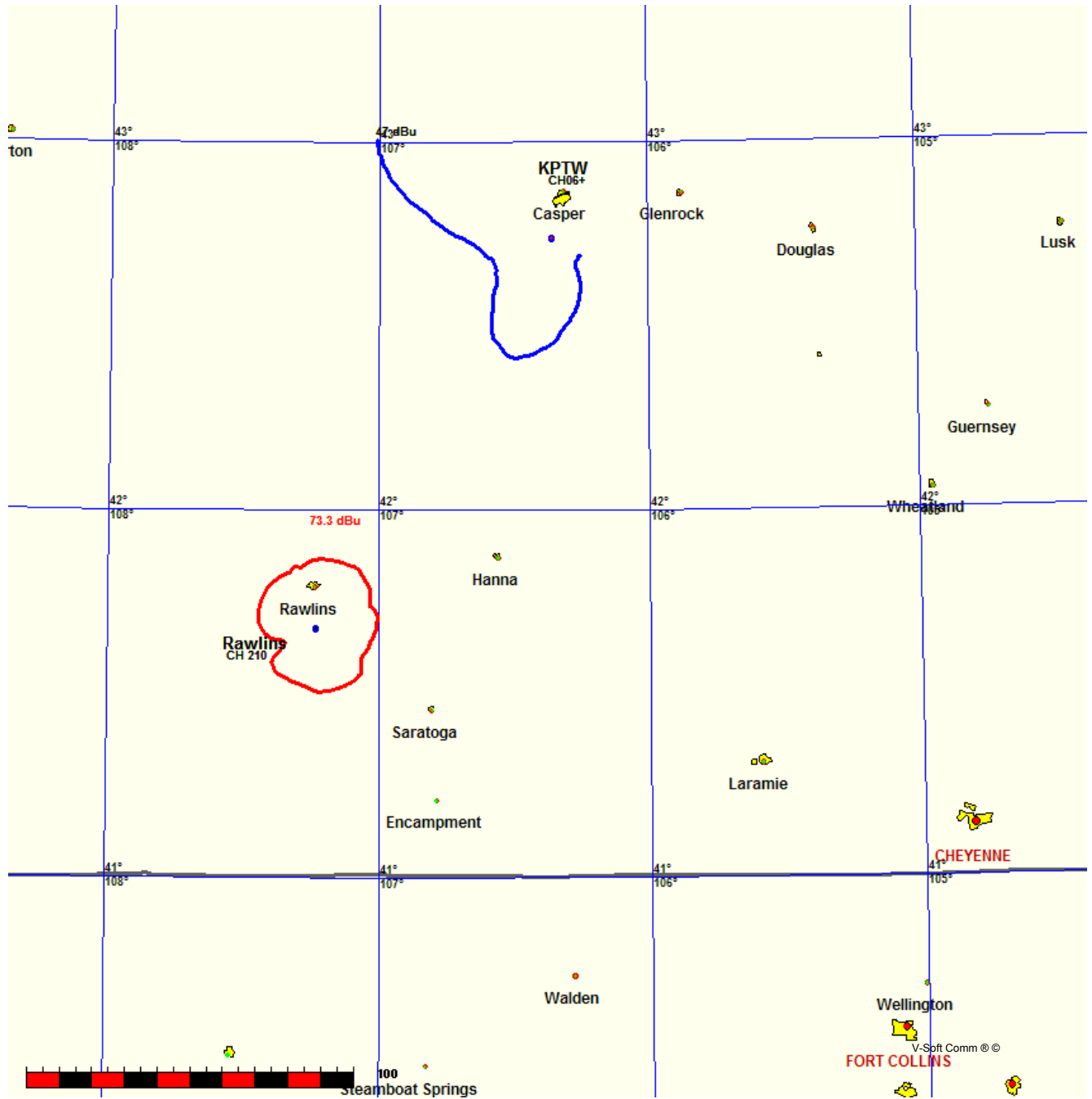


FMCommander Single Allocation Study
10-09-2007

Rawlins CH 210 C3
2.05 kW 2495 M COR
Intef. = 73.3 dBu

KPTW CH 06+ 2E BPET19960624KT
0.331 kW, 2501 M COR DA
Prot. = 47 dBu



10-09-2007 USGS 03 SEC Terrain Data

KPTW BPET19960624KT
 Channel = 06+2E
 Max ERP = 0.331 kW
 RCAMSL = 2501 M
 N. Lat. 42 44 26.0
 W. Lng. 106 21 34.0
 Protected
 47 dBu

Rawlins
 Channel = 210C3
 Max ERP = 2.05 kW
 RCAMSL = 2495 M
 N. Lat. 41 40 46.0
 W. Lng. 107 14 08.0
 Interfering
 73.3 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
152.0	000.0156	0186.8	019.0	038.4	002.0500	0411.3	129.8	34.54
153.0	000.0163	0192.2	019.4	038.5	002.0500	0411.1	129.3	34.66
154.0	000.0171	0198.8	020.0	038.7	002.0500	0410.7	128.8	34.78
155.0	000.0178	0204.1	020.4	038.8	002.0500	0410.3	128.2	34.90
156.0	000.0186	0208.9	020.9	038.9	002.0500	0409.9	127.7	35.02
157.0	000.0194	0212.3	021.2	039.0	002.0500	0409.5	127.2	35.13
158.0	000.0202	0217.2	021.7	039.1	002.0500	0409.0	126.7	35.26
159.0	000.0210	0228.5	022.4	039.3	002.0500	0408.0	126.0	35.40
160.0	000.0219	0235.5	022.9	039.4	002.0500	0407.4	125.4	35.54
161.0	000.0223	0239.4	023.2	039.4	002.0500	0407.3	124.9	35.66
162.0	000.0227	0247.9	023.7	039.5	002.0500	0406.8	124.3	35.80
163.0	000.0231	0256.9	024.2	039.6	002.0500	0406.4	123.7	35.94
164.0	000.0235	0258.0	024.3	039.5	002.0500	0406.6	123.3	36.06
165.0	000.0239	0266.9	024.8	039.6	002.0500	0406.3	122.6	36.20
166.0	000.0243	0275.4	025.3	039.7	002.0500	0405.9	122.0	36.35
167.0	000.0247	0288.3	025.9	039.8	002.0500	0405.3	121.3	36.52
168.0	000.0251	0296.2	026.4	039.8	002.0500	0405.1	120.6	36.68
169.0	000.0255	0301.4	026.7	039.8	002.0500	0405.1	120.1	36.82
170.0	000.0260	0306.1	027.0	039.8	002.0500	0405.3	119.5	36.97
171.0	000.0262	0309.3	027.2	039.7	002.0500	0405.7	119.0	37.11
172.0	000.0264	0318.8	027.7	039.8	002.0500	0405.6	118.4	37.27
173.0	000.0267	0328.7	028.2	039.8	002.0500	0405.5	117.7	37.45
174.0	000.0269	0341.6	028.8	039.8	002.0500	0405.1	116.9	37.64
175.0	000.0272	0357.2	029.6	039.9	002.0500	0404.6	116.0	37.85
176.0	000.0274	0373.4	030.3	040.0	002.0500	0404.2	115.1	38.07
177.0	000.0277	0391.1	031.0	040.1	002.0500	0403.9	114.2	38.29
178.0	000.0279	0404.4	031.6	040.1	002.0500	0403.9	113.5	38.49
179.0	000.0282	0410.4	031.9	039.9	002.0500	0404.5	112.9	38.66
180.0	000.0284	0420.6	032.3	039.9	002.0500	0404.8	112.1	38.85
181.0	000.0282	0434.1	032.8	039.8	002.0500	0405.2	111.4	39.05
182.0	000.0279	0446.2	033.2	039.7	002.0500	0405.8	110.8	39.24
183.0	000.0277	0453.3	033.4	039.5	002.0500	0406.6	110.2	39.40
184.0	000.0274	0462.9	033.7	039.4	002.0500	0407.4	109.6	39.57
185.0	000.0272	0473.5	034.0	039.3	002.0500	0408.0	109.0	39.76
186.0	000.0269	0486.1	034.5	039.1	002.0500	0408.7	108.3	39.96

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
187.0	000.0267	0499.9	035.0	039.0	002.0500	0409.3	107.6	40.17
188.0	000.0264	0509.4	035.3	038.8	002.0500	0410.1	107.0	40.35
189.0	000.0262	0519.6	035.6	038.6	002.0500	0410.8	106.4	40.54
190.0	000.0260	0529.4	036.0	038.4	002.0500	0411.2	105.8	40.71
191.0	000.0255	0538.7	036.2	038.2	002.0500	0411.5	105.2	40.86
192.0	000.0251	0549.7	036.5	038.0	002.0500	0411.8	104.7	41.02
193.0	000.0247	0562.6	036.9	037.7	002.0500	0411.9	104.1	41.18
194.0	000.0243	0574.8	037.2	037.5	002.0500	0412.0	103.6	41.33
195.0	000.0239	0588.8	037.5	037.2	002.0500	0412.2	103.0	41.48
196.0	000.0235	0606.5	037.9	037.0	002.0500	0412.2	102.4	41.66
197.0	000.0231	0618.1	038.1	036.7	002.0500	0412.3	101.9	41.78
198.0	000.0227	0624.7	038.2	036.3	002.0500	0412.4	101.7	41.86
199.0	000.0223	0629.6	038.2	036.0	002.0500	0412.4	101.5	41.92
200.0	000.0219	0632.8	038.1	035.6	002.0500	0412.3	101.3	41.95
201.0	000.0210	0636.1	037.9	035.2	002.0500	0412.1	101.4	41.93
202.0	000.0202	0637.0	037.6	034.8	002.0500	0411.9	101.6	41.88
203.0	000.0194	0636.0	037.2	034.4	002.0500	0411.5	101.8	41.80
204.0	000.0186	0635.6	036.8	034.0	002.0500	0411.0	102.0	41.71
205.0	000.0178	0637.0	036.4	033.6	002.0500	0410.5	102.3	41.64
206.0	000.0171	0640.1	036.2	033.2	002.0500	0410.0	102.5	41.57
207.0	000.0163	0643.8	035.9	032.9	002.0500	0409.2	102.7	41.49
208.0	000.0156	0648.3	035.6	032.5	002.0500	0408.3	102.9	41.41
209.0	000.0149	0654.4	035.4	032.2	002.0500	0407.2	103.0	41.33
210.0	000.0142	0660.0	035.1	031.8	002.0500	0405.9	103.3	41.23
211.0	000.0131	0663.9	034.5	031.5	002.0500	0404.4	103.9	41.02
212.0	000.0120	0668.4	033.9	031.1	002.0500	0402.9	104.5	40.81
213.0	000.0109	0671.5	033.2	030.8	002.0500	0401.5	105.2	40.58
214.0	000.0100	0675.7	032.5	030.5	002.0500	0400.3	105.9	40.34
215.0	000.0090	0679.1	031.7	030.3	002.0500	0399.1	106.7	40.10
216.0	000.0081	0681.9	030.9	030.0	002.0500	0398.2	107.6	39.85
217.0	000.0073	0684.4	030.1	029.8	002.0500	0397.5	108.4	39.61
218.0	000.0065	0686.3	029.3	029.6	002.0500	0396.9	109.3	39.36
219.0	000.0057	0687.3	028.5	029.4	002.0500	0396.4	110.2	39.11
220.0	000.0050	0686.8	027.6	029.2	002.0500	0395.9	111.2	38.85
221.0	000.0046	0686.3	027.0	029.0	002.0500	0395.4	111.8	38.67
222.0	000.0043	0686.0	026.5	028.8	002.0500	0394.9	112.4	38.50
223.0	000.0039	0686.6	026.0	028.7	002.0500	0394.5	113.0	38.33
224.0	000.0036	0686.6	025.4	028.5	002.0500	0394.1	113.7	38.15
225.0	000.0032	0685.2	024.8	028.4	002.0500	0393.8	114.3	37.96
226.0	000.0029	0682.3	024.2	028.3	002.0500	0393.4	115.1	37.76
227.0	000.0026	0678.6	023.5	028.2	002.0500	0393.1	115.8	37.56
228.0	000.0024	0674.9	022.8	028.1	002.0500	0393.0	116.6	37.35
229.0	000.0021	0672.0	022.1	028.0	002.0500	0392.8	117.4	37.14
230.0	000.0019	0670.4	021.4	028.0	002.0500	0392.8	118.2	36.94
231.0	000.0018	0668.8	021.2	027.8	002.0500	0392.6	118.5	36.85
232.0	000.0017	0667.8	021.0	027.7	002.0500	0392.4	118.9	36.76
233.0	000.0017	0667.6	020.8	027.6	002.0500	0392.3	119.2	36.68
234.0	000.0016	0667.2	020.6	027.5	002.0500	0392.2	119.5	36.59
235.0	000.0016	0666.0	020.4	027.4	002.0500	0392.1	119.9	36.50
236.0	000.0015	0664.0	020.2	027.3	002.0500	0392.1	120.2	36.40
237.0	000.0015	0662.1	020.0	027.2	002.0500	0392.0	120.6	36.31

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
238.0	000.0014	0659.6	019.8	027.1	002.0500	0391.9	121.0	36.21
239.0	000.0014	0656.5	019.5	027.0	002.0500	0391.8	121.3	36.11
240.0	000.0013	0653.0	019.3	026.9	002.0500	0391.8	121.7	36.01
241.0	000.0013	0649.1	019.2	026.8	002.0500	0391.6	121.9	35.95
242.0	000.0013	0644.7	019.2	026.7	002.0500	0391.5	122.2	35.89
243.0	000.0013	0640.3	019.2	026.6	002.0500	0391.4	122.4	35.83
244.0	000.0013	0637.4	019.1	026.4	002.0500	0391.4	122.6	35.78
245.0	000.0014	0635.2	019.1	026.3	002.0500	0391.3	122.8	35.72
246.0	000.0014	0633.1	019.1	026.2	002.0500	0391.3	123.0	35.67
247.0	000.0014	0630.3	019.1	026.1	002.0500	0391.2	123.2	35.61
248.0	000.0014	0627.3	019.1	026.0	002.0500	0391.2	123.5	35.55
249.0	000.0014	0623.5	019.1	025.9	002.0500	0391.1	123.7	35.49
250.0	000.0014	0619.8	019.1	025.8	002.0500	0391.1	124.0	35.42
251.0	000.0015	0619.4	019.4	025.5	002.0500	0391.1	124.0	35.43
252.0	000.0016	0620.3	019.7	025.3	002.0500	0391.2	123.9	35.43
253.0	000.0017	0619.5	020.1	025.1	002.0500	0391.2	124.0	35.42
254.0	000.0018	0618.8	020.4	024.9	002.0500	0391.3	124.0	35.41
255.0	000.0019	0616.3	020.6	024.7	002.0500	0391.3	124.1	35.39
256.0	000.0020	0611.9	020.9	024.5	002.0500	0391.4	124.3	35.35
257.0	000.0021	0607.8	021.1	024.3	002.0500	0391.4	124.4	35.31
258.0	000.0023	0602.5	021.3	024.2	002.0500	0391.3	124.6	35.27
259.0	000.0024	0596.5	021.4	024.0	002.0500	0391.2	124.8	35.21
260.0	000.0025	0589.7	021.6	023.8	002.0500	0391.0	125.0	35.15
261.0	000.0028	0581.1	022.1	023.6	002.0500	0390.7	125.1	35.12
262.0	000.0032	0572.3	022.5	023.3	002.0500	0390.4	125.2	35.09
263.0	000.0035	0565.8	022.9	023.0	002.0500	0390.2	125.3	35.05
264.0	000.0039	0562.1	023.4	022.8	002.0500	0389.9	125.4	35.02
265.0	000.0043	0563.7	024.0	022.4	002.0500	0389.6	125.5	34.99
266.0	000.0047	0570.2	024.7	022.1	002.0500	0389.3	125.6	34.96
267.0	000.0051	0576.5	025.4	021.7	002.0500	0388.9	125.7	34.93
268.0	000.0055	0584.5	026.1	021.3	002.0500	0388.6	125.8	34.89
269.0	000.0060	0596.5	026.8	020.9	002.0500	0388.2	125.9	34.84
270.0	000.0065	0605.8	027.5	020.6	002.0500	0387.9	126.1	34.79
271.0	000.0077	0610.5	028.8	020.0	002.0500	0387.4	126.1	34.77
272.0	000.0090	0614.3	030.0	019.4	002.0500	0387.0	126.2	34.73

Channel-Six TV Protection Study

KPTW CP 06+ 2E Dom Int 0.331 kW 536 M HAAT VHN DA=D
Casper WY 2501.0 M COR AMSL
Lat= 42 44 26.0, Lng= 106 21 34.0
Central Wyoming College BPET19960624KT
Fac ID# 82575
Dist.=138.3 km, Azi=31.2°, Rev Azi=211.7°

Direct line HAAT Grade B, 47 dBu= 34.05 km & Grade A= 7.91 km

Distance from reference to Grade B = 104.25 km

Cutoff Dist from Full Service or Class CA= 196

Maximum Co-located power= 21.4 kW

KPTW Signal Contour at Reference location = 6.0 dBu

CH. 210, U/D ratio = 26.3 dB, Maximum FM signal = 73.3 dBu , 6 dB credit added

TV/FM D to U values

47.0	73.3	55.0	72.3	63.0	73.9	71.0	78.7	79.0	85.0	87.0	91.6
48.0	73.0	56.0	72.4	64.0	74.4	72.0	79.5	80.0	85.8	88.0	92.4
49.0	72.6	57.0	72.5	65.0	74.8	73.0	80.2	81.0	86.6	89.0	93.3
50.0	72.3	58.0	72.6	66.0	75.4	74.0	81.0	82.0	87.4	90.0	94.2
51.0	72.2	59.0	72.8	67.0	76.0	75.0	81.8	83.0	88.2	91.0	94.2
52.0	72.2	60.0	73.0	68.0	76.6	76.0	82.6	84.0	89.0	92.0	94.2
53.0	72.1	61.0	73.3	69.0	77.3	77.0	83.4	85.0	89.9	93.0	94.2
54.0	72.2	62.0	73.5	70.0	78.0	78.0	84.2	86.0	90.7	94.0	94.2