



Major Assumptions:

1) Selection of the Most Common Recent Ancestor (MRCA) was based on the possibility that the DNA markers with most common value must be the MRCA. (majority rules). This assumes that the DNA submissions for this cluster is random in nature (not probably true in this case) and that other clusters are not related (probably not true in this case). This is the most common methodology for selecting the MRCA of a cluster. It appears that this cluster could be related to another cluster (Irish origins).

2) Arvle Casey and Jackson Casey are brothers that have two mutation differences. A third brother is required to determine the exact source of these two mutations. It is assumed that each have one single mutation each (requires fewest total mutations - two). Either Jackson Casey or Arvle Casey could have a double mutation (other brother having no mutations - these scenarios require three total mutations). If Arvle Casey is the source of a double mutation then the Henson Casey line would be more closely related to the James H. Casey line. If Jackson Casey is the source of a double mutation then the Henson Casey line would be more closely related to the John Casey (SC).

3) Chart is based on 67 markers. Twelve submissions in this cluster have 67 markers analyzed and all markers from 38 to 67 markers are identical to date. Upgrades to 67 markers for other lines could result in additional changes in chart.

4) Those marked with "P" are progenitors of Casey lines (oldest proven ancestor).