Exhibit B: Test Report
World Telemetry, Inc.
DataGate WTDG0901

Project Number: 04074-10

Prepared for:
World Telemetry, Inc.
6655 South Lewis Ave., Ste. 150
Tulsa , Oklahoma 74136

By

Professional Testing (EMI), Inc.
1601 FM 1460, Suite B
Round Rock, Texas 78664

May 2004

CERTIFICATION
Electromagnetic Interference Test Report
World Telemetry, Inc.
DataGate WTDG0901
(Intentional Radiator Portion)

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Certificate Of Compliance

Applicant:	World Telemetry, Inc.
Applicant's Address:	6655 South Lewis Ave., Ste. 150 Tulsa, Oklahoma 74136
FCC ID:	SBOWTDG0901
Project Number:	04074-10
Test Dates:	October 3, 2003

I, Jeffrey A. Lenk, for Professional Testing (EMI), Inc., being familiar with the FCC rules and test procedures have reviewed the test setup, measured data and this report. I believe them to be true and accurate.

The **World Telemetry, Inc., DataGate WTDG0901** was tested to and found to be in compliance with FCC Part 15 Subpart C for an Intentional Radiator.

The highest emissions generated by the above equipment are listed below:

	Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Fundamental	903.3	93.5	94	-0.5
Spurious	814.56	42.9	46	-3.1

Lab Code 200062-0

Jeffrey A. Lenk
President

This report has been reviewed and accepted by World Telemetry, Inc.. The undersigned is responsible for ensuring that **World Telemetry, Inc., DataGate WTDG0901** will continue to comply with the FCC rules.

1.0 EUT Description

The **DataGate WTDG0901** (EUT) is a transceiver combined with a modem. The transceiver collects metering data from utility meters and transfers the information to the utility database using the dialup modem. The device is powered by two AA batteries.

47 CFR 15.249	Fundamental Transmit Power
47 CFR 15.205 & 15.249	Spurious Radiated Power
47 CFR 15.203	Antenna Requirement

The system tested consisted of the following:

Manufacturer & Model	**Serial #**	**FCC ID #**	**Description**
World Telemetry, Inc., DataGate	N/A	SBOWTDG0901	Base Station

1.1 EUT Operation

The **DataGate WTDG0901** was operated in continuous transmit mode.

2.0 Electromagnetic Emissions Testing

Professional Testing (EMI), Inc. (PTI), follows the guidelines of NIST for all uncertainty calculations, estimates and expressions thereof for EMC testing.

2.1 Radiated Emissions Measurements

Radiated emission measurements were made of the Fundamental and Spurious Emission levels for the **DataGate WTDG0901.** Measurements of the occupied bandwidth were also made.

Measurements of the maximum emission levels for the fundamental and the spurious/harmonic emissions of the **DataGate WTDG0901** were made at the Professional Testing "Open Field" Site 3, located in Round Rock, Texas to determine the radio noise radiated from the EUT. A "Description of Measurement Facilities" has been submitted to the FCC and approved pursuant to Section 2.948 of CFR 47 of the FCC rules.

Tests of the fundamental for the device were performed to determine the worst case polarization of the devices. The fundamental emissions of the device were measured with the antennas of the device in the three orthogonal axes.

2.1.1 Test Procedure

The EUT was placed on a non-conductive table 0.8 meters above the ground plane. The table was centered on a motorized turntable which allows 360 degree rotation. For measurements of the fundamental signal, a measurement antenna was positioned at a distance of 3 meters as measured from the closest point of the EUT. For spurious/harmonic measurements above 1 GHz, the measurement antenna was placed 1 meter from the EUT. The radiated emissions were maximized by rotating the EUT.

A Spectrum Analyzer with peak detection was used to find the maximums of the radiated emissions during the variability testing. A drawing showing the test setup is given as Figure 1.

2.1.2 Test Criteria

The table below shows FCC Part 15.249 radiated limits for an intentional radiator operating at 903 MHz band. FCC Part 15.249 allows the use of its spurious limit which is higher than the 15.209 limit normally associated with the restricted bands outlined in 15.205. The spurious measurements of the harmonic were performed to the 10th harmonic of the fundamental. The reference distance for each limit is also shown in this table.

	Test Distance	Field Strength	
Signal Type	(Meters)	(μV/m)	(dBμV/m)
Fundamental 903.03 MHz	3	50,000	94
Harmonics (2nd through 10th)	3	500	54

2.1.3 Test Results

The radiated test data for the fundamental is included in Appendix A. Peak detection was used during the test and the corrected signal level was then averaged to account for the duty cycle of the pulsed transmission of the 903 MHz transmitter. The radiated emission test data for the harmonics is included in Appendix A. The emissions were maximized at each frequency and the highest emissions identified were measured using peak detection. The radiated emissions generated by the **DataGate WTDG0901** are below the FCC Part 15.249 maximum emission criteria.

3.0 Antenna Requirement

An analysis of the **DataGate WTDG0901** was performed to determine compliance with Section 15.203 of the Rules. This section requires specific handling and control of antennas used for devices subject to regulations under the Intentional Radiator portions of Part 15.

3.1 Evaluation Procedure

The structure and application of the **DataGate WTDG0901** were analyzed with respect to the rules. The antenna for the DataGate is a wire that is soldered to the PCB and is inside of the EUT housing and is not accessible to the user. An auxiliary antenna port is not present.

3.2 Evaluation Criteria

Section 15.203 of the rules states that the subject device must meet at least one of the following criteria:

(a) Antenna be permanently attached to the unit.

(b) Antenna must use a unique type of connector to attach to the EUT.

(c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

3.3 Evaluation Results

The **DataGate WTDG0901** meets the criteria of this rule by virtue of having an internal antenna not accessible to the user. The EUT is therefore compliant with §15.203.

4.0 Modifications to Equipment

C-31 filled with 0.1 μf. C-27 filled with 6pF.

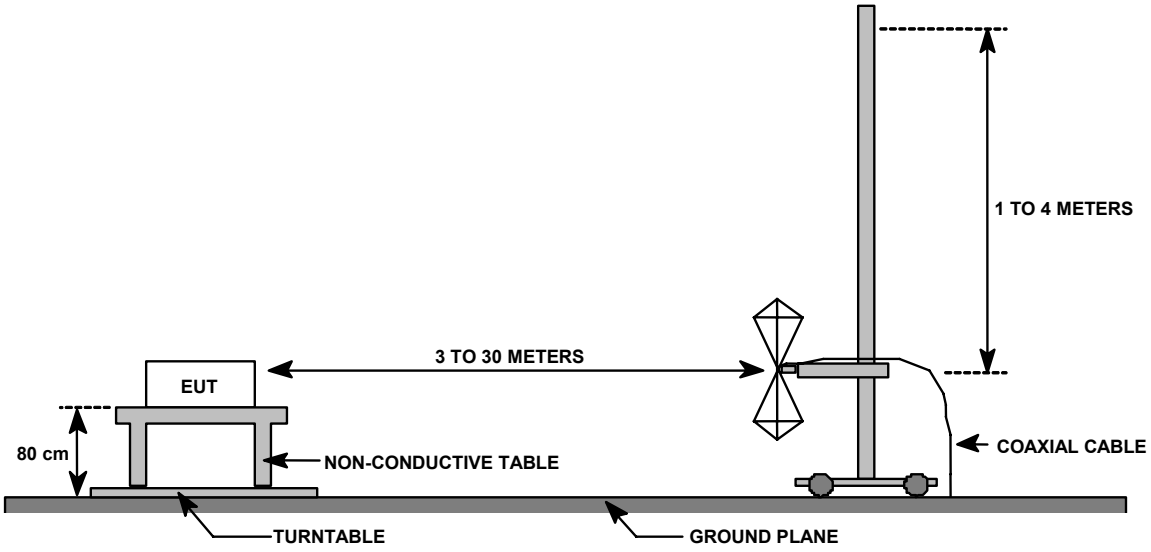
5.0 List of Test Equipment

A list of the test equipment utilized to perform the testing is given below. The date of calibration is given for each.

Electromagnetic Emissions Test Equipment

Device	Description	Calibration Due
HP 85662A	Display Unit	November 2004
EMCO 3146	Log Periodic Antenna	December 2004
HP 85650A	Quasi Peak Adapter	November 2004
HP 8566B	Spectrum Analyzer	November 2004
HP 8447D	Preamplifier	November 2004
Compliance Design B-100	Biconical Antenna	December 2004
Tektronix 2706	RF Preselector	January 2005
MITEQ	20GHz Preamplifier	May 2005
EMCO 3115	Ridge Guide Antenna	June 2004

FIGURE 1: Radiated Emissions Test Setup



Appendix A Emissions Data Sheet

Radiated Data Sheet
Fundamental and Spurious
World Telemetry, Inc.
DataGate WTDG0901
Peak Detection

Test Date: October 3, 2003
Measurement Distance (Meters): 3
Constant transmit mode. 0db code

Vertical

Corrected Level = Recorded Level - Amplifier Gain + Antenna Factor + Cable Loss

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
903.03	270	1.2	70.2	26.0	25.2	11.5	80.9	94	-13.1
844	noise	floor	23	26.0	24.5	10.7	32.2	46	-13.8
814.56	noise	floor	23	26.1	24.3	10.7	31.9	46	-14.1
486.63	180	1.2	32.6	26.7	19.6	8.0	33.6	46	-12.4
117.91	0	1	29.6	26.5	12.6	4.1	19.9	43.5	-23.6

Horizontal

Corrected Level = Recorded Level - Amplifier Gain + Antenna Factor + Cable Loss

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
903.03	0	1	82.81	26.0	25.2	11.5	93.5	94	-0.5
844	0	1	35.9	26.0	24.5	10.7	45.1	46	-0.9
814.56	0	1	34	26.1	24.3	10.7	42.9	46	-3.1
486.63	40	2	38.3	27.2	19.6	8.0	38.7	46	-7.3
117.971	1	2	31.6	26.5	12.6	4.1	21.9	43.5	-21.6

Modifications: C31 stuffed with cap from C-53, C-27=6pF

TEST ENGINEER: Mike Royer

Microwave Radiated Data Sheet
Fundamental and Harmonics
World Telemetry, Inc.
DataGate WTDG0901
Peak Detection

Test Date: October 3, 2003
Measurement Distance (Meters): 1
C-31 is stuffed with component from C-53

Vertical

Corrected Level = Recorded Level - Amplifier Gain + Antenna Factor + Cable Loss

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Corrected Level (dBuV/M)	Limit (dBuV/M)	Margin (dB)
1806	330	1	36	22.9	26.7	2.4	42.2	63.5	-21.3
2709	110	1	39	22.6	29.3	3.0	48.7	63.5	-14.8
3612	180	1	22.5	22.9	31.9	3.6	35.1	63.5	-28.4
4515	0	1	21.6	23.2	33.3	4.1	35.8	63.5	-27.7
5418	noise	floor	17	23.0	34.9	4.4	33.3	63.5	-30.2
6321	noise	floor	18	22.2	35.2	5.1	36.0	63.5	-27.5
7224	noise	floor	19	21.4	36.8	5.4	39.8	63.5	-23.7
8127	noise	floor	20	21.2	37.5	5.3	41.7	63.5	-21.8
9030	noise	floor	21	21.1	37.3	5.6	42.8	63.5	-20.7

Horizontal

Corrected Level = Recorded Level - Amplifier Gain + Antenna Factor + Cable Loss

Constant Transmit Mode

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Corrected Level (dBuV/M)	Limit (dBuV/M)	Margin (dB)
1806	100	1	38.4	22.9	26.7	2.4	44.6	63.5	-18.9
2709	120	1	34.4	22.6	29.3	3.0	44.1	63.5	-19.4
3612	135	1	20.1	22.9	31.9	3.6	32.7	63.5	-30.8
4515	180	1	17.3	23.2	33.3	4.1	31.5	63.5	-32.0
5418	170	1	17.2	23.0	34.9	4.4	33.5	63.5	-30.0
6321	noise	floor	17	22.2	35.2	5.1	35.0	63.5	-28.5
7224	noise	floor	18	21.4	36.8	5.4	38.8	63.5	-24.7
8127	noise	floor	19	21.2	37.5	5.3	40.7	63.5	-22.8
9030	noise	floor	20	21.1	37.3	5.6	41.8	63.5	-21.7

Modifications: C-31 is stuffed with component from C-53

Notes: Rev. 2 Software

TEST ENGINEER: Mike Royer

Appendix B Occupied Bandwidth Data Sheets

Occupied Bandwidth Datasheet
World Telemetry, Inc.
DataGate WTDG0901

903 MHz Transmitter