



## GeneSeek Yak DNA Test

**Date of Report:** July 8, 2021

**Animal Name:** CBC Smokey

**Animal ID (USYAK Ear Tag#):** 20A61

**Sample ID:** 2119116043

**DNA Fingerprint:** 16 SNP Identification Code  
KYKCRTTM-SYGSTYT

**Parentage:**

CBC Smokey qualifies as offspring of the sire CBC-Shiva with 0 exclusions out of 86 genotypes checked. Insufficient genotype data to confirm or exclude the dam CBC Tana with 78 genotypes checked (min. 82).

**Cattle Introgression**

CattleAlleles = 2

CattleFraction = 0.012

**Coefficient of Inbreeding**

No. Heterozygous SNPs = 33

EstimationOfCOI = 0.0044

**Other Features**

ATP6 Mitochondrial DNA: G - Cattle

KIT Coat pattern Y - Trim

**SAMPLE QUALITY**

TotalAssays= 87

TotalCalls= 84

CallRate =0.966

CallRateThreshold =0.94

CallRateStatus=Pass

$COI = 1.0 - \text{heterozygoteTotal} / (\text{Nsites} * \text{ExpectedHets})$   
 $\text{ExpectedHets} = 0.3946$   
 $COI = 1.0 - 33 / (84 * 0.3946)$   
 $COI = 0.0044$

| SNP # | Genotype | 24 | --  | 48 | G/T | 72 |     |
|-------|----------|----|-----|----|-----|----|-----|
| 1     | G/T      | 25 | C/T | 49 | A/G | 73 | A/A |
| 2     | C/T      | 26 | G/G | 50 | C/C | 74 | C/C |
| 3     | G/T      | 27 | A/G | 51 | T/T | 75 | G/G |
| 4     | C/C      | 28 | T/T | 52 | T/T | 76 | G/T |
| 5     | G/A      | 29 | C/G | 53 |     | 77 | C/C |
| 6     | T/T      | 30 | C/C | 54 |     | 78 | C/G |
| 7     | T/T      | 31 | G/G | 55 | C/T | 79 | C/T |
| 8     | C/A      | 32 | C/C | 56 | C/G | 80 | C/C |
| 9     |          | 33 | A/A | 57 | T/T | 81 | G/G |
| 10    | C/G      | 34 | G/G | 58 | C/T | 82 | C/C |
| 11    | C/T      | 35 | C/T | 59 | T/T | 83 | A/A |
| 12    | G/G      | 36 | C/C | 60 | C/C | 84 | T/T |
| 13    | C/G      | 37 |     | 61 | A/C | 85 | G/G |
| 14    | T/T      | 38 |     | 62 | C/C | 86 |     |
| 15    | C/T      | 39 | G/G | 63 | G/G | 87 | T/T |
| 16    | T/T      | 40 | A/C | 64 | G/T | 88 | --  |
| 17    | C/C      | 41 | A/A | 65 | C/T | 89 | C/C |
| 18    | G/G      | 42 | A/G | 66 | T/T | 90 |     |
| 19    | C/G      | 43 | T/T | 67 | T/T | 91 | G/G |
| 20    | A/A      | 44 | A/T | 68 | C/C | 92 | G/T |
| 21    | C/T      | 45 | G/G | 69 | C/C | 93 | G/T |
| 22    | A/T      | 46 | T/T | 70 | C/C | 94 | A/A |
| 23    | C/C      | 47 | C/C | 71 | --  | 95 | A/G |