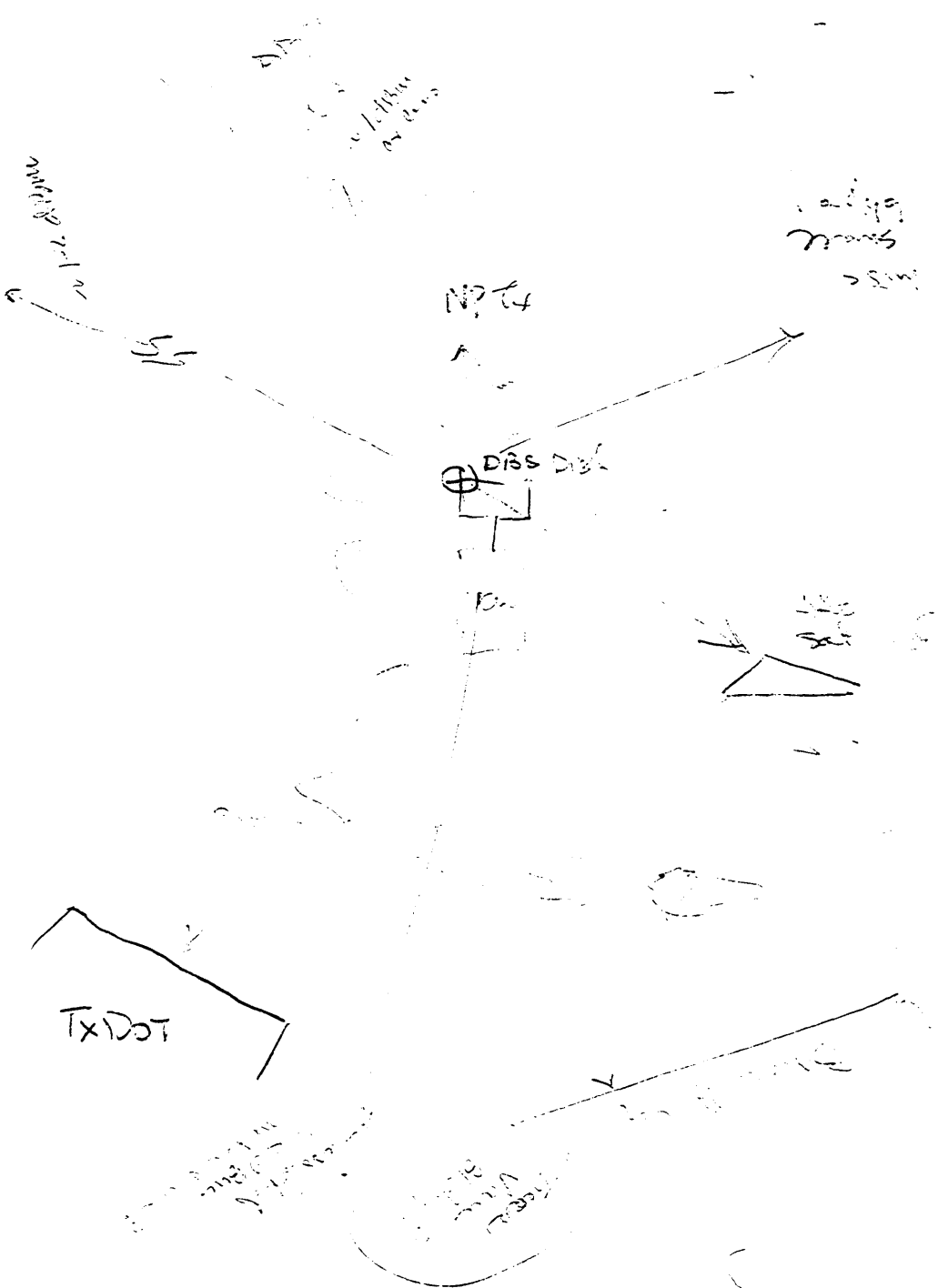


Hand-drawn

23 Dec 93 Du

Site 4 - Austin Station

556  
Engineer's Computation Pad



2/1/94  
10/1/94  
12/1/94

100  
80  
100

NP 14

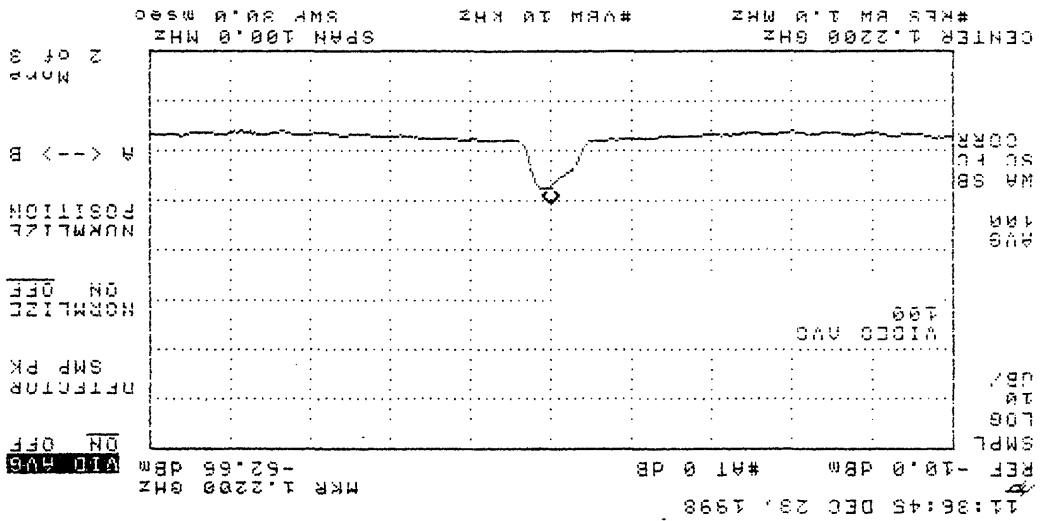
DBS Dist

K1

TXDOT

100  
100  
100

100  
100  
100

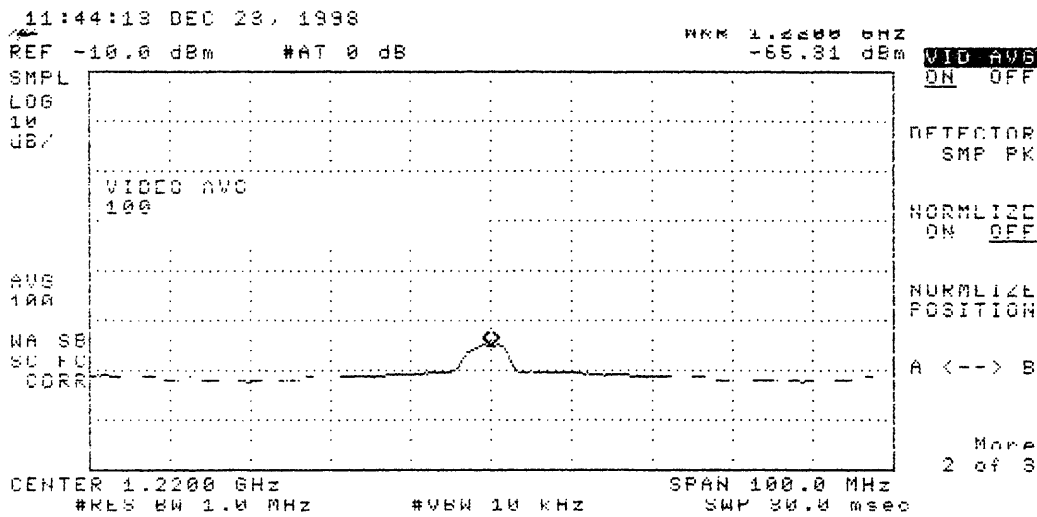


Plot - 4-R-A

1. Site-4, Set-1, 12/23/98
2. Boom Down,
3. Reflection of SWR, pointing at Big White Ant. to left of Van.
4. Good picture on screen.
5. HP-8591E

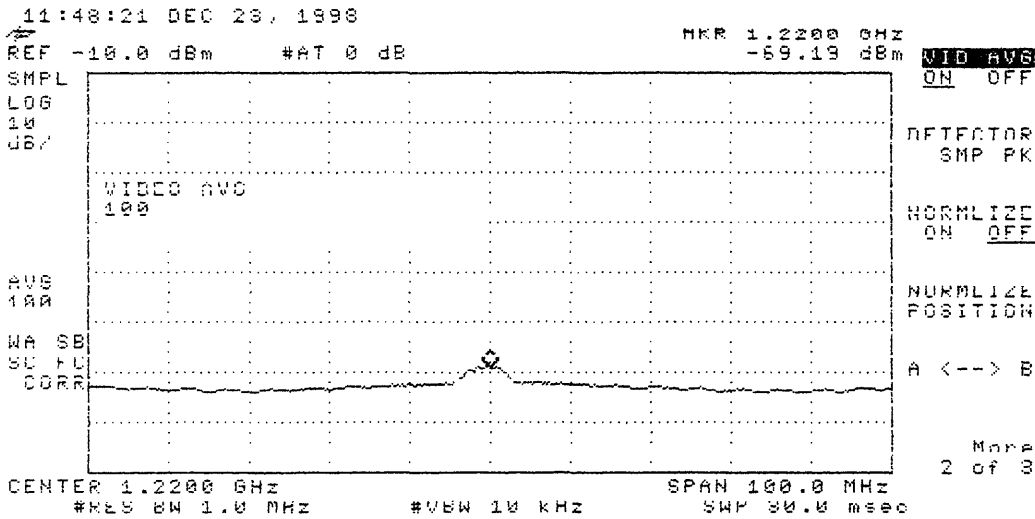
1. Site-4, Set,-1, 12/23/98
2. Boom, Down
3. Reflection off of TXDOT, No Picture on T.V.
4. HP-8591E

Plot-4-R-B



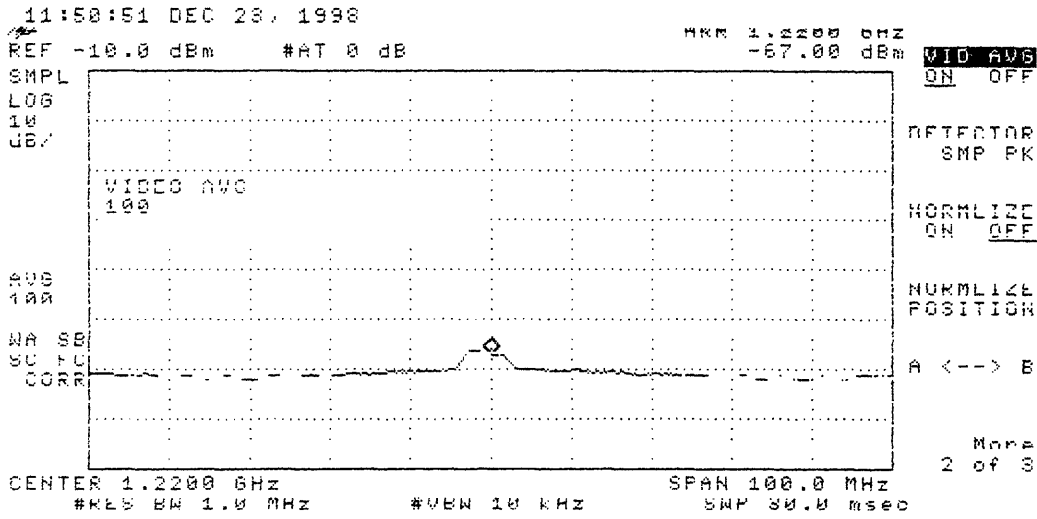
1. Site-4, Set-1, 12/23/98
2. Boom Down, HP-8591E
3. Pointing at Embassy Suites  
No Picture on T.V.

Plot -4-R-C



1. Pointing at Austin American Statesman
  2. Site -4, Set-1, 12/23/98, Boom Down
  3. HP-8591E
- No Picture on T.V.

Plot-4-R-D





## COMMENTS FROM SITE 4

### Site 4 American-Statesman

- a. Used pie pans to shield from NP Tx. Saw an increase of 5-6 pts. on TV meter, went from 79-85 (Estar)
- b. Estar was pointing through some trees.
- c. Have four reflection plots.
  1. Reflection off of big white antenna to the left of site
  2. Reflection off of TX DOT
  3. Reflection off of Embassy Suites
  4. Reflection off of American-Statesman

# Northpoint Technology – DBS Compatiblilty Test – Austin Test Area

Jalisco's

## Rx Site Data Log

Rx Site No. 5 p1  
Set: 11

Re: Rx Condx Ref. No. 2 Date / Time: 12/22/98 3:50 CST  
Re: Tx Condx Ref. No. 2 Operator: SMVH

---

### Data Measurements:

- (1) On arrival --
  - Position and deploy antenna platform (first at ground level).
  - Position GPS Receiver and allow to average during site occupation.
  - Obtain information for Rx Site Location Log.
  - Point Precision Horn Antenna toward Tx (approx. direction).
  
- (2) DBS Signal Interference Tests – DirecTV and EchoStar.

For each satellite case (one at a time), with Tx OFF, point DBS Antenna to the satellite and peak the signal strength. Observe the monitor for the prescribed TV channel (w/ appropriate DBS Rx) and assess signal quality. Turn Tx ON and observe the TV signal quality. Note any change in signal quality that is correlated with the Tx ON/OFF condition. Repeat Tx ON/OFF sequence as needed.

With the Spectrum Analyzer (SA), observe and record the Signal Power Spectrum and its peak value at the LNB output for the two Tx states (ON/OFF). Label the Spectrum Plots and mark them with an assigned ID code.

DirecTV – Tx OFF: OK? Y\_\_\_ / N\_\_\_ Tx ON: OK? Y\_\_\_ / N\_\_\_

Any behavior correlated with Tx ON/OFF ? Y\_\_\_ / N\_\_\_

Comments: \_\_\_\_\_

Signal Power Spectrum – Tx ON: --Peak -- -56.03 dBm Plot ID Code S-D  
Tx OFF: – Peak -- \_\_\_\_\_ dBm Plot ID Code \_\_\_\_\_

Comments: no change w/ sat pos

EchoStar – Tx OFF: OK? Y\_\_\_ / N\_\_\_ Tx ON: OK? Y\_\_\_ / N\_\_\_

Any behavior correlated with Tx ON/OFF ? Y\_\_\_ / N\_\_\_

Comments: \_\_\_\_\_

Signal Power Spectrum – Tx ON: --Peak -- -56.03 dBm Plot ID Code \_\_\_\_\_  
Tx OFF: – Peak -- \_\_\_\_\_ dBm Plot ID Code \_\_\_\_\_

Comments: \_\_\_\_\_

# Northpoint Technology – DBS Compatibility Test – Austin Test Area

## Rx Site Data Log

Rx Site No. 5 p2  
Set: 1/1

(3) Northpoint Signal Quality Test –

With the Tx ON, point the DBS antenna toward the Tx, while using the NP Rx equipment, and peak the signal strength. Observe the monitor (w/ NP Rx equipment) and assess the signal quality.

NP Signal – OK? Y X / N \_\_\_\_\_ Comments: \_\_\_\_\_

(4) NP Rx Signal Level and Power Spectrum at Rx Site – LNB output --

With the DBS antenna on the NP Tx, and with the Tx ON, observe and record the Signal Power Spectrum and the peak level at the LNB output. Label the spectrum plot with an assigned ID Code.

Signal Power Spectrum -- Peak -- -63.51 dBm Plot ID Code -- S-N

Comments: \_\_\_\_\_

(5) Tx Signal Level and Power Spectrum at Rx Site – w/ Precision Ant. and SA.

Using the Precision Antenna and Test Set, observe and record the Tx Signal Power Spectrum and the peak value at the Rx site. Label the spectrum plot with an assigned ID Code.

Signal Power Spectrum -- Peak -- \_\_\_\_\_ dBm Plot ID Code -- \_\_\_\_\_

Comments: \_\_\_\_\_

(6) When Rx Site measurements and tests are completed, read the GPS Receiver and record the position in the Rx Site Location Log. Prepare the equipment for movement to the next site.

---

Use the space below for added comments and notes. Attach extra pages if necessary.

**Northpoint Technology – DBS Compatibility Test – Austin Test Area  
Signal Strength Readings**

**Rx Site Data Log**

Rx Site No. 5

Set 1 / 1

Re: Condx Ref. No. 2

Date / Time 12/22/98 3:50 CST

Re: Condx Ref. No. 2

Operator: J-R

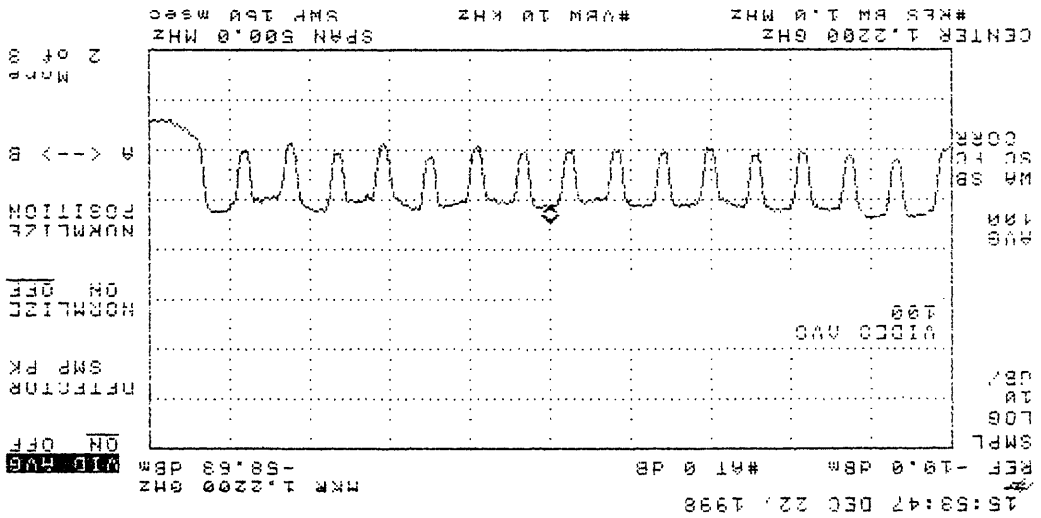
**Direct T.V. Signal Strength Readings**

Tsp No	Signal Strength Readings										Avg
<b>16</b>	86	86	86	86	85	85	86	86	86	86	85.8
<b>18</b>	83	84	84	83	83	83	83	83	83	83	83.8
<b>20</b>	87	86	86	86	86	86	86	86	86	86	86.2

**Estar T.V. Signal Strength Readings**

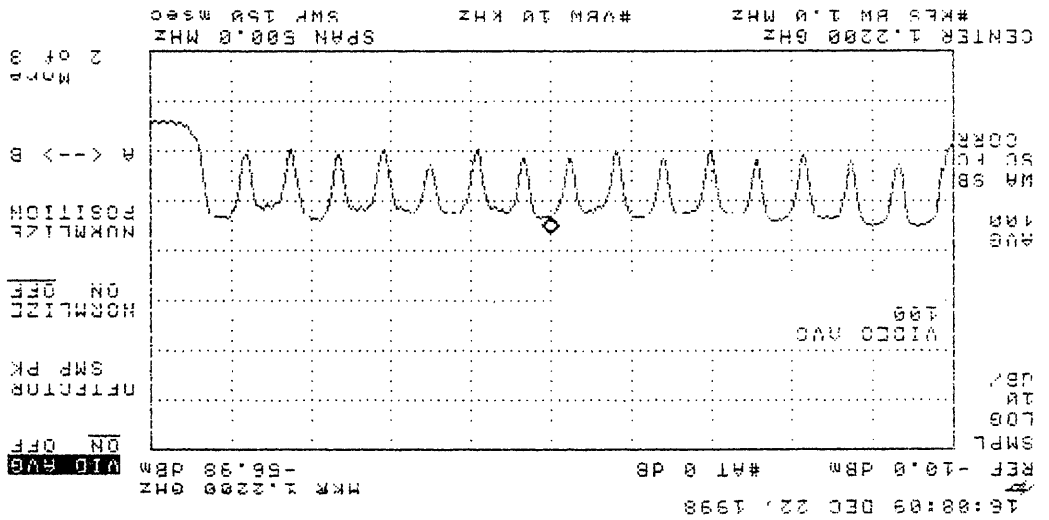
Tsp No	Signal Strength Readings										Avg
<b>16</b>	92	93	93	93	93	93	93	93	93	93	92.7
<b>18</b>	93	93	93	94	93	93	93	93	93	93	93.6
<b>20</b>	94	94	94	94	94	94	94	94	94	94	94.9

Notes:



S-1  
 S-2  
 Beam Down  
 Trans #1  
 12-22-98  
 S-1 - P 8591E

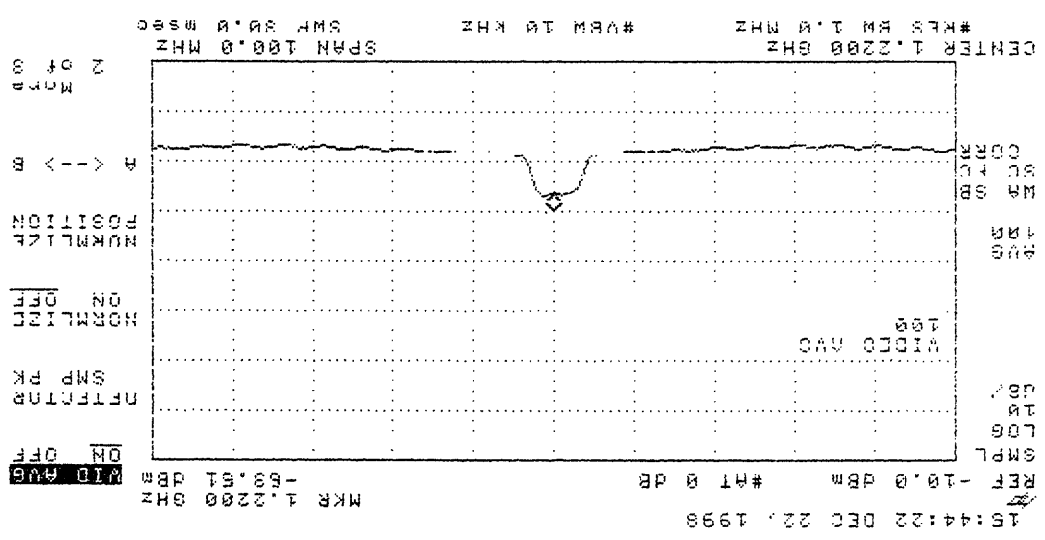
P/2: 3-D



Set 1  
 5-11  
 12-22-08  
 58:47 854E

Plot 5-E

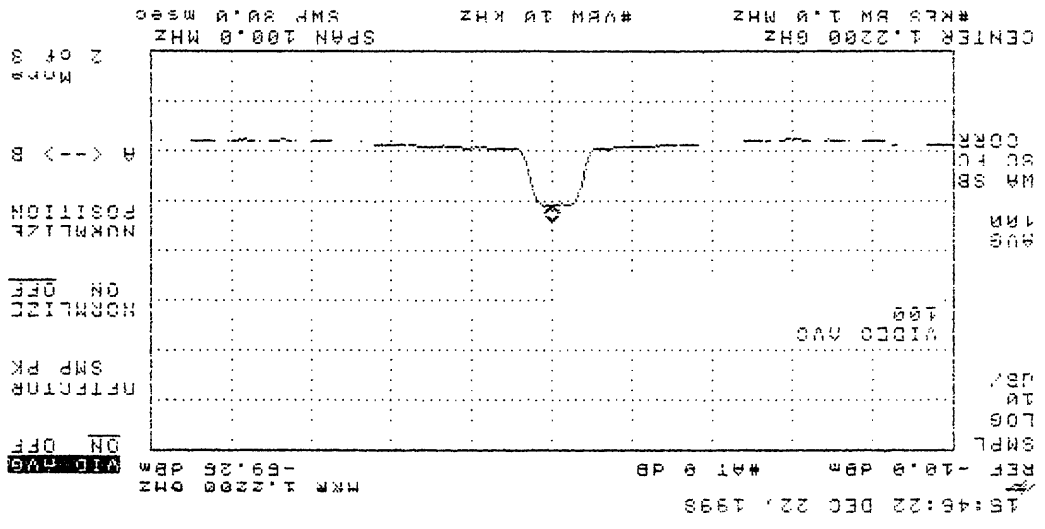
*Boiler mostly operating with flame of 10000 BTU*



*Boiler Room  
 12/22/98  
 15:44:22*

*PLS-N*

Fig-19 showing parking garage area between



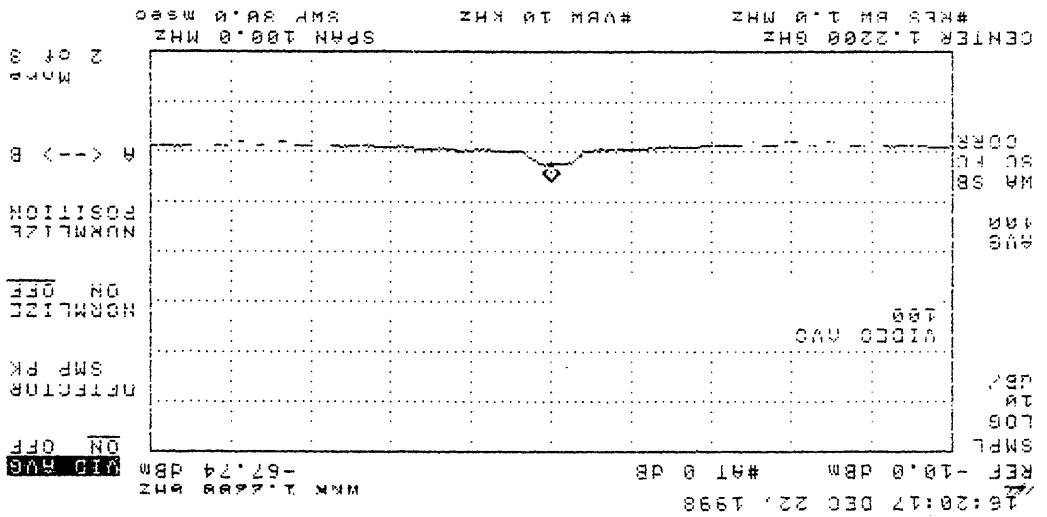
SA HP 8591E  
 Date: 12-22-98  
 Location: [unclear]  
 [unclear]  
 [unclear]  
 [unclear]

PL 5-R



SOS Baton Rouge

Printed at Doc Tex - Center



SOS Baton Rouge  
 Baton Rouge  
 State  
 SOS

5-12-13

Plot: BAN

Set: 1

Plot: S-R-C

Site: 5

Beam: Down

Transmitter: M-6, 100W

Date: 12-22-98

SA: HP 8591E

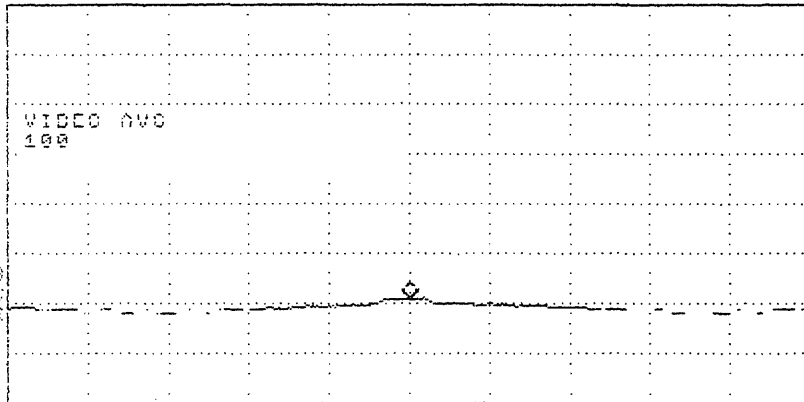
16:24:39 DEC 22, 1998

REF -10.0 dBm #AT 0 dB

MKR 1.2200 GHz  
-69.18 dBm

WID AVG  
ON OFF

SAMPL  
LOG  
10  
QBY



REFLECTOR  
SMP PK

NORMALIZE  
ON OFF

AUG  
10A

NORMALIZE  
POSITION

WA SB  
SU FL  
CORR

A <--> B

More  
2 of 3

CENTER 1.2200 GHz

SPAN 100.0 MHz

#RES BW 1.0 MHz

#VBW 10 kHz

SMP 30.0 msec

Pointed at Palmer Auditorium

## **COMMENTS FROM SITE 5**

### **Site 5 Jalisco's**

- a. No change of DTV with pie pan**
- b. NP Tx. Is minutely obstructed by building**
- c. Have three reflection plots**
  - 1. Reflection off of parking garage above benniguns**
  - 2. Reflection off of One Texas Center (505 Barton Springs)**
  - 3. Reflection off of Palmer Auditorium**

# Northpoint Technology – DBS Compatibililty Test – Austin Test Area

*Cristina*

## Rx Site Data Log

Rx Site No. 6 p1  
Set: 1

Re: Rx Condx Ref. No. 2 Date / Time: 12/22/99 14:49 CST  
Re: Tx Condx Ref. No. 2 Operator: John Deary

### Data Measurements:

- (1) On arrival --
  - Position and deploy antenna platform (first at ground level).
  - Position GPS Receiver and allow to average during site occupation.
  - Obtain information for Rx Site Location Log.
  - Point Precision Horn Antenna toward Tx (approx. direction).
- (2) DBS Signal Interference Tests – DirecTV and EchoStar.

For each satellite case (one at a time), with Tx OFF, point DBS Antenna to the satellite and peak the signal strength. Observe the monitor for the prescribed TV channel (w/ appropriate DBS Rx) and assess signal quality. Turn Tx ON and observe the TV signal quality. Note any change in signal quality that is correlated with the Tx ON/OFF condition. Repeat Tx ON/OFF sequence as needed.

With the Spectrum Analyzer (SA), observe and record the Signal Power Spectrum and its peak value at the LNB output for the two Tx states (ON/OFF). Label the Spectrum Plots and mark them with an assigned ID code.

DirecTV – Tx OFF: OK? Y\_\_\_ / N\_\_\_ Tx ON: OK? Y  / N\_\_\_

Any behavior correlated with Tx ON/OFF ? Y\_\_\_ / N\_\_\_

Comments: \_\_\_\_\_

Signal Power Spectrum – Tx ON: --Peak -- -58,88 dBm Plot ID Code 6-D  
Tx OFF: – Peak -- \_\_\_\_\_ dBm Plot ID Code \_\_\_\_\_

Comments: \_\_\_\_\_

EchoStar – Tx OFF: OK? Y\_\_\_ / N\_\_\_ Tx ON: OK? Y  / N\_\_\_

Any behavior correlated with Tx ON/OFF ? Y\_\_\_ / N\_\_\_

Comments: \_\_\_\_\_

Signal Power Spectrum – Tx ON: --Peak -- -57,87 dBm Plot ID Code 6-E  
Tx OFF: – Peak -- \_\_\_\_\_ dBm Plot ID Code \_\_\_\_\_

Comments: \_\_\_\_\_

# Northpoint Technology – DBS Compatibility Test – Austin Test Area

## Rx Site Data Log

Rx Site No. 6 p2  
Set: 1

(3) Northpoint Signal Quality Test –

With the Tx ON, point the DBS antenna toward the Tx, while using the NP Rx equipment, and peak the signal strength. Observe the monitor (w/ NP Rx equipment) and assess the signal quality.

NP Signal – OK? Y  / N  Comments: \_\_\_\_\_

(4) NP Rx Signal Level and Power Spectrum at Rx Site – LNB output --

With the DBS antenna on the NP Tx, and with the Tx ON, observe and record the Signal Power Spectrum and the peak level at the LNB output. Label the spectrum plot with an assigned ID Code.

Signal Power Spectrum -- Peak -- -53.67 dBm Plot ID Code -- 6-N-A

Comments: \_\_\_\_\_

(5) Tx Signal Level and Power Spectrum at Rx Site – w/ Precision Ant. and SA.

Using the Precision Antenna and Test Set, observe and record the Tx Signal Power Spectrum and the peak value at the Rx site. Label the spectrum plot with an assigned ID Code.

Signal Power Spectrum -- Peak -- \_\_\_\_\_ dBm Plot ID Code -- \_\_\_\_\_

Comments: \_\_\_\_\_

(6) When Rx Site measurements and tests are completed, read the GPS Receiver and record the position in the Rx Site Location Log. Prepare the equipment for movement to the next site.

---

Use the space below for added comments and notes. Attach extra pages if necessary.

Metal pole & cut of tree obstruct view of  
antenna

**Northpoint Technology – DBS Compatibility Test – Austin Test Area  
Signal Strength Readings**

**Rx Site Data Log**

Rx Site No.

6

Set

1/1

Re: Condx Ref. No.

2

Date / Time

12/24/93 3:18 CST

Re: Condx Ref. No.

2

Operator:

Jm

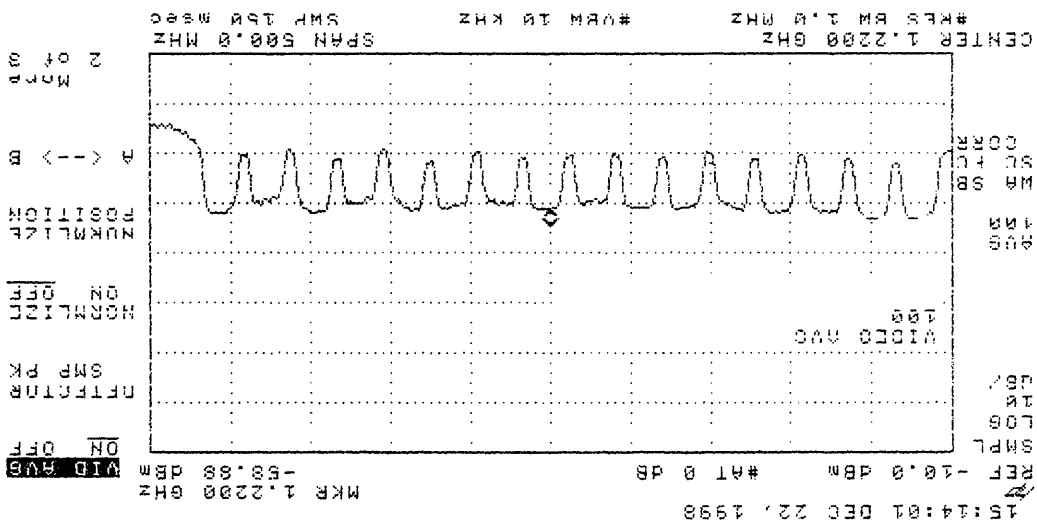
## Direct T.V. Signal Strength Readings

Tsp No	Signal Strength Readings										Avg
16	80	80	80	80	82	<del>79</del>	81	81	80	80	80.3
18	78	73	78	79	79	76	80	80	77	79	78.4
20	82	81	81	82	82	80	80	80	80	82	81

## Estar T.V. Signal Strength Readings

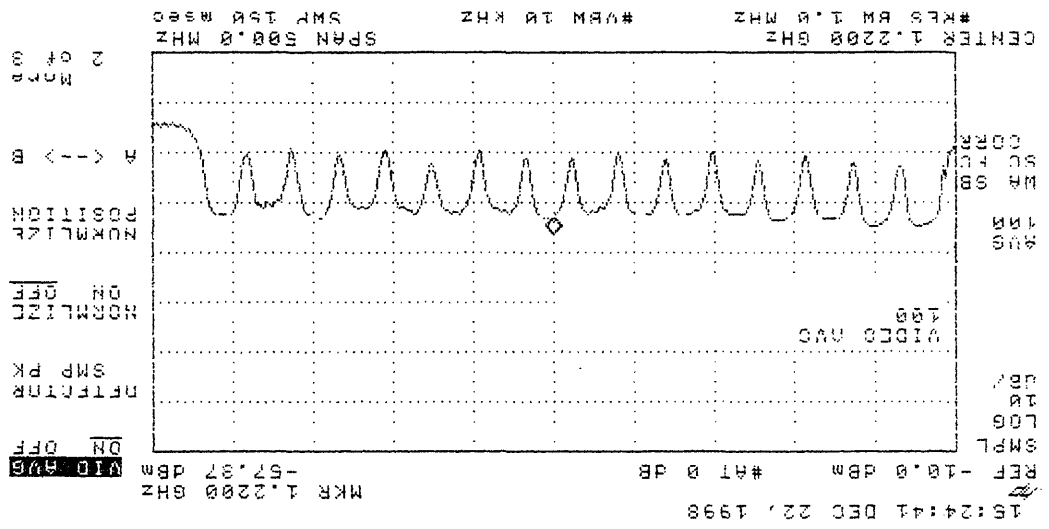
Tsp No	Signal Strength Readings										Avg
16	92	91	90	91	91	91	91	90	90	91	90.8
18	91	90	90	90	89	90	90	89	89	90	89.8
20	93	93	93	93	93	93	93	92	93	93	92.9

Notes: Cold, Windy, Over Cast.



Site: 6  
 Set: 1  
 Norm Down  
 12/198  
 Transponder: DTV  
 Spectrum: 8591E

P10+6-D



Set 1  
 Plot 6-F  
 State 6  
 Board form  
 Date: 12-22-98  
 Transmission Editor  
 SA File 8501E



set. 1  
Site: 6

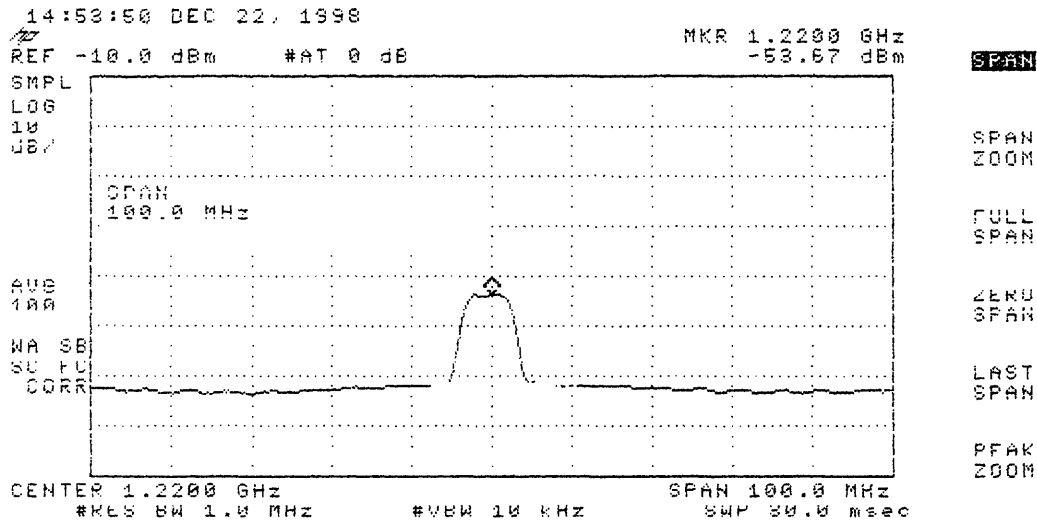
Plot. ~~CA~~ 6-A1-A

cont. Down

center. North point

Date: 12-22-98

Spectrum Analyzer HP 8591E



Sec: 1 Plot: 6-R-A

Site: 6

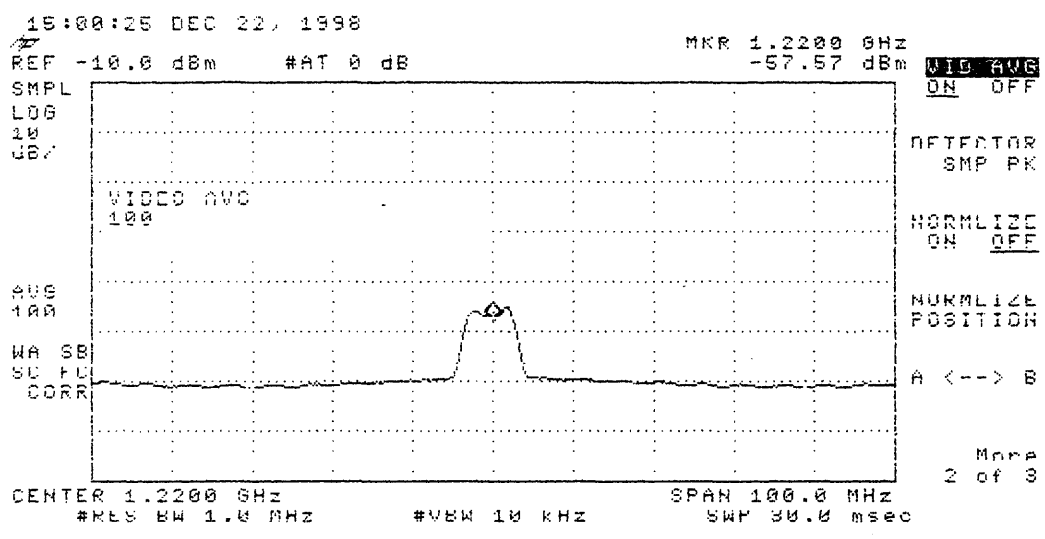
Mount: Down

Transmitter: No. 200-17

Date: 12-22-98

S.A. # 8591E

Bld: 811 Bowen Springs Rd.  
East Side of 15th



## **COMMENTS FROM SITE 6**

### **Site 6 Coliseum**

- a. Metal pole and part of a tree obstructing view of transmitter**
- b. Have one reflection plot**
  - 1. Reflection off of building (811 Barton Spring Rd. East side of building)**

# Northpoint Technology – DBS Compatibililty Test – Austin Test Area

## Rx Site Data Log

*Palmer* 

Rx Site No. 7 p1  
Set: 11

Re: Rx Condx Ref. No. 2 Date / Time: 12 / 30 / 98 1:37 CST  
Re: Tx Condx Ref. No. 2 Operator: T. D.

### Data Measurements:

- (1) On arrival --
  - Position and deploy antenna platform (first at ground level).
  - Position GPS Receiver and allow to average during site occupation.
  - Obtain information for Rx Site Location Log.
  - Point Precision Horn Antenna toward Tx (approx. direction).
- (2) DBS Signal Interference Tests – DirecTV and EchoStar.

For each satellite case (one at a time), with Tx OFF, point DBS Antenna to the satellite and peak the signal strength. Observe the monitor for the prescribed TV channel (w/ appropriate DBS Rx) and assess signal quality. Turn Tx ON and observe the TV signal quality. Note any change in signal quality that is correlated with the Tx ON/OFF condition. Repeat Tx ON/OFF sequence as needed.

With the Spectrum Analyzer (SA), observe and record the Signal Power Spectrum and its peak value at the LNB output for the two Tx states (ON/OFF). Label the Spectrum Plots and mark them with an assigned ID code.

DirecTV – Tx OFF: OK? Y\_\_\_ / N\_\_\_ Tx ON: OK? Y  / N\_\_\_

Any behavior correlated with Tx ON/OFF ? Y\_\_\_ / N\_\_\_

Comments: \_\_\_\_\_

Signal Power Spectrum – Tx ON: --Peak -- 59.72 dBm Plot ID Code 7-D  
Tx OFF: – Peak -- \_\_\_\_\_ dBm Plot ID Code \_\_\_\_\_

Comments: \_\_\_\_\_

EchoStar – Tx OFF: OK? Y\_\_\_ / N\_\_\_ Tx ON: OK? Y  / N\_\_\_

Any behavior correlated with Tx ON/OFF ? Y\_\_\_ / N\_\_\_

Comments: \_\_\_\_\_

Signal Power Spectrum – Tx ON: --Peak -- 59.21 dBm Plot ID Code 7-E  
Tx OFF: – Peak -- \_\_\_\_\_ dBm Plot ID Code \_\_\_\_\_

Comments: \_\_\_\_\_

# Northpoint Technology – DBS Compatibility Test – Austin Test Area

## Rx Site Data Log

Rx Site No. 7 p2  
Set: 11

(3) Northpoint Signal Quality Test –

With the Tx ON, point the DBS antenna toward the Tx, while using the NP Rx equipment, and peak the signal strength. Observe the monitor (w/ NP Rx equipment) and assess the signal quality.

NP Signal – OK? Y  / N  Comments: \_\_\_\_\_

(4) NP Rx Signal Level and Power Spectrum at Rx Site – LNB output --

With the DBS antenna on the NP Tx, and with the Tx ON, observe and record the Signal Power Spectrum and the peak level at the LNB output. Label the spectrum plot with an assigned ID Code.

Signal Power Spectrum -- Peak -- -34.5 dBm Plot ID Code -- 7-N

Comments: \_\_\_\_\_

(5) Tx Signal Level and Power Spectrum at Rx Site – w/ Precision Ant. and SA.

Using the Precision Antenna and Test Set, observe and record the Tx Signal Power Spectrum and the peak value at the Rx site. Label the spectrum plot with an assigned ID Code.

Signal Power Spectrum -- Peak -- \_\_\_\_\_ dBm Plot ID Code -- \_\_\_\_\_

Comments: \_\_\_\_\_

(6) When Rx Site measurements and tests are completed, read the GPS Receiver and record the position in the Rx Site Location Log. Prepare the equipment for movement to the next site.

---

Use the space below for added comments and notes. Attach extra pages if necessary.

**Northpoint Technology – DBS Compatibility Test – Austin Test Area  
Signal Strength Readings**

**Rx Site Data Log**

Rx Site No. 7

Set 11

Re: Condx Ref. No. 2

Date / Time 12/22/98 12:00 CST

Re: Condx Ref. No. 2

Operator: JMB

**Direct T.V. Signal Strength Readings**

Tsp No	Signal Strength Readings										Avg
<b>16</b>	80	80	80	80	79	79	80	80	80	80	79.8
<b>18</b>	73	73	73	75	74	74	74	71	71	74	73.2
<b>20</b>	80	80	80	80	80	81	81	81	82	82	80.8

**Estar T.V. Signal Strength Readings**

Tsp No	Signal Strength Readings										Avg
<b>16</b>	87	87	87	87	87	88	87	88	87	87	87.2
<b>18</b>	87	88	87	87	86	87	87	87	87	87	87
<b>20</b>	89	89	90	90	89	89	89	89	90	89	89.3

Notes: *Overcast, very cold temp in site*