If 2 pure bred dogs are bred together to create a mixed breed puppy. If this mixed breed puppy is bred with another puppy from 2 other breeds then the inherited traits seen in the offspring would not be what you would expect to see. Common sense would indicate that the dog should be 25% of each of the 4 breeds of their grandparents, however when the genetic make up of those puppies is examined then that is not the case. If there were 16 puppies in the litter then 4 of those puppies would be expected to show 25% of each of their grandparents breeds, 8 puppies would only show 3 breeds, and 4 puppies would only show 2 of the breeds.

The DNA Breed ID test only shows the Breeds that actually contribute DNA, so the fact that 12 of the 16 puppies do not show all 4 breeds would be shown by the Breed ID Test.