KEN FAUX – NATIVE AMERICAN FINDINGS ON GEDMATCH CALCULATORS

As will be seen consistently below, irrespective of which Gedmatch calculator is used, Ken has approximately the same percentage of Native American (or surrogate / proxy such as East Asian or Siberian) on each. Frankly this comes as a surprise to the author (his son) since until recently the latter did not bother testing his father on these calculators since the genealogy is very clear with both of his parents being born in England. The only "unknown" is a great great grandmother, Maria Hannah MILLER, "*an American lady*" (sons obituary) who married a British soldier Sgt. Maj. William WORRILL in Quebec City, Canada. She is a likely source for the ancestry described below.
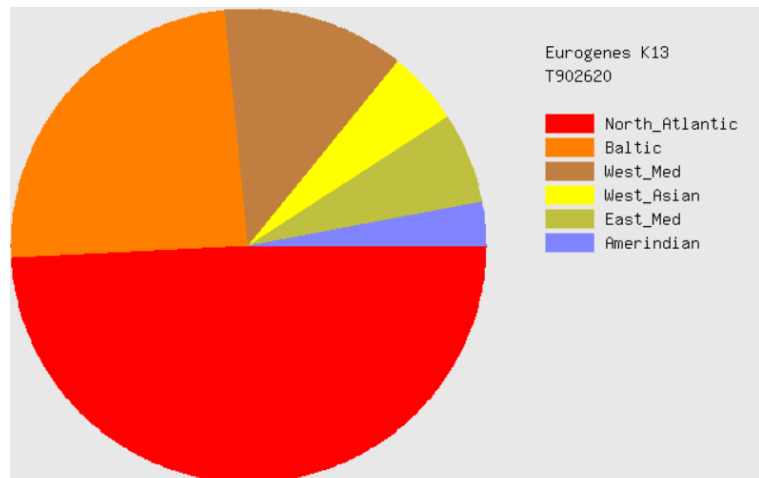
What follows are a series of **Gedmatch** calculator results from a variety of projects, as well as **yourDNAportal**. See Gedmatch here and yourDNAportal here for further information.

Gedmatch:

1) Eurogenes K13:
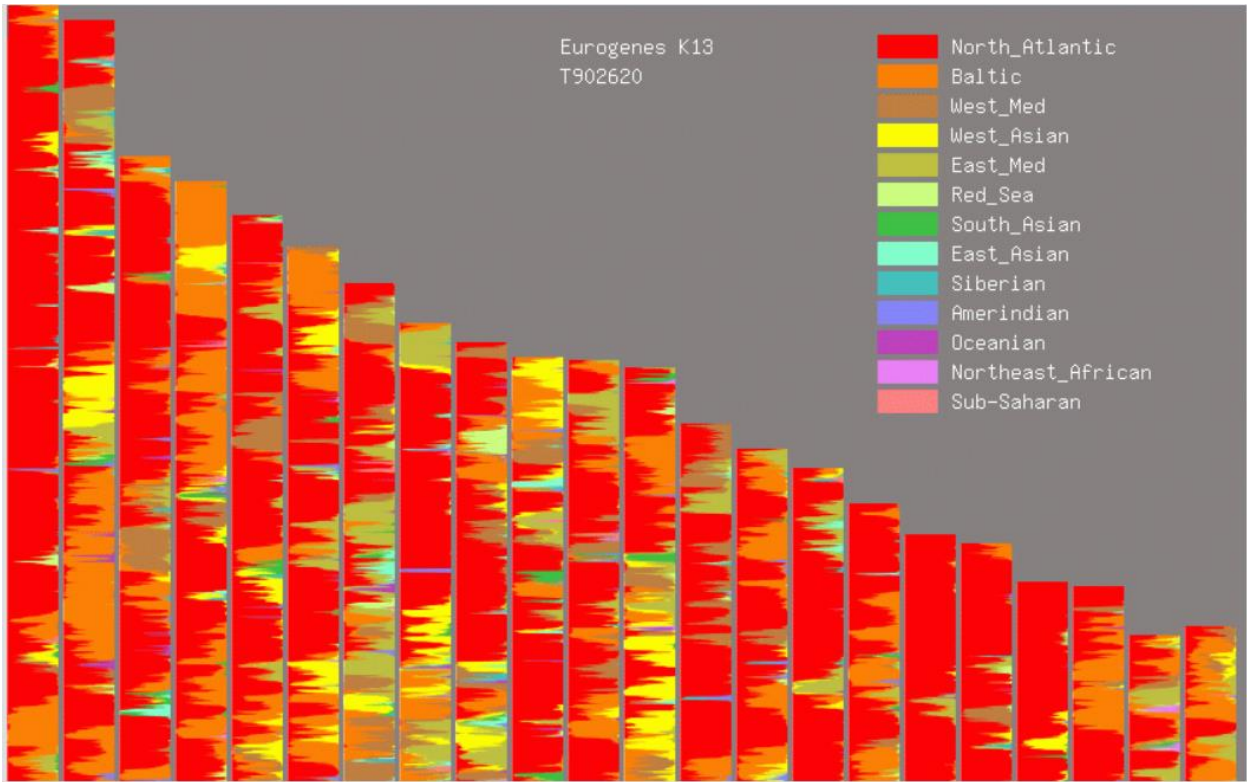
Population	
North_Atlantic	49.06 Pct
Baltic	24.26 Pct
West_Med	12.64 Pct
West_Asian	5.08 Pct
East_Med	5.98 Pct
Red_Sea	0.28 Pct
South_Asian	-
East_Asian	0.52 Pct
Siberian	-
Amerindian	1.57 Pct
Oceanian	0.4 Pct
Northeast_African	-
Sub-Saharan	0.21 Pct

Oracle

Eurogenes K13
T902620

- North_Atlantic
- Baltic
- West_Med
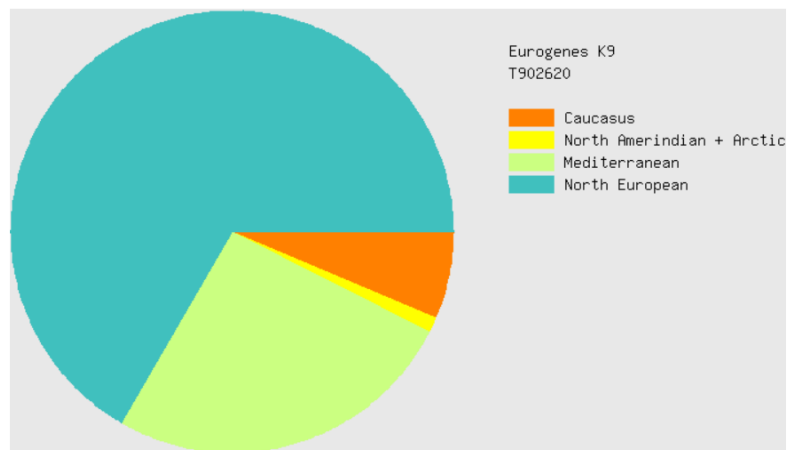- West_Asian
- East_Med
- Amerindian

Below is the chromosome painting relating to this test. Although difficult to read (any beyond 13 or so become difficult to see the different ancestries embedded in a confusing matrix). A careful inspection will show some of the, albeit small, segments that are Amerind or East Asian (the latter can (and was in the early days of genetic testing) in many cases be used as a substitute for Native American due to the genetic similarities between the two.

Eurogenes K13
T902620

North_Atlantic	(red)
Baltic	(orange)
West_Med	(brown)
West_Asian	(yellow)
East_Med	(olive)
Red_Sea	(light green)
South_Asian	(green)
East_Asian	(teal)
Siberian	(cyan)
Amerindian	(blue)
Oceanian	(purple)
Northeast_African	(magenta)
Sub-Saharan	(pink)

2) Eurogenes K9:

Population	
South Asian	-
Caucasus	6.45 Pct
Southwest Asian	-
North Amerindian + Arctic	1.13 Pct
Siberian	0.36 Pct
Mediterranean	25.75 Pct
East Asian	-
West African	0.06 Pct
North European	66.25 Pct

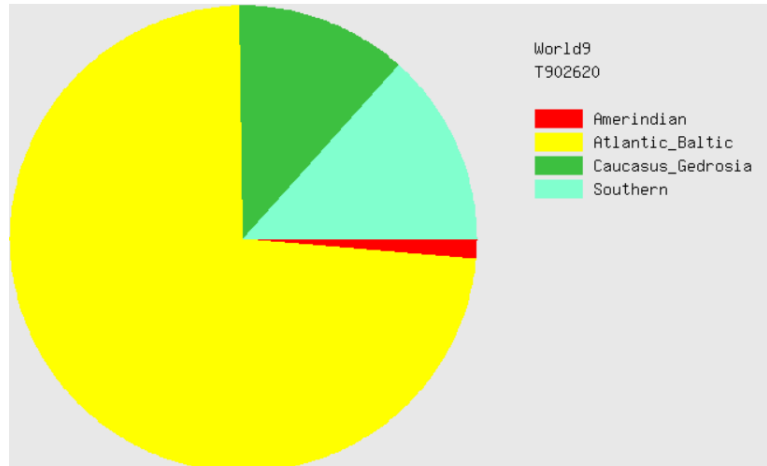No reference data for this calculator so Oracle is unavailable.

Eurogenes K9
T902620

- Caucasus
- North Amerindian + Arctic
- Mediterranean
- North European

3) <u>Dodecad World9</u>:

Population	
Amerindian	1.39 Pct
East_Asian	-
African	0.09 Pct
Atlantic_Baltic	73.23 Pct
Australasian	-
Siberian	0.78 Pct
Caucasus_Gedrosia	11.92 Pct
Southern	12.59 Pct
South_Asian	-

Oracle
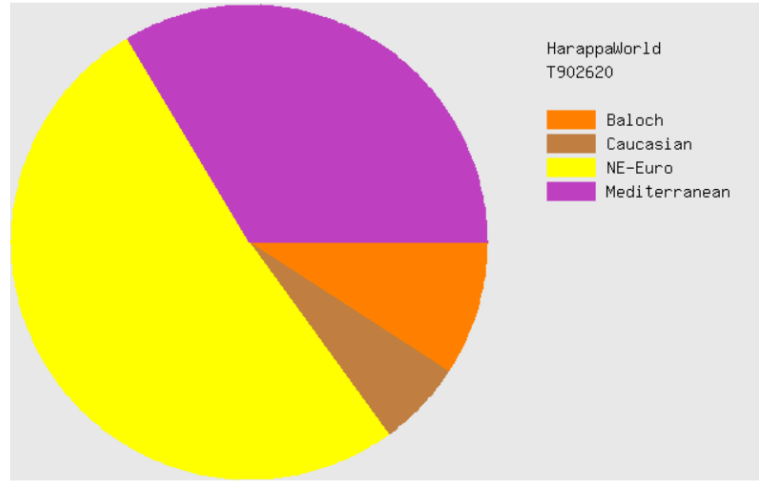Oracle-4

UNDER
DEVELOPMENT:

World9
T902620

- Amerindian
- Atlantic_Baltic
- Caucasus_Gedrosia
- Southern

Mixed Mode Population Sharing:

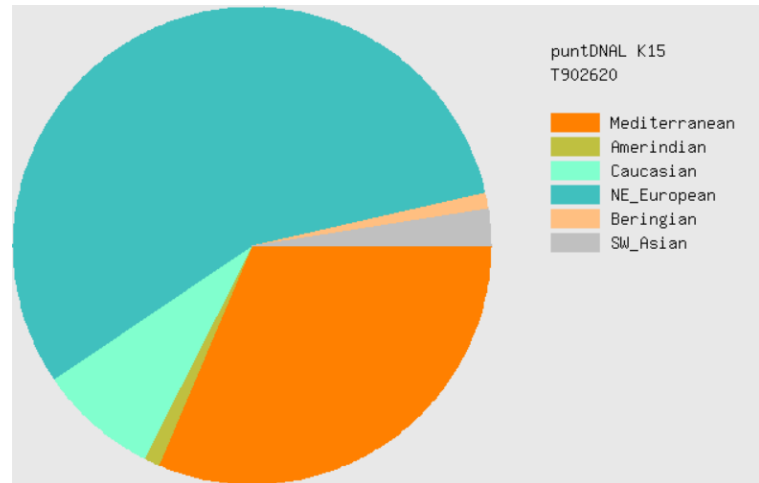| #	Primary Population (source)	Secondary Population (source)	Distance
1	98.4% Mixed_Germanic (Dodecad)	1.6% Athabask	0.96
2	91.9% German (Dodecad)	8.1% Brazilian (Dodecad)	0.96
3	98.8% Mixed_Germanic (Dodecad)	1.2% Pima	0.99
4	98.9% Mixed_Germanic (Dodecad)	1.1% Karitiana	0.99
5	98.9% Mixed_Germanic (Dodecad)	1.1% Surui	0.99
6	98.8% Mixed_Germanic (Dodecad)	1.2% Colombians	0.99
7	98.8% Mixed_Germanic (Dodecad)	1.2% Maya	1
8	95.9% Dutch (Dodecad)	4.1% CLM30	1.01
9	98.6% Mixed_Germanic (Dodecad)	1.4% PEL30	1.03
10	96.7% Dutch (Dodecad)	3.3% Colombian	1.08
11	95.7% German (Dodecad)	4.3% CLM30	1.08
12	97.2% Dutch (Dodecad)	2.8% MEX30	1.09
13	98.1% Mixed_Germanic (Dodecad)	1.9% Ecuadorian	1.12
14	97.7% Dutch (Dodecad)	2.3% Ecuadorian	1.13
15	97.9% Mixed_Germanic (Dodecad)	2.1% MEX30	1.14
16	98% Mixed_Germanic (Dodecad)	2% WestGreenland	1.15
17	98.5% Mixed_Germanic (Dodecad)	1.5% EastGreenland	1.16
18	95.8% Mixed_Germanic (Dodecad)	4.2% Aleut	1.18
19	95.2% German (Dodecad)	4.8% PUR30	1.18
20	66.1% Kent (1000 Genomes)	33.9% Hungarians (Behar)	1.19

4) Harappaworld:

Population	
S-Indian	-
Baloch	9.12 Pct
Caucasian	5.95 Pct
NE-Euro	51.5 Pct
SE-Asian	-
Siberian	-
NE-Asian	0.63 Pct
Papuan	-
American	0.53 Pct
Beringian	0.58 Pct
Mediterranean	31.53 Pct
SW-Asian	-
San	0.14 Pct
E-African	-
Pygmy	-
W-African	-

HarappaWorld
T902620

- Baloch
- Caucasian
- NE-Euro
- Mediterranean

5) puntDNAL K15:

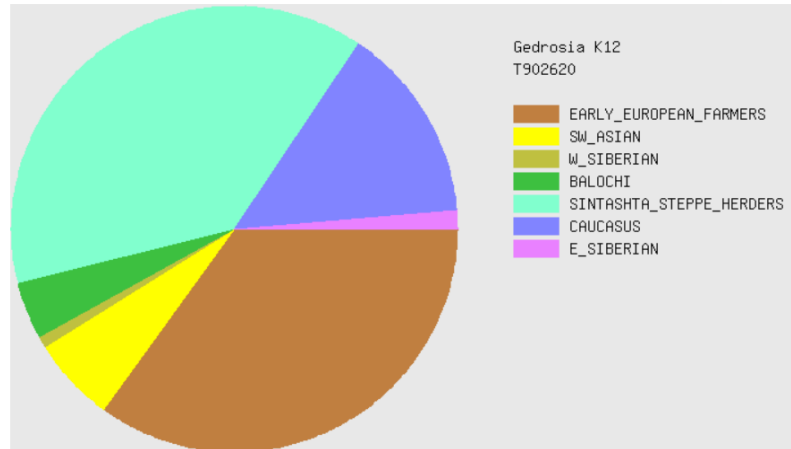| Population	
S_Indian	-
Mediterranean	31.49 Pct
Siberian	-
Wht_Nile_River	-
Amerindian	1 Pct
S_African	0.12 Pct
E_Asian	-
Caucasian	8.19 Pct
NE_European	55.97 Pct
Omo_River	0.59 Pct
W_African	-
Horn_Of_Africa	-
Oceanian	0.08 Pct
Beringian	1.21 Pct
SW_Asian	1.35 Pct

puntDNAL K15
T902620

- Mediterranean
- Amerindian
- Caucasian
- NE_European
- Beringian
- SW_Asian

6) Gedrosia K12:

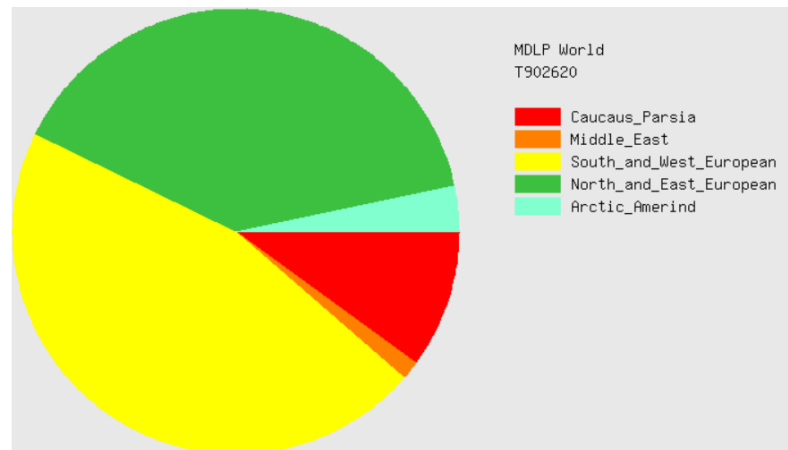| Population	
S_INDIAN	-
SUB_SAHARAN	-
EARLY_EUROPEAN_FARMERS	34.97 Pct
SW_ASIAN	6.14 Pct
W_SIBERIAN	0.96 Pct
SE_ASIAN	-
BALOCHI	4.11 Pct
SINTASHTA_STEPPE_HERDERS	38.21 Pct
INDO_TIBETAN	-
CAUCASUS	14.27 Pct
E_AFRICAN	-
E_SIBERIAN	1.36 Pct

Oracle
Oracle-4

Gedrosia K12
T902620

- EARLY_EUROPEAN_FARMERS
- SW_ASIAN
- W_SIBERIAN
- BALOCHI
- SINTASHTA_STEPPE_HERDERS
- CAUCASUS
- E_SIBERIAN

7) MDLP World:

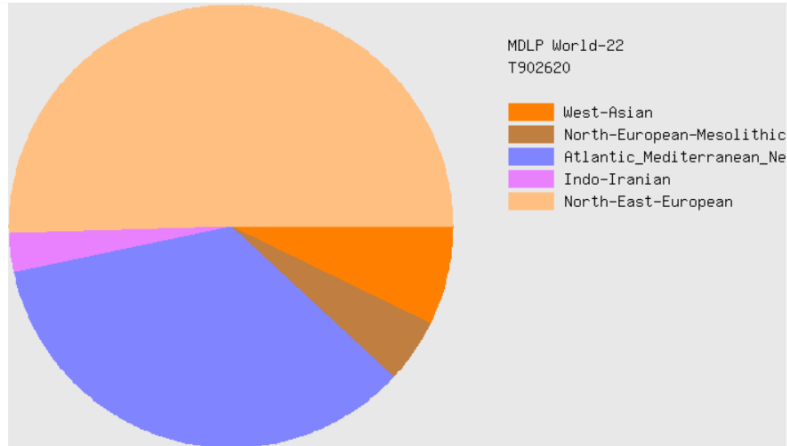| Population	
Caucaus_Parsia	10.09 Pct
Middle_East	1.38 Pct
Indian	-
South_and_West_European	45.94 Pct
Melanesian	0.55 Pct
Sub_Saharian	0.1 Pct
North_and_East_European	39.49 Pct
Arctic_Amerind	1.46 Pct
East_Asian	-
Paleo_African	0.18 Pct
Mesoamerican	0.8 Pct
North_Asian	-

Oracle
Oracle-4

MDLP World
T902620

- Caucaus_Parsia
- Middle_East
- South_and_West_European
- North_and_East_European
- Arctic_Amerind
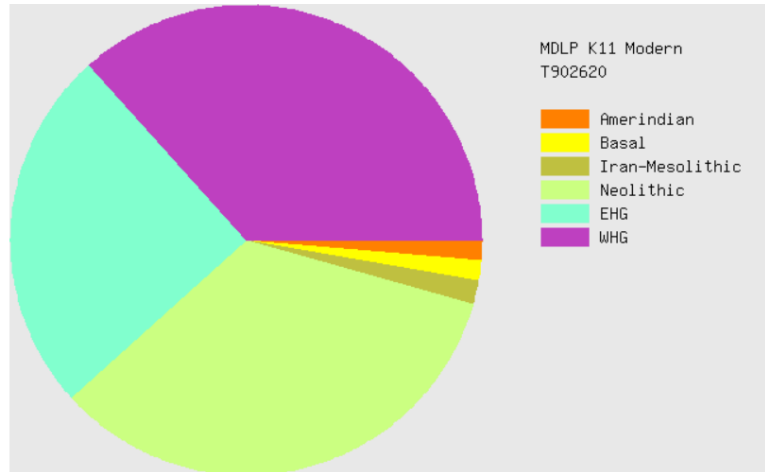
Two calculators which are recommended here include the following:

8) <u>MDLP World-22</u>:

Population	
Pygmy	0.09 Pct
West-Asian	7.19 Pct
North-European-Mesolithic	4.8 Pct
Indo-Tibetan	-
Mesoamerican	0.73 Pct
Arctic-Amerind	0.37 Pct
South-America_Amerind	0.08 Pct
Indian	-
North-Siberean	-
Atlantic_Mediterranean_Neolithic	34.77 Pct
Samoedic	0.61 Pct
Indo-Iranian	2.85 Pct
East-Siberean	-
North-East-European	46.85 Pct
South-African	-
North-Amerind	0.54 Pct
Sub-Saharian	0.1 Pct
East-South-Asian	-
Near_East	0.52 Pct
Melanesian	0.52 Pct
Paleo-Siberian	-
Austronesian	-

MDLP World-22
T902620

- West-Asian
- North-European-Mesolithic
- Atlantic_Mediterranean_Ne
- Indo-Iranian
- North-East-European

9) <u>MDLP K11 Modern</u>:

Population	
African	0.09 Pct
Amerindian	1.38 Pct
ASI	-
Basal	1.37 Pct
Iran-Mesolithic	1.53 Pct
Neolithic	33.92 Pct
Oceanic	-
EHG	24.96 Pct
SEA	-
Siberian	0.51 Pct
WHG	36.25 Pct

Oracle

Oracle-4

MDLP K11 Modern
T902620

- Amerindian
- Basal
- Iran-Mesolithic
- Neolithic
- EHG
- WHG

While the above two tests may be good, the one which is most likely to be reliable and valid even for small amounts of DNA is 23andMe. However, Ken only tested at Family Tree DNA (originally for Y chromosome testing) and he passed away (2006) before the author could request that he test with 23andMe. Hence all the results in this study are from Ken's FTDNA raw data uploaded to Gedmatch and yourDNAportal. Perhaps one day 23andMe will, as other companies such as

MyHeritage does, permit the uploading of raw data from other test companies to their site for analysis.

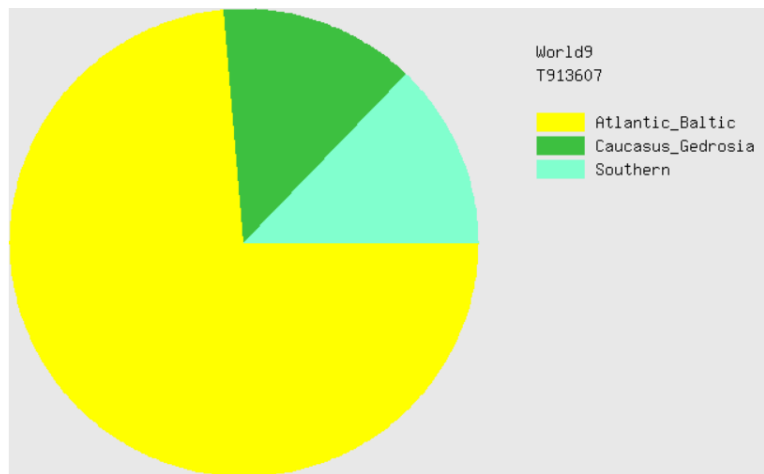**Validation Check 1 – the Results of Two Children**

As a check on the likely accuracy of the above results, relative to simply being "noise", testing Ken's children should show that each have at most the same percentage of NA as the parent, or more likely (due to recombination) lesser levels of Native American (or surrogates / proxies East Asian, Siberian etc.) – assuming that all of the NA DNA came from the paternal side.

1) Son David – Dodecad World9:

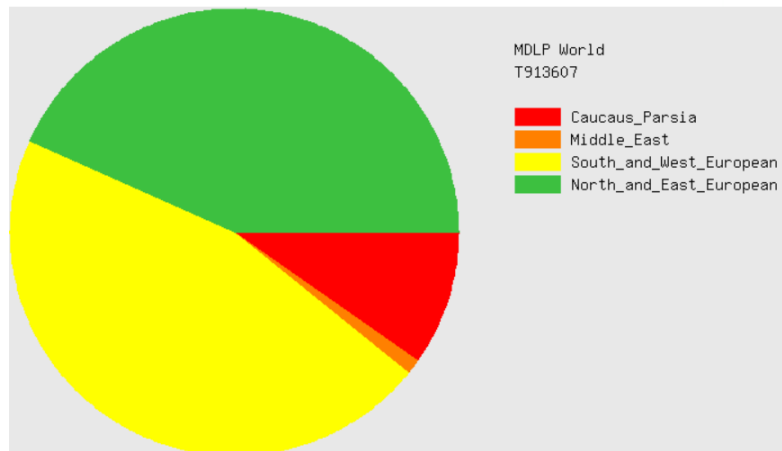| Population	
Amerindian	0.58 Pct
East_Asian	-
African	-
Atlantic_Baltic	73.54 Pct
Australasian	0.35 Pct
Siberian	0.29 Pct
Caucasus_Gedrosia	13.57 Pct
Southern	11.61 Pct
South_Asian	0.06 Pct
Oracle	
Oracle-4	

UNDER
DEVELOPMENT:

World9
T913607

- Atlantic_Baltic
- Caucasus_Gedrosia
- Southern

Son David – MDLP World:

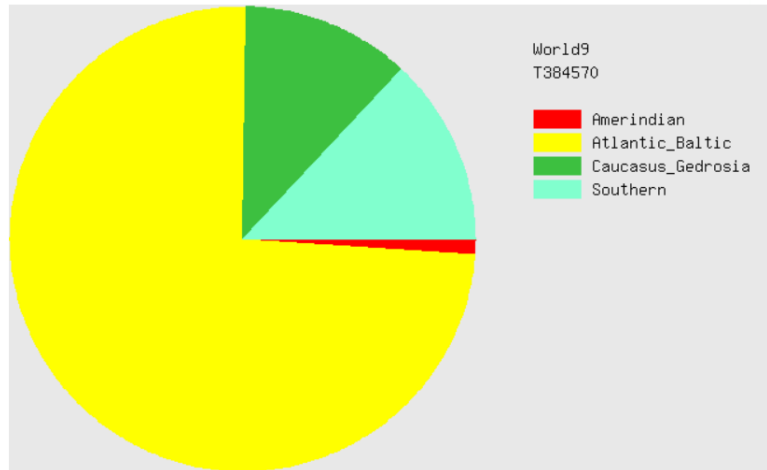| Population	
Caucaus_Parsia	9.85 Pct
Middle_East	1.23 Pct
Indian	-
South_and_West_European	45.82 Pct
Melanesian	0.29 Pct
Sub_Saharian	-
North_and_East_European	41.63 Pct
Arctic_Amerind	0.71 Pct
East_Asian	-
Paleo_African	0.31 Pct
Mesoamerican	0.17 Pct
North_Asian	-
Oracle	
Oracle-4	

MDLP World
T913607

- Caucaus_Parsia
- Middle_East
- South_and_West_European
- North_and_East_European

2)   Daughter Ferne – Dodecad World9:

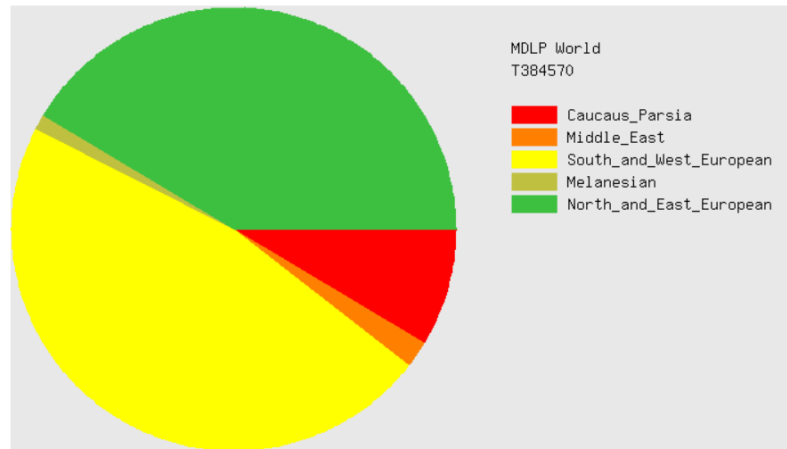| Population	
Amerindian	1.19 Pct
East_Asian	-
African	0.15 Pct
Atlantic_Baltic	74.08 Pct
Australasian	0.28 Pct
Siberian	0.27 Pct
Caucasus_Gedrosia	11.75 Pct
Southern	12.28 Pct
South_Asian	-

Oracle

Oracle-4

UNDER
DEVELOPMENT:

World9
T384570

Amerindian
Atlantic_Baltic
Caucasus_Gedrosia
Southern

MDLP World:

Population	
Caucaus_Parsia	8.74 Pct
Middle_East	1.91 Pct
Indian	-
South_and_West_European	46.85 Pct
Melanesian	0.97 Pct
Sub_Saharian	0.08 Pct
North_and_East_European	39.97 Pct
Arctic_Amerind	0.49 Pct
East_Asian	-
Paleo_African	0.3 Pct
Mesoamerican	0.7 Pct
North_Asian	-

Oracle

Oracle-4

MDLP World
T384570

Caucaus_Parsia
Middle_East
South_and_West_European
Melanesian
North_and_East_European

With the Gedmatch calculators they show that both the son and daughter have inherited less than the father shows, and that consistently the daughter shows more Native American than the son – a pattern that would be expected considering the vagaries of DNA inheritance especially at the smaller percentages.

As a second check on the accuracy of these various results, it would make good sense to include the test results of those who are supposedly 100% European, and who should therefore show only "noise" or trace amounts of Native American or surrogate data. The following will illustrate the point. The pie charts are not included since they include the private Gedmatch kit numbers:

8

Validation Check 2 - Results of Testing Three Northwestern European Individuals

MDLP World-22

Population		Population	
Pygmy	-	Pygmy	0.1 Pct
West-Asian	6.75 Pct	West-Asian	7.08 Pct
North-European-Mesolithic	3.48 Pct	North-European-Mesolithic	5.51 Pct
Indo-Tibetan	0.53 Pct	Indo-Tibetan	0.36 Pct
Mesoamerican	-	Mesoamerican	-
Arctic-Amerind	-	Arctic-Amerind	-
South-America_Amerind	-	South-America_Amerind	-
Indian	-	Indian	-
North-Siberean	-	North-Siberean	-
Atlantic_Mediterranean_Neolithic	37.22 Pct	Atlantic_Mediterranean_Neolithic	34.88 Pct
Samoedic	0.37 Pct	Samoedic	1.16 Pct
Indo-Iranian	0.58 Pct	Indo-Iranian	1.78 Pct
East-Siberean	-	East-Siberean	-
North-East-European	46.25 Pct	North-East-European	46.13 Pct
South-African	-	South-African	-
North-Amerind	-	North-Amerind	-
Sub-Saharian	0.13 Pct	Sub-Saharian	-
East-South-Asian	-	East-South-Asian	-
Near_East	3.7 Pct	Near_East	2.88 Pct
Melanesian	0.6 Pct	Melanesian	0.13 Pct
Paleo-Siberian	-	Paleo-Siberian	-
Austronesian	0.38 Pct	Austronesian	-

yourDNAportal:

1) Native American Origins – Ancient

"The Indigenous peoples of the North American Southwest are those in the current states of Colorado, Arizona, New Mexico, Utah, and Nevada in the western United States, and the states of Sonora and Chihuahua in northern Mexico. An often quoted statement from Erik Reed (1964) defined the Greater Southwest culture area as extending north to south from Durango, Mexico to Durango, Colorado and east to west from Las Vegas, Nevada to Las Vegas, New Mexico. Other names sometimes used to define the region include "American Southwest", "Northern Mexico", "Chichimeca", and "Oasisamerica/Aridoamerica". This region has long been occupied by hunter-gatherers and agricultural people. Many contemporary cultural traditions exist within the Greater Southwest, including Pima, Yuman-speaking peoples inhabiting the Colorado River valley, the uplands, and Baja California, O'odham peoples of Southern Arizona and northern Sonora, and the Pueblo peoples of Arizona and New Mexico. In addition, the Apache and Navajo peoples, whose ancestral roots lie in the Athabaskan-speaking peoples in Canada, entered the Southwest during the 14th and 15th century and are a major modern presence in the area."

"This mathematical setting divides your genome into 400 fragments, with each fragment representing 0.25% of your genome. This enables the capture and identification of even the most distant origins."

Population	Value
Insular Celtic	56.5%
Scando-Germanic	29.75%
Ancient East Mediterranean	9%
Ancient West Mediterranean	3.5%
Ancient North-Central American	1.25%

Here Ken shows clear evidence of Native American (1.25%), the best matching category being "Ancient North-Central American".

2) **Native American Origins – Genome Wide**

"This test utilises a large dataset of samples, to estimate an overall share of Native American ancestry in your genome, without specific tribal breakdowns. This test will reveal even the smallest traces of Native American ancestry."

Population	Value
North-Western European	52.75%
Basque	14.5%
North-Eastern European	10.5%
East-Central European	7.75%
Balkan	6.75%
Levantine	4%
Caucasian	2.25%
Native American	1.5%

On this test Ken shows 1.5% "Native American".

3) **Native American Origins – Modern**

"*This test utilizes the most up to date research, utilizing a comprehensive dataset of tribal specific Native American samples. Also included are basic regional results from Europe, Africa, Asia and Oceania.*"

This test utilizes the most up to date research, utilizing a comprehensive dataset of tribal specific Native American samples. Also included are basic regional results from Europe, Africa, Asia and Oceania.

Population	Value
North-Western European	86.5%
Western European	4%
Basque	3%
Central European	1%
Central Mediterranean	1%
South-West Mediterranean	1%
Balkan	0.75%
Sephardi Jewish	0.75%
Greek	0.5%
North-Eastern European	0.5%
Ashkenazi Jewish	0.25%
Levantine	0.25%
Totonac Mexico	0.25%
Zapotec Oaxaca Mexico	0.25%

It appears that Ken's closest Native American matches are peoples from Mexico, specifically Totonac and Zapotec Oaxaca.

Conclusion: All of the indicators suggest that Ken Faux has a Native American ancestor, likely from the 18th century. The results are supported by the data (percentages of NA or proxy) from the son and daughter taking the same Gedmatch tests. In addition, two tests of individuals who are, from the genealogical evidence, of 100% Northwestern European ancestry are included – both of whom have no NA or proxy (e.g., Siberian, East Asian).

These DNA results cannot stand alone – there needs to be validation with a secure paper trail – in other words genealogical support.

Dr. David K. Faux

19 May 2023