Tower Inspection Report

PO Box 40245, Houston, TX 77240
Tel: 832-237-5888 Fax: 832.487.8050
www.pexx.net

Customer:					
Site Name:			**FCC Tower Reg.#**		
Site Manager:			**Contact Number**		
Site Location:					
City/State			**County**	Austin	
Latitude:		**Longitude**			
Elevation AMSL:		**Tower Height**			
Reference Maps					
Site supervisor description of possible deficiencies:					
TOWER INFORMATION					
Safety Equip	**Anti-Fall Equip**		☑ Yes Pipe	☐ NO	
	If yes, what type?				
	Climbing Facilities:		☑ Yes	☐ NO	
	If yes, what type?		Ladder		
Members	☐ Bent ☐ Loose	☐ Missing	☐ Other	☑ All Good	
	Details of Deficiencies:				
Finish Condition	☐ Paint		☑ Galvanize		
	FAA Color Tolerance:	☐ Good	☑ N/A	☐ Repaint	
If Tubular	**Are Weep Holes Clear**	☐ Yes	☐ No	☑ Solid	
	Is Water Trapped?	☐ Yes	☐ No	☑ Solid	
Lighting	**Is Tower Lighted?**	☑ Yes		☐ No	
	☐ Conduit (3/4" Ridged)		☑ SO Cord		
	Junction Boxes Secure?	☑ Yes		☐ No	
	Junction Box vents open?	☑ Yes	☐ N/A	☐ No	
	Flasher Operational?	☐ Yes		☐ No	
	Photo Control Tested?	☑ Yes no good		☐ No	
	Light Lenses Condition?	☑ Good		☐ Replace	
	☑ Strobe **Makes:**	TWR	**Model:**		
	☐ Side Lights and Beacons:	☐ Replaced	**# of Bulbs:**	3	
	Details:		☐ Yes		
Grounding	**Lightning Rod?**	☑ Yes	☐ No	☐ Pres	☐ Exothermic
	Is Lightning Rod Tallest Point?		☑ Yes	☐ No	
	Down Conductor?	☑ Yes	☐ No	☐ Pres	☐ Exothermic
	Ground Rod?	☑ Yes	☐ No		☐ Exothermic
	Guy Wire Grounds?	☐ Good	☐ Loose	☐ Replace	
	Transmission Lines	☑ Top	☑ Bottom	☑ Entry	
	Details or Deficiencies:	Photo cell not working			

Tower Inspection Report

PO Box 40245, Houston, TX 77240
Tel: 832-237-5888 Fax: 832.487.8050
www.pexx.net

TOWER INFORMATION CONTINUED

Customer:				
Foundation condition	**Settlements or Movements:**		☐ Yes	☑ NO
	Drainage:		**poor**	
	Grout:	☐ Good	☐ Poor	☑ N/A
	Erosion:		☐ Yes	☐ NO
	Details of Deficiencies:			
Guy Anchors	**Above Grade:**		☐ Yes	☐ NO
	Water Trap:		☐ Yes	☐ NO
	Condition:		☐ Good	☐ Poor
	Condition 8" Below Grade		☐ Good	☐ Poor
	Details of Deficiencies:			
Antenna Mount Conditions				
Wave Guide Bridge	**Bridge Type?**	Standard		
	Height from Ground?	10		
	Line Support Type?	Butterflies		
	Space Available	☐ Yes	☑ No	
Wave Guide Ladder	**Waveguide Ladder Installed**	☑ Yes	☐ No	
	Type: ☐ Angle:	☐ Standard:	☐ Snap-In	☑ Other UniStrut
	Number of Holes Total?			
	Number of Holes Available?			
	Details of Deficiencies:			
Other Details				

Tower Inspection Report
PO Box 40245, Houston, TX 77240
Tel: 832-237-5888 Fax: 832.487.8050
www.pexx.net

TOWER INFORMATION CONTINUED							
	Cross Bracing:	☑ Z Type	☐ X Type	☐ K Type	☐ Other		
	Bracing Type:		☐ Round		☑ Angle		
	Bracing Size:	Length:	7'4"	Width:	2"	Depth/OD	7/16"
	Joint Length						
	Leg Type:	☐ Solid Round		☐ Round		☑ Angle	
	Leg Size:	Length:	20'	Width:	6"	Depth/OD	1/2"
	Width at Base	32' 6"					
	Tower Manufacturer						

TOWER VERTICAL ALIGNMENT (PLUMB)								
Transit # 1		180°	Degrees (Magnetic) from North					
Transit # 2		270°	Degrees (Magnetic) from North					
	Guyed		Transit #1					
SS Tower	Tower	Left	0	Right		Left	0	Right
Base	Base							
100'	1st Guy							
200"	2nd Guy							
300'	3rd Guy							
400'	4th Guy							
500'	5th Guy							
600'	6th Guy							
700'	7th Guy							
800'	8th Guy							
900'	9th Guy							
Approximate Wind Speed:								MPH

INSPECTOR/SURVEYOR	
Name:	
Date:	
Phone:	
Fax:	
Email:	

APPURTENANCES

Height C/L	Description	Azimuth	Line Type

PICTURE FILE DETAILS

File Name:	Description

Tower Inspection Report

PO Box 40245, Houston, TX 77240
Tel: 832-237-5888 Fax: 832.487.8050
www.pexx.net

GROUND RESISTANCE MEASUREMENTS		
Location Description (Per EIA/TIA - Resistance ,<=5.0 Ohms):	**Resistance:**	
		Ω

GUY WIRE TENSIONS						
Guy Leg:			**1**	**2**	**3**	**4**
	GAL	**Size**	**LBS**	**LBS**	**LBS**	**LBS**
Guy Wire Tensions						

Correct Guy Tensions 10% of Breaking Strength (Typical Rohn EHS Cable):

1/4 Inch	5/16 Inch	3/8 Inch	7/16 Inch	1/2 Inch	9/16 Inch

Tower Inspection Report

PO Box 40245, Houston, TX 77240
Tel: 832-237-5888 Fax: 832.487.8050

CATHODIC TESTING - ANCHORS					
Metal Condition:	☐ Excellent	☐ Good	☐ Fair	☐ Poor	
Cathodic Testing Necessary?				☐ Yes	☐ NO
IF TESTING NECESSARY -RESULTS					
Inner Anchor:	**1**	**2**		**3**	**4**
Voltage Reading					
Outer Anchor	**1**	**2**		**3**	**4**
Voltage Reading					

Describe Protection Used (If Applicable):

WHAT READINGS INDICATE

Greater than - 1.65 volts for a structure with magnesium anodes

The maximum voltage output from a magnesium anode is -1.65 volts. If your reading is greater than this, the system could have impressed current cathodic protection rather than galvanic, or there could be stray currents in the vicinity. If it turns out this is NOT an impressed current system, have a corrosion engineer investigate as soon as possible.

Greater than - 1.1 volts for a structure with zinc anodes

The maximum voltage output from a magnesium anode is -1.1 volts. If your reading is greater than this, the system could have impressed current cathodic protection rather than galvanic, or there could be stray currents in the vicinity. If it turns out this is NOT an impressed current system, have a corrosion engineer investigate as soon as possible.

Greater than -0.88 volt

Structure is adequately protected.

"-0.85" volt to "-0.88" volt

Structure still meets the standard for corrosion protection, but there is not much of a safety cushion. Monitor the system closely to determine the rate at which the voltage is dropping and plan on adding anodes or performing other work on the system in the not too distant future.

Less than -0.85 volt

The structure does not meet the -0.85 volt standard for corrosion protection and is out of compliance with regulatory requirements.

"-0.4" volt to "-0.6" volt

Expect this voltage range from steel that has no cathodic protection. This could indicate that the structure was not cathodically protected originally. Or that the anodes are completely utilized. Call in a corrosion engineer to investigate.

"-0.3" volt to "-0.4" volt

Rusty steel will sometimes register down in this range. Call in a corrosion engineer to investigate.

"-0.1" volt to "0.0" volt

This type of reading is most likely to occur if you are measuring the potential of a piece of copper. Most likely the copper wire you are connected to is broken off underground. Find another way to get an electrical connection to the structure you want to monitor.

Variable readings

This could indicate stray currents, but check your meter to be sure that it is operating properly and that all test lead connections are in solid contact with shiny metal.

Wildly fluctuating readings (digital meter)

This probably indicates that one of your test lead connections is not good or that your reference cell is dry. Make sure that all your connections are solid metal to metal. This might also be indicative of extremely dry conditions.