

Exhibit 18

TV Channel 6 Study

The proposed site is 65.37 km from WECT, a TV channel 6 station in Wilmington, NC. This is well within the guidelines of 265 km shown in Table A, §73.525 of the Commission's rules for channel 201. This exhibit demonstrates that the proposed station will not cause interference in an area containing more than the 4,000 persons as specified in §73.525(c)(2). This is possible because the proposed site is in a rural location with low resident population and employs vertically polarized radiation.

The affected population in the area of interference was determined as follows:

1) A chart was prepared tabulating the data from §73.599 Figure 1 for channel 201. It shows each protected contour of the TV station, the associated undesired/desired ratio, and the resultant interfering contour (= TV6 protected contour + U/D ratio) for the proposed FM station to create "just perceptible" interference.

2) Since the proposed FM antenna is vertically polarized, a power correction is made for the vertical polarization. The equivalent power is $H + V/40 = 0 + 1.5/40 = .0375$ kW, since the predicted area of interference lies entirely outside the limits of a city of 50,000 persons (§73.525(e)(4)(ii)). This value is used in all contour subsequent calculations in this exhibit relating to the proposed station.

3) A map was prepared showing the predicted TV6 protected contours in the area of interest and the associated predicted FM interfering contours over the same area. The first contours plotted are the 69 dBu protected TV contour and the corresponding 63.3 dBu interfering FM contour. The last contour plotted for the TV6 station was the 73 dBu protected contour, and the last contour plotted for the FM station was the 67.9 dBu interfering contour. Contours are calculated according to the procedures specified in §73.684 for the TV protected contours and §73.313 for the FM station interference contours.

4) A point was plotted at each point where the TV6 protected contour intersects the associated FM interfering contour. These points were joined by smooth line segments. The closed curve created designates the "area of just perceptible interference". This manually drawn curve largely encompasses swampland, and could therefore be expected to be sparsely inhabited.

5) C.F.R. §73.525(e)(2)(iv) provides for higher precision than the assumption of uniform population density underlying §73.525(e)(2)(ii) and (iii), allowing "more detailed population data" to be used. Increasing the spatial resolution to the census block group level, the 2000 census block group centroids were plotted by latitude and longitude. Six of the centroids were found to be inside the area of interference. This is illustrated in the TV6 Population Scattergram and is tabulated on the appended chart. These centroids total 2,483 persons, well within the 3,000 maximum count required by §73.525(c)(2). **Since it has been demonstrated that the population in the "area of interference" is less than the statutory limit of 3,000, the Commission may properly grant the proposed construction permit.**

Channel-Six TV Protection Study

WECT LI 06Z 2C Dom 100.000 kW 588 M HAAT V HY
Wilmington NC 612M COR AMSL
N. Lat= 34 34 43, W. Lng= 78 26 13
Raycom America License Sub BLCT19810729KF
Fac ID# 48666, Cutoff Date= 1 113
Dist.=65.37251 km, Azi=331.2°, Rev Azi=151.2°

Direct line HAAT Grade B, 47 dBu= 128.45 km & Grade A= 72.85 km

Distance from reference to Grade B = -63.08 km

Cutoff Dist from Full Service= 265

Maximum Co-located power= 1.1 kW

WECT Signal Contour at Reference location = 71.0 dBu

CH. 201, U/D ratio = -4.9 dB, Maximum FM signal = 66.1 dBu , add 6 dB if within angle.

TV/FM D to U values

47.0	48.0		55.0	53.7		63.0	59.4		71.0	66.1		79.0	73.4		87.0	80.7
48.0	48.7		56.0	54.4		64.0	60.1		72.0	67.0		80.0	74.3		88.0	81.7
49.0	49.3		57.0	55.1		65.0	60.9		73.0	67.9		81.0	75.2		89.0	82.6
50.0	50.0		58.0	55.7		66.0	61.7		74.0	68.7		82.0	76.1		90.0	83.5
51.0	50.7		59.0	56.4		67.0	62.6		75.0	69.7		83.0	77.0		91.0	83.5
52.0	51.5		60.0	57.1		68.0	63.4		76.0	70.6		84.0	77.9		92.0	83.5
53.0	52.2		61.0	57.9		69.0	64.3		77.0	71.5		85.0	78.9		93.0	83.5
54.0	52.9		62.0	58.6		70.0	65.2		78.0	72.4		86.0	79.8		94.0	83.5

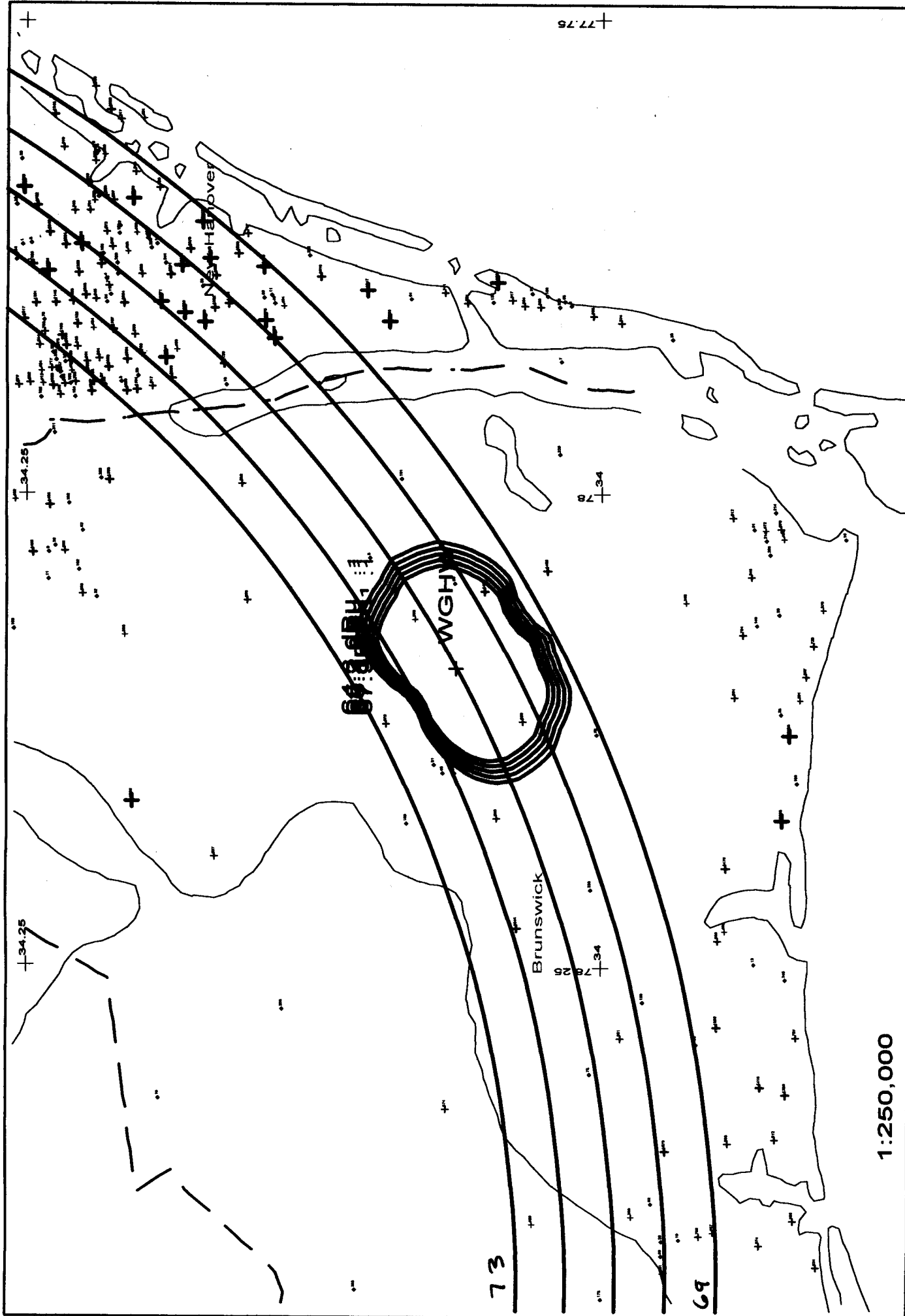
Exhibit 18

TV6 Interpolation

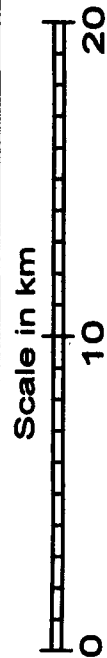
Channel 201 - 88.1 MHz

Report Radius 265 km.

TV	Contour	Undesired/Desired Ratio	Total
	69	-4.7	64.3
	70	-4.8	65.2
	71	-4.9	66.1
	72	-5.0	67.0
	73	-5.1	67.9



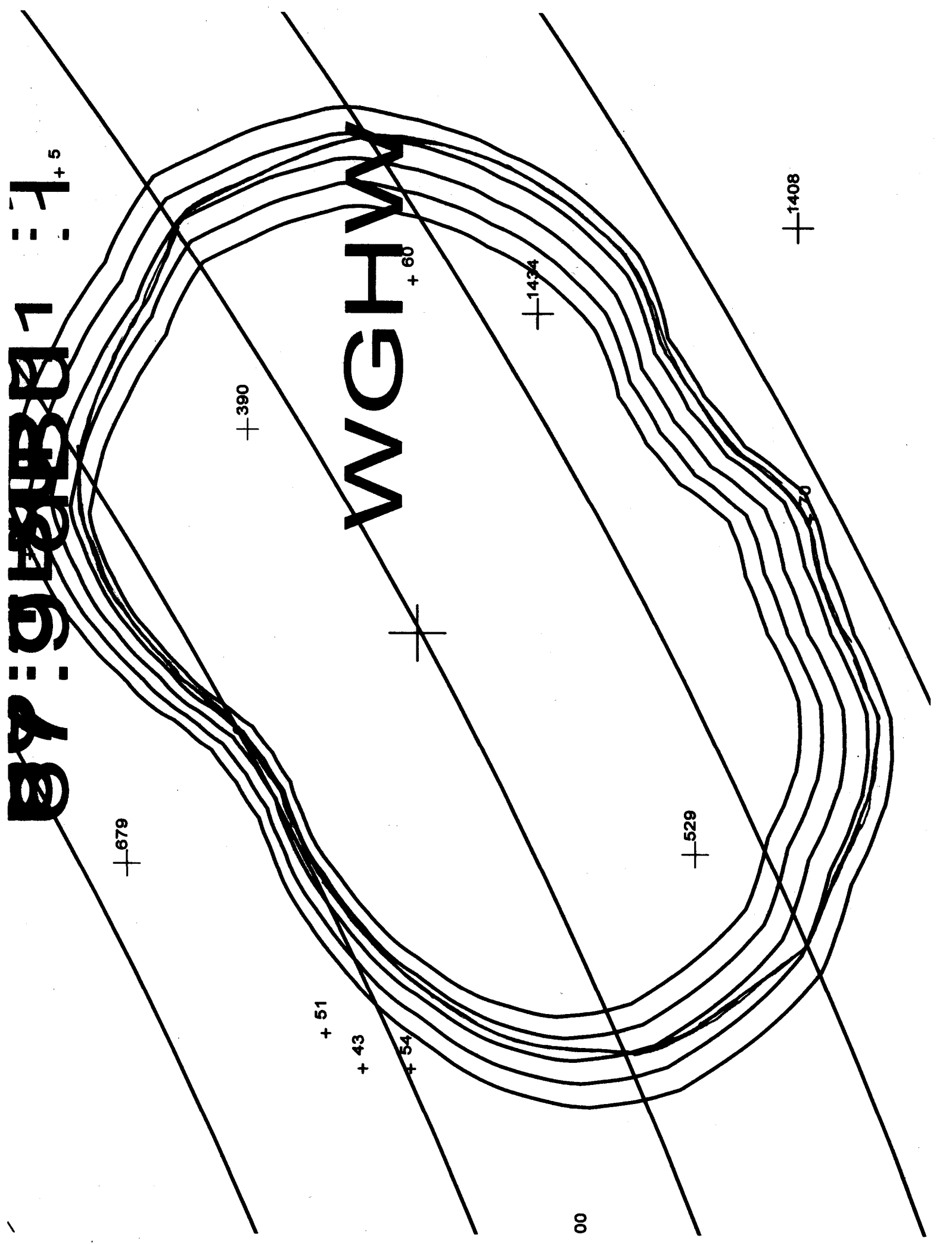
1:250,000



WGHW 201A .0375kW 102M AMSL
N. Lat. 34 03 48 W. Lng. 78 05 32

NC Lockwoods TV6
Bob Moore - 01/06

BY: GREGORY 1:15



WGHW

Exhibit 18

TV6 Population Centroid Count

WGHW Lockwoods Folly Twp, NC

ERP 0.0375 kW

N. Lat. 34 3 48

W. Lon. 78 5 32

Center of Radiation 102.00 m AMSL

St Numb.	Latitude	Longitude	Distance	Az	Count
NC 958	340204	780714	4.1450	219	529
NC 961	340303	780306	3.9843	110	1434
NC 962	340351	780251	4.1211	89	60
NC 963	340120	780439	4.7523	163	70
NC 966	340452	780359	3.0910	50	390
2000 Grouped Population					2483