A known plaintext attack on 4-round DES

Claim: After 4 rounds 8 bits are not affected by key bit 46
Key bit 46 is not used in K1
Key bit 46 is used in K2
Key bit 46 is not used in K3
A known plaintext attack on 5-round DES

Claim: After 4 rounds 8 bits are not affected by key bit 52
Key bit 52 is not used in K1
Key bit 52 is used in K2
Key bit 52 is not used in K3
Key bit 52 is not used in K5