

Fingerprint Correlation of Saunders Deep and Texas Deep Oils

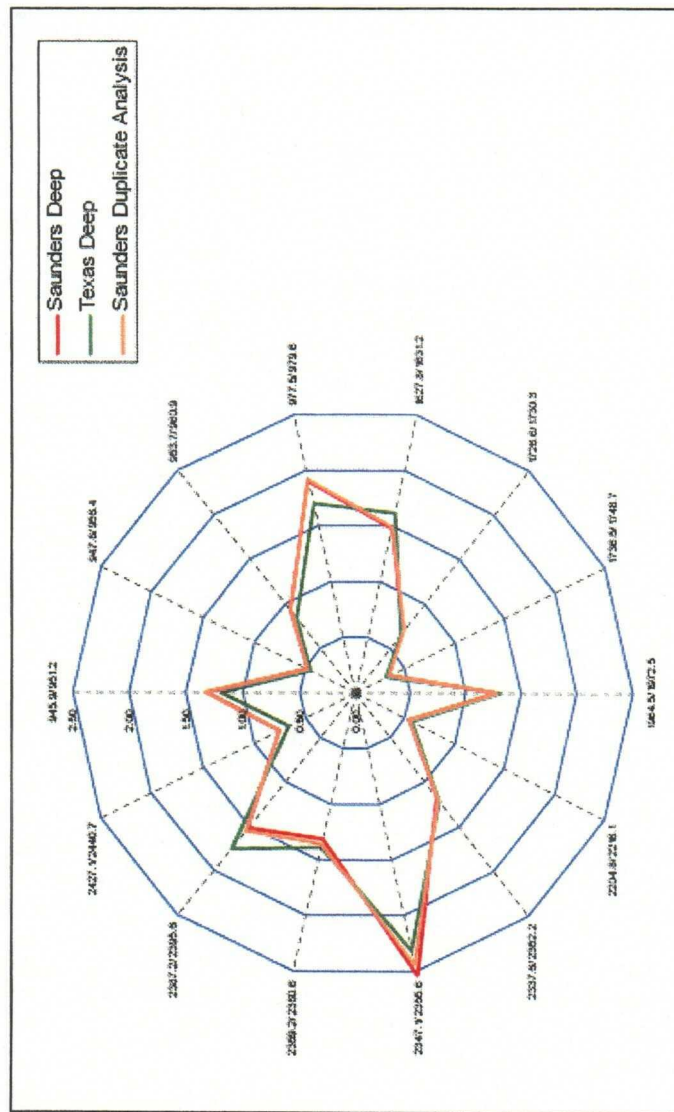


Figure 1. Star diagram comparison of 14 C9 to C25 hydrocarbon range peak ratios from Saunders Deep and Texas Deep oils. Each axis on the star shows the values for a different ratio of a pair of GC peaks. The ratios are labeled at the end of each axis, and the numerical values are provided in Table 2. Peak ratios are in Kovats Indices where peaks with identifications between C9 and C10 are in the 900's and so on. Comparison of the three patterns indicates that Texas Deep oil is slightly different than the Saunders Deep oil and the duplicate analysis of the Saunders Deep oil. When comparing Saunders and Texas Deep oils, 12 of 14 ratios vary by > 5% and the average variation is 7.1%, whereas the comparison of the two analyses of the Saunders Deep condensate shows that none of the ratios varies >5% and average 1.7%. However this separation is based on small variations of low quantity hydrocarbon compounds and is therefore not compelling. The lack of significant variation of the majority of the C7-C25 range hydrocarbons indicates that the Saunders Deep and Texas Deep oils are from a single continuous reservoir.