

RADIOTECHNIQUES

PO Box 367 402 Tenth Avenue Haddon Heights, NJ 08035

856-546-8008 fax 856-546-1841

Exhibit 15 Figure 2C, Page 1
Ground Conductivity Data - WXGI
WCTN - Potomac-Cabin John, MD
March 2005

Sources of Measured Conductivity: Summary of WXGI measured conductivity data

Bearing	Cond.	Dist.	Cond.	Dist.	Cond.	Dist.	Cond.	Dist.	Cond.	Dist.	Cond.	Dist.
10	2.0	20.74	1.0	84.28	0.5	96.89						
30*	1.0	46.6	0.5	85.8	1.5	123.0	1.0	136.3				
50*	2.0	15.7	1.5	32.6	1.0	73.4	1.5	116.3	3.0	117.8		
70*	1.0	50.6	0.5	73.8	1.0	165.5	2.0	204.0				
350	1.5	20.7	1.0	84.3	0.5	93.3						

Note: The above conductivity is that used in BP-20050323AAW. Measurements were included as part of that application, and as part of the WPEN application * BP990521AC. The graphing program rounded end distances to the nearest tenth of a kilometer. All other conductivity values are from FCC figure M-3.

GROUND CONDUCTIVITY REPORT

Lat : 37-30-52.0 N

Lon : 77-30-28.0 W

Radius : 700

* Includes measured conductivity data

0 deg:	20.74,	2.0*	84.28,	1.0*	96.89,	0.5*	430.14,	2.0				
	639.53,	4.0	680.30,	8.0	699.75,	15.0						
5 deg:	20.74,	2.0*	84.28,	1.0*	96.89,	0.5*	245.80,	2.0				
	249.55,	4.0	425.35,	2.0	648.72,	4.0	687.77,	8.0	699.89,	15.0		
10 deg:	20.74,	2.0*	84.28,	1.0*	96.89,	0.5*	98.05,	2.0				
	100.00,	5000.0	115.10,	4.0	116.01,	5000.0	130.99,	4.0	131.11,	2.0		
	132.03,	4.0	240.20,	2.0	302.39,	4.0	426.74,	2.0	700.26,	4.0		
15 deg:	20.74,	2.0*	84.28,	1.0*	96.89,	0.5*	100.11,	5000.0				
	126.85,	4.0	135.66,	5000.0	164.37,	4.0	244.22,	2.0	344.09,	4.0		
	414.51,	2.0	700.02,	4.0								
20 deg:	20.74,	2.0*	46.60,	1.0*	84.28,	1.0*	85.80,	0.5*				
	96.89,	0.5*	123.00,	1.5*	136.30,	1.0*	215.58,	4.0	216.70,	2.0		
	217.57,	4.0	218.69,	2.0	220.42,	4.0	225.51,	2.0	226.38,	4.0		
	237.43,	2.0	238.30,	4.0	239.42,	2.0	363.04,	4.0	419.63,	2.0		
	699.57,	4.0										
25 deg:	46.60,	1.0*	85.80,	0.5*	123.00,	1.5*	136.30,	1.0*				
	188.82,	4.0	191.95,	8.0	201.02,	4.0	211.55,	8.0	215.51,	4.0		
	218.64,	8.0	221.77,	4.0	223.75,	40.0	409.06,	4.0	458.84,	2.0		
	677.13,	4.0	699.90,	2.0								
30 deg:	46.60,	1.0*	85.80,	0.5*	123.00,	1.5*	136.30,	1.0*				
	171.90,	4.0	213.20,	40.0	238.54,	4.0	238.91,	40.0	239.71,	4.0		
	240.87,	8.0	241.24,	40.0	242.03,	8.0	259.53,	40.0	263.81,	8.0		
	435.99,	4.0	507.81,	2.0	699.89,	4.0						
35 deg:	46.60,	1.0*	85.80,	0.5*	123.00,	1.5*	136.30,	1.0*				
	150.14,	4.0	194.66,	40.0	202.45,	4.0	202.87,	40.0	283.15,	4.0		
	307.28,	8.0	308.03,	4.0	309.62,	8.0	310.36,	4.0	319.29,	8.0		
	444.27,	4.0	469.83,	2.0	594.61,	4.0	595.34,	1.0	595.76,	4.0		
	700.04,	1.0										
40 deg:	15.70,	2.0*	32.60,	1.5*	46.60,	1.0*	73.40,	1.0*				
	85.80,	0.5*	116.30,	1.5*	117.80,	3.0*	123.00,	1.5*	136.30,	1.0*		
	141.15,	4.0	155.72,	5000.0	178.98,	40.0	271.07,	4.0	278.55,	5000.0		
	433.54,	4.0	458.62,	5000.0	471.15,	0.5	471.62,	4.0	472.30,	0.5		
	479.72,	4.0	480.20,	5000.0	483.67,	4.0	493.87,	5000.0	496.18,	4.0		
	522.34,	5000.0	522.82,	1.0	523.97,	5000.0	583.37,	1.0	699.85,	2.0		

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Exhibit 15 Figure 2C, Page 2
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45 deg:	15.70,	2.0*	32.60,	1.5*	73.40,	1.0*	116.30,	1.5*		
	117.80,	3.0*	127.77,	4.0	130.63,	5000.0	138.67,	4.0	146.71,	5000.0
	161.09,	2.0	163.94,	5000.0	170.29,	2.0	175.98,	40.0	256.11,	4.0
	278.93,	5000.0	419.72,	4.0	515.53,	5000.0	558.19,	0.5	607.38,	5000.0
	608.51,	2.0	612.44,	5000.0	624.13,	2.0	625.26,	5000.0	699.83,	2.0
50 deg:	15.70,	2.0*	32.60,	1.5*	73.40,	1.0*	116.30,	1.5*		
	117.80,	3.0*	126.44,	4.0	149.90,	5000.0	189.31,	2.0	250.27,	4.0
	291.18,	5000.0	318.98,	4.0	320.12,	5000.0	350.14,	4.0	355.80,	5000.0
	359.19,	4.0	700.22,	5000.0						
55 deg:	15.70,	2.0*	32.60,	1.5*	73.40,	1.0*	116.30,	1.5*		
	117.80,	3.0*	119.23,	5000.0	125.53,	4.0	150.80,	5000.0	155.97,	2.0
	162.27,	5000.0	218.36,	2.0	256.65,	4.0	700.25,	5000.0		
60 deg:	15.70,	2.0*	32.60,	1.5*	50.60,	1.0*	73.40,	1.0*		
	73.80,	0.5*	116.30,	1.5*	117.80,	3.0*	165.50,	1.0*	204.00,	2.0*
	245.61,	2.0	699.74,	5000.0						
65 deg:	50.60,	1.0*	73.80,	0.5*	165.50,	1.0*	204.00,	2.0*		
	230.06,	2.0	699.92,	5000.0						
70 deg:	50.60,	1.0*	73.80,	0.5*	165.50,	1.0*	204.00,	2.0*		
	204.74,	2.0	700.03,	5000.0						
75 deg:	50.60,	1.0*	73.80,	0.5*	165.50,	1.0*	204.00,	2.0*		
	700.30,	5000.0								
80 deg:	50.60,	1.0*	73.80,	0.5*	165.50,	1.0*	204.00,	2.0*		
	700.06,	5000.0								
85 deg:	100.14,	2.0	143.61,	5000.0	170.82,	2.0	700.21,	5000.0		
90 deg:	63.16,	2.0	65.36,	5000.0	103.58,	2.0	138.87,	5000.0		
	153.57,	2.0	160.92,	5000.0	163.12,	2.0	699.75,	5000.0		
95 deg:	66.41,	2.0	70.07,	5000.0	95.96,	2.0	96.70,	5000.0		
	110.70,	2.0	138.90,	5000.0	147.78,	2.0	700.02,	5000.0		
100 deg:	71.69,	2.0	75.48,	5000.0	94.09,	2.0	94.26,	5000.0		
	95.70,	2.0	109.07,	5000.0	109.25,	2.0	109.97,	5000.0	110.69,	2.0
	136.90,	5000.0	143.76,	2.0	700.33,	5000.0				
105 deg:	77.66,	2.0	78.62,	5000.0	79.32,	2.0	84.54,	5000.0		
	100.70,	2.0	139.67,	5000.0	139.93,	2.0	140.64,	5000.0	145.15,	2.0
	699.94,	5000.0								
110 deg:	105.98,	2.0	700.32,	5000.0						
115 deg:	79.08,	2.0	86.27,	5000.0	120.66,	2.0	700.01,	5000.0		
120 deg:	59.76,	2.0	67.36,	5000.0	70.84,	2.0	80.19,	5000.0		
	84.31,	2.0	91.92,	5000.0	92.39,	2.0	102.39,	5000.0	103.50,	2.0
	104.13,	5000.0	116.98,	2.0	125.71,	5000.0	159.08,	4.0	699.70,	5000.0
125 deg:	89.96,	2.0	90.50,	5000.0	99.21,	2.0	108.47,	4.0		
	119.47,	5000.0	124.10,	4.0	126.45,	5000.0	167.03,	4.0	699.58,	5000.0
130 deg:	100.27,	2.0	113.01,	4.0	115.34,	5000.0	169.28,	4.0		
	700.21,	5000.0								
135 deg:	102.70,	2.0	194.99,	4.0	201.44,	5000.0	213.82,	4.0		
	699.82,	5000.0								
140 deg:	107.09,	2.0	199.12,	4.0	227.71,	5000.0	250.84,	4.0		
	700.03,	5000.0								
145 deg:	116.09,	2.0	186.58,	4.0	206.69,	5000.0	230.38,	4.0		
	239.47,	5000.0	257.23,	4.0	700.28,	5000.0				
150 deg:	132.18,	2.0	189.71,	4.0	196.83,	5000.0	267.09,	4.0		
	700.26,	5000.0								
155 deg:	154.95,	2.0	158.94,	4.0	164.93,	5000.0	181.21,	4.0		
	194.66,	5000.0	263.85,	4.0	699.91,	5000.0				
160 deg:	180.77,	2.0	233.08,	4.0	259.43,	5000.0	264.55,	4.0		
	301.79,	5000.0	310.66,	4.0	700.44,	5000.0				
165 deg:	196.29,	2.0	235.52,	4.0	244.16,	5000.0	287.17,	4.0		
	291.85,	5000.0	310.22,	4.0	700.09,	5000.0				
170 deg:	209.42,	2.0	222.59,	4.0	225.45,	5000.0	274.34,	4.0		
	284.65,	5000.0	314.77,	4.0	699.80,	5000.0				
175 deg:	222.95,	2.0	322.44,	4.0	699.88,	5000.0				
180 deg:	238.79,	2.0	339.78,	4.0	700.19,	5000.0				
185 deg:	243.40,	2.0	382.84,	4.0	383.83,	5000.0	384.75,	4.0		
	699.89,	5000.0								

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Exhibit 15 Figure 2C, Page 3 Ground Conductivity Data - WXGI WCTN - Potomac-Cabin John, MD March 2005

190 deg:	234.86,	2.0	408.69,	4.0	699.82,	5000.0		
195 deg:	228.89,	2.0	287.20,	4.0	316.91,	2.0	425.87,	4.0
	700.12,	5000.0						
200 deg:	225.12,	2.0	272.33,	4.0	341.95,	2.0	533.08,	4.0
	700.47,	5000.0						
205 deg:	222.98,	2.0	262.74,	4.0	376.39,	2.0	609.09,	4.0
	699.95,	5000.0						
210 deg:	222.51,	2.0	260.82,	4.0	419.23,	2.0	700.31,	4.0
215 deg:	191.39,	2.0	267.15,	4.0	467.53,	2.0	700.34,	4.0
220 deg:	171.80,	2.0	324.03,	4.0	326.89,	2.0	327.62,	4.0
	675.63,	2.0	700.09,	4.0				
225 deg:	158.78,	2.0	699.89,	4.0				
230 deg:	153.08,	2.0	699.72,	4.0				
235 deg:	150.30,	2.0	260.18,	4.0	312.05,	2.0	312.65,	4.0
	313.81,	2.0	314.41,	4.0	538.98,	2.0	699.66,	4.0
240 deg:	150.90,	2.0	244.56,	4.0	688.54,	2.0	699.79,	1.0
245 deg:	153.85,	2.0	242.31,	4.0	700.10,	2.0		
250 deg:	159.96,	2.0	209.83,	4.0	210.85,	2.0	211.54,	4.0
	685.32,	2.0	700.41,	4.0				
255 deg:	166.91,	2.0	175.94,	4.0	429.01,	2.0	430.72,	4.0
	431.43,	2.0	514.72,	4.0	700.04,	2.0		
260 deg:	349.69,	2.0	518.83,	4.0	680.21,	2.0	700.43,	4.0
265 deg:	360.95,	2.0	388.40,	4.0	389.25,	2.0	390.72,	4.0
	662.58,	2.0	700.12,	4.0				
270 deg:	582.29,	2.0	633.27,	8.0	699.85,	4.0		
275 deg:	548.74,	2.0	613.18,	8.0	700.31,	4.0		
280 deg:	547.42,	2.0	700.16,	8.0				
285 deg:	550.43,	2.0	700.39,	8.0				
290 deg:	550.25,	2.0	700.13,	8.0				
295 deg:	522.28,	2.0	700.01,	8.0				
300 deg:	480.94,	2.0	622.33,	8.0	699.83,	15.0		
305 deg:	413.34,	2.0	463.25,	4.0	572.44,	8.0	654.14,	15.0
	699.72,	8.0						
310 deg:	263.42,	2.0	321.89,	4.0	383.02,	2.0	450.71,	4.0
	592.12,	8.0	671.91,	15.0	699.73,	8.0		
315 deg:	241.34,	2.0	319.95,	4.0	363.76,	2.0	445.24,	4.0
	620.89,	8.0	635.97,	15.0	643.20,	8.0	669.92,	15.0
320 deg:	226.65,	2.0	442.67,	4.0	623.55,	8.0	669.12,	10.0
	699.91,	15.0						
325 deg:	220.84,	2.0	443.17,	4.0	615.45,	8.0	651.63,	10.0
	700.09,	15.0						
330 deg:	218.33,	2.0	448.02,	4.0	609.83,	8.0	657.04,	10.0
	680.04,	8.0	699.94,	15.0				
335 deg:	218.68,	2.0	411.39,	4.0	412.53,	2.0	413.36,	4.0
	475.25,	2.0	531.47,	8.0	545.85,	4.0	594.63,	8.0
	697.67,	8.0	699.94,	10.0				
340 deg:	20.70,	1.5*	84.30,	1.0*	93.30,	0.5*	227.53,	2.0
	321.44,	4.0	511.19,	2.0	563.08,	4.0	585.92,	8.0
	692.59,	8.0	699.61,	10.0				
345 deg:	20.70,	1.5*	84.30,	1.0*	93.30,	0.5*	240.30,	2.0
	326.91,	4.0	484.72,	2.0	553.27,	4.0	592.80,	8.0
	659.30,	8.0	681.64,	15.0	699.86,	5.0		
350 deg:	20.70,	1.5*	84.30,	1.0*	93.30,	0.5*	261.03,	2.0
	359.00,	4.0	458.87,	2.0	582.34,	4.0	680.54,	8.0
355 deg:	20.70,	1.5*	84.30,	1.0*	93.30,	0.5*	297.01,	2.0
	369.55,	4.0	442.09,	2.0	586.35,	4.0	684.09,	8.0
							699.90,	15.0